Sensemaking During Crisis: Untangling Uncertainty and the Creation of Resilience

Canan Katrin Akpolat-Ertuna

A thesis submitted for the

degree of

Doctor of Philosophy (C02048)

University of Technology Sydney

13 April 2020

Certificate of Original Authorship

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as part of the collaborative doctoral degree and/or fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This research is supported by an Australian Government Research Training Program Scholarship.

Signature: Production Note:
Signature removed prior to publication.

Date: 12.04.2020

Acknowledgements

My first thank you goes to Jochen Schweitzer. Without your imperturbable belief in my academic abilities, I would not have embarked on my PhD journey. Your guidance into the world of uncertainty and unwavering supervision have helped me through this journey.

I also owe great gratitude to Stewart Clegg and Marco Berti, my other supervisors. Stewart Clegg, I may have only glimpsed your vast intellect but this provided the foundation and steward of my thesis. Marco Berti, my accomplishment would not have been possible without your passionate participation and scholarly input. I feel privileged to have been supervised by three exceptional scholars.

I would also like to acknowledge Deborah Edwards, Hussain Rammal, Katharina Hölzle and Jenny Edwards for their expert opinion and support.

I am indebted to my colleagues and fellow students Daphne Freeder, Veronica Espana Alcorta, Rosemay Sainty, Ralf Wilden, Chelsea Wise, Krithika Randhawa, Chris Biesenthal, Michele Lancione and Lisa Naar for their encouragement and commiserations.

Capstone Editing provided copyediting and proofreading services, according to the guidelines laid out in the university-endorsed national 'Guidelines for Editing Research Theses'.

I am grateful to my father, Hasan Akpolat, and my husband, Murat Ertuna for their tireless love and strength.

Last, Ela Grace Ertuna, *kartanem*, thank you for your unconditional love and patience. Everything I am is because of you!

Contents

Table of Figures and Tables

Abstract

This thesis concerns the responses of a European oil and gas company and its expatriates during the Arab Spring in Libya and Egypt. I analysed 13 interviews with expatriates by using membership categorisation analysis to establish how the organisation managed the events. In doing so, I highlighted how the expatriates used categorisation devices to voice their uncertainty perceptions, sensemaking and resilience to navigate through the crisis.

For each concept, I demonstrated how membership categorisation plays a crucial role as a construction mechanism. People use their category devices as instruments for their sensemaking, uncertainty experience and expression and as resources and capabilities for resilience creation.

I observed how people described their states of uncertainty and constructed them as reflective narratives of a crisis situation. Regarding sensemaking, the category devices function as instruments for sensemaking to simplify the world while the creation of the 'other' category device, as a relational pair, helps to redefine oneself in the wake of a crisis.

Last, I demonstrated how participants generated resilience while aligning decision-making with changes occurring in their environment. I cautioned that in the event that resilience is enforced as an 'entrapment' of employees, it has the potential to cause in employees adverse cognitive and behavioural consequences towards the organisation.

Chapter 1: Introduction

1.1 Research Motivation

In January 2011, the world watched the Arab Spring start in Tunisia. It soon spread across to other North African countries, the Arabian Peninsula and Middle East. In Libya and Syria, it soon escalated into a devastating civil war costing hundreds of thousands of lives. Watching the Arab Spring unfold, it became clear that despite the vast amount of research available relating to crisis management, individuals, organisations and governments were still surprised by the immediacy and magnitude of these crises. It was this unpreparedness and mismanagement of the crisis that motivates this thesis.

Organisations are in constant interaction with their environments and there is an abundance of theories trying to explain the organisation–environment relationship (Ashill & Jobber 2014; Boccia 2009; Hambrick 1982; Regan 2012). For instance, institutional models explain how organisations become isomorphic with their environments over time (DiMaggio & Powell 1983; Meyer & Rowan 1977). Some of the theories that derive from the organisation–environment relation are contingency theory (Burns & Stalker 1961; Donaldson 2001; Lawrence & Lorsch 1967), organisational adaptation and change theories (Battilana & Casciaro 2013; Burnes 2004; Ford, Ford & D'Amelio 2008; Levinthal 1991; Todnem By 2005; Weick & Quinn 1999) and the concept of environmental uncertainty (Achrol & Stern 1988; Bordia et al. 2004; Downey, Hellrigel & Slocum Jr. 1975b; Duncan 1972; Gerloff, Muir & Bodensteiner 1991; Hrebiniak & Snow 1980; Jauch & Kraft 1986; Milliken 1987; Weick & Sutcliffe 2011). Contingency theory proposes that organisations need to align with their environments to survive and prosper (Burns

& Stalker 1961; Child 1972; Donaldson 1996; Lawrence & Lorsch 1967). The idea of an organisation–environment equilibrium is a central theme in contingency theory (Donaldson 2001) and change management theory (Lewin 1951). Lewin (1951) asserted that organisational change is about moving the organisation from one state of equilibrium to the next. Meyer (1982, p. 516) stated that environmental jolts are a contingency that in his research moved 'hospitals away from their equilibria'. The idea of equilibrium seeking has been critiqued by some scholars, who suggested that an organisation can only be successful if it maintains constant change (Weick & Quinn 1999) without trying to reach a state of equilibrium (Pascale 1990; Stacey 1993). Further, early research in the field of contingency theories measured environmental uncertainty as an objective state, comprising complexity and the rate of change in the environment (Duncan 1972; Milliken 1987). A major problem with measuring environmental uncertainty as an objective state was that conditions of the environment might be expected to be experienced in the same manner by all organisations operating in the same environment. Nonetheless, Meyer's (1982) study is a good example that this is not the case and that environmental uncertainty should be measured as a perceptual phenomenon (Milliken 1987). In line with that statement, Weick (1969) asserted that it is not possible to separate an individual's perception of an environment and the actual environment. Moreover, in the Meyer (1982) study, administrators did not perceive the environmental jolts in the same way, so each hospital adapted to the jolts in a different way.

The paper by Meyer (1982) is a good illustration of the concept of the enacted environment. In accordance with the enacted environment view, an organisation will respond to its environment based on how it interprets and constructs the environment (Weick 1969). If an organisation understands its environment to be

complex and ambiguous it may normally not decide to influence its environment and only react in crisis (Weick 1969). As Meyer (1982) stated, most scholars believe that jolts are threats for organisations and should be minimised or eliminated at all costs (Lant, Milliken & Batra 1992). Nevertheless, if organisations perceive sudden environmental changes as an opportunity it can create a source of better performance, as was the case with one of the hospitals in Meyer's study (Bradley et al. 2011; Meyer 1982; Weick 1969).

Consequently, organisations evolve as they enact and respond (or fail to do so) to environmental changes and events. The political uprisings in Northern Africa, the Arabian Peninsula and Middle East in the beginning of 2011 (referred to as the Arab Spring) had major organisational effects because of the political, economic, social–cultural and legal responses. Libya's and Egypt's economy were profoundly dependent on their oil and gas industry. However, the exploration, production and export of oil and gas came almost to a halt during the political unrests in Libya and Egypt at that time. The mismanagement of the uprising of people that began as part of the Arab Spring quickly turned into a civil war in Syria that cost hundreds of lives and the destruction of the entire country.

In March 2011, the world watched in horror when an earthquake initiated a devastating tsunami that hit Fukushima and the nuclear power plant. In addition to the loss of life, there were major power and water supply failures while supply chains were disrupted and the weaknesses of just-in-time strategies exposed. According to a report from Green Cross International, in 2015, an estimated 32 million lives were affected by radioactive contamination caused by the Fukushima disaster (Green 2015). As Boin (2009) argued, a growing number of crises have 'transboundary effects' that encompass multiple systems and

subsystems at the same time. As a result of the Fukushima disaster, the German government immediately shutdown eight power plants and changed its energy policy to address public outcry (Federal Ministry of Economics and Technology 2012; Siemens 2012). The objectives of the new energy policy mean that Germany will phase out its remaining nine nuclear power plants by 2022 and that greenhouse gas emissions will be reduced by 80 per cent by 2050 (World Nuclear Association 2016). To achieve those goals, Germany has to refurbish its entire power supply system. While events such as the Fukushima disaster do not happen on a daily or monthly basis, they do occur and when they do they have an enormous destructive power and associated substantial costs. According to Kobayashi (2011), the estimated clean-up cost of the Fukushima disaster ranged between ¥5.7 to ¥20 trillion (US$70 to $250 billion). Consequently, a need to re-examine and deepen our understanding of the theories and concepts relating to crisis and crisis management is urgently required.

1.2 Research Contributions

The initial aim of this thesis was to discuss and contribute to the field of perceived environment uncertainty during times of crisis. To accomplish such an undertaking, I used membership categorisation analysis (MCA). The ambition was not to arrive at findings with a pre-set range of hypotheses but rather to let the data analysis guide the research by highlighting themes co-constructed during interviews by the participants and researcher.

In addition to the explication of empirical data, MCA provides for the demonstration of how people categorise themselves and others as elements of society (Day, 2010). Consequently, the application of MCA enables participants to voice their own analyses. Moreover, Day (2010) asserts that MCA ‘should thus not

be thought of as, for example, a theory of social categorisation that is applied to some empirical materials to test its predictability, rather as the explication of peoples' own resources for social life' (p. 1). Further, MCA does not require the formulation of research questions prior to analysis. The majority of studies that used MCA applied it to pre-existing conversations, including the speeches of political figures (Leudar et al., 2004, Silverman, 2013), recorded interrogations between suspects and police officers (Stokoe, 2010), recorded phone conversations between people (Psathas, 1999, Day, 2010) or interviews and audio-recordings of meetings (Whittle et al., 2015). Stokoe (2012) argues that there is a lack of studies that outlined how researchers should use MCA and consequently, provides five steps of guidance for undertaking MCA:

1. Collect data across different settings (e.g., domestic or institutional settings).

2. Identify and build collections of categories (e.g., German, musician), category devices (e.g., family and academics) and standardised relational pairs (e.g., man–woman and doctor–patient).

3. Highlight the sequence in which these categories, category devices and standardised relational pairs are located.

4. Analyse the sequences in terms of their design, turn in text and actions.

5. Seek further evidence within the conversation or other conversations with similar and dissimilar settings.

Stokoe (2012) claimes that 'it may be the case that one approaches an MCA study with a particular category in mind' (p. 280). I followed Stokoe's (2012) five steps in my study. In addition, this research was influenced by a wide range of prior

knowledge and interests I myself held in particular concerning crisis and perceived uncertainty. In the course of data analysis, sensemaking and resilience arose as themes of significance by informing me about people's perceived uncertainty but also highlighting new insights about a person's sensemaking and resilience creation. Nevertheless, to guide the reader I will outline my research contributions that emerged during the data analysis process, in the remained of this section.

Recent events inform us about the rise in crises with 'transboundary effects' (Boin 2009; Casto 2014). The Fukushima disaster, the Arab Spring and Brexit are just a few examples of how crises can transcend national boundaries without any physical crossing of national borders. Yet, existing crisis management research is generally based on routine crisis and often researchers simplify their study by focusing on just one particular concept concerning crisis management. Such an undertaking is surely advancing our knowledge on each construct in isolation, but its extrapolation to more complex crisis can be limited or even misleading. Further, enactivism informs us that people are not passively receiving input from their environment but rather that their experiences are based on dynamic interactions between actors and their environment (Thompson 2010). Some scholars have cautioned that 'the study of crisis may lead to oversimplified models of sensemaking that take only a few factors into account' (Hernes & Maitlis 2010; Maitlis & Sonenshein 2010, p. 552; Weick 2010). The same applies to most studies into perceived uncertainty and resilience, in that each concept is studied as only one aspect of a crisis. Yet, people in crisis situations do not experience uncertainty, sensemaking and resilience in isolation or in the absence of the other constructs. Hence, the isolation of concepts relating to crisis management often fails to capture the dynamic interplay between those concepts, resulting in a potential oversimplification of the true nature of a person's crisis perception, sensemaking and resilience. Consequently, I address this

gap of the crisis management literature by studying the phenomenon holistically 'as a set of diverse interacting elements' (Mingers & White 2010, p. 1148) by questioning which mechanism do people choose to construct and navigate their perceived uncertainty, sensemaking, and resilience.

In the following paragraphs, I will examine each construct in more detail and outline how I contribute to each construct in this thesis.

The concept of perceived environmental uncertainty originates from the field of organisational behaviour (Gerloff, Muir & Bodensteiner 1991; Milliken 1987) and has been further researched in the fields of strategic management (Hough & White 2004; Sawyerr, McGee & Peterson 2003; Song & Montoya-Weiss 2001) and marketing (Achrol & Stern 1988; Ashill & Jobber 2001, 2010; Read et al. 2009). In conversations, one often observes people reporting about states of uncertainty. Sometimes these states are conveyed by signs that are obscure and subtle, such as hesitations, utterances and pauses, while other times people voice their uncertainty more explicitly when saying, for example, 'I don't know' (Potter 2003; Silverman 2016). Prior research has so far identified at least four different types of uncertainty: state uncertainty, effect uncertainty, response uncertainty (Ashill & Jobber 2014; Milliken 1987; Gerloff, Muir & Bodensteiner 1991) and outcome uncertainty (Regan 2012). Yet, how people describe their states of uncertainty is a question that remains unanswered by prior research.

Consequently, in this research I examine how people express their uncertainty states.

Some scholars have stated that different uncertainty constructs exist in a linear interrelationship (Ashill & Jobber 2010; Gerloff, Muir & Bodensteiner 1991) and that an increase in one construct could lead to an increase in the others (Ashill &

Jobber 2001, 2010). I proposition that the relationship between the different uncertainty constructs is far more complex in that multiple constellations are possible. In addition, each construct is experienced because of a lack of information or restricted processing ability relating to that particular construct. Thus, one does not experience effect uncertainty because one has previously experienced state uncertainty but rather because one lacks information regarding the state and effects of the crisis. Potentially, someone can experience all three types of uncertainty at the same time. It is also possible that a person experiences each uncertainty in a linear fashion but there are many possible constellations as to how people experience uncertainty. Consequently, I regard the different types of uncertainty as dynamic and evolving rather than being rigid constructs.

Of paramount importance is realising the significance of a person's perception and understanding of the organisation's external environment as constituted by their learning and sensemaking processes. As Weick (1969) postulated, organisations know their environment through their actor's perceptions and sensemaking—the environment is enacted. Some researchers have defined sensemaking as a cognitive process whereby stimuli are transformed to enable a person's sensemaking of her environment (Elsbach, Barr & Hargadon 2005; Starbuck & Milliken 1988). Others advocate that sensemaking is a process that is co-constructed through interactions with others (Gephart 1993; Maitlis & Christianson 2014; Weick, Sutcliffe & Obstfeld 2005). In this research, I question organisational sensemaking is a process whereby organisational members interpret their environment through interactions with others, both within and outside the organisation (Maitlis 2005; Weick, Sutcliffe & Obstfeld 2005). In fact, the interaction and inter-group processes of sensemaking play a significant role in mastering a crisis situation. According to prior research, a number of different sensemaking constructs have been established,

such as sensegiving (Gioia & Chittipeddi 1991), sensedemanding (Vlaar et al. 2008; Weick 1969) and sensehiding (Monin et al. 2013).

Further, in difficult times people often tend to blame others for their dire situation. The need to personify a crisis situation seems an essential mechanism for people's sensemaking and acceptance of a crisis (Christophersen 2007). In accordance with social identity theory, the creation of the 'otherness' or 'others' category helps to 'explain the social world and to legitimize the past and current actions of the ingroup' (Hornsey 2008, p. 209).

Thus, in this research I demonstrate how the "others" category, as a standard relational pair, becomes a mechanism for people to facilitate and justify their need to change their thinking and actions to manage a crisis situation.

The creation of the 'others' and stereotyping are often closely related to felt emotions. In the traditional sensemaking literature, emotions have been regarded as a hindrance to cognitive processing (Maitlis & Sonenshein 2010; Shiv et al. 2005; Weick 1993). Weick (1990) argued that interferences to an ongoing stream of activity do not cause explicit sensemaking but rather arousal from the interferences that trigger sensemaking (Maitlis & Sonenshein 2010). Since arousal is integral in sensemaking then any intense emotion felt during a crisis has the potential to trigger sensemaking. Intense emotions have also the power to restrict a person's cognitive ability, hindering their sensemaking. Sensemaking also involves bracketing of a crisis so another person's expressed negative emotions, such as stress and panic, can influence one's sensemaking of the situation (Maitlis & Sonenshein 2010).

In terms of coping with a crisis, Ungar (2008) stated that resilience is determined by the interaction that takes place between the individual and social environment. Moreover, Ungar (2008) cautioned against defining resilience as a uniform concept

and proposed to understand it as an evolving process depending on the individual, environment and culture. In other words, resilience will change depending on the individuals, their environment and cultural understanding. Resilience is a process premised on an ability to mobilise resources and capabilities to turn a crisis situation into an opportunity (Kantur & İşeri-Say 2012; Linnenluecke, Griffiths & Winn 2012; Vogus, Sutcliffe & Weick 2010). So, regarding resilience, I investigate how people generate resilience while aligning decision-making with changes occurring in their environment.

Considering the vast constellation of category devices, a person can hold, what determines which particular categories will be chosen in a given situation is based on accessibility and fit (Hornsey 2008; Oakes, Turner & Haslam 1991).

The skills, resources and capabilities needed to achieve resilience are created from the category devices one already enacts or specifically constructs for that purpose. According to Weick (1995, p. 23), 'sensemaking is triggered by a failure to confirm one's self', meaning that when an individual's self-efficacy and self-fulfilment is under threat by the experience of a crisis, the person will explicitly engage in sensemaking. I argue that the same applies to a person's engagement in constructing resilience as an action to restore or redefine their identity. Therefore, I propose that if one's identity, including professional category devices, is under threat by the experience of a crisis, not only does this trigger a person's sensemaking (Maitlis & Christianson 2014) but also their resilience to understand and re-establish their identity.

Although the majority of studies in the field of organisational behaviour regard resilience as a successful coping mechanism when organisations face adversity (Bell 2002; Bhamra, Dani & Burnard 2011; Comfort, Boin & Demchak 2010;

Grafton, Gillespie & Henderson 2010), I advocate that enforced resilience should be distinguished from resilience that comes from within of people.

1.3 Structure of Thesis

Since MCA seeks to identify patterns across an interview or set of interviews this thesis does not follow a conventional thesis structure but opts for a thematic structure. Although very similar, the thematic structure of this thesis shall not be confused with a thematic analysis in which a researcher identifies, analyses and reports themes within data (Braun et al. 2019). In fact, as explained by Bernard, Wutich and Ryan (2016), the process of grounded theory is to '(1) read verbatim transcripts, (2) identify possible themes, (3) compare and contrast themes, identifying structure among them, and (4) build theoretical models, constantly checking them against the data' (Guest, MacQueen & Namey 2012). Indeed, I followed steps 1 to 4 when applying MCA in this thesis. Yet, I have reviewed exceptional research applying MCA without building a theoretical model, making step four not a requisite for MCA. In fact, I have followed the above suggested five steps by Stokoe (2012) when conducting MCA. Thus, I devote Chapter 2 to discussing and promoting MCA as a method for investigating and revealing new insights into perceived uncertainty, sensemaking and resilience.

In Chapter 3, the focus is on defining crises. Regarding Pearson and Clair's (1998) three perspectives of defining a crisis, I will assume mostly a 'psycho–social' and 'social–political' view in this study. The psychological view defines crisis in respect to the perceptions and sensemaking of the person who is experiencing the crisis. Research that embraces this perspective emphasises that a crisis can force individuals to become disillusioned and reorganise their assumptions about themselves, the organisation, their culture, structural relationships and corporate

role identities (Boin 2009; Pearson & Clair 1998; Norris et al. 2008; Rosenthal, Boin & Comfort 2001). Regarding the social–political perspective, a crisis is the basis of changes in cultural and institutional symbols, meanings and ideologies. The crisis in this case is a collective collapse of sensemaking and corporate identity construction with the results of a breakdown of social order and followership (Pearson & Clair 1998; Weick, 1993, 2010).

Since readiness theory, contingency theory and organisational learning theory contribute to our understanding of crisis management I will briefly discuss them but then move on to higher level theories and concepts such as perceived uncertainty, sensemaking and resilience that enable me to capture and advance crisis management knowledge at a deeper level.

In Chapter 4, I start off by reviewing the literature on perceived uncertainty followed by a discussion of excerpts from data collected from expatriates to illuminate how they use their membership categorisation devices (MCDs) as constructions to voice their different states of perceived uncertainty.

In the second analysis chapter, Chapter 5, before reporting on enquiry into the practices participants employed in constructing crisis sensemaking, I begin with a general overview of sensemaking theory. In line with the previous two analysis chapters, I will begin the last analysis chapter (Chapter 6) with a general literature review. I will advocate that employees use a number of resources to generate resilience, including specific knowledge, experience and skills that derive from their definitions of realities in terms of their membership of different categories. I will conclude Chapter 6 by problematising 'being stuck' as a negative form of resilience.

The last chapter is entirely devoted to a discussion of the main contributions and implications of perceived uncertainty, sensemaking and resilience. In this chapter, I will also present an overall framework depicting the sources and effects that expatriates experienced during the Arab Spring. As primary external sources of uncertainty, political unrest and instability is named by all expatriates. Since there is a close interrelationship between other external sources of uncertainty (Ashill & Jobber 2001, 2014) and, based on the information expatriates voiced during their interviews, economic volatility, social–cultural differences, technological and infrastructural deficits and legal instability will also enter the research framework. The effects of the Arab Spring for the organisation and its expatriates include (1) expatriate evacuations during the first and second revolution in Egypt, (2) shutdown of plant operations in Egypt and, eventually, (3) market exit in Libya, (4) imposition of a curfew for all employees, resulting in reduced business hours and (5) renegotiation of contracts due to legislative changes in Egypt.

The framework used will also depict sensemaking and resilience as coping strategies. The actual consequences and coping strategies that expatriates mentioned in the interviews will be discussed in the following sections. When discussing the sources and effects of the Arab Spring, I will highlight employee's selectiveness of those factors and effects based on their occupational role and enactment of category devices. Moreover, I assert that if the process of selecting crisis factors is already biased, as people only concentrate on the factors that have an immediate association with their corporate roles then their perception and understanding will be biased as well, leading to 'blind spots'. Thus, I propose that organisations should encourage their employees to widen their perceptions of potential uncertainty factors through an enactment of their different corporate category devices.

The classic strategic management literature discusses the uncertainty sources the expatriates voiced as potential crisis factors. Yet, some expatriates stated that some of the sources can also be a means to prevent a crisis. Technology was named as a potential source of crisis, in particular the mismanagement of equipment. Nonetheless, technology also has the potential to minimise the uncertainty around drilling a well, for example. Engineers have the chance to generate predictive models before they commence drilling. Consequently, the different sources of crisis exist in a complex relationship—the sources, in isolation or in various combinations, not only have the potential to trigger a crisis but also to contain or even prevent it.

Chapter 2: Methodology

2.1 Membership Categorisation Analysis

All interviews in this research were analysed using MCA. Categorisation is a basic cognitive process that enables people to construct and make sense of their surroundings but also supports them in the management of uncertainty (Hogg & Tindale 2001). MCA is an analysis of how people construct and make sense of themselves, others and their actions (Leudar, Marsland & Nekvapil 2004). According to Sacks (1992b), categories are classifications with which to identify and describe a person and all other concrete elements in one's environment, such as mother, lion, doctor and flower. They also include abstract concepts, such as peace, love and music. As with other research methodologies and analytic techniques, MCA consists of unique terminology, obligations and rules (Sacks 1992b). It is a sub-section of conversation analysis (CA), which is also associated with Harvey Sacks. Thus, a concise summary regarding the main focus of CA will be discussed in the following section.

CA is a strand of ethnomethodology that, like MCA, is grounded on Harvey Sack's highly acclaimed *Lectures on Conversation* (Sacks 1992b; Stokoe 2012). Of the two analytic methods, CA has been far more applied and published such that some authors have raised concerns that MCA as an independent method has become endangered (Schegloff 2007; Stokoe 2012; Wilkinson & Kitzinger 2008). CA is in essence the study of talk in interaction (Wilkinson & Kitzinger 2008) that enables the researcher to understand how people construct their social world (Psathas 1999). As such, it has been applied to various disciplines, such as linguistics, sociology, psychology and business (Schegloff 2007; Stokoe 2010, 2012; Wilkinson and

Kitzinger 2008). Further, the theoretical assumptions that CA are embedded in are that (1) talk is action, (2) it is structurally organised and (3) intersubjective (Heritage 2001, 2013; Wilkinson and Kitzinger 2008). The main benefit of adopting CA (Ten Have 2007) is that it enables the researcher to be much closer to the phenomena in question because it demands a highly detailed interaction with data. Moreover, CA regards talk as being organisational and procedural in that it is co-produced between the involved parties rather than being a series of isolated acts (Ten Have 2007).

According to Psathas (1999), I should distinguish between 'sequential analysis' and 'talk in institutional settings'. Sequential analysis is concerned with the structures of conversation sequences. In such analysis, the setting where the interaction takes place has little relevance. Attention is given mainly to category formulation and relating structures of pairs and sequences. In contrast, the analysis of talk in institutional settings emphasises the importance of the context and setting in which the interaction takes place. The focus is on how conversations are constructed, influenced or hindered by the environment in which the talk is produced (Psathas 1999). In this thesis, sequential analysis is applied because I am concerned with how people use their membership categories to construct their business environment and how they create and mobilise their memberships to address major changes taking place in their environment. Hence, I turn my attention to MCA.

In this research, MCA was chosen because it permits one to focus on language as a key element in perceiving uncertainty during times of crisis. Moreover, I argue that organisational actors use experience and knowledge drawn from their different identities and the sense that these provide of their membership of categories. I am especially interested in how they use these membership categorisations to create

resilience and engage in sensemaking and management of uncertainties during crises.

As with other research methodologies and analysis techniques, MCA consists of unique terminology, obligations and rules (Sacks 1992b). The following section is dedicated to informing the reader about such terminology and rules. Leudar, Marsland and Nekvapil (2004) used MCA to study how political figures create the 'enemy' by focusing on usage of the pronouns 'us' and 'them' in political speeches as membership categories. In their research, 'us' and 'them' were regarded as 'standardised relation pairs'. Perhaps the most famous standardised relation pairs in CA was introduced by Sacks (1992a) in the example, 'The baby cried. The mommy picked it up'. This provides an excellent case with which to illustrate the rules and terminology of MCA. Any collection of categories is referred to as MCD (Sacks 1992a). At least two categories can be grouped together as belonging to an overarching category. The most prominent example of a MCD is probably 'family' to which the categories of 'mother', 'father' and 'child' belong (Psathas 1999; Sacks 1992a). Typically, common sense understanding of these adjacent sentences (i.e., 'The baby cried. The mommy picked it up') reads the 'it' as the baby, although nowhere is this explicitly stated.

When two categories can be paired, such as 'husband/wife' or 'mother/child', we would talk about standardised relational pairs. The usage of one term implies the existence and associated obligations, rules and rights of the other pair (Leudar, Marsland & Nekvapil 2004; Sacks 1992a). The economy rule asserts that a person will hear the implicit relationship of a single category to the collection of categories with which it belongs (Sacks 1992a). Thus, one will hear 'mother' and 'child' belonging to the 'family' category device. In line with the economy rule, if we have

categorised one person belonging to a particular category device then we have to categorise other categories belonging to the same device. So, if one were told that 'x cries. Y picks it up' (Silverman 1998), one would tend to categorise 'x' to be the baby, belonging to the family device and 'y' as the mother (Sacks 1992a). One would not hear 'y' as being the baby's childcare teacher, although a childcare teacher has the responsibility to care for a crying baby but does not belong to the 'family' device as does the baby.

In the above example, one also hears the 'mother' as being the actual mother of the baby and not of any other baby. To explain this phenomenon, Sacks suggested that we tend to regard, where possible, members belonging together as a 'unit' or 'team' (Sacks 1992a; Silverman 1998). In other words, when we see a father, mother and child, we tend to group them together as a team or sub-group under the 'family' device. Surely, grandparents, uncles and cousins all belong to the same category device but often they are regarded as another group, the 'extended family'.

Closely related to the duplicative organisation is the hearer's maxim that explains that if we hear the mother to be the actual mother of the baby then we should not doubt it unless we are told otherwise. With this rule, Sacks was trying to understand how people experienced and constructed their social life based on the descriptions with which they were provided (Francis & Hester 2004). Each category comes with its own set of activities and obligations. Generally, it is the mother's obligation to care for a crying baby while crying is a normal activity of babies.

When Sacks talks about norms, he does not mean to use them as an account for any grounds of action. In fact, Sacks is more concerned about how viewers use their norms to construct any actions they observe (Silverman 1998). Considering the famous example from Sacks's *Lectures on Conversation*, 'x cried. Y picked it up',

we understand that ‘x’ is a baby and ‘y’ its mother because of the category-bound activities. Babies normally cry and it is the job of the mothers to pick them up. Hence, ‘if a member sees a category-bound activity being done, then, if one sees it being done by a member of a category to which the activity is bound, see it that way’ (Sacks 1992a, p. 259). One could argue that ‘y’ is the father but in the twenty-first century, most of the population hold the norm that it is primarily a mother’s responsibility to care for a crying baby. Thus, most people hear ‘y’ as being the mother rather than the father.

Positioned categories are categories that have ranking position. Considering our ‘baby’, the next position would be toddler, school child, adolescent and then adult (Sacks 1992a; Silverman 1998). Bearing in mind that each category has its own set of activities, this rule enables us to praise or criticise using higher- or lower-ranking categories as a reference point. In other words, we can praise a teenager as behaving like an ‘adult’ when being mature or scold when acting like a ‘cry baby’ (Silverman 1998). Moreover, we can do the same also in the case of ‘absent’ activities. For instance, when a young child does not cry when given a vaccination, we would praise it for being brave and often say, for example, ‘You are a big girl already’.

One of the prominent characteristics of CA is that it does not beseech ‘social structural factors’ when examining a phenomenon but rather enables the researcher to examine how individuals construct and communicate the experienced phenomenon (Sacks 1992a; Silverman 2013). Further, with CA and MCA, we examine how individuals construct their social world and events that take place as well as how they portray their identities in doing so (Silverman 1998, 2013). This focus of MCA intrigued me to explore and unfold new and enriching knowledge by examining the constructed narratives of my participants. In fact, MCA guided me

to study how people perceived and made sense of an experienced crisis and how they created resilience as a coping mechanism by using their different identities. To my knowledge, most studies that are concerned with the perception of high uncertainty and resilience creation during and after a crisis event have not applied MCA as a methodological approach before.

Another key characteristic of CA is its ability to produce a rich analysis from short sequences of communication (Silverman 2016). Further, CA empowers the researcher with a freedom to analyse data guided by their prior knowledge and interests rather than a rigid preset of hypotheses. Certainly, one could argue that preset hypotheses are informed by prior knowledge and interests. However, the difference is that CA allows the researcher to explore a wide range of theories and concepts guided by the actual data (Silverman 2016).

Whittle et al. (2015) used MCA to examine the function of categorisation practices in discursive leadership during times of strategic change. They demonstrated that categorisation enabled managers to 'frame situations, inform managerial sensemaking and intervention' (Whittle et al. 2015, p. 377). To construct their social environment, people form categories not only with its own set of obligations, rules, feelings, rights and actions but also with significant implications. Although categories are powerful, they are also often subtle and can be easily missed. This does not mean that categories are passive. In fact, one would argue that categories are very much active inasmuch as they are accepted and rejected, activated and inhibited, or acknowledged and ignored. In other words, even when people reject or silence a category, it is an active decision and action. Further, each category a person enacts is not just one particular component of the person's self but rather part of an interrelated whole that makes the person for they are. In most

circumstances, people like to 'own' their categories and the associated thinking and behaviour that come with each category. Nevertheless, categories can be in competition with each other and it is the person's active choice which category to enact or reject in any given situation.

Given that people acknowledge multiple categories, what would determine which category devices they will enact in any given situation? In accordance with prior research, categorisation will be determined by accessibility and fit (Hogg, Turner & Davidson 1990; Hornsey 2008; Turner & Reynolds 2011). In a given context, a person's perception of the social reality will influence their assessment and enactment of the best-fitting category from their constellation of category devices (Hornsey 2008). As Goffman (1981) asserted, people are social actors who perform identities in conversations. People negotiate and stage their identities in ways that they deem desirable (Charmaz & Bryant, cited in Silverman 2016). Consequently, they will choose a 'preferred' category device from their array of categories that they deem appropriate to understand and manage their social reality, enabling them to portray the persona through which they want to be known. Understanding people as a constellation of different category devices and as performers of those different categories encourages different analytical opportunities in contrast to methods that view people as 'a singular unified self' (Charmaz & Bryant, cited in Silverman 2016, p. 372).

My interest in MCA arose in the course of collecting data between January 2014 and June 2014 when, as a result of closely reading the material I had transcribed from a series of interviews, I became aware of the different types of sensemaking created by differential use of categories by the speakers. As stated, my research was guided by my interest in perceive uncertainty and crisis. As such, it was not a

prerequisite to interview expatriates but given they are more likely to experience uncertainty because they are foreign to their actual environment, I believed that this particular group of employees was more suitable to participate.

2.2 Triangulation

One of the goals of researchers is to increase the credibility and validity of their research, often achieved by using triangulation (Denzin, 1970, Thurmond, 2001), in which they combine 'two or more data sources, investigators, methodologic approaches, theoretical perspectives (Denzin, 1970), or analytical methods' (Thurmond, 2001, p. 253, Kimchi et al., 1991). When researchers use more than one type of triangulation, such as the utilisation of theoretical triangulation and data triangulation in the same study, it is referred to as multiple triangulation (Thurmond, 2001, Denzin, 2017). The most prominent type of triangulation is data triangulation, which consists of different sources of information such as employees, customers, suppliers and other community members. In my study, I identified different stakeholders such as employees (expatriates and local employees), government officials (from Egyptian Natural Gas/Egyptian General Petroleum Corporation), competitors (Apache Corporation, Eni S.p.A. and Petroliam Nasional Berhad) and contractors (Halliburton Company, Siemens and General Electrics). I intended to conduct interviews with at least three different stakeholder groups, which could then be compared to determine agreement and divergence across groups. However, I was only granted permission by one organisation to interview 13 of their expatriate employees. When I questioned their refusal to permit me to interview their local employees, I was informed that the Arab Spring was underway and that this was a very emotional topic for their local employees. Additionally, the organisation insisted on anonymity in all published material, including my thesis.

Nonetheless through MCA, I discovered that corporate category devices are a common denominator of perceived uncertainty, sensemaking and resilience, which in turn enabled me to accomplish theoretical triangulation. In theoretical triangulation, the researcher uses multiple theories or hypotheses to examine a phenomenon (Denzin, 2017, Thurmond, 2001). I achieved theoretical triangulation by combining perceived uncertainty, sensemaking and resilience, which provides credibility and validity for my thesis.

2.3 The Organisation and its Stake in Egypt and Libya

Organisations that operate in the oil and gas industry are generally more prone to the experience of uncertainty and crisis because most oil and gas reservoirs are located in areas that are subject to extreme natural conditions, such as the open sea or desert. Further, organisations in the oil and gas industry are often not from the country where most oil and gas reservoirs are located, which predetermines the experience of social–cultural and legal uncertainty for the organisations and their expatriate staff members. Since I am interested in investigating employee's sensemaking and resilience creation of their perceived uncertainty during a crisis, as mentioned above I decided to approach a number of stakeholders in the oil and gas industry operating in Northern Africa to participate in this study. Only one organisation accepted the invitation. The organisation that granted permission to interview 13 of its expatriates is a European energy company with oil and gas businesses around the world, including Egypt, Libya, Norway, Turkmenistan and Trinidad and Tobago. The dataset that was used for the analysis comprises 13 semi-structured interviews with expatriates working for a European oil and gas company during the Arab Spring in Cairo, Egypt, and annual reports dating from 2010 to

2015. All interviews were audio-recorded and transcribed, resulting in 151 pages of data. The annual reports from 2010 to 2015 result in 252 pages of data.

According to the organisation's annual report (2010, p. 20), the organisation was able to enter into new concession and gas purchase agreements in Egypt that would lead to an investment of '3.6 million US dollars in developing the Giza, Fayoum, Raven, Taurus and Libra gas fields'. Further, it was predicted that these concessions and agreements will yield to 'more than 50 billion cubic metres of natural gas' of which 3 billion cubic metres of gas are to be produced for the organisation's stake annually over a period of 20 years (Annual Report 2010, p. 20). All in all, the organisation has been operating in Egypt for over 30 years (Annual Report 2011, p. 31). Regarding its operations in Libya, the organisation was able to negotiate 'a new agreement for future exploration and field development work of their past finds in the NC193 and NC195 concessions with the state-owned Libyan oil company NOC' (Annual Report 2010, p. 20).

By the end of 2010, the organisation reported that 74 of its employees were working overseas for an extended period of time on expatriate contracts (Annual Report 2010, p. 21). At the time of the interviews (first six months of 2014), the company had a total of 67 expatriates located in Egypt, Libya, Turkmenistan, the United Kingdom (UK), Norway and Trinidad and Tobago. The majority of expatriates were assigned from headquarters to those countries to fill vacant positions. Almost all expatriates had held management-level positions in the subsidiaries of the host country. Expatriates from headquarters are normally assigned a two- to three-year contract with the possibility of extensions on a yearly basis. In terms of expatriate preparedness of their overseas assignment, the organisation prided itself by stating, 'we prepare these employees particularly intensively for their foreign assignment,

which sometimes last several years' (Annual Report 2010, p. 34) on topics of culture, politics, social issues, climate and business methods for their assigned countries. Moreover, the organisation reported that 'we contribute to the success of these foreign assignments by taking care of the employees and their families during their stay abroad and during the subsequent reintegration phase' (Annual Report 2010, p. 35).

In addition to sending local employees on expatriate assignments, the company also employs consultants or self-initiated expatriates from other countries on expatriate contracts. By the end of 2012, a UK subsidiary was established functioning as a 'home port', specifically selecting a crew of highly qualified, self-initiated expatriates 'who can be deployed to all the countries where' (Annual Report 2012, p. 33) the organisation operates. Further, the organisation's 2012 Annual Report states that 'the new deployment model differs substantially from the existing expatriate system, which will continue to exist in its current form' (p. 33), suggesting that self-initiated expatriates work on projects until their assignment is completed whereas the classic expatriate contract is for 'a limited time and intended as one-off missions' (Annual Report 2012, p. 33). Consultants are normally employed on six-month contracts with the option of continuous six-month renewals. In some cases, people from headquarters are also assigned expatriate positions as training measures to support their projects on a short-term basis (normally on a six- to 12-month basis). Employees that come from headquarters on expatriate contracts have more privileges over consultants and short-term employees, as they can also bring their families with them and are provided with a budget for international schools, housing and flights.

2.4 Expatriates

Expatriates are defined as employees assigned from headquarters to work and live in another country for a certain time of period (Harzing 2002; McEvoy 2011). Standard expatriate assignments are of two- to five-year lengths (Jassawalla & Sashittal 2011) but sometimes companies employ expatriates for six-month periods with the option of extension. At times, such extensions can amount to more than five years. Certainly, such short-term extensions can cause high levels of job insecurity and uncertainty for the expatriate and their family.

According to Edström and Galbraith (1977), the reasons for employing expatriates are threefold. First, it enables the organisation to employ people with desired technical knowledge and skills that might be lacking in the subsidiary country. Second, national managers are able to increase their experience and knowledge by being employed in a different national context. Third, the organisation is able to enhance its development via knowledge transfer from the headquarters to the peripheral country and through the creation and implementation of an information network (Edström & Galbraith 1977; Harzing 2002). Further, Harzing (2002) argued that organisations use expatriates as a 'control mechanism' to ensure that subsidiaries comply with the business culture of headquarters. Depending on the type of control mechanism, Harzing (2002) suggested that expatriates will be classified as 'bears, bumblebees, and spiders'. As bears, expatriates ensure that decision-making in the subsidiary is synchronised with headquarters, which is viewed as a direct type of control. As bumblebees, they exercise their control in terms of socialisation and the creation of shared values. Spiders execute the establishment of communication networks through the webs of networks that they weave. Both of the latter are indirect control mechanisms (Harzing 2002).

In the classical management literature, expatriates are mainly treated as employees that have been assignment from headquarters to a project that is executed in a foreign country (McEvoy 2011). Nonetheless, many global companies also employ people from third countries as well as self-initiated expatriates (Aiken 2013; Peltokorpi 2008,) on expatriate contracts. For example, a Dutch company can hire someone from Italy to work as an expatriate for them in Africa, or the company may find a Canadian that has already worked in Africa for another company as an expatriate and the Dutch company hires them for their own project in Africa. The difference between an expatriate that has been assigned from headquarters or a third country to a self-initiated expatriate is that the self-initiated expatriate often already has working rights and experience in the host country, or has experience working and living as an expatriate somewhere else.

According to recent studies, about 40 per cent of all expatriates fail to accomplish their overseas contract assignment (Aiken 2013; Jassawalla & Sashittal 2011). Factors contributing to expatriate success or failure are said to be the type, length and location of assignment (Kühlmann & Hutchings 2010). One could argue that assignment type, length and location apply to any project success or failure regardless of whether expatriates or local employees are involved in its accomplishment. However, expatriates are more likely to experience uncertainty due to their ignorance of the host country's political, economic, social, cultural, technological, legal and natural systems.

2.4.1 The Sample

Now I shall introduce the cast of characters—the interviewees—with a brief note about their experience and backgrounds. In what follows, when the 'home country' is referred to it denotes the country of origin of the global firm in question.

Andrew is an expatriate of South African and Greek ancestry. As an expatriate, he had only worked in Cairo for two years and four months but had working experience in South Africa, the UK and Swaziland. Andrew had been working as a mechanical engineer in the oil and gas industry for about 10 years. At the time of the interviews, he worked as the site and construction supervisor ensuring that all packages were completed correctly and on time. He was one of the consultants on a six-month contract.

Carl is originally from the home country and had worked for three years as an expatriate in Egypt. All in all, he has 15 years work experience in the oil and gas business. At the time of the interviews, Carl was back at headquarters and employed as the general manager of exploration in North Africa. However, during his time as an expatriate in Egypt, he was the head of the exploration department and responsible for all explorations in the Nile Delta.

Claude is originally from the home country and has 14 years work experience in the oil and gas industry. He has worked as an expatriate for three years in Cairo, Egypt, as a senior representative of the controlling department. He was originally on a two-year expatriate assignment but extended his assignment by one more year.

Dave is from the UK and has worked for about seven and a half years as an expatriate in Egypt. He has also worked in the UK, Norway and South Africa for some time. All in all, Dave has 26 years of work experience in the oil and gas industry. At the time of the interviews, Dave was the contractual procurement manager for the major projects in Egypt. Dave was assigned a six-month contract as a consultant but his contract was extended every six months, resulting in an overall assignment of over seven years.

Daniel is from the home country and holds the position of audit manager. He overlooks all auditing procedures in Scandinavia, Spain, Holland, the UK, Scotland, Egypt, Libya, Nigeria, Turkmenistan, Trinidad Tobago and the United States of America. Daniel has also worked for one year in Thailand but was not on an expatriate contract at that time. He has worked six and a half years in the oil and gas industry.

David is originally from Canada and has 27 years of work experience in oil and gas. Since 2002, David has worked in Kazakhstan, Russia, Serbia and Egypt as a self-employed expatriate on a consultant contract. Consequently, David has worked for different oil and gas companies in each of the four countries. In Egypt, he worked as the project director with an emphasis on engineering technical support. Originally, David was an electrical engineer and has also worked for four years in the mining industry.

Efe is originally from Turkey and has 10 years work experience in the oil and gas industry. He has worked in Egypt and headquarters as an expatriate for seven years. Efe was a senior petroleum engineer responsible for monitoring daily oil and gas production, as well as reporting to headquarters and planning further development options.

Harry is originally from the home country and has been working for over 20 years in the oil and gas industry. He worked for over seven years as an expatriate in Egypt as the reservoir simulation and reserves manager. Harry was on a three-year expatriate contract that was extended another three years with an additional one-year extension.

Ian is from the home country and has six years work experience as an expatriate in Egypt. Overall, he has worked for 15 years in the oil and gas industry. At the time

of the interviews, Ian had returned to headquarters as the head of business planning, while in Egypt he held the position of head of finance. His responsibilities as the head of business planning comprise corporate planning of operational businesses for headquarters and all subsidiaries in Norway, Egypt, the UK, Turkmenistan, Slovenia and Trinidad and Tobago. Ian was on two expatriate contracts each for a three-year duration. In-between his expatriate assignments, he worked at headquarters.

Johan is from the home country and has been working in the oil and gas industry for 22 years. He worked as an expatriate for four years of which one year was spent in Libya and three years in Egypt. During his time in Egypt, he was the exploration manager. Johan was originally on a three-year expatriate contract in Libya but due to the war that developed as a mismanagement of the Arab Spring, Johan's contract was changed to a three-year expatriate contract in Egypt.

Mark's father is from Spain and his mother from the home country. Mark has spent the first 13 years of his life in Spain and then moved to the home country. Overall, he has working experience in Spain, Norway, the UK, Egypt and the United States of America. He has been working in the oil and gas industry for over three years and holds the position of category manager in the procurement department at headquarters. Mark was one of the few people to whom headquarters assigned a short-term contract as a training measure and as support staff.

Maria is from the home country and has worked as a category analyst and category manager for over three years in the oil and gas industry. She had worked for six months in Egypt as an expatriate at the time of the interviews. As in Mark's case, Maria was also assigned a training and support staff contract for supporting the main project in Egypt.

Bob is from the UK and has worked for over 35 years as an expatriate in the oil and gas industry in countries such as Oman, Nigeria, Malaysia, Norway and Egypt. He is a trained mechanical engineer but occupies the position of an independent consultant project manager overlooking the construction and commissioning phase of projects concerning all surface facilities and equipment. Moreover, Bob received his engineering degree as a Royal Navy officer and is a self-initiated expatriate.

Ali is originally from the host country (Egypt) and was on an expatriate assignment in the home country (headquarters) at the time of the interviews. Therefore, the company allowed him to participate at the interviews. At the time of the interview, he was responsible for negotiating with the government and other business partners to obtain commissions to explore and produce oil and gas in Egypt, Norway and the UK.

Sarah is originally from the home country and has worked for seven months as an expatriate in Egypt. Sarah had worked in the oil and gas industry for four years at the time of the interviews. Her position within the human resource department as global mobility adviser means she is responsible for taking care of all 67 expatriates of the company. In her capacity as the global mobility adviser, Sarah works closely with the expatriates in the management of issues concerning their assignments such as schooling of dependent children, housing, taxation, social security and spouse working rights. Sarah's expatriate assignment was a training measure intended to enable her to understand the process and related issues of expatriate experience.

Werner is originally from Austria and has 14 years of work experience in the oil and gas industry. He was the deputy operations manager in Egypt on a second expatriate contract. In total, he had worked in Egypt for nearly five years as an expatriate at the time of the interviews. Werner was not on a consultant expatriate

contract although he is not from the home country. However, because he held European citizenship, he had initially applied for a position at headquarters but was later offered an expatriate assignment package for Egypt.

In this chapter, I have described MCA and its exceptional powers as an analytical means to uncover deep insights into any given research problem. I have also justified and introduced the expatriates that are the sample of this study.

Chapter 3: Defining Crisis

This chapter presents a definition of my understanding of what a crisis is by discussing potential sources, effects and consequences of crises in general followed by the particular crisis that motivated this research. Moreover, I will discuss the different perspectives relating to crisis management and highlight the position my study takes within those perspectives.

Organisations are subject to the dynamics of their environment. Therefore, it is not surprising that organisations are prone to crisis events. A crisis is the 'result of multiple causes, which interact over time to produce a threat with devastating potential' (Boin & McConnell 2007, p. 46). Although no two crises are alike, there are unifying characteristics to all crises in that they pose a potentially serious threat to the core function of an organisation (Snyder et al. 2006; Weick 1988) and are ambiguous in terms of state and effect (Milliken 1987; Quarantelli 1988). Nevertheless, crises do vary on multiple attributes, such as duration and magnitude (Snyder et al. 2006), frequency and nature (Boin 2009). Consequently, crises are multidimensional phenomena that can be studied from different perspectives. According to Pearson and Clair (1998, p. 1), 'researchers believe that psychological, social–political, and technological–structural issues should be explicitly considered and integrated when studying and managing organizational crises'.

From a *technological–structural* view, the term *technology* refers to any organisational machinery and equipment, such as pipes, drills, compressors, filters and pumps that are used, for example, in the oil and gas industry. The term *structural* refers to management procedures and policies. Moreover, this particular

perspective states that an interaction failure with both components can be a source of organisational crises. Consequences associated with a failure regarding the management of organisational machinery and organisational practices are employee injury, death, destruction and pollution of the natural environment (Pearson & Clair 1998; Vogus, Sutcliffe & Weick 2010; Weick 2010), such as the Chernobyl disaster and the Shell oil spill into the Gulf of Mexico. Coping with such crises involves immediate damage control in the form of individual evacuation, treatment and the recovery of tangible assets (e.g., buildings and equipment) and intangible assets (e.g., employee trust, organisational reputation and customer loyalty) (Fee et al. 2017; Pearson & Clair 1998).

Regarding the social–political perspective, a crisis is the basis of cultural and institutional symbols, meanings and ideologies. The reasons of a crisis are a collective collapse of sensemaking and corporate identity construction, resulting in a breakdown of social order and followership (Pearson & Clair 1998; Weick 1993, 2010). Weick's (1993) noted analysis of the Mann Gulch disaster proposed group communication and group intimacy as key factors in determining the survival of group members. Coping with a crisis often demands a post-evaluation and reconstruction of old values, collective behaviour and relationships (Pearson & Clair 1998).

From a psychological view, crises should be regarded from the viewpoint of the person who is experiencing it. As such, the psychological view involves the application of psychological research and cognitive studies (Maitlis & Sonenshein 2010; Pearson & Clair 1998; Weick 1988). Moreover, crises are associated with uncertainty, complexity and emotions while individuals that experience crises are understood to have limited stimuli-processing abilities (Milliken 1987; Pearson &

Clair 1998). The majority of research taking a psychological research perspective have investigated individual aspects in the creation of organisational crisis (Meyer 1982; Weick 1988, 2010). Little research has concentrated on individuals' experiences of organisational crisis (Pearson & Clair 1998). In recent years, studies that engage with a psychoanalytic basis are often related to mental health and trauma (Boin 2009; Pearson & Clair 1998; Pfefferbaum et al. 2008; Rosenthal, Boin & Comfort 2001). Research that embraces a trauma perspective in studying organisational crisis emphasises that a crisis can force employees to disillusion and reorganisation of their assumptions about themselves, the organisation, their culture, structural relationships and corporate role identities (Boin 2009; Pearson & Clair 1998; Norris et al. 2008; Rosenthal, Boin & Comfort 2001). Pearson and Clair (1998) suggested that employees' trauma experience will have an organisational-level effect and that employees enact an important role in organisational crises. Since this study is motivated in investigating the effect on employees, in particular expatriates, of their cognitive and behavioural experiences in the form of uncertainty perceptions, sensemaking and resilience construction during and after an organisational crisis, I embed my research in line with psychological and social–political perspectives. Although the organisation in my study had to evacuate its expatriates out of Egypt and Libya, the actual crisis was not caused by a failure in mismanagement regarding any machinery or management practices. Therefore, the technological–structural perspective is not voiced in my study.

3.1 Sources of Crises

Other means to distinguish between crises are based on the sources that trigger a crisis, such as the '*centre of gravity*' (external/internal) and '*frequency*' (normal/abnormal) (Snyder et al. 2006). Milliken (1987) asserted that it is not

'*frequency of change*' that causes people to perceive a crisis as a crisis but rather the unknown about the event in terms of state, effect and response. According to Hannah et al. (2009, p. 898) and Casto (2014, p. 25), an abnormal or extreme event has to reach the 'threshold of intolerable magnitude' to be classified as such. Nonetheless, when people talk about a crisis, not only do they often refer to it according to its frequency of occurrence, magnitude or centre of gravity but also to the actual triggers that are often subdivided into external and internal sources.

External sources of crises that operate at a macro level are said to be of a political, economic, sociocultural, technological, legal and environmental nature. In addition, external sources contributing to a crisis at a micro level would be suppliers, competitors, consumers, unions and governments (Ashill & Jobber 2001). Table 1 outlines classical examples for each of the sources.

At an internal level, crisis sources are initiated by employees or are related to the physical buildings and equipment. As I have already mentioned under the technology–structural perspective, a mismanagement of the complex interactions between actors and technology can lead to devastating crises (Pearson & Clair 1998). Once again, Table 1 outlines classical examples for each of the internal sources.

Table 1: Sources of Crises

External Crisis (Macro Level)	
Political	Terrorism, revolution, war
Economic	Depression, currency deflation, economic sanctions
Sociocultural	Consumer-initiated brand boycotts (e.g., religiously motivated), revolution
Technological	Cyber attacks

Legal	Industry deregulation, dissolution of parliament and constitution
Natural	Earthquake, flooding, hurricane, tsunami, bushfires
External Crisis (Micro Level)	
Suppliers	Supplier failure, bankruptcy
Competitors	Industrial espionage, hostile takeover
Consumer	Product or brand boycott, product tempering, corporate blackmailing
Union	Strike, lobbying
Governments	Political and legal regulations restricting business operations
Internal Crisis	
Physical	Accidents, equipment and building failure, fire
Personnel	Sexual harassment, vandalism, communication breakdown

It is important to note that each source is dynamic and tightly coupled with the other sources. Although each source has the potential to create a crisis on its own, it is often the complex interplay between the sources that generates an abnormal event with devastating consequences. As mentioned before, a growing number of crises have '*transboundary effects*' that encompass multiple systems and subsystems at the same time (Boin 2009). The political uprisings in Northern Africa, the Arabian Peninsula and Middle East in the beginning of 2011 had major organisational effects as a consequence of the political, economic, social, cultural and legal responses. The uprising started as a people's movement against the prevailing governments in the involved countries. Tunisia was the first country in which the '*people's revolution*' started that later on spread to Egypt, Libya, Yemen, Bahrain and Syria. The main reasons attributed to the uprisings were dictatorship,

corruption, economic struggles and high unemployment (in particular among the young educated population), poverty and human rights violation. The involvement of technologies and the social media contributing to the organisation of mass protests and demonstration is an interesting source in itself. With the Arab Spring, we can see how the interplay of multiple sources construct the phenomena and add to its complexity. In my research, I will concentrate only on Egypt as an example of the Arab Spring because the organisation participating was primarily operating in Egypt and to a minimal extent in Libya. Last, the expatriates that participated in my study were all working in Egypt and not Libya.

3.2 Effects of Crises

The overall effects often associated with crisis events are restrictions to the 'status quo' of business operations. Such restrictions to normal business operations are often associated with limited working hours and regulated movements of employees, renegotiations of contracts and reduced plant operations. In severe circumstances, employee evacuations become a necessity when employee safety is at risk and in rare cases organisations may be forced to exit markets permanently.

On a country level, Libya and Egypt's economy were profoundly dependent on their oil and gas industry. The exploration, production and export of oil and gas came almost to a halt during the political unrests in Libya and Egypt at that time. At an organisational level, the oil and gas company participating in this study experienced the effect of the uprisings in Egypt in multiple ways. Violence erupted—many people died on the streets and hundreds were arrested during the protests. In the first few days, the organisation was forced to evacuate all its expatriate employees and accompanying families out of the country for a period of around six weeks. Curfews imposed by the Egyptian military led to temporary shutdowns of plants

and side operations. In Libya, the company was forced to evacuate all expatriates and exit the country permanently.

After the initial overthrow of the Mubarak regime, suspension of the Egyptian constitution and dissolution of the parliament and when the immediacy of the situation had calmed, the company was able to reinstate normal business operations by flying back all its expatriate employees. Due to the changes in legislations, contract renegotiations were an additional effect of the uprising on the business operations for the company.

With the overthrow of the Morsi regime, the organisation was for a second time required to evacuate all family members of expatriates and some of its expatriates. After the first evacuation, the organisation as a learning outcome composed a list of so-called '*essentials*' expatriates: those who were not evacuated unless an actual civil war took place in the host country. *Essentials* were the general manager and all department heads.

3.3 Consequences of Crises

While events such as the Fukushima disaster or Arab Spring do not happen on a daily or monthly basis, they do occur randomly and occasionally and when they do they have an enormous destructive power with substantial associated costs. Other potential consequences experienced as a result of a crisis are often associated with dissonance (Brehm 1966, 1989; Brehm & Brehm 2013), confusion (Mitchell, Walsh & Yamin 2005; Walsh & Mitchell 2010), perceived uncertainty (Ashill & Jobber 2014; Milliken 1987), communication breakdown (Weick 2010) and employee injuries and death (Weick 1993).

Confusion is regarded as a state of mind affecting an individual's ability to process information (Mitchell & Papavassiliou 1999). Confusion has been proposed as a multidimensional construct consisting of similarity confusion, overload confusion and ambiguity confusion (Mitchell, Walsh & Yamin 2005). Similarity confusion occurs when people perceive stimuli as being too akin, affecting their ability to distinguish accurately between the presented information, whereas overload confusion arises when individuals are confronted with too much information (Mitchell & Kearney 2002; Walsh et al. 2007). Ambiguity confusion takes place when stimuli are vague or incomplete (Walsh & Mitchell 2010). Considering that a crisis situation demands urgency in information processing but at the same time disrupts the flow and nature of information being transferred, it is understandable that during a crisis people will experience confusion. Consequences of confusion that have been reported are negative dissonance, frustration, dissatisfaction and decision postponement (Mitchell & Papavassiliou 1999; Mitchell, Walsh & Yamin 2005; Walsh et al. 2007). Further, individuals that are confused are more inclined to make irrational decisions or to postpone their decision to a later point in time (Mitchell & Papavassiliou 1997; Walsh & Mitchell 2008). This can have major implications for individuals and organisations during a crisis. Closely related to the conceptualisation of a lack or inability to process information in organisational behaviour studies is the concept of perceived uncertainty.

3.3.1 Perceived Uncertainty and Crisis Management

The concept of perceived environmental uncertainty originates from the field of organisational behaviour (Gerloff, Muir & Bodensteiner 1991; Li, Bingham & Umphress 2007; Milliken 1990) and has been researched further in various fields, such as strategic management (Hough & White 2004; Sawyerr, McGee & Peterson

2003; Song & Montoya-Weiss 2001), information systems (Karimi, Somers & Grupta 2004; Mangaliso 1995) and marketing (Achrol & Stern 1988; Ashill & Jobber 2001, 2010). Often the terms risk and uncertainty are used interchangeably in the literature but it is vital to distinguish between the two terms. Miller (1992, p. 312) stated that risk refers 'exclusively to unpredictability in corporate outcome variables' while uncertainty denotes 'the unpredictability of environmental or organizational variables that impact corporate performance or the inadequacy of information about these variables'. Hence, uncertainty decreases the 'predictability of corporate performance, that is, increases risk' (Miller 1992, p. 312). Moreover, some researchers have strongly advocated studying environmental uncertainty as a perceptual construct (Child 1972; Downey & Slocum 1975; Milliken 1987) while others have cautioned that doing so could condemn the construct to become a study of 'psychoanalysis' (Tinker 1976, p. 507). Milliken (1987) defined perceived environmental uncertainty as an individual's lack of adequate information to make precise predictions about their environment.

One noteworthy critique is the work by McMullen & Shepherd (2006). Milliken's claim to distinguish between different types of uncertainty only applies in the context of understanding what uncertainty is rather than what it does (McMullen & Shepherd 2006). McMullen and Shepherd (2006, p. 135) asserted that managers would ask three simple questions: for state uncertainty, 'What is happening out there?', for effect uncertainty, 'How will it affect me?' and for response uncertainty, 'What am I going to do about it?'. The asking of such questions necessitates an employee to form a belief that denotes the presence of doubt and uncertainty (McMullen & Shepherd 2006). Consequently, a researcher seeking to study perceived environmental uncertainty as what it does (e.g., hesitancy and indecisiveness) should not provoke the manifestation of doubt and uncertainty by

asking such questions. Therefore, they should not need to distinguish between the three types of uncertainty (McMullen & Shepherd 2006). Notwithstanding, I argue that it is inevitable to study what perceived environmental uncertainty is before assessing what it does, agreeing with Milliken (1987) on distinguishing between the different types of uncertainty.

Even though perceived environmental uncertainty has been a well-researched concept in organisational studies, its review suggests that its research potential has not been exhausted. At some levels, the entire power of the concept is less developed than it should be in explaining the relationship between an organisation and a turbulent crisis-ridden environment. Hence, in this thesis I will concentrate on the experience of perceived uncertainty as the main consequence of a crisis. In doing so, I wish to contribute to the shortcomings relating to the definition and construction of perceived uncertainty.

Other noteworthy concepts and theories that contribute to our current understanding of crisis definition and management often lie in the realms of crisis preparedness or crisis responses. For instance, readiness theory asks that organisations be at least somewhat prepared for a crisis situation with contingency planning (Casto 2014; Weiner 2009). Smits and Ezzat Ally (2003) asserted that organisations should have laid out emergency procedures and roles, knowledge and rehearsals that will establish a readiness when a crisis unfolds. I acknowledge that the idea of crisis preparation could be useful to a certain extent, in particular when rather 'routine' crisis events occur. Yet, by definition a crisis is never really a 'routine' phenomenon, making it nearly impossible for organisations to accurately predict and prepare accordingly (Quarantelli 1988). Moreover, the idea of readiness can instil an 'optimistic bias', contributing to an ignorant confidence that falsifies one's

assessment and management of a crisis (Casto 2014; Joffe 2003). Research has established that one's perception of crisis has only limited or no effect on one's readiness for a crisis. Solberg, Rosetto and Joffe (2010, p. 1665) asserted that people who live in 'seismically active areas, who have had past experience of earthquakes, do not manifest ongoing concern regarding their vulnerability' to earthquakes, contributing little to their preparedness. In fact, the experience and perception of crisis events such as earthquakes creates an opportunity to construct and share narratives (Er 2003; Solberg, Rosetto & Joffe 2010). The creation, rehearsal and retelling of narratives based on an experienced crisis enables a person to construct category devices about their self and other parties that were involved and influenced by the event.

3.4 Coping Strategies in Crisis Management

To ensure survival, an organisation's rate of learning has to be the same or even greater than the rate of change of its external environments (Revans 1982). Thus, organisational learning has been linked to organisational change and crisis management as a pre-eminent source of sustainable competitive advantage (Nevis et al. 1995; Škerlavaj & Dimövski 2006). As such, it has been associated with the resource-based view in which organisations use their learning capability as a distinctive resource that cannot easily be acquired and imitated by their competitors (Khadra & Rawabdeh 2006; Lui 2006). The key influences of organisational learning are survival in fast-changing and uncertain environments, the world being a global village undergoing a rapid change in technology (Kenny 2006; Mayo 2007; Senge 1990).

Galbraith (1974) stated that uncertainty depicts the gap between an organisation's acquired and required knowledge to operate successfully during times of crisis. It

is argued that organisations need to align to their environments, in particular if the environment is perceived to be uncertain, implying that organisations need the capacity to learn over time (Fiol & Lyles 1985; Miles 1982). Hence, learning is regarded as a necessity for an organisation to survive (Giles & Hargreaves 2006) and outperform its competitors. Further, researchers have often argued that learning mechanisms can help with coping and reducing uncertainty during and after a crisis (Carroll 1995; Ellis & Shpielberg 2003; Weick 1996).

One major shortcoming of organisational learning is the lack of a uniform definition (see Table 2) that can be attributed to the vast application of the theory to different academic disciplines, such as psychology, organisation theory, leadership and innovation (Argyris & Schön 1978; Crossan, Lane & White 1999; Fiol & Lyles 1985; Kim 1998; Levitt & March 1988; Nonaka 2008).

Table 2: Definitions of Organisational Learning

Authors	Definition
Argyris & Schön (1978, p. 2)	'A process by which members of an organisation detect error or anomaly and correct it by restricting organisational theory of action (the norms, assumption, and strategies inherent in collective practices) and by encoding and embedding the results in their inquiry in organisational maps and images.'
Garvin (1993, p. 80)	'An organization skilled at creating, acquiring, and transferring of knowledge and at modifying its behaviour to reflect new knowledge and insights.'

Edmondson & Moingeon (1998, p. 12)	'A process in which an organisation's members actively use data to guide behaviour in such a way as to promote ongoing adaptation of the organisation.'
Ellis & Shpielberg (2003, p. 1237)	'The process through which organization members develop shared knowledge based on analysis of data gathered from or provided by multiple sources, including the organizational members themselves.'

Communalities among the diverse definitions of organisational learning are that the concept is regarded as a process and that it involves individual members of an organisation. In accordance with the above definitions, organisational learning can be considered a process in which individual members of the organisation use information (from their environment) to create knowledge and capabilities to ensure the organisation's competitiveness (Argyris & Schön 1978; Ellis & Shpielberg 2003; Edmondson & Moingeon 1998; Garvin, 1993).

Different typologies have been asserted by researchers to explain organisational learning, such as single- versus double-loop learning (Argyris & Schön 1978), first-order versus second-order change (Watzlawick, Weakland & Fisch 2011) and generative versus adaptive learning (Senge et al. 2005). Single-loop learning encompasses learning from preceding actions to generate future patterns of action. As such, single-loop learning is a process based on observing the consequences of prior actions and using this new knowledge to correct future conduct (Argyris & Schön 1978). Although this type of learning is capable of solving problems, it is not able to identify the cause of the problem, resulting in corrective behaviour. Therefore, organisations that seek a deeper understanding of their own behaviour

in terms of cause and problem solving would have to engage in double-loop learning. Double-loop learning requires the organisation to question its own assumptions and actions and, when needed, is able to adjust its own way of organising (Argyris & Schön 1978; Daft & Weick 1984; Fiol & Lyles 1985). This ability of self-reflection in double-loop learning is often compared to the concept of autopoiesis (Hatch & Cunliffe 2013; Maturana & Varela 1980). Autopoietic systems are self-producing or self-organising systems that, in the learning context, mean that those systems learn to determine and modify their own behaviour, norms, objectives and distinctiveness (Chiva, Grandío & Alegre et al. 2010; Hatch & Cunliffe 2006; Maturana & Varela 1980).

Regarding the crisis learning literature, it distinguishes between pre-crisis learning, inter-crisis learning and intra-crisis learning. Inter-crisis learning involves learning from one crisis to manage a future crisis (retrospectively after the crisis happened), whereas intra-crisis learning means learning during a crisis to enhance responsiveness to the crisis while it is unfolding (Moynihan 2009; Smith & Elliott 2007). Inter-crisis learning includes learning that is accumulated after the experience of a crisis. Pre-crisis learning involves the scanning of the environment for cues of an emerging crisis (Spillan et al. 2011).

Realising the significance of a person's perception of their environment in their learning process and understanding of the organisation's external environment is of paramount importance. As Weick (1969) postulated, organisations know their environment through actor's perceptions and enactments. Moreover, Daft and Weick (1984) asserted that organisations differ in their assumptions about their ability to understand their environment. Therefore, organisations must realise the dynamics of their environment (Hall & Saias 1980), make sense of their

environment (Daft & Weick 1984; Maitlis 2005) and learn from previous and present changes in their environment to make appropriate strategic choices that will ensure the organisation's competitiveness and survival (Child 1997; Gephart 1993; Levinthal & March 1993; Weick 2010; Weick, Sutcliffe & Obstfeld 2005).

Nonetheless, learning, even in routine situations, can be incomplete (Moynihan 2008), proposing a potentially greater struggle of learning during a crisis situation. Moynihan (2008) stated that an overload of information is often overwhelming for people's capacity for cognitive evaluation. In routine situations, people might be able to cumulate sensemaking 'through trial and error learning' (Moynihan 2008, p. 350) but in a crisis situation this trial and error learning is not possible due to the urgency and magnitude of the situation. Organisation members will look for other means to learn and maximise their responses. I understand organisational learning as an ongoing, dynamic and collaborative process for sensemaking purposes (Lane & Lubatkin 1998; Weick, Sutcliffe & Obstfeld 2005).

There are other theories trying to explain the organisation–environment relationship. For instance, institutional models explain how organisations become isomorphic with their environments over time (DiMaggio & Powell 1983; Meyer & Rowan 1977). Other theories that derive from the organisation–environment relation are contingency theory, organisational adaptation and change and environmental uncertainty. Contingency theory proposes that organisations need to align with their environments to survive and prosper (Burns & Stalker 1961; Child 1972; Donaldson 2001; Lawrence & Lorsch 1967). The idea of an organisation–environment equilibrium is a central theme in contingency theory (Donaldson 2001) and change management theory (Lewin 1951). Lewin (1951) asserted that organisational change is about moving the organisation from one state of

equilibrium to the next. Meyer (1982, p. 516) stated that an environmental jolt moved 'hospitals away from their equilibria'. However, this idea of equilibrium seeking has been critiqued by some scholars, who stated that an organisation can only be successful if it maintains constant change (Weick & Quinn 1999) without trying to reach a state of equilibrium (Pascale 1990).

Further, early research into contingency theories measured environmental uncertainty as an objective state comprising complexity and rate of change in the environment (Duncan 1972; Milliken 1987). A major problem with measuring environmental uncertainty as an objective state was that conditions of the environment would be experienced in the same manner by all organisations operating in the environment. Nonetheless, Meyer's (1982) study is a good example that this is not the case and that environmental uncertainty should be measured as a perceptual phenomenon (Milliken 1987). In line with that statement, Weick (1969) asserted that it is not possible to separate an individual's perception of an environment and the actual environment. Moreover, in the Meyer (1982) study, administrators did not perceive the environmental jolts in the same way, so each hospital adapted to the jolts in a different way.

The paper by Meyer (1982) is a good illustration of the concept of an enacted environment. In accordance with the enacted environment view, an organisation will respond to its environment based on how it interprets and constructs the environment (Weick 1969). Hence, if an organisation understands its environment to be complex and ambiguous, it may not decide to influence its environment and only react in crisis (Weick 1969). Moreover, as Meyer (1982) stated, most scholars believe that jolts are threats for organisations and should be mitigated (Lant, Milliken & Batra 1992). Nevertheless, if organisations perceive sudden

environmental changes as an opportunity, they can create a source of better performance as was the case with one of the hospitals in Meyer's study (Weick 1969; Meyer 1982; Bradley et al. 2011).

Although readiness theory, organisational learning and contingency theory make valid contributions to our understanding of organisational behaviour and crisis management, it is theories such as organisational sensemaking and resilience that illuminate our knowledge at a higher level.

3.4.1 Sensemaking and Crisis Management

Organisational sensemaking is a process whereby organisational members interpret their environment through their interactions with others within and outside the organisation (Maitlis 2005). In fact, the interaction and inter-group processes of sensemaking play a significant role in mastering a crisis situation. For instance, Weick's (1993) analysis of the Mann Gulch disaster proposed group communication and group intimacy as key factors in determining the survival of group members. Sensemaking is a theory that explains the construction and interactions between category devices during a crisis.

Further, after Weick's (1988) initial research on sensemaking, the theory has divided into two paths. Some researchers have studied sensemaking as a crisis was unfolding (Kayes 2004; Vendelo & Rerup 2009) while others have studied sensemaking retrospectively after the crisis took place (Brown & Jones 2000; Casto 2014). Both paths of inquiry present their salient contributions to our understanding of sensemaking. Regardless of the path chosen, a central argument in sensemaking is that organisations construct the understanding used in sensemaking and the actions that could alternate the progression of an event (Weick 1988, 2010). In the Bhopal disaster, Weick (1988, p.305) asserted that 'there is a delicate tradeoff

between dangerous action which produces understanding and safe inaction which produces confusion', illustrating the key point of sensemaking. Weick (2010) argued that by advocating the construction and communication of beliefs and actions alerting people to the implications of their own actions as determinants of a crisis, the organisation might wish to prevent sensemaking through advance crisis prevention and management.

A note of caution is required, as is the case with readiness theory, regarding the notion of '*optimistic bias*'. During the process of sensemaking, people can be inclined to overlook or minimise cues that contradict their understanding or preconception (Casto 2014; Maitlis & Sonenshein 2010,). Closely related to the concept of optimistic bias is the concept of '*false optimism*' (Casto 2014) or '*minimisation*', in which people in a crisis situation downplay the severity of the crisis by making optimistic statements. Weick's (1993) work on the Mann Gulch fire of 1949 illustrates a great example of optimistic statements that constructed false optimism contributing to the death of 12 smoke jumpers (Weick, Sutcliffe & Obstfeld 2005).

Based on Weick's (1995) work, we know that during times of crisis it is imperative for organisations to establish a '*shared understanding*' that consists of *commitment, identity* and *expectations*. Commitment as a pillar of sensemaking generates meaning when facing uncertainty but it can also delude people into developing '*optimistic bias*'. Identity as a construct gains prominence because qualities that are attributed to identities are the means people use to create their understanding and behaviour. In the Mann Gulch fire, the smoke jumpers dropped their tools and ran (Weick 1993). Expectations are coupled with cues to create understanding. During

a crisis, people should adjust their expectations to address the unfolding changes (Casto 2014; Weick 1995; Weick & Quinn 1999).

In this study, I wish to contribute to the understanding of identity as a pillar of sensemaking and crisis management. I will do so by demonstrating how category devices are activated and abundant in the process and wake of sensemaking.

3.4.2 Resilience and Crisis Management

I have discussed with readiness theory that organisations that are prepared for a crisis are more likely to survive it and probably lessen any damage compared to organisations that are unprepared (Smits & Ezzat Ally 2003; Spillan et al. 2011; Spillan et al., 2014). Concepts, such as scenario planning, contingency planning and disaster simulation studies, are important elements to assist organisations with their crisis readiness (Casto 2014; Spillan et al. 2011). Yet, having a strategy to deal with a specific crisis does not mean one will be successful in implementing the strategy and emerge victoriously from the battlefield. In fact, scholars have pointed out that preparation is useful and should not be ignored but it has limitations when addressing the complexity of crisis situations (Casto 2014; Quarantelli 1988). Adaptation to crisis is as essential as preparation. Some crises have vague warning signs before they strike, making it almost impossible to predict them in terms of their true nature, magnitude, impact timing and location. As readiness theory suggests, scenario planning or disaster simulation can generate optimistic biases, suggesting that organisations believe that through planning they are able to reduce uncertainty (Casto 2014; Weick, Sutcliffe & Obstfeld 2005).

I do not disregard the necessity of planning per se. I caution that such actions should fall under the realm of sensemaking and understanding (Weick & Sutcliffe 2011) rather than scenario and contingency planning. Thus, I turn to organisational

sensemaking and resilience as more suitable theories explaining organisational coping strategies in times of crisis.

Although resilience has long-standing relevance in traditional organisational behaviour studies, it has just recently gained prominence in crisis management literature (Williams et al. 2017). According to Comfort, Boin and Demchak (2010), the reasons for its absence in crisis management literature might be because researchers have focused more on investigating causes and interactions of crises rather than how organisations are actually dealing with uncertainty and endurance of crisis. In line with other scholars, I believe that linking resilience and crisis would enable a deeper and 'more complete understanding of the organization–adversity relationship' (Boin et al. 2010; Williams et al. 2017, p. 740).

In terms of defining resilience, it has been generally described at a system, organisational or individual level. At a system level, resilience is understood as the 'capacity of a social system to proactively adapt to and recover from disturbances that are perceived within the system to fall outside the range of normal and expected disturbance' (Boin et al. 2010, p. 9; Williams et al. 2017). At an organisational level, resilience is defined as an organisational ability to react and recover from an environmental jolt (Meyer 1982; Vogus & Sutcliffe 2007). Often it is also understood as a coping strategy of uncertainty (Wildavsky 1988; Williams et al. 2017).

Concerning the individual level, Ungar (2008) stated that resilience is determined by the interaction that takes place between the individual and their social environment. Also, Ungar (2008) cautioned against defining resilience as a uniform concept but rather that it should be understood as an evolving process depending on the individual, environment and culture. In other words, resilience will change

depending on the individual, their environment and cultural understanding. Likewise, resilience is a process premised on an ability to mobilise resources and capabilities to turn a crisis situation into an opportunity (Linnenluecke, Griffiths & Winn 2012; Kantur & İşeri-Say 2012; Vogus, Sutcliffe & Weick 2010). In this study, the aim is to investigate how participants generate resilience while aligning decision-making with changes occurring in their environment. I will illuminate how, under high uncertainty, employee identities are activated and used as sources of resilience. At the same time, I will also illustrate how resilience when mobilised at an organisational level can entrap its employees into a form of 'stuckedness' that should be clearly distinguished as a negative form of resilience.

3.4.3 Overall Research Framework

Based on my literature review, I propose the following overall research framework (see Figure 1).

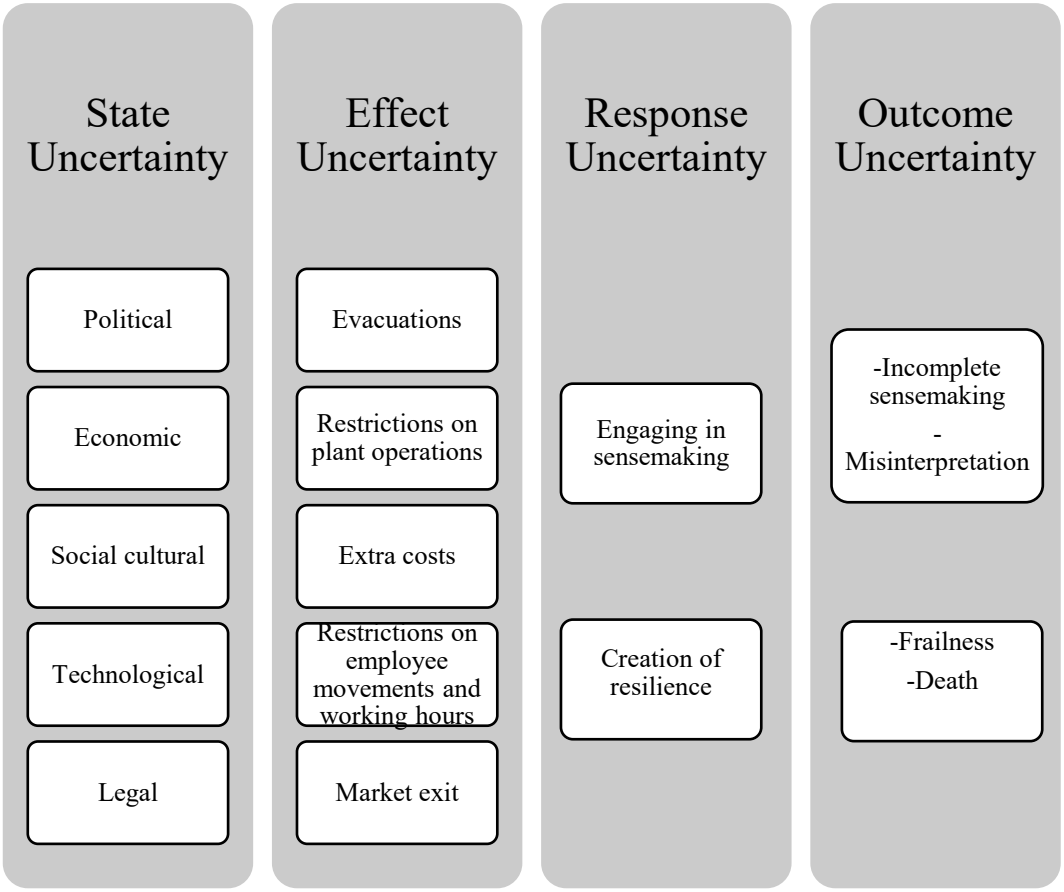

Figure 1: Overall Research Framework

The Arab Spring began at the end of 2010 as a response to an authoritarian regime in Tunisia that then spread to neighbouring countries in 2011. As of today, the Syrian Civil War, Libyan Civil War, Egyptian Crisis and Yemeni Crisis are large-scale conflicts classified under the umbrella term 'Arab Spring' or 'Arab Awakening'. The main reasons attributed to the uprisings were dictatorship, corruption, economic struggles and high unemployment (in particular among the young educated population), poverty and human rights violation. The involvement of technologies and social media contributing to the organisation of mass protests and demonstration is an interesting source in itself. With the Arab Spring, we can

observe how the interplay of multiple sources construct the phenomena and add to its complexity. In my research, I will concentrate only on the Egypt Crisis as an example of the Arab Spring because the organisation participating was primarily operating in Egypt and to a minimal extent in Libya. Last, the expatriates that participated in my study were all working in Egypt and not Libya.

From my interviews with the expatriates, I know that the organisation was present and operating before January 2011 and beyond June 2015 while Egypt underwent three major political changes as part of the Arab Spring. This fact allowed me to investigate how the expatriates of the organisation perceived, experienced and managed each political change. Moreover, the fact that each change was political in nature and occurred in the same location enabled me to draw conclusions as to the organisation's ability to incorporate sensemaking from previous crises. This allowed the organisation to alter its responses to minimise the effect of subsequent crises. Figure 1 summarises all aspects the expatriates voiced during their interviews regarding their crisis experience.

3.4.3.1 The Sources of the Crisis

Political unrest and instability were named by the interviewed expatriates as the primary external sources of uncertainty and contributing factors to their crisis perception:

> *Given that it's Egypt and I've been there through—to name the President Mubarak's era, the first revolution in 2011 another change of government after so called democratic elections with President Morsi being ousted and the current President Sisi. These were one, two, three dramatic changes on the political scene in the host country and they have an immediate and sometimes deep effect on undertaking oil and gas project in such a country*

... The concomitant security issues, a lot of people would say the personal risk is a little bit higher or it can be perceived to be higher. But I think as an expatriate we are a little bit more aware perhaps of these things and perhaps we have survived those, to put it in a word (Bob, p. 3).

Uncertain? I mean when I think of Egypt, of course, the first thing that comes into our mind is the security situation, of course, that this is an uncertain environment you go to because you can't really perceive the environment in the beginning, so it really takes time until you have an idea what you can do, what you can't do, especially as a woman (Sarah, p. 3).

Since there is a close interrelationship between other external sources of uncertainty (Ashill & Jobber 2001, 2014), it is not surprising that factors relating to the economy were also voiced by the expatriates:

Then another factor for sure is the oil price and how the oil price influence the project. So at the moment a lot of projects are stopped and that changed the market situation (Maria, p. 3).

Perhaps uncertainties applying to them all, we've seen it just recently at the end of last year is the global oil and gas price. I think the fall in the oil price and then following there will be a fall in gas price last year was a big surprise to the majority of people, so I've read (Bob, p. 5).

Some expatriates also named social–cultural aspects as potential sources of their uncertainty perception:

That has—had a certain effect, yes, on the whole energy business environment. But also with respect to fracking, that is a major discussion.

The society becoming more aware and more sensitive about what our industry is doing and if then sometimes things happen it's—it is under much more focus than it was let's say 10 years ago (Herbert, p. 3).

On the other hand side, I see also a certain uncertainty within the Egyptian society because it's a different culture, and also different behaviour in the working environment (Johan, p. 2).

I felt this as it had a big impact on me, that security issue, but also, on the other hand, for the working environment you really need to find out how people—what culture you work in. Egypt hierarchies are much lower in one respect. Then the people treat older colleagues with a much higher respect, and you really can't interfere when they have an opinion. That's usually—they make the decisions, so this is also a complete different working environment than we have in the home country, where everybody's more or less at an equal stage when it comes to age (Sarah, p. 3).

Of course, employees who consider legislation and working closely with government departments due to their corporate roles (as the human resource manager or procurement and contracts manager) voiced legal matters as a source of uncertainty:

So there we are, the contractual financial risks for a project and on a personal basis possibly security risks but personally I don't count it very highly, it's there but not so high. Those are risks but on the other hand there are fantastic advantages, which I think, more than out way such risks. Not that you asked that but there it is [laughs] (Bob, p. 3).

Yeah, quite often. I mean I experienced that in Egypt at least, that they issue certain laws which make it really difficult for us to operate as we have also joint ventures in the company when we operate. Then it's really difficult because there's diverse information sometimes. I think the government has other interests—even the interest that we pay more and they earn more money in the end. So this is really part of the game, I guess. Yeah, this causes also a lot of uncertainty (Sarah, p. 4).

When we deal with factors related to the environment you're in, [unclear]. Every environment you're in, there's laws, there's regulations, some of the regimes that we've just talked about, which are not—call it, classical Western regimes. The laws and regulations can be changed at a moment's notice, and catch you by surprise. I'm not saying that there aren't written laws, but there are written laws that they have. There are at times, when these things are changed or interpreted differently, and that can cause extreme amount of risk and uncertainty to the owners (David, p. 4).

First, we can observe a natural bias in the perception of uncertainty factors in employees based on their corporate identity and associated roles. This selectiveness in their consideration of potential uncertainty factors provides a good argument that some concepts like scenario planning can create 'bias' and 'blind spots' in people. In essence, scenario planning asks people to identify potential factors and scenarios in crises and then develop strategies and procedures addressing those crises. Now, if the process of selecting crisis factors is already biased because people only concentrate on the factors that have an immediate association with their corporate roles then surely the creation of actual scenarios and subsequent strategies will also be biased.

We observe that the selectiveness of uncertainty factors is multifaceted because it is dependent on the corporate category membership people enact that determines their selectiveness of perceived uncertainty factors. Moreover, we observe the role selectiveness of some of the expatriates, in particular the engineers, stated technology and its use as an important uncertainty factor:

> *Yeah I think there are probably two sides. On the one hand side, we are working in the exploration with certain risks and certain uncertainties. Because we don't know exactly do we find oil and gas? We only can do I would say a technical evaluation based on actual state of the art technology. Our work, that's one uncertainty. Nevertheless, we do not know exactly if we do find oil and gas. So from that point of view, there is a certain uncertainty within our business and our technical work (Johan, p. 2).*

> *There are technical factors as everywhere, especially I said before [brown oil], so all our—or most of our equipment is beyond design. Normally equipment is designed 25 to 30 years and it is producing 30 years, it's beyond design so you have to do inspections for recertification and reissue or issue the usage of the equipment for further years. So you have to look carefully at the maintenance, on that side. On the greenfields, it's basically start-up so no procedures are available so you have to prepare them and you have to bring certain standards into the organisation (Werner, p. 3).*

With Werner's statement, we can see the interrelationship between the technological components and equipment that are normally used in the oil and gas industry, such as pipes, pumps and compressors, and the natural environment, such as the type of field development with which the company is concerned. Werner is

the only person in my dataset that relates to the previously mentioned technological–structural perspective of crisis definition (Pearson & Clair 1998). Here, Werner discusses how in a 'brownfield development', a mismanagement of equipment in terms of maintenance can create a crisis. Conversely, a 'greenfield development' imposes uncertainty in terms of managerial procedures, addressing the structural aspect of the 'technological–structural' view.

Last, some expatriates also named the natural environment as a potential uncertainty factor:

> *Well if you are dealing with, for example, a prospect that you are going to drill and you don't have any analogue data, you are dealing with a wide range of uncertainties. For example, if you have really an oil deposit and you have a reservoir rock and the reservoir rock has physical properties such as porosities, permeability, a certain thickness of course and all these things—once you don't have a benchmark, an analogue—they are really, really uncertain. They only relate back to models that you basically determine beforehand, before drilling (Carl, p. 3).*

Carl's uncertainty account relates to the natural environment—the density and composition of the earth's layers and their effects on the drilling of an oil well. At the same time, his statement also refers to the technological source. We know that a crisis is the 'result of multiple causes, which interact over time to produce a threat with devastating potential' (Boin and McConnell 2007, p. 46). The classic strategic management literature discusses all the factors the expatriates in this study have voiced as potential crisis factors. Yet, Carl refers to technology as a means to manage the uncertainty arising from the natural environment. Consequently, we assert that the different sources of a crisis are in a complex relationship and that the

sources, in isolation or in combination, have not only the potential to trigger a crisis but also to contain or even prevent it.

3.4.3.2 The Effects of the Crisis

As the Arab Spring started to unfold in Egypt and Libya, the organisation (Annual Report 2011, p. 21) stated that:

> *As these crises started to develop, [we] decided at an early stage to evacuate the Company's employees and their families. This decision was vindicated by the events that followed. Even after the evacuation, we continued to look after our employees and their families. [We] supported them not only in finding work and arranging for work permits but also in their search for accommodation and places in schools and kindergartens.*

In 2012, the organisation reported that field development projects in Egypt were resumed a few weeks after the first revolution. Regarding Libya, the organisation stated that 'due to the political upheaval and unstable situation still prevailing in Libya, the projects have suffered delays' (Annual Report 2012, p. 28).

As a result of the Arab Spring in Egypt and Libya, the organisation hired professional local security firms as a means of crisis prevention and management (Annual Report 2012, p. 23). This measurement ensured that the organisation was able to:

> *Rapidly evaluate information regarding changes in the security situation as they unfold [which] allows [us] to gear up for the implementation of additional measures to ensure the highest possible levels of security for our staff and their families (Annual Report 2012, p. 23).*

The organisation (Annual Report 2013, p. 25) made a clear updated statement concerning employee safety and wellbeing in Libya for that year in its annual report of 2013 by stating:

> *We have thus far sent only a small team of international experts to Libya, without their families, due to the continuing lack of clarity regarding the situation in that country. The work of the core workforce of more than 50 Libyan employees continues.*

Regarding the effects of the Arab Spring, all expatriates named expatriate evacuations during the first and second revolution in Egypt as the primary factor:

> *Then probably—I guess everybody in Egypt who's been there in the last years would say the revolution in 2011 was it ... That was probably the biggest crisis that I've experienced. Yes, I'm trying to think. Yes and it was a little bit worrying when all communications were cut off, mobile phones and so on. We were relying on information from the satellite television news and so on. Gunfire every evening, vigilantes in the streets, yeah very interesting [laughs] ... The Company still has very good—what do you call it—security organisation and procedures which were put into operation and we followed those. After I think three or four days there were various evacuation flights (Bob, p. 7).*

> *We also had the situation in 2013 where we evacuated our employees because there were signs of another—of riots actually. So our QHC department told us—and our board has decided to evacuate people. So that was, of course, for us, also a difficult situation because it's always strange when you sit in the home country and the media sometimes really*

biasing information also. Until you talk to ex-patriots—it's a lot of different perceptions of the situation, so it wasn't really easy to handle (Sarah, p. 5).

Although Sarah's reporting is different from Bob's because she was actually working at headquarters at the time of the revolutions, we observe that both employees construct narratives when they report on the effects of the Arab Spring. Further, both accounts illustrate the complex and close relationship between the sources and effects of crises. Yet, people make meaningful distinctions between the different sources and effects of crises, advocating a multidimensional conceptualisation of perceived uncertainty.

The below two statements talk about an increase of costs, loss of time, changes to contracts and project delay as examples of uncertainty effects experienced due to the Arab Spring. However, again, we observe that the construct is multifaceted:

Until again, the risk assessment people determined, okay we think everything is calm again, business is normal we can then bring our people back, and continue on. Of course that costs—again—the project extra money, and people, and lost time, and then of course delays (David, p. 8).

Including probably the most fundamental is the threat to the contracts, which are signed at the beginning of a project. For example, including the amount of oil and gas to be produced and the price that the host country is willing to pay for it (Bob, p. 3).

In a situation we were in there, there was a certain minimum of staff that was maintained in Egypt, to carry on, just keeping the business moving

forward. But there was very limited gains in it, so definitely there was the delay in a project (David, pp. 5–6).

Each effect is interrelated with the other uncertainty effects in that it can influence the magnitude of and even trigger other effects. For instance, the need for an evacuation of expatriates is an effect of the Arab Spring. However, it also functioned as a cause of project delay and extra costs (i.e., evacuation flights, accommodation and car rental for expatriates during their time working at headquarters):

Perhaps uncertainties applying to them all, we've seen it just recently at the end of last year is the global oil and gas price. I think the fall in the oil price and then following there will be a fall in gas price last year was a big surprise to the majority of people, so I've read. These quite clearly have an impact immediately on projects. In countries where the national income or the GDP as we call it is highly dependent on that natural resource, then the effects are immediate. I saw that in the mid 80s in Nigeria and we've seen it recently in Egypt where projects are put on hold. I think I'm going off topic, bring me back (Bob, p. 5).

Bob's statement about sources and their effects is almost suggesting a linear relationship between the different uncertainty constructs. One might think that people would first experience state uncertainty and then effect uncertainty followed by response uncertainty. Indeed, when regarding the perceived uncertainty literature, this linear interrelationship between the constructs is being echoed by some researchers (Ashill & Jobber, 2001, 2010; Gerloff et al. 1991), who stated that an increase in state uncertainty would lead to an increase in effect uncertainty. Yet I advocate that the relationship between the different uncertainty constructs are far

more complex, as multiple constellations are possible. For instance, if we told a person living in California that there will be an earthquake in their region at 5 am tomorrow morning, but withhold the exact magnitude of the earthquake, the person could experience state and effect uncertainty without experiencing response uncertainty. This is because someone living in California is expected to know how to respond to an earthquake threat. Each construct is experienced because of a lack of information or restricted processing ability relating to that particular construct. Hence, one does not experience effect uncertainty because she has previously experienced state uncertainty but because she lacks information regarding the state and effects of the crisis. Surely, I do not disagree with the potential that someone can indeed experience all three types of uncertainty at the same time. In other words, it is possible that a person experiences each uncertainty in a linear fashion. However, I claim that there are many more possible constellations as to how people can experience uncertainty other than state uncertainty first then effect uncertainty followed by response uncertainty.

3.4.3.3 Consequences of the Crisis

In terms of the consequences to the Egyptian Crisis, I propose that the organisation and its employees experienced high levels of state, effect, response and outcome uncertainty. Although there is no reference to the second revolution from July to August 2013 against the Morsi regime in Egypt in the company's 2013 annual reports, we will see expatriates expressing their uncertainty and evacuation experiences regarding that second revolution. In fact, the organisation only repeats its statement regarding the first revolution in 2011 in its annual report from 2013 (Annual Report 2013). Nonetheless, since the organisation was operating during

the second revolution in Egypt, I proposition that the organisation and its employees experienced an additional uncertainty of corrected response.

3.4.3.4 Coping Strategies for the Crisis

Regarding coping strategies, I propose an understanding of category devices as a pillar of sensemaking and crisis management. I will do so by demonstrating how category devices are activated and abundant in the process and wake of sensemaking.

I define resilience as an ongoing process deployed to make sense and cope with adversity. Further, resilience involves 'attitudes, beliefs, behaviours, and even physical functioning' (Pfefferbaum et al. 2008 p. 349). People's constitution of membership categories plays an important role in the creation of resilience. They use those memberships they espouse and the associated knowledge and skill sets of each category to build resilient responses to adversity. Hence, I propose how, under high uncertainty, employee identities are activated and used as sources of resilience.

Concerning further implications that the Arab Spring had on the organisation, market exit was named within the context of the organisation's Libyan operations:

> *No. These countries we didn't have anything like this. The projects themselves are sometimes a bit upside down, I guess, but we didn't have situations where we, as an HR assignment team, got involved. The only other country was Libya, indeed, where we also had two evacuations because of the same reasons in the end—[like Egypt]. That was even worse because there's really a war state at the moment, so we decided also to exit the country in the end (Sarah, p. 7).*

> *So I have two in my mind immediately. So the one that's the situation [unclear] and they evacuated the people. That is something we partly also experienced. But for sure, we also had a crisis in Libya where from one day to another, we stopped all business and have never been able to go back and maybe that's it. We've spent already hundreds of millions of US dollars which are lost then (Claus, p. 4).*

Since Sarah, as member of the human resource department, is caring for all company expatriates she is able to report on the effects of the Arab Spring in Libya. Conversely, Claus was an expatriate in Egypt. Thus, when he reports about the market exit in Libya as a consequence of the Arab Spring, he enacts his overall corporate identity as a representative of his organisation rather than his expatriate category. Once again, all the accounts regarding the effects the Arab Spring had on the expatriates show that people use their corporate identities as a mechanism to voice them.

Last, the restrictions on employee movement and a reduction in productivity were named as additional effects of the Arab Spring:

> *That would have impacted me more with higher stress levels. I'm trying to think back then. I believe our working hours were reduced and we may have even—I think we also got actual days off where we were asked to stay at home. But on the run up on that, yes it did create higher stress and therefore I would say my productivity did drop (Andrew, p. 5).*

Andrew's statement is a great example of how felt emotions are an integral aspect of experiencing uncertainty. Similar emotions have been voiced from other expatriates too:

> *Yes and it was a little bit worrying when all communications were cut off, mobile phones and so on. We were relying on information from the satellite television news and so on. Gunfire every evening, vigilantes in the streets, yeah very interesting [laughs] (p. 7).*

> *Things were—yes in Egypt. There was great uncertainty over security not only of expatriates but also regarding non-Egyptian people. There was a curfew. There was talk of having us evacuated and that was quite an uncertain time because you didn't really know what was going on. At that time something that didn't help was where our actual security service wasn't at the top of their game and you were told, we're going, no we're not going to take you out of the country. We're going to take you out of the country, no we're not going to take you out of the country. There wasn't a clear message. From the point of view of when we were trusting to have our back and not having a clear communication from them did not instil confidence and did not make us feel secure (Andrew, pp. 4–5).*

In crisis situations, people are often pushed to their limits regarding their information processing ability and decision-making, yet in the literature, there is limited application of felt emotions on uncertainty and sensemaking (Hernes & Maitlis, 2010; Weick 2010; Maitlis & Sonenshein 2010).

Chapter 4: Untangling an Uncertain World

In this chapter, I will discuss a corpus of excerpts given by expatriates to illuminate their uncertainty construction. This shall not be confused with the content analytical procedure of giving counts of occurrence. I start off with a general overview of the perceived uncertainty literature and then proceed with an examination of the interactions by highlighting the means that participants use in constructing their tokens of uncertainty.

Organisations have dynamic interactions with those environments they constitute and those that have an influence on them. Extensive research into the relationship between organisations and their external environments, founded in contingency theory, led to its revision in sensemaking approaches (Weick 1969, 1988; Weick & Quinn 1999) in which the concept of perceived environmental uncertainty was central (Duncan 1972; Milliken 1987, 1990). The actors at the centre of the organisation perceived environmental uncertainties, a concept that originates from the field of organisational behaviour (Gerloff, Muir & Bodensteiner 1991; Milliken 1987) and has been further researched in the fields of strategic management (Hough & White 2004; Sawyerr, McGee & Peterson 2003; Song & Montoya-Weiss 2001) and marketing (Achrol & Stern 1988; Ashill & Jobber 2001, 2010; Read et al. 2009).

A recurring issue with the study of perceived environmental uncertainty is the lack of a common definition. Early research used the term to describe it as an objective state of an organisation's environment or as a state of an individual's perception about the environment (Milliken 1987). Describing environmental uncertainty as an objective state means that it is plausible to assign characteristics to the

environment explaining its certainty or uncertainty (Downey, Hellrigel & Slocum Jr. 1975b). Conversely, describing environmental uncertainty as a perceptual phenomenon implies that uncertainty derives from a person's state of mind concerning how certain or uncertain they perceive the environment to be (Downey & Slocum 1975; Downey, Hellrigel & Slocum Jr. 1975a; Duncan 1972; Milliken 1987). Thus, some researchers have strongly advocated studying environmental uncertainty as a perceptual construct (Child 1972; Downey & Slocum 1975; Milliken 1987). Others have cautioned that doing so could condemn the construct to becoming an object of 'psychoanalysis' (Tinker 1976).

Another problem with environmental uncertainty identified by Milliken (1987) is the inconsistency and difficulty of interpreting results from prior studies. Certainly, this issue is related to the lack of a mutual definition of the construct. Researchers have in the past measured it as an objective or perceptual state, leading to confusing and, therefore, questionable results. Some researchers have focused on the complexity of the environment as a characteristic leading to perceived uncertainty (Duncan 1972; Glazer & Weiss 1993). It has been argued that as environments become more multifaceted, the limitations of the capacity of human information processing may result in perceiving environmental uncertainty (Ashill & Jobber 2014; Glazer & Weiss 1993). Further, for researchers that have measured environmental uncertainty as an objective state (Duncan 1972; Glazer & Weiss 1993), the volatility of an environment cannot be used in assessing environmental uncertainty, as it is not a change in the environment per se that creates uncertainty but rather 'unpredictable change' (Miles et al. 1978; Milliken 1987). Consequently, it is essential to distinguish between measuring an objective state from a perceptual state.

Even existing measurement scales that seem to measure environmental uncertainty as a perceptual phenomenon are questionable regarding their accuracy (Milliken 1987). For instance, the measurement scale development by Duncan (1972) measures lack of information and inability to predict forthcoming events in an environment. Lawrence and Lorsch's (1967) scale measures job performance and requirements (Milliken 1987). Past research has re-examined the subscales of these environmental uncertainty measures and claimed an absence of correlation between them, suggesting that each measurement might assess different types of environmental uncertainty (Downey & Slocum 1975; Milliken 1987). Only a few studies that have agreed with Milliken's proposal to regard perceived environmental uncertainty as a perceptual phenomenon have measured it as a multidimensional construct (Ashill & Jobber 2010, 2014; Gerloff, Muir & Bodensteiner 1991; Milliken 1987). Gerloff, Muir and Bodensteiner (1991) attempted to measure the three types of environmental uncertainty by probing the Duncan (1972) items but experienced problems with the wording of some items and had considerably low reliability ($\alpha = 0.25$) for effect uncertainty. Consequently, Ashill & Jobber (2010, p. 1279) stated that there seems to be 'no full and rigorous psychometric development and testing of scales to measure the three constructs'.

In this thesis, I follow Milliken's (1987) view of understanding environmental uncertainty as a perceptual construct. I define environmental uncertainty as an individual's lack of adequate information to articulate precise predictions about their environment. Moreover, I assess perceived uncertainty as a multidimensional construct (Ashill & Jobber 2010, 2014; Milliken 1987; Regan 2012).

4.1 Types of Uncertainty

The academic literature notes at least four different types of perceived environmental uncertainty: state uncertainty, effect uncertainty, response uncertainty and outcome uncertainty (Gibbons & Chung 1995; Milliken 1987; Regan 2012). State uncertainty is 'conceptually the closest to using the term environmental uncertainty to describe the state' of an organisation's environment (Milliken 1987, p. 136). It is used to term a 'perceptual experience of uncertainty and not an objective state' of the environment (Milliken 1987, p. 136). Individuals experience state uncertainty if they lack information about the actual state of the environment. Effect uncertainty is concerned with the implications of a given state of change. These implications relate to the magnitude of the change that happens in the environment (Milliken 1987). Response uncertainty is closely related to decision-making theory. Individuals experience response uncertainty if they are uncertain about their response choices or unable to judge which response would be the most appropriate in achieving a desired outcome (Milliken 1987).

Regarding the different types of perceived environmental uncertainty, researchers have proposed an additional type of uncertainty called 'outcome of response' (Gibbons & Chung 1995; Regan 2012). Outcome of response uncertainty refers to the inability to predict the success of one's response to an environmental change (Gibbons & Chung 1995). Subsequently, it is the type of information individuals lack that determines which type of perceived environmental uncertainty they experience (Milliken 1987).

To date, only one study has measured the relationship between the degree of instability of change and the different types of uncertainty: state uncertainty, effect uncertainty and response uncertainty (Ashill & Jobber 2014). Regan (2012)

extended the typology of perceived environmental uncertainty by adding 'outcome uncertainty'. In this study, I will discuss state, effect and response uncertainty (Gibbons & Chung 1995; Milliken 1987, 1990; Regan 2012), confirm the existence of 'outcome uncertainty' and suggest an additional type of uncertainty called 'corrected response uncertainty'.

One noteworthy critique to understanding and examining perceived uncertainty as a multidimensional construct is the work by McMullen and Shepherd (2006). Milliken's claim that it is important to distinguish between different types of uncertainty only applies in the context of understanding what uncertainty is rather than what it does (McMullen & Shepherd 2006). McMullen and Shepherd (2006, p. 135) asserted that managers would ask three simple questions: for state uncertainty, 'What is happening out there?', for effect uncertainty, 'How will it affect me?' and for response uncertainty, 'What am I going to do about it?'. The asking of such questions necessitates a person to form a belief that denotes the presence of doubt and uncertainty (McMullen & Shepherd 2006). Consequently, a researcher seeking to study perceived environmental uncertainty as what it does, such as hesitancy and indecisiveness, should not provoke the manifestation of doubt or uncertainty by asking such questions. Therefore, researchers should not need to distinguish between the three types of uncertainty in the first place (McMullen & Shepherd 2006). Nevertheless, I concur with Milliken and argue that it is advisable to study what perceived environmental uncertainty is before assessing what it does. Subsequently, I propose that the different conceptions of uncertainty are members' categories—members of the profession of organisational behaviour. In what follows, I shall examine how these members' categories map onto and are reflected in the categories in use by expatriate managers faced with a crisis situation.

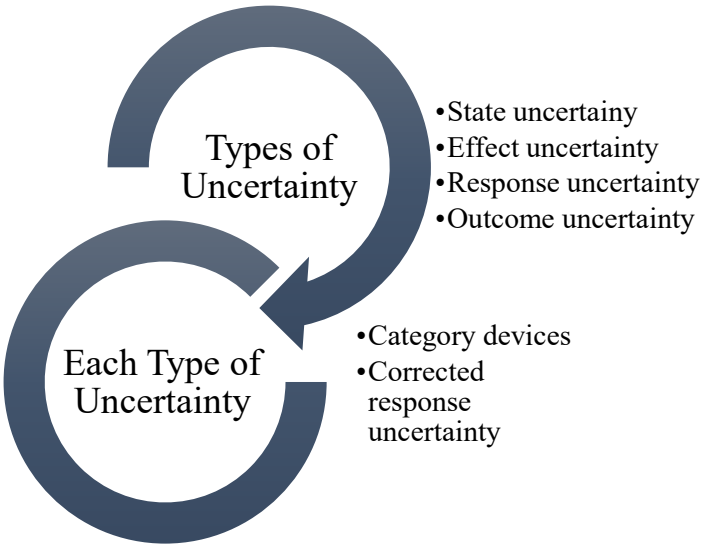

Figure 2: Basic Research Framework for Perceived Uncertainty

In the following section, I discuss the various types of uncertainty participants experienced during the Arab Spring in Egypt. I begin with an extract from Bob that illustrates a great example of experienced state and effect uncertainty.

Extract 1: Bob (page 3)

Katrin: Then what would you perceive to be uncertain in your current business environment?

Bob: Given that it's Egypt and I've been there through—to name the President Mubarak's era, the first revolution in 2011 another change of government after so called democratic elections with President Morsi being ousted and the current President Sisi. These were one, two, three dramatic changes on the political scene in the host country and they have an immediate and sometimes deep effect on undertaking oil and gas project in such a country. Including probably the most fundamental is the threat to the contracts, which are signed at the beginning of a project. For example,

including the amount of oil and gas to be produced and the price that the host country is willing to pay for it.

Again, in Western type countries this is pretty much stable but in such an environment as we've seen in Egypt over the last five, six, seven years these are not at all cast in stone they can be changed.

Katrin: Are there any other factors you would perceive to be uncertain other than those political ones maybe?

Bob: The concomitant security issues, a lot of people would say the personal risk is a little bit higher or it can be perceived to be higher. But I think as an expatriate we are a little bit more aware perhaps of these things and perhaps we have survived those, to put it in a word. So there we are, the contractual financial risks for a project and on a personal basis possibly security risks but personally I don't count it very highly, it's there but not so high. Those are risks but on the other hand there are fantastic advantages, which I think, more than out way such risks. Not that you asked that but there it is [laughs].

In Extract 1, Bob explicitly discusses his experience of what the literature would refer to as state and effect uncertainty. In lines 1 to 6, he gives a brief chronological account of the political changes that unfolded during the Arab Spring in Egypt. Then in lines 6 to 13, he outlines the effects such changes have had in his accounting of the experience of effect uncertainty. He explicitly labels the effect of uncertainties. They are 'threats to contracts' (line 7) and 'amount of production and price' (line 9), while for him state uncertainty is categorised as a 'change of government' (line 2) and 'dramatic changes on the political scene' (lines 4 to 5).

After being prompted, in lines 14 to 20, Bob expands on his experience of effect uncertainty. He names an additional effect uncertainty, calling it ‘security issues’ or ‘personal risk’ in lines 14 and 17. In line 18, Bob actually summarises his previously stated effect uncertainties under the umbrella term ‘contractual financial risks’. From Bob’s brief chronological account of the three political changes unfolding in Egypt from 2011 until 2015 (in lines 1 to 5), we can understand that he has experienced each change but that he does not distinguish between his experienced uncertainties corresponding to each particular change. Thus, we might assume that with each change he experienced, the same state and effect uncertainties anew. We may also note that experiencing uncertainty, as many other things in life, is always relative to a particular ‘status quo’. People use reference points or comparisons to a known category in their formulation of new categories. In Bob’s case, his experience of uncertainty in Egypt is relative to the status quo he is familiar with from ‘Western type countries’ (line 11).

Bob assembles his story about uncertainty using distinct MCDs. Each membership category device comes with its own set of rules and obligations as well as its own set of norms and expectations (Sacks 1992a, 1992b; Silverman 1998), forming the foundation of the category’s perceptions. In lines 13 and 14, we can see that Bob uses his ‘expatriate’ membership category device when he talks about his uncertainties. Hence, his account of experienced uncertainties is from the perspective of an expatriate and not that of an engineer or private person. Such a distinction of which membership category device people use to express their perceived uncertainty has crucial consequences. Not only do the perceptions of uncertainty differ for each category, it is also the case that coping strategies are likely to differ.

In the following extract, we will see how David constructs and portrays his perceived state and effect uncertainties.

Extract 2a: David (page 3)

Katrin: What do you perceive to be actually uncertain, in your business environment?

David: Well [laughs] in this current time, we're all suffering with the same volatility in oil prices. As much as people maybe give the oil and gas industry sometimes a bad name—I'm biased of course, because I'm in the industry, but this world still runs on energy. It runs on—we cannot function in this world right now—I don't care where you are—without energy. They're still one of the largest, or the most economical sources of energy is still hydrocarbon, oil and gas.

It's until we find some alternatives and I'm all for alternatives, once the technology comes along, we need to have this. We are suffering as you see in the news today—in the volatile oil prices it's dropped since late December to now—50 per cent in price. That has a huge effect to everybody from the operating companies, to the everyday consumer. Because I'm not sure what's it like in Sydney, but we're definitely seeing prices of goods and service here, some rise, some fall, it all depends on what it is. So this is why it's uncertain right now, we're a resource, we are relying on a resource that's non-renewable, and the price is always moving.

In line 1, David starts off naming explicitly the 'volatility in oil price' as an example of state uncertainty relating to business environment. Then in line 2, he voices the 'bad reputation of the industry' as another example of state uncertainty. Lines 3 to 10 are then dedicated to defending the oil and gas industry against the negative publicity and public opinion. In the middle of line 10, David switches back to the 'volatility in oil price' by expressing the 'volatility of prices in goods and services' as an example of effect uncertainty. In lines 11 and 12, he uses effect uncertainty as a mechanism to reunite the oil and gas industry with the public by stating 'that has a huge effect to everybody from the operating companies, to the everyday consumer'.

As Potter (2016, cited in Silverman 2016) points out, in CA, emphasis is given to the idea of '*accountability'* and '*stake*'. More recently, Clayman and Heritage (2014) referred to the concept of stake as '*benefactives*' (Potter 2016, cited in Silverman 2016). People are viewed as actors with multiple interests, motives, loyalties and alliances, meaning that their actions have a stake to benefit some but not others. As such, the notion of stake can function as a means to detoxify an action or opinion. David voices the stated uncertainties enacting his cooperate category membership (in lines 3 and 4 he says, 'I'm in the industry'), thereby putting his reputation at stake as well. Thus, David elaborates extensively how important the actions of the oil and gas business are for 'everyone'. Noteworthy is his usage of the pronoun 'we' as a category device to indicate his membership to a particular group. In lines 1 to 4, the 'we' category device indicates membership of the oil and gas business. Then in lines 5 to 13, the 'we' category symbolises his membership to the 'public' category device. This becomes apparent by his usage of the 'they' pronoun in reference to the oil and gas industry in line 6. His switching of the 'we' category device in lines 5 to 13 serves as a detoxication effort to lessen his stake of

being viewed as someone who pollutes the environment by association with an industry that uses hydraulic fracking.

In Extract 2b, David continues to point out state uncertainties concerning legal aspects and the unskilled workforce. This time, David explicitly does not choose his corporate category device to voice his uncertainties but instead makes use of the 'nationality' category membership device, which is often substituted by expatriates for their corporate category device. By definition, an expatriate is a 'foreigner' working in a country other than their home country. Therefore, expatriates often use the 'nationality' category membership device to replace their 'expatriate' category device.

Extract 2b: David (page 4)

Katrin: Yeah, any other factors?

David: When we deal with factors related to the environment you're in, [unclear]. Every environment you're in, there's laws, there's regulations, some of the regimes that we've just talked about, which are not—call it, classical Western regimes. The laws and regulations can be changed at a moment's notice, and catch you by surprise. I'm not saying that there aren't written laws but there are written laws that they have. There are at times, when these things are changed or interpreted differently, and that can cause extreme amount of risk and uncertainty to the owners.

We also then have the uncertainty of resources in people. We of course saw that in my experience of places like Kazakhstan, where the workforce there is not as skilled, and as educated as we are maybe used to seeing, in our classical Western environment. So these are things that of course,

make it much more challenging to develop industrial projects in the parts of the world that we spoke about earlier.

In lines 18 to 25, David distinguishes between 'classic Western regimes' and 'classic Eastern regimes' to express his uncertainties with an active omission of the latter category device. The usage of the 'classic Western regime' automatically implies the existence of the 'Eastern regime' because they are standardised relational pairs—the usage of one term implies the existence and associated obligations, rules and rights of the other pair (Leudar, Marsland & Nekvapil 2004; Sacks 1992a). In line 27, he confirms the existence of the 'Eastern regime' category device by naming Kazakhstan as an example (i.e., 'places like Kazakhstan'). Notably, in lines 22 and 23, David makes an attempt to detoxify his remarks by saying, 'I'm not saying that there aren't written laws' because his stake is that he could be regarded as a 'Western imperialist' by his remarks. Nonetheless, in the remainder of his answer in Extract 2b, David does not make much effort to revoke his rather condescending remarks about 'Eastern regimes', implying that the 'stakes' of being portrayed as an 'imperialist' are not as important to him as being someone who 'pollutes the environment' with hydraulic fracking.

In the following extract, I will highlight response and outcome uncertainty as additional types of uncertainty people experience.

Extract 3: Bob (pages 7–8)

Katrin: How did it [the crisis] impact your work?

Bob: We stopped work immediately. The lack of communication—I was working in the office in the early part of the project at that time so we did not have site operations. It might have been different if we had. The whole team was

located in the town, in Cairo and with the lack of communications—actually landline telephones came back after a little while. The Company still has very good—what do you call it—security organisation and procedures which were put into operation and we followed those. After I think three or four days there were various evacuation flights. Initially I declined one of those but then the second day it was made very clear that one ought to take it so I did.

So that was all quite interesting and good to see actually. I'm talking about the company I was working for at the time XYZ, but I know of many other expatriates with other oil and gas companies, other non-oil and gas companies whose procedures were similar and were tested and sometimes found wanting a little bit but overall worked.

Katrin: *How many days in total, or how many weeks did you actually stop working?*

Bob: *Six.*

Katrin: *Six days or six weeks?*

Bob: *I certainly was evacuated from Egypt, away from Egypt for six weeks. However for the latter three of those weeks the company moved us to the headquarters in the home country and we continued working there. That was made possible by let's call it current technology, IT technology. We were able to operate as if we were in Cairo pretty much which was amazing. So that's how we managed that.*

Katrin: How did it make you actually feel experiencing that crisis situation?

Bob: First of all I was not surprised because the political tensions in the country were tangible even 10 years previously. However I was surprised at the immediacy of what happened, the response of the government was immediate and brutal and it's a little bit disconcerting to hear gunfire near one's residence. How did I feel? A little bit concerned I think. I don't think I have any fears for myself because as I said earlier one tends to look after oneself. What I was concerned about a lot was my Egyptian friends and colleagues because this was their country being torn apart in many ways and with no communications it was very difficult to get in contact and see how people work. All of them were fine as it turned out but those were concerns and feelings. What else?

In Extract 3, Bob has been asked to share his experience in terms of response and outcome uncertainty. When reading through his answer, it becomes evident that the organisation created and implemented a response plan that consisted of a number of events. Moreover, each event or response signalled a period of experienced uncertainty. Bob does not explicitly label his felt uncertainty. However, through his discussion of the events, it is apparent that members experienced high levels of uncertainty during the response period that are, by definition, related to response and outcome uncertainty.

In line 1, Bob starts off with the first event of the response plan that was to stop work immediately. Bob justifies the immediacy of the company's response to halt all work by stating yet another effect uncertainty, 'lack of communication', being experienced. In lines 6 and 7, the next stage of the response plan is discussed as the

‘security organisation and procedures’ that were put into place. In line 8, Bob expands on those ‘security organisation and procedures’ as evacuation flights. Until lines 11 and 12, it is not evident that those evacuation flights were only made available to all expatriates. The last response stage is described in lines 17 to 19 when expatriates were moved to headquarters after three weeks of the initial evacuation. Hence, we also learn that all expatriates must have been evacuated to their own country of origin for the first three weeks of the six-week period of their absence in Egypt. The membership category device that Bob is using becomes clear in lines 12 and 13 when he is saying ‘but I know of many other expatriates’ that he is using his ‘expatriate’ membership category device. Thus, his usage of the ‘we’ pronoun from lines 1 to 22 is a replacement for the ‘expatriate’ category device.

This immediately changes when Bob is asked to reflect on how he felt during the crisis. In line 23, Bob switches straight to the ‘I’ pronoun but until line 27 of his response we are not sure if he uses his ‘private person’ category device or that of a ‘soldier’. In fact, it is plausible that Bob does use both meanings; from lines 23 to 26, he uses his ‘private person’ category and from lines 27 to 33 that of his ‘soldier’ category. In lines 28 and 29, he states ‘one tends to look after oneself’, which sounds more like something a soldier or someone with military or police force experience would tend to say. In line 29, he then elaborates on that particular statement by stating that he was more concerned about his Egyptian friends and colleagues. The reference to his ‘Egyptian friends and colleagues’ is also the switching point when he transitions back to his expatriate category because in the remaining lines (29 to 32), he references back to the lack of communication they experienced. Bob explicitly states in line 30 ‘how people work’, making it clear that he is talking now from a professional point of view.

Regarding outcome uncertainty, Bob makes the most explicit references to this type of uncertainty in lines 11 to 15. First, he again uses a reference point (i.e., other companies from the oil and gas and non-oil and gas industries) to make a statement concerning his company's response management during the crisis. Further, his statement in those lines also serves as judgement and approval of his company's responses and coping strategies. However, in lines 14 and 15, when he says 'whose procedures were similar and were tested and sometimes found wanting a little bit but overall worked', this is also a means of expressing the outcome uncertainty he experienced. In fact, only the words 'tested' and 'worked' in lines 14 and 15 capture all the outcome uncertainty. Consequently, we can confirm that outcome uncertainty is being experienced as an additional type of perceived uncertainty during a crisis situation (Regan, 2012).

As Bob has outlined in his statement in Extract 3, during the period from January 2011 until June 2015, Egypt underwent three political changes. Consequently, the organisation was present and operating while each political change was unfolding in Egypt. This fact allows us to investigate how the expatriates of the organisations perceived and experienced each political change. Moreover, the fact that each change was political in nature and each took place in the same location also enables us to draw conclusions as to the organisation's ability to incorporate learning from the previous crisis to alter its responses to minimise the effect of the subsequent crisis. By doing so, I claim the existence of an additional uncertainty called 'corrected response uncertainty'.

Extract 4 outlines a statement given by Andrew reflecting on a crisis situation in which he experienced high uncertainty. Andrew chooses to focus on the second

political change that took place in Egypt during the months of July and August in 2013.

Extract 4: Andrew (pages 4–5)

Andrew: Yes, a crisis situation would have been where it was ... July 2013. That was when I think it was the second revolution and—

Katrin: In Egypt?

Andrew: Things were—yes in Egypt. There was great uncertainty over security not only of expatriates but also regarding non-Egyptian people. There was a curfew. There was talk of having us evacuated and that was quite an uncertain time because you didn't really know what was going on.

At that time something that didn't help was where our actual security service wasn't at the top of their game and you were told, we're going, no we're not going to take you out of the country. We're going to take you out of the country, no we're not going to take you out of the country. There wasn't a clear message.

From the point of view of when we were trusting to have our back and not having a clear communication from them did not instil confidence and did not make us feel secure.

In the above extract, we can clearly see that Andrew experienced high uncertainty regarding personal security and lack of communication or miscommunication. We have established already that the organisation and its employees had experienced a similar political situation one and a half years previously. Thus, we would expect

that the organisation and its employees would have some familiarity with how to respond during the second revolution. Based on Andrews's statements, we understand that the situation required the organisation to evacuate its expatriates again but the organisation did alter its actual response procedures by trying to delay the evacuation. In lines 8 to 11, Andrew informs us about how his organisation's lack of clear communication only increased his experience of response and outcome uncertainty but it also tells us that his organisation must have altered the response procedures. Considering Bob's statement in Extract 3, we already established that evacuation flights were organised within three to four days when the first revolution took place and that all expatriates were advised to comply with the procedures. In fact, Bob positively appraises his organisation's security procedures (in Extract 7, line 6) while Andrew finds them lacking. In lines 13 to 14, Andrew clearly attributes his uncertainty levels to his organisation's lack of communication and indecisiveness.

Extract 5: Andrew (page 10)

Katrin: Sure. Sorry, one follow up from me about the incidents July 2013. Were you actually evacuated in the end or not?

1 *Andrew: Yes we were.*

Katrin: Yes you were? For how long?

2 *Andrew: I was out of the country for nearly one and a half months.*

Katrin: Roughly six weeks?

3 *Andrew: Yes.*

Katrin: During that time you worked then—from outside of the country, work still continued or did work completely stop?

Andrew: No work continued. We had I would say a skeleton staff onsite from an expatriate point of view and everyone else was supporting from remote locations from outside the country.

In Extract 5, Andrew informs us that his organisation did indeed evacuate him but we also learn that not all expatriates were evacuated. In lines 4 and 5, he states that a number of expatriates stayed in Egypt during the second revolution. However, the lack of communication did increase Andrew's response uncertainty. We can conclude that the organisation did alter its response during the second revolution, confirming that organisations can experience corrected response uncertainty. Moreover, considering that the experience of outcome and response uncertainty seems very closely related to each other, we could even conclude that individuals would experience a 'corrected outcome uncertainty'.

Our last extract (Extract 6) in this chapter focuses on Efe and his coping mechanisms of perceived uncertainty.

Extract 6: Efe (pages 6-7)

Katrin: Has it ever happened that when you experience uncertainty that you actually didn't do anything?

Efe: You mean if I face an uncertainty and I ignore it completely, this is what you meant?

Katrin: Yeah, exactly.

3 *Efe:* *Um …*

Katrin: *Or postpone it maybe, for later, when you maybe believe you need more information?*

4 *Efe:* *Yeah, sure. [There could be] uncertainties [above our] limits, acceptance*
5 *limits, I would say. Of course we prefer not to carry on with this and then*
6 *just sit down and review once again everything from A to Z before we carry*
7 *on.*

Katrin: *So you mean you actually have a certain threshold, a certain acceptance limit?*

8 *Efe:* *It depends on the project and it depends on the financial risk of the project*
9 *most of the time. But I will say, if I feel the uncertainty is more than 80 per*
10 *cent, I will definitely stop, I will not carry on.*

Categorisation is essential in that each category device determines our perceptions, experiences and awareness. A person in a dire situation who enacts the category device of a 'victim' perceives and reacts differently to that of a 'fighter' or 'survivor' because each category device comes with its own set of rules, obligations and actions (Sacks 1992b; Silverman 2016) as well as specific perceptions and mindset. Consequently, we will see variance in the perception and experience of uncertainty among people. In fact, it is an entirely personal experience which of the uncertainty categories will be enacted and at what intensity. In Extract 6, lines 4 and 5, Efe points out that his experience of uncertainty has an 'acceptance limit'. From his statement, we can conclude that his uncertainty category devices are dynamic. Hugenberg and Bodenhausen (2004) argued that categories would be in

competition for dominance. Yet, the dynamism of category devices would enable us to redirect the argument of category dominance to category compatibility. In some circumstances, category devices may seem conflicting in nature. However, due to the dynamic power of category devices, a person could alter the intensity of a particular category device without entirely suppressing it, accomplishing a harmonic coexistence of multiple category devices.

The category compatibility argument also answers the questions regarding the specific order of uncertainty experience (Ashill & Jobber 2010). We can assert that an individual can experience only one type of uncertainty or multiple uncertainties at the same. Hence, a person does not have to experience first-state uncertainty to experience effect uncertainty. In fact, one could be certain that a particular change will arise in the environment but be unsure about the effects the change will cause.

Moreover, a person can redefine and create 'new' category devices that could advance their uncertainty and dissonance experience. For example, many people that have become victims of a crime are often encouraged to change their perception and identity from that of a 'victim' to that of a 'survivor' to cope with their terrible experience. This particular switching of category devices is often more constructive as a coping mechanism than denial and resignation.

To sum up, in this chapter I have not only confirmed the existence of different types of uncertainty but in fact highlighted how people describe their states of uncertainty and construct them through the lens of their category membership devices.

Chapter 5: Sensemaking of a Crisis and the Creation of 'the Other'

As with Chapter 4, I will discourse interactions given by expatriates. Before reporting on my enquiry into the practices participants employed in constructing crisis sensemaking, I will begin with a general overview of sensemaking theory.

To ensure survival, an organisation's rate of sensemaking and learning has to be the same or even greater than the rate of change of its external environment (Revans 1982). Hence, sensemaking and learning have been linked to organisational change and adaptation and been identified as a pre-eminent source of sustainable competitive advantage (Gould 2009; Škerlavaj & Dimövski 2011). Further, organisational sensemaking has been related to a dynamic capability view, in which organisations are observed using their learning capability as a distinctive resource that cannot be easily acquired and imitated by competitors (Abu Khadra & Rawabdeh 2006). Moreover, key influences increasing organisational sensemaking and learning are the struggle for survival in fast-changing and uncertain environments (Kenny 2006; Mayo 2007; Senge 1990). In strategic management, organisational learning is understood as a means for reducing uncertainty (Lei, Hitt & Bettis 1996) and facilitating the adaptation of organisations to their changing environments (Daft 2006; Dodgson 1993; Ellis & Shpielberg 2003). In fact, researchers argue that organisational sensemaking and learning is a positive reaction to the necessity of adjustment when uncertainty is high (Freeman & Pérez 1988; Pavitt 1991). In this thesis, I assert that sensemaking should be regarded as a dynamic capability for understanding and coping with high uncertainty that also functions as a means of competitive advantage.

Realising the significance of a person's perception and understanding of the organisation's external environment as constituted by their learning and sensemaking processes is of paramount importance. As Weick (1969) postulated, organisations know their environment through their actor's perceptions and sensemaking—the environment is enacted. Moreover, Daft and Weick (1984) asserted that organisations differ in their assumptions about their ability to understand their environment. Therefore, organisations must realise the dynamics of their environment (Hall & Saias 1980), make sense of their environment (Daft & Weick 1984; Maitlis 2005) and learn from previous and present changes in their environment to make appropriate strategic choices that will ensure the organisation's competitiveness and survival (Child 1997; Gephart 1993; Levinthal & March 1993). Even in routine situations, learning can be incomplete (Moynihan 2008), precipitating a potentially greater struggle to learn during a crisis situation. Moynihan (2008) stated that an overload of information often overwhelms people's capacity for cognitive evaluation. However, in routine situations, people will be able to cumulate sensemaking 'through trial and error learning' (Moynihan 2008, p. 350). In a crisis situation, 'trial and error learning' is often not possible due to the urgency and magnitude of the situation. Organisation members will seek other means to learn and maximise their responses.

Organisational sensemaking is a process whereby organisational members interpret their environment through interactions with others, both within and outside the organisation (Maitlis 2005). In fact, the interaction and inter-group processes of sensemaking play a significant role in mastering a crisis situation. For instance, Weick's (1993) noted analysis of the Mann Gulch disaster proposed that group communication and group intimacy are key factors in determining the survival of group members. Further, after Weick's (1988) initial research on sensemaking, the

theory has parted into two directions. Some researchers have studied sensemaking as a crisis was unfolding (Kayes 2004; Vendelo & Rerup 2009) while others have studied sensemaking retrospectively after the crisis took place (Brown & Jones 2000; Casto 2014). Both approaches present salient contributions to understanding sensemaking. Regardless of the path chosen, organisations construct both their sense from understandings constituted as legitimate in sensemaking as well as the actions that respond to an event (Weick 1988, 2010). In the Bhopal disaster, Weick (1988, p. 305) asserted that 'there is a delicate tradeoff between dangerous action which produces understanding and safe inaction which produces confusion', illustrating a key point of sensemaking. Weick (2010) argued that by advocating the construction and communication of beliefs and actions that will alert people about the implications of their own actions as determinants of a crisis the organisation might wish to prevent, sensemaking can advance crisis prevention and management.

Based on my review of the literature, sensemaking consists of seven properties. Identity (1) explains the importance of who a person believes they are and how such beliefs determine their interpretation and enactment (2) of their social surroundings (Weick 1993; Weick, Sutcliffe & Obstfeld 2005). People enact their environments by constructing narratives that help them to understand their experience, perceptions and sensemaking (Weick 1988, 1995). Those narratives are often shared and constructed in conversations with others instituting a social activity (3) (Hernes & Maitlis 2010; Maitlis 2005). As such, people's sensemaking process involves retrospection (4) (Gephart 1993) and is continuous (5) (Weick 1993, 1995). The last two properties of sensemaking are the extraction of cues (6) and plausibility over accuracy (7) that people rely on to filter fruitful information for

their construction of meaning and sense (Hernes & Maitlis 2010; Jørgensen, Jordan & Mitterhofer 2012; Weick 1993, 1995).

A note of caution is that during the process of sensemaking, people can be inclined to overlook or minimise cues that contradict their understanding or preconception, often referred to as 'false optimism' (Casto 2014) or 'minimisation' (Casto 2014; Maitlis & Sonenshein 2010). Closely related to the concept of 'false optimism' (Casto 2014) and 'minimisation' is the concept of 'optimistic bias' in which people in a crisis situation downplay the severity of the crisis by making optimistic statements. Weick's (1993) work on the Mann Gulch fire of 1949 illustrates an example of optimistic statements constructing false optimism contributing to the death of 12 smoke jumpers (Weick, Sutcliffe & Obstfeld 2005). Based on cognitive dissonance theory, the rationale behind 'false optimism' and 'optimistic bias' are that people tend to pursue consistency among their cognitions. Since the experience of dissonance, an inconsistency of cognition, is unpleasant for people, they tend to alter, ignore or eliminate stimuli to achieve harmony.

In this research, I have interviewed participants after their crisis experience. Therefore, I have asked participants to reflect on their perceptions, experiences and coping strategies retrospectively (Brown & Jones 2000; Brown, Colville & Pye 2015; Casto 2014).

Further, I wish to contribute to the understanding of identity as a pillar of sensemaking and crisis management. I will do so by demonstrating how category devices are activated and altered and how new categories are created in the process and wake of sensemaking. Consequently, I will examine how organisational members use the creation of 'the other' to facilitate their sensemaking process in situations in which they have to manage enacted frustration with the environmental

context. In addition, I will discourse how the felt absence of support in sensemaking seems to elevate the need to blame others, creating the experience of 'sense-abandonment'.

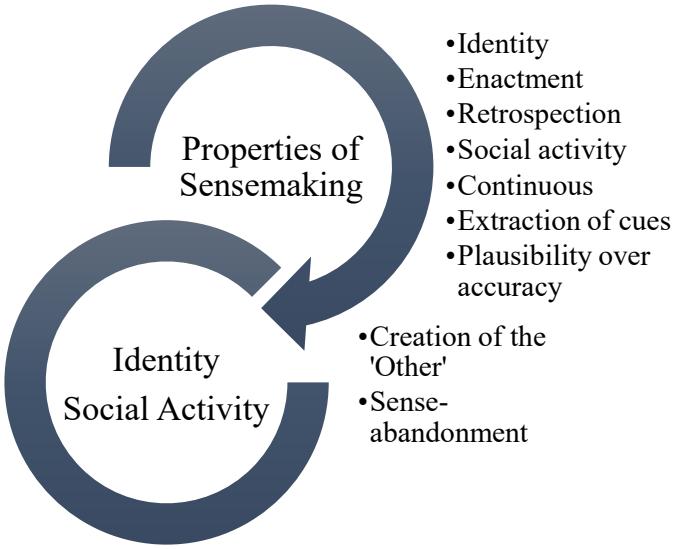

Figure 3: Basic Research Framework for Sensemaking

5.1 Creation of 'Otherness'

In difficult times, people often tend to blame others for their dire situation. The need to personify a crisis situation seems an essential mechanism for people's sensemaking and acceptance of the crisis (Christophersen 2007). Once the 'enemy' or 'others' category is created and blamed for a given crisis, people seem to be able to mobilise resources in handling the given situation. Of course, this particular exercise can have the devastating consequence of not addressing the actual but only the perceived crisis. I argue that people use categorisation as a source for sensemaking of their social surroundings, others and themselves. In MCA, when two categories belong to the same category device, I can link them together as 'standard relational pairs' (Sacks 1992a), such as husband and wife or black and white. For instance, according to De Beauvoir (2014), humanity is masculine. Therefore, a woman is defined in relation to a man rather than in her own right. He,

the man, is an autonomous being viewed as the 'absolute' while she, the woman, is the 'other'. He is often regarded as the 'subject' while she is the 'object' (De Beauvoir 2014; Zevallos 2018). I mentioned in previous chapters that each category comes with its own set of rights and obligations (Sacks 1992a; Silverman 1998). In the case of standard relational pairs, the corresponding pair often determines these rights and obligations. Leudar, Marsland and Nekvapil (2004) used MCA to study how political figures create the 'enemy' by focusing on the usage of the pronouns 'us' and 'them' in political speeches as membership category devices.

The following extracts and discussions will highlight how employees created 'the other' membership category to facilitate their sensemaking process of the political crisis in Egypt during the Arab Spring. The first step in the creation of 'the other' is often the formation of a hierarchy of status of people. In Extract 7, Bob's statement illustrates the formation of a ranking of employees. We will observe how Bob is able to formulate the hierarchy explicitly by directly naming categories and implicitly by omitting categories.

Extract 7: Bob (pages 10–11)

Bob: *I think that goes right back to expatriate experience call it that. Because on the project as I mentioned we did have a number of guys come from the company headquarters and sometimes with no expatriate experience at all. We found that these— when I say guys by the way it's men and women—we found that they operate with not such a wide perspective as would benefit the project. I think all of us as a result of these environmental changes we've broadened our outlook on the country and the project to try and take into account all of the—I call it environmental I don't mean*

the green side I mean politically and otherwise—all of those influences on the project. I think it awakens people a lot more.

Whether we've actually changed any procedures or not, I don't know but I think we all, on a personal basis develop a little bit from that experience and take it forward with us. I don't remember any procedural changes because of this possibly in the security procedures but not others no; [personal basis].

In Extract 7, Bob was asked to think about how his experiencing and learning to deal with one crisis helps him to prepare for future crises. Bob makes a direct connection between sensemaking, being able to manage a crisis and being an 'expatriate' or having 'expatriate experience' (in line 1). In lines 2 to 15, he expands in more detail as to how the 'expatriate' membership device enables a person to broaden their perspective and understanding about their environment. In lines 3 to 5, Bob makes a clear distinction between employees that work at headquarters and those that have worked abroad (expatriates). Moreover, in line 3, he makes a strong judgement about employees from headquarters and their inexperience and incompetency to work on the project due to their lack of 'expatriate experience'. To Bob, it is the 'expatriate' who has the highest standing in terms of sensemaking, knowledge and competency. People who work at headquarters are limited in their perspective and local employees are not considered at all by Bob. He does not mention how local employees might have helped to cope with the crisis or how they might have assisted in constructing an understanding of the crisis. The lack of acknowledgement of local employees' involvement in crisis sensemaking, crisis learning and subsequent crisis management is rather surprising because would one not expect that local employees have a more informed sensemaking and

understanding about the political crisis unfolding in their very own country? Hence, a hierarchy of employees becomes evident in Bob's statement: at the top level we have the 'expatriates', then non-Egyptian employees from headquarters and then Egyptian employees. In the following discussion, I will show how Ian constructs a hierarchy of different membership category devices that play a crucial role in his sensemaking. Moreover, we will see how Ian actually manages to portray the Egyptian public as the 'enemy'.

When individuals discuss events, ideas, news and other people, they make remarks that are sometimes harsh or even toxic. On some occasions, people choose to detoxify their statements so others may not perceive them as mean, arrogant or ignorant. In the following section I will highlight how Ian performs a 'dance' between toxication and detoxication.

To start with, Ian uses detoxication to ensure the integrity and competence of his own job and that of his company. Moreover, Ian uses detoxication to justify any struggles he and his organisation faced during the crisis of the Arab Spring.

Extract 8: Ian (page 3)

Katrin: Let's take one of those examples here, just [unclear]. I mean, you can choose any, maybe the public opinion or any other, and could you then describe to me how you manage that particular uncertainty?

Ian: Sure. I mean, first of all, you cannot manage each and every uncertain item. Like it's obvious that we don't have an influence on worldwide macroeconomics. So there's no way for us really to influence commodity prices. What we can do, we can do our hedging policy to mitigate the effects of change in commodity prices. In terms of public opinion, you have

a chance to manage this uncertainty because you can try to influence the public opinion and this is what we are trying to do in our home country business, maybe increase our public relations activities in the regions.

We are trying to become much more transparent regarding our operations. So if we have any major operations in the region usually we publish this in the regional newspapers. So we make sure that the public knows what we are doing and why we are doing it and we are trying to increase the communication with the public.

Ian's detoxications are placed either at the beginning or at the end of his answers or paragraphs rather than the in-between sentences. In line 1, Ian starts off with a detoxication by saying 'I mean, first of all, you cannot manage each and every uncertain item. Like it's obvious that we don't have an influence on worldwide macroeconomics', indicating to the listener that anything he is going to say that could make him or his company look unfavourable should be regarded as being out of their control. He underlines his detoxication by giving a bold example of an uncertainty they have no control over: 'worldwide macroeconomics'. Further, he stresses his detoxication by using words likes 'obvious' and 'worldwide'.

Ian continues to emphasise how his organisation has no means of influencing uncertainties by talking about 'commodity prices' as another example. In line 3, his wording is crucial—he over-accentuates his statement by using words like 'no way' and 'really'.

Now, in lines 5 to 8, he talks about public opinions and how his company is trying to 'influence' it. In line 6, using the word 'influence', Ian makes his remark toxic

because ‘influence’ is a strong word that has negative connotations. His organisation could be understood as trying to manipulate the public’s opinion.

However, in the following extract we will see how Ian detoxifies his statement about his organisation and public opinion by highlighting his organisation’s efforts ‘to become much more transparent’ about their operations and public relations. He finishes his answer on a positive note by stating how his organisation tries to ‘increase the communication with the public’.

The placements of his detoxications are crucial because most people remember things that are said or read at the beginning and at the end of a conversation. Thus, the placements of his detoxications are strategic. In Extract 9, Ian is asked to reflect on a crisis situation in which he experienced high levels of uncertainty.

Extract 9: Ian (pages 4–5)

Ian: *Yes, I can give you the example of the Egyptian revolution in 2011 where I was as an ex-pat responsible for our finances as the finance manager. We had two major development projects; one was the [first] development project and the other one is the [second] project where ABC is operator. It was just one of the biggest projects in the country.*

So the investment volume for the [first] project is around $300 million and the other one is around $10 billion. With both of those projects we made decisions in 2010 that we should go into the next project phases. So in the [first] project it was the execution phase and for the [second] project it was the defined phase. So pretty advanced in the project management cycle of both projects.

Then at the beginning of 2011 the Egyptian revolution started, which led to big question marks regarding the future of both projects. So with [second] project we had to fight especially against public opinion because first of all the public opinion it was stated that the concession terms which were received in 2010 for those projects are unfair and are favourable for the contractors and unfavourable for the Egyptian state. So that led already to a lot of pressure on our projects.

Secondly, in the city of north [unclear] it was planned to build an on shore terminal for the project and there the public started to do public protests against the project. Even we had violent protests on the site against our contractors. So we had to stop all preparational work at site.

This finally ended in the decision, together with the governmental, authorities, that we have to stop the project for the time being, which for sure impacted our business a lot because it was the biggest single development project of our company history and we have reserved already quite high funds for that project and we had big hopes that this will drive the growth for the future. So the impact on our business was very, very high and, sure, nobody predicted that such a revolution would happen.

On the other hand, for the [first] project we were able already in May 2011, despite all this political [unclear], to approve the project because we had very strong support from the government. They provided us with very quiet comforts that we will get the maximum support if we would execute the project.

35 *In fact, despite also here we had strong opposition from the public opinion*
36 *and from [unclear], but finally we were able to deliver the project. It was*
37 *much more costly than expected and it took much more time. But finally it*
38 *was executed and I think that was a big success in this big political*
39 *[unclear] to complete such a project.*

In Extract 9, Ian is asked to give an example about a crisis he and his organisation experienced. He chooses to report on his experience as an expatriate in Cairo during the first revolution in January 2011. In lines 3 to 11, he starts off with a detailed description of two projects his company was working on before the crisis unfolded. Being the finance manager, he makes explicit financial statements regarding both projects and highlights that another organisation was the operator in one of the projects. In fact, he stresses in line 5 that it was the 'biggest project in the country'. Consequently, in the first two paragraphs of his answer Ian sets the stage for his narrative. Then, in line 12, Ian starts to reflect on the events that took place during the revolution. In lines 12 to 38 he outlines the events, actions and consequences of the revolution on the 'biggest project in the country' and for his company. Ian describes the uncertainty factor as 'public opinion' (lines 14 and 15) 'public protests' (lines 20 and 21), and 'violent protests' (line 21). In line 14, he declares that his organisation had to 'fight especially against public opinion' but does not elaborate on any confrontation with the public until lines 21 and 22. He briefly accepts the reasoning of the public opinion and protests (in lines 23 to 25) but concentrates in full magnitude on its consequences on the project. He describes the consequences as physical (in line 22) because they had to stop all work onsite, as monetary (in line 27) without providing an explicit number and as having psychological and emotional consequences (in lines 25 to 28) by talking about the

high ‘hopes’ they had on the project and naming it the ‘biggest single development project of our company history’.

Noteworthy are two things about Ian’s description regarding the crisis and its effect on ‘the biggest project’ of his company. First, Ian does not attribute any blame or wrongdoing concerning the public protests. In line 21, he is rather surprised that ‘even we had violent protests on the site’ and quickly asserts that it was ‘against our contractors’ and not directly his organisation. As such, Ian constitutes his company as a victim. The public becomes the sole aggressor of violence while his organisation, their contractor, and the government become the defenders of peace and order.

Second, Ian again finishes off his description with a detoxication (in lines 37 to 39) ensuring that his organisation, their contractors and the government could not be perceived as unprepared and weak and no ‘victim blaming’ should take place. In fact, when we analyse all Ian’s toxication and detoxications, an order of importance becomes apparent. Concerning the public protests and two projects, his company is presented as a unity (he never distinguishes between headquarters and the Egypt branch) and, as said here, his organisation is not engaged in wrongdoing. Consequently, he as an individual comes first, then it is his organisation in which the Egypt branch seems to stand higher than headquarters, then the Egyptian government and service providers, then the contractors and competitors and finally the public.

From the above extracts, we see that in crisis situations people facilitate their sensemaking by constructing a hierarchy of different category devices that enact a central role in the crisis. Moreover, we can draw from the extracts the conclusion that, as one might expect, expatriates seem to be living in a bubble and regard

themselves as superior in comparison to other category devices. Their pre-eminence is based on their foreignness in comparison to people who are either local or who live or work in the home country. Membership to the category 'expatriate' is based on not being a local citizen but being employed by a foreign organisation. From an organisational point of view, the 'expatriate' category could be understood as a standardised relational pair to the 'headquarters' category, such as doctor and patient or husband and wife. As we know, even with standardised relational pairs we often see a ranking. Surely, from an organisational perspective one might expect that the 'headquarters' category should be regarded as the higher standing device, but based on our above discussion it is obvious that members of the 'expatriate' category device see themselves as superior. Below Claus, yet another expatriate, reiterates the supremacy of the 'expatriate' category.

Extract 10: Claus (pages 5–6)

Katrin: *Just maybe describe to me how the situation was at that time and how it impacted your company and the way you do business, you personally do business.*

Claus: *How the company was affected. So from the company point of view—what was important for the company? For sure that the oil production continues. But on the other hand, they had to take care of the expatriates. To make it possible that in future also, we will find expatriates for Egypt for example. So say what gives the other colleagues in headquarters the feeling that they do not take care of the expatriates in Egypt, then it will be even harder than it is anyhow to find new expats. Maybe this was two important things. So this was the company's point of view.*

From my point of view, yeah, it was never too critical but it was more—I think, from my point of view, and here we come back to uncertainty, you never know exactly what will happen. Afterwards we know that it was not always really, really bad when we were there. But at the time, while we were there, we did not know what would happen next week. This is somehow an emotional topic. So then you get crazy and think maybe next week this and that will happen, and then it's better to go out of the country. But later on, you say okay, some people died in this square and that square but nothing in [unclear] so you could have also stayed there. But you do not know this before so, yeah.

Katrin: *So when you were evacuated, you were evacuated back to headquarters? Then you tried to continue your work as usual or what happened?*

Claus: *Yes I think so. So we tried to do our best from here. What is also possible for a short time? Yeah, it was possible for a short time because Egyptians still went to the office and it worked because they knew that we would come back one day and they still have to perform otherwise we would give them whatever [issued] in three weeks or one month. So they were still under the pressure of us because expats were always the bosses, as you know. But if they would feel that we would stay always in headquarters, so then the question is why do we have expats anyhow if you can work from headquarters?*

So if you always work from headquarters then for sure, you don't have the control over the people anymore. But for a short term, it was possible to work in headquarters with the Egyptians working in the office in Cairo.

31 *Then the difference was from [finance] point of view, not affected too much*
32 *because production continued and all the reports we have to send out and*
33 *whatever, I don't know, worked fine.*

In lines 2 and 3, Claus names the continuity of the 'oil production' as an important consideration factor during the crisis. In line 3, by stating that 'they had to take care of the expatriates', Claus establishes 'expatriate safety' as another factor the organisation had to consider. In lines 3 to 7, he amplifies the rationale and importance of 'expatriate safety'. In his elaboration, he restricts membership of 'employee safety' to 'expatriates' only, omitting all local employees and establishing a superiority of the 'expatriate' category.

Although he names 'oil production' before 'expatriate safety' as an important consideration factor, his elaboration only concerns 'expatriate safety', implying that expatriate safety is his personal preference of importance. In lines 19 to 33, Claus strengthens the pre-eminence of the 'expatriate' category in comparison to other employee categories such as 'local employees' or 'headquarters'. In fact, by stating in lines 22 and 23 that 'we would give them whatever' and that 'expats were always the bosses' in line 24, Claus explicitly expresses expatriates as the superior relational pair having control and authority over 'local employees'. In lines 28 and 29, he crowns the 'expatriate' category as the ultimate power by stating that 'headquarters' has no 'control over the people anymore'.

In Claus's and Bob's extracts, the hegemony of the 'expatriate' category to its relational pair of 'headquarters' is established by directly highlighting the power expatriates possess over local employees or by degrading 'headquarters' as 'inexperienced'. Noteworthy is that the relational pair to 'expatriates' is 'headquarters' and not 'local employees' because 'expatriates' define themselves

in relation to ‘headquarters’ and not ‘local employees’. Considering that by definition an expatriate is actually defined by the country they are from and the foreign country in which they live and work, it is noteworthy to highlight that the interviewed expatriates somehow omit the second part of the defining criteria. Consequently, we can assert that people not only actively create, suppress or disown categories in their entirety but they also alter, suppress or disown defining characteristics, obligations and actions. People do this by partially highlighting those characteristics of categories that serve their perception and sensemaking during a crisis.

5.2 Sense-Abandonment

Based on Weick’s (1995) work, we know that during times of crisis it is imperative for organisations to establish a ‘shared understanding’ that consists of commitment, identity and expectations. Commitment as a pillar of sensemaking generates meaning when facing uncertainty but it can also delude people into developing ‘optimistic bias’. Identity as a construct gains prominence because qualities that are attributed to identities are the means people use to create their understanding and behaviour. In the Mann Gulch fire, the smoke jumpers dropped their tools and ran (Weick 1993). Expectations are coupled with cues to create understanding. During a crisis, people should adjust their expectations to address the unfolding changes (Casto 2014; Weick 1995; Weick & Quinn 1999). In Claus’s extract, we have observed how his identity as an ‘expatriate’ comes with the expectations that the organisation’s primary concern during the crisis has to be the safety of its ‘expatriates’.

In the excerpts below, we will see how the expectations of one category (expatriates) in a relational pair determines the obligations and functions of the

corresponding category (headquarters). We will start off with an account from David, who has been asked to talk about an extreme situation he has experienced.

Extract 11: David (pages 8–9)

David: *Then going back with the situation in Egypt, when we were evacuated in August 2013, that was a risk assessment by the company ... they at the time, they weren't sure if maybe something would manifest politically there, and there would be more riots et cetera. It was nothing that was announced, but they just felt the safety of their people, they would best to evacuate them.*

We always felt—and there was a continuously monitored, we all knew we would return to the country, we just didn't know exactly what date. Until again, the risk assessment people determined, okay we think everything is calm again, business is normal we can then bring our people back, and continue on. Of course that costs—again—the project extra money, and people, and lost time, and then of course delays.

Katrin: *Now when you experience those crisis situations and uncertainty, how did it make you feel actually, personally?*

David: *Well we'll start with the Egypt one again [laughs], firstly that was a very—it was a first time experience. I do recall the day that they—the company XYZ well there's a chance that we may evacuate. I recall it was—Friday was the day off there right, so I remember them telling us Friday morning that—actually no it was back a bit. Thursday night they said, you know this weekend there's a chance we might evacuate, we will keep you apprised of this situation every day.*

I recall on Friday morning, that we got a call and they said, go out and do your shopping, but make sure that you are back into your homes, apartments, whatever by noon, when the prayers are done. Because if anything happens, likely maybe it'll flair up after the prayers, yes it puts you in a—personally I was a little bit tense, alright? It's a little stressful and you don't know what's going to happen, I never felt unsafe, but of course you have this little bit of stress and anxiety. You go through a whole day of being basically, almost under house arrest.

Because the company at that said: go back to your homes, apartments, do you not leave, we will update you again when this—as we know more things. I again recall getting another phone call, probably it was 10 pm that Friday night, and they said again, we're looking at a situation where there is still a chance that we might evacuate Saturday morning. But we'll have you know Saturday morning.

Again you get this, let's say the only way I can describe it is you get this anxiety about you, right? Because you don't know what's going to happen but there's really not much you can do about it. No really there is nothing you can do about that situation, other than you trust in the system, of the support system, of the company, that they are managing it with your best interests in mind. From that you can relax, but as I said there is that anxiety about it, there's no doubt.

David gives us a chronological narrative of the actual evacuation procedures during the second revolution. In his account of the events leading up to the second evacuation, he also uses the pronouns 'they' and 'us' to highlight the relational

pairing of ‘headquarters’ and ‘expatriate’. Moreover, we can assert that David echoes Claus’s expectations that it is the organisation’s duty of care to evacuate its ‘expatriate’ employees. In David’s narrative of the events, we can hear his need for sensemaking. In lines 24 to 26, he makes references to feeling ‘stressful and you don’t know what’s going to happen’. According to Maitlis and Christianson (2014), the need for sensemaking arises from a disparity between a person’s expectations and reality. In lines 24 to 36, David’s statements that he felt anxious and did not know that was going on are great examples of the discrepancy between his expectations and his understanding of the world around him, eliciting a need for sensemaking.

Throughout his statement, David describes his persona as being passive while the organisation is actively assessing and monitoring the situation, telling people how to best behave and what to do. Moreover, in lines 36 to 39, David states that ‘there is nothing you can do … other than you trust in the system, of the support system, of the company, that they are managing it with your best interests in mind’. Based on the literature, we know that sensemaking will not be triggered if systems, groups and organisations diminish cues (Maitlis & Sonenshein 2010, 2014; Weick, Sutcliffe & Obstfeld 2005). However, in David’s account, the organisation seems to engage in sensemaking but excluding David and fellow expatriates from participating in the process.

In Extract 12, we can observe how Ian is being rejected by ‘headquarters’ in the co-creation of sensemaking.

Extract 12: Ian (page 8)

1 *Ian: If you go back to the headquarters everybody will just turn their head and*
2 *say, oh my gosh, don’t ask me. Just take a decision there and let me alone*

3 *with that. So everybody is feeling uncomfortable with this uncertainty*
4 *which you have in this regard. So getting the people on the table and say,*
5 *okay, now we have to take a decision and we have to take a decision*
6 *together, it's very, very complicated, especially—I mean, when you look*
7 *at people in corporate sometimes they don't have experience working with*
8 *other countries at all.*

In lines 3 to 5, Ian voices his need of support from 'headquarters' in his sensemaking of the crisis. In line 3, he mentions 'the uncertainty which you have' in which the experience of uncertainty is the trigger for his sensemaking need. Sensemaking is elicited by *cues* (e.g., political unrest or company takeover) through which meaning and consequences are experienced with uncertainty (Gephart 1997; Hernes & Maitlis 2010; Maitlis & Christianson 2014; Weick 1988). As I have mentioned previously, sensemaking is a *social activity* that is co-created with others in dialogue. In lines 4 ('getting the people on the table') and line 5 ('we have to take a decision together'), Ian expresses an invitation to 'headquarters' for co-constructing sensemaking. Nonetheless, in lines 1 and 2, Ian stated already that 'headquarters' had rejected his invitation and abandoned him with his experience of uncertainty and sensemaking efforts. Yet, in lines 6 and 7, Ian then diminishes headquarters sense-abandonment by demeaning them as not having 'experience working with other countries', echoing Bob's words from Extract 7 (in line 3, 'sometimes with no expatriate experience at all' and in line 5, 'operate with not such a wide perspective as would benefit the project'). Hence, we can establish that people seek engagement with others in co-constructing sensemaking but are selective with their invitations for such endeavour. In other words, people invite others belonging to the same category (i.e., Andrew mentioned how staying with a fellow expatriate helped him with his uncertainty experience) or to an existing

relational pair (i.e., Claus, David and Ian expressed their expectations in the involvement of 'headquarters' in their sensemaking process).

Last, we also see how during a crisis situation, expatriates can perceive their freedom of choice to be restricted due to their inability to make sense of the actual situation. In Extract 11 in lines 24 to 26, David expresses negatives feelings such as stress and anxiety because he does not know 'what's going to happen' and he goes 'through a whole day of being basically, almost under house arrest'. During a crisis, people are often restricted in engaging in behaviours and freedoms they hold dear. According to Brehm (1966), an individual experiences a negative motivational state called reactance if their freedom of choice and behaviour is being threatened or restricted. The occurrence of reactance is often associated with defensiveness, aggression, hostility, discomfort and frustration towards the source of restriction (Brehm 1966; Brehm & Brehm 1981; Dowd et al. 1991; Dowd 1993; Fitzsimons & Lehmann 2004; Miron & Brehm 2006). Further, Dillard and Shen (2005) postulated that reactance should be regarded as a latent construct that consists of anger and negative cognitions. In Ian's case, the rejection from 'headquarters' to participate in sensemaking elicits defensiveness and frustration towards 'headquarters', causing his demeaning remarks concerning their inexperience at the end of his excerpt.

Moreover, in the traditional sensemaking literature, emotions such as frustration and reactance have been regarded as a hindrance to cognitive processing (Shiv et al. 2005; Maitlis & Sonenshein 2010; Weick 1993). Weick (1990) argued that interferences to an ongoing stream of activity do not cause explicit sensemaking but that it is the arousal from the interferences that trigger sensemaking (Maitlis & Sonenshein 2010). Since arousal is integral in sensemaking then any intense

emotions felt during a crisis have the potential to trigger sensemaking. Yet, intense emotions have also the power to restrict a person's cognitive ability, hindering their sensemaking. Sensemaking also involves the bracketing of a crisis so another person's expressed negative emotions, such as stress and panic, can influence one's sensemaking of the situation (Maitlis & Sonenshein 2010). Mass hysteria is one extreme example in which expressed emotions fuel the panic of others. During a crisis, expressed emotions can provide insightful data and feedback for organisations to understand employees' perceptions of a crisis and their subsequent coping strategies. Thus, I advocate that organisations should monitor and direct expressed emotions to avert an escalation of a situation and to ensure the successful implementation of crisis management strategies.

One way to achieve the redirection of negatively expressed emotions would be to instil and emphasise positive emotions, such as excitement and hope. We have observed how Bob expressed his concerns about the events leading up to the first evacuation:

> *That was probably the biggest crisis that I've experienced. Yes, I'm trying to think. Yes and it was a little bit worrying when all communications were cut off, mobile phones and so on. We were relying on information from the satellite television news and so on. Gunfire every evening, vigilantes in the streets, yeah very interesting [laughs] (p. 7).*

Bob mentions that he felt a little worried about the lack of communication, hearing gunfire and vigilantes on the street. In an earlier account, he talks about his perceived uncertainty. At the end of this account, Bob turns those felt uncertainties into 'fantastic advantages':

> *The concomitant security issues, a lot of people would say the personal risk is a little bit higher or it can be perceived to be higher. But I think as an expatriate we are a little bit more aware perhaps of these things and perhaps we have survived those, to put it in a word. So there we are, the contractual financial risks for a project and on a personal basis possibly security risks but personally I don't count it very highly, it's there but not so high. Those are risks but on the other hand there are fantastic advantages, which I think, more than out way such risks. Not that you asked that but there it is [laughs] (p. 3).*

Bob illustrates how one can change negatively felt emotions into positive ones, influencing a change in his perception and understanding of a crisis. Employees like Bob could easily function in a supportive role to redirect other employees' negatively expressed emotions by partaking in a sensegiving role. In addition, organisations should appraise and instil positive emotions like 'pride' by celebrating even the small accomplishments of their employees during times of crisis. Pride and honour are powerful positive emotions that motivate people for endurance, which is often required during a crisis.

In this chapter, I have discoursed how people format category devices in a hierarchy and even transform and declare categories as the 'other' to assist their sensemaking after a crisis experience. Further, I have discussed how expatriates have expressed their need for socially constructing sensemaking but have either been excluded or rejected in the organisational sensemaking effort. Consequently, we have observed how expatriates can perceive their freedom of choice to be threatened due to their inability to make sense of the actual crisis situation, arousing the experience of reactance and other negative emotions against the organisation (in particular

headquarters) and its actions. Such resentment at and frustration with the restriction of their freedom of choice can be further strengthened when expatriates believe that they hold more expertise and capabilities in sensemaking of the crisis compared to people from headquarters. To address such an occurrence, headquarters should assess expatriates' frustration and reactance levels carefully by providing reasons why freedoms might be restricted and direct expatriates to process and manage their emotional state.

Chapter 6: From Latent Resources of Resilience to 'Waiting Out' the Crisis

Even though organisations are increasingly subjected to the experience of crisis situations, it is surprising that organisations are often taken unaware when confronted by the immediacy and magnitude of a crisis such that they still struggle to anticipate and prepare for crisis situations. Reasons for such unpreparedness could relate to a lack of resources and time constraints, executives' ignorance or optimistic attitudes (Spillan et al. 2011).

Organisations that do anticipate and prepare for a crisis situation can still struggle during and after the crisis. However, organisations that are ready for a crisis are more likely to survive it in the first place and probably with less damage compared to organisations that are unprepared (Smits & Ezzat Ally 2003; Spillan et al. 2011; Spillan et al. 2014). Concepts, such as scenario planning, contingency planning and disaster simulation studies are important elements to assist organisations with their crisis readiness (Casto 2014; Spillan et al. 2011). Having a strategy to deal with a specific crisis does not mean one will be successful in implementing the strategy and emerge victoriously from the battlefield. In fact, scholars have pointed out that preparation is useful and should not be ignored but it has limitations when addressing the complexity of crisis situations (Casto 2014; Quarantelli 1988). Adaptation to crisis is as much essential as preparation. Some crises have vague warning signs before they strike, making it almost impossible to predict them in terms of their true nature, impact, timing and location. Scenario planning or disaster simulation can generate 'optimistic biases', suggesting that organisations believe that through planning they are able to reduce uncertainty (Casto 2014; Weick,

Sutcliffe & Obstfeld 2005). This rather deterministic view of uncertainty and crisis is misleading because the very definition of 'the unknown' implies that crisis events are unpredictable (Casto 2014; Quarantelli 1988, 1997).

The notion that 'the explorer cannot know what he is facing until he faces it' (Weick 1988, p. 305) seems sound. Therefore, on this basis one should adopt the view that crisis and perceived uncertainties have to be embraced to be managed. I do not disregard the necessity of planning per se but caution that such actions should fall under the realm of sensemaking and resilience (Weick & Sutcliffe 2011) rather than scenario and contingency planning. Thus, in this chapter I turn to organisational resilience as a more suitable theory to guide our investigation between perceived uncertainty and crisis sensemaking.

In the literature, organisational resilience has been linked to resources (Pal, Torstensson & Mattila 2014; Vogus & Sutcliffe 2007), dynamic competitiveness (Eisenhardt & Martin 2000; Prahalad & Hamel 1990), learning (Vogus & Sutcliffe 2007; Weick & Sutcliffe 2011), culture and leadership (Seville et al. 2006). As with other concepts, controversy exists in the literature in terms of how to define resilience (Pooley & Cohen 2010). Some authors have proposed that resilience should be viewed as a personal trait while others have suggested researching it as a process (Ahern, Ark & Byers 2008). As a personal trait, resilience is understood as an ability to adapt to stress (Ahern, Ark & Byers 2008), whereas as a process, it is observed as an evolving process of self-organisation and interaction between the environment and developing organism (Curtis & Cicchetti 2007; Pooley & Cohen 2010; Ungar 2008). Moreover, resilience as a process is defined as a set of events characterised by positive outcomes after a disordered exchange between an agency and its environment. It is 'the capacity of a dynamic system to withstand or recover

from significant challenges that threaten its stability, viability, or development' (Masten & Narayan 2012, p. 231). According to Pooley and Cohen (2010), factors that contribute to the creation of resilience are a sense of belonging, social support and self-efficacy. In fact, they argued that 'the ability to recognise, want and seek support, as well as having the opportunity for support, are all important interactive mechanisms which contribute to resilience' (Pooley & Cohen 2010, p. 33).

Understanding and examining the organisation and its capacity to operate and survive in turbulent and ambiguous environments has increased interest in organisational resilience (Vogus & Sutcliffe 2007; Weick 1993). Organisations that are resilient possess so-called 'latent' resources and capabilities that can be activated and restructured according to the demands of a crisis (Limnios et al. 2014; Vogus & Sutcliffe 2007). As a concept, organisational resilience stresses being able to monitor an environment for threats and mobilise resources and capabilities to ensure reproduction no matter how demanding the conditions (Kantur & İşeri-Say 2012; Limnios et al. 2014; Linnenluecke, Griffiths & Winn 2012; McManus et al. 2008; Vogus & Sutcliffe 2007). As such, organisational resilience conceptualises organisations as proactive survivors rather than as passive victims facing adverse situations. Employees, we will argue, use a number of resources to generate resilience, including specific knowledge, experience and skills that derive from their definitions of realities in terms of their membership of different categories.

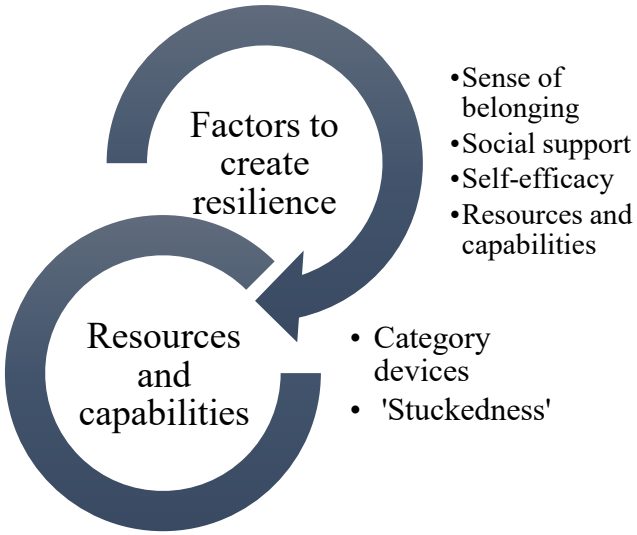

Figure 4: Basic Research Framework for Resilience

Given the phenomenon that organisations are subjected to (unanticipated) events, the remainder of this chapter will discuss how organisations are able to create resilience. The aim is to investigate how participants generate resilience while aligning decision-making with changes occurring in their environment. I will illuminate how, under high uncertainty, employee identities are activated and used as sources of resilience. Subsequently, as with the previous chapters, I will use extracts from interviews conducted with employees of a European oil and gas company that was operating in Egypt and Libya at the time of the Arab Spring, analysing MCDs.

I define resilience as an ongoing process deployed to make sense and cope with adversity. Further, resilience involves 'attitudes, beliefs, behaviours, and even physical functioning' (Pfefferbaum et al. 2008, p. 349). People's constitution of membership of categories plays an important role in the creation of resilience. They use those memberships they espouse and the associated knowledge and skill sets of each category to build resilient responses to adversity.

The following extract outlines a conflict situation Ian was experiencing in his decision-making during a crisis situation. Ian was working as the finance manager on a three-year expatriate assignment in Cairo, Egypt, from January 2011 to May 2013. He was asked to reflect on his experience and decision-making during the crisis.

Extract 13: Ian (page 8)

Ian: *Therefore this is—and also you don't have a lot of people around you who really know how to act and even if you have access to professional service providers with experience on that, also they can just give you guidance but they will never take a decision. Sure, because for them this is very dangerous to really give you advice on how to take a decision. They will just provide you information and you have to take the decision.*

If you go back to the headquarters everybody will just turn their head and say, oh my gosh, don't ask me. Just take a decision there and let me alone with that. So everybody is feeling uncomfortable with this uncertainty which you have in this regard. So getting the people on the table and say, okay, now we have to take a decision and we have to take a decision together, it's very, very complicated, especially—I mean, when you look at people in corporate sometimes they don't have experience working with other countries at all.

So for them even under normal business circumstances dealing with exotic countries like Egypt or Libya is already quite challenging for them because they just known the home country framework and the home country stability. In a lot of circumstances it's already a big, big challenge

for them to deal with those countries and they have totally different cultures and totally different behaviours and political frameworks. Then when you have such a crisis situation it really gets very difficult and sometimes emotional. So deal with the situations is very stressful.

People enact membership of various categories at the same time and it is understandable that categories can be in competition with each other. Hugenberg and Bodenhausen (2004) argued that in the case of competing categories, one category will eventually gain dominance over other categories and be declared the 'dominant category', inhibiting the use of other categories (Macrae, Bodenhausen & Milne 1995). In addition, it was hypothesised that categories could decay over time (Hugenberg & Bodenhausen 2004) or they could become disowned as inefficient or spoiled. The activation and inhibition of categories is an essential ability. Necessary skill sets are attributed to each category with their own set of experience, knowledge, skills and abilities such that categories are invariably implicated in relational struggles. In fact, the ability to control the activation and inhibition of categories should be regarded as a source of resilience in itself. As such, it is not the number of categories that people are members of but rather the ability to position a category as the most appropriate skill set for dealing with a particular situation that contributes to the creation of resilience. While category control and dominance have the potential to generate resilience, individuals determine which category or categories are the most appropriate for any given situation. Hence, it is the reciprocal relation between the situation and the person's selection and activation ability that determines their resilience creation in defining the situation (McHugh 1968). In other words, if the person is able to activate what is taken to be the most appropriate category matching the situation then they are more likely to be resilient.

In the above extract, Ian is deliberately using his 'expatriate' category membership when he talks about his experience during the Arab Spring. He could have chosen his category as the 'finance manager' of the subsidiary in Egypt or as a member of the 'headquarters' category because at the time of the actual interview, Ian's expatriate assignment had eased already and he had returned to headquarters. Moreover, as an expatriate, Ian would also have been still regarded as a representative of the 'headquarters' category. However, in lines 7 to 20 he actively inhibits his representativeness of 'headquarters' and any associated skills and knowledge he has regarding headquarters. Instead, Ian activates his knowledge about Egypt, its culture and political framework associated with his 'expatriate' membership exclusively. Nonetheless, in lines 15 and 16 Ian refers to Egypt and Libya as 'exotic' countries and in line 19 he labels both countries as 'those' countries and 'they'. This makes it apparent that he is neither Egyptian nor Libyan but still carries expertise in both countries in comparison to people who have only worked in the home country. Consequently, in Ian's case it is his experience and knowledge drawn from his 'expatriate' membership that becomes the latent resource and capability with which to create resilience in mastering uncertainty.

Another account to highlight how people use their memberships to generate resilience is that of Bob. Bob is an engineer and expatriate working for the same organisation as Ian. Bob, like Ian, has been asked to talk about an extreme uncertainty or crisis situation he had experienced while working in the gas and oil industry in Egypt.

Extract 14: Bob (pages 6–8)

1 *Bob:* *After I left school, I joined the Royal Navy as an engineer and ending up*
2 *as an engineer officer. A little bit similar and that's where the qualification*

came from. I did it then for a few years in the UK but not in the oil and gas business. The gas was entirely international. I hope that doesn't exclude me.

Katrin: *Not at all.*

Bob: *Then probably—I guess everybody in Egypt who's been there in the last years would say the revolution in 2011 was it?*

Katrin: *Yeah.*

Bob: *That was probably the biggest crisis that I've experienced. Yes, I'm trying to think. Yes and it was a little bit worrying when all communications were cut off, mobile phones and so on. We were relying on information from the satellite television news and so on. Gunfire every evening, vigilantes in the streets, yeah very interesting [laughs]. We stopped work immediately. The lack of communication—I was working in the office in the early part of the project at that time so we did not have site operations. It might have been different if we had. The whole team was located in the town, in Cairo and with the lack of communications—actually landline telephones came back after a little while. The Company still has very good—what do you call it—security organisation and procedures which were put into operation and we followed those. After I think three or four days there were various evacuation flights. Initially I declined one of those but then the second day it was made very clear that one ought to take it so I did.*

So that was all quite interesting and good to see actually. I'm talking about the company I was working for at the time XYZ, but I know of many other

expatriates with other oil and gas companies, other non-oil and gas companies whose procedures were similar and were tested and sometimes found wanting a little bit but overall worked.

Katrin: How many days in total, or how many weeks did you actually stop working?

Bob: Six.

Katrin: Six days or six weeks?

Bob: I certainly was evacuated from Egypt, away from Egypt for six weeks. However for the latter three of those weeks the company moved us to the headquarters and we continued working there. That was made possible by let's call it current technology, IT technology. We were able to operate as if we were in Cairo pretty much which was amazing. So that's how we managed that.

Katrin: How did it make you actually feel experiencing that crisis situation?

Bob: First of all I was not surprised because the political tensions in the country were tangible even 10 years previously. However I was surprised at the immediacy of what happened, the response of the government was immediate and brutal and it's a little bit disconcerting to hear gunfire near one's residence. How did I feel? A little bit concerned I think. I don't think I have any fears for myself because as I said earlier one tends to look after oneself. What I was concerned about a lot was my Egyptian friends and colleagues because this was their country being torn apart in many ways

42 *and with no communications it was very difficult to get in contact and see*
43 *how people work. All of them were fine as it turned out but those were*
44 *concerns and feelings. What else?*

Bob starts his answer by giving some information about his background. His background information seems to function as an explanation as to why he has never worked in the oil and gas industry in his home country but actually only serves to highlight his membership as an officer of the Royal Navy. He could have just stated that he only worked in the oil and gas industry as an expatriate but instead he chooses to highlight his affiliation with the Royal Navy. In fact, Bob had been asked to give a little background information at the beginning of the interview, at which point he chose not to express his membership with the Royal Navy. Thus, his placement of that information in the interview has significance in the sense that when prompted to talk about his experience of a crisis situation, he wants the listener to know of his membership as an engineer officer because it is a membership device he activated during the actual crisis. Otherwise, it makes no sense why he would choose to provide this background information.

Bob continues his answer by giving an account of the first revolution in 2011 in Egypt. During his narrative of the events, one could argue that his 'military' membership comes to the forefront by his using the words and phrases 'operation' and 'we followed those' in lines 19 and 20 although the predominant membership device he expresses in lines 9 to 34 is that of an expatriate. In lines 24 and 25, he states clearly that he is talking on behalf of all 'expatriates' regardless of which company and industry in which they work. Nonetheless, in lines 35 to 45, after being asked to reflect on how he felt experienced the crisis, he makes a direct remark in lines 39 to 41 referring to his military membership device by saying, 'I

don't think I have any fears for myself because as I said earlier one tends to look after oneself'. All Bob said earlier was that he was trained as an engineer officer in the Royal Navy, implying that he is capable of looking after himself. In lines 41 to 45, he outlines his concerns about the safety of his Egyptian friends and colleagues, aligning with the duties of his military membership that are to primarily concern himself with the protection of himself and others. He is the only interviewee who expressed concerns for his local co-workers and friends.

6.1 The 'Stuckedness' of Resilience

When people face adversity, there is frequently a call for change in the way people perceive, make sense and cope with the crisis (Battilana & Casciaro 2013; Foley 2001; Maitlis & Sonenshein 2010; Meyer, Brooks & Goes 1990; Weick & Quinn 1999). Hence, as a coping strategy, resilience is portrayed as an ability to survive and 'bounce back' from adversity (Ahern, Ark & Byers 2008; Bell 2002; Bhamra, Dani & Burnard 2011). Often implied with the call for change is the notion of action and mobility. As such, resilience enables people to cope and move on with their lives during and after a crisis. Yet, we know that in some circumstances people fall into paralysis when confronted with adversity. Such an inability to move should not be confused with the notion of being 'stuck' (Hage 2009; Missbach 2013; Vignehsa 2014). For example, Vignehsa (2014) distinguished clearly between 'strandedness' and 'stuckedness'. She discussed the volcanic eruption of Eyjafjallajökull in Iceland in May 2010 as an example of 'strandedness', in which many tourists were 'stranded' for several days. Common responses of passengers were either to 'fight' with members of the tourism industry or to 'flight' by trying to arrange transportation via other means, such as other airlines or sea passage. Regardless of which response effort passengers pursued, the result was 'strandedness'. Vignehsa

(2014, p. 26) emphasised that 'strandedness' is an inability to move while 'stuckedness' is about enduring a 'troublesome practice in the face of pervasive crisis'. Although I agree with Vignehsa (2014) that one should distinguish between 'strandedness' and 'stuckedness', I believe that 'stuckedness' is much more than simply enduring a crisis.

While stuckedness or 'being stuck' presumes that a person has an inability to move, enduring 'stuckedness' during a crisis is actually resilience (Hage 2009; Missbach 2013) because people can actively choose not to move, as in being stuck, to 'weather out' the crisis. It is exactly that active choice of wanting to 'wait out' the crisis that enables us to transform stuckedness into resilience. Hence, if enacted as a choice 'stuckedness' is not an opposition to resilience on a mobility continuum, but a form of resilience.

Now let us reassess David's narrative of the events leading up to the second evacuation in light of stuckedness as a form of resilience. At first glance, the organisation's coping mechanisms may appear as hesitancy and indecisiveness. However, we will see that the organisation makes an active choice for stuckedness as an enactment of the 'resilient organisation' category to govern its expatriates.

Extract 15: David (pages 8–9)

David: Then going back with the situation in Egypt, when we were evacuated in August 2013, that was a risk assessment by the company … they at the time, they weren't sure if maybe something would manifest politically there, and there would be more riots et cetera. It was nothing that was announced, but they just felt the safety of their people, they would best to evacuate them.

We always felt—and there was a continuously monitored, we all knew we would return to the country, we just didn't know exactly what date. Until again, the risk assessment people determined, okay we think everything is calm again, business is normal we can then bring our people back, and continue on. Of course that costs—again—the project extra money, and people, and lost time, and then of course delays.

Katrin: Now when you experience those crisis situations and uncertainty, how did it make you feel actually, personally?

David: Well we'll start with the Egypt one again [laughs], firstly that was a very—it was a first time experience. I do recall the day that they—the company XYZ well there's a chance that we may evacuate. I recall it was—Friday was the day off there right, so I remember them telling us Friday morning that—actually no it was back a bit. Thursday night they said, you know this weekend there's a chance we might evacuate, we will keep you apprised of this situation every day.

I recall on Friday morning, that we got a call and they said, go out and do your shopping, but make sure that you are back into your homes, apartments, whatever by noon, when the prayers are done. Because if anything happens, likely maybe it'll flair up after the prayers, yes it puts you in a—personally I was a little bit tense, alright? It's a little stressful and you don't know what's going to happen, I never felt unsafe, but of course you have this little bit of stress and anxiety. You go through a whole day of being basically, almost under house arrest.

Because the company at that said: go back to your homes, apartments, do you not leave, we will update you again when this—as we know more things. I again recall getting another phone call, probably it was 10 pm that Friday night, and they said again, we're looking at a situation where there is still a chance that we might evacuate Saturday morning. But we'll have you know Saturday morning.

Again you get this, let's say the only way I can describe it is you get this anxiety about you, right? Because you don't know what's going to happen but there's really not much you can do about it. No really there is nothing you can do about that situation, other than you trust in the system, of the support system, of the company, that they are managing it with your best interests in mind. From that you can relax, but as I said there is that anxiety about it, there's no doubt.

In lines 25 to 27, David describes his 'stuckedness' as 'being basically, almost under house arrest', making an explicit reference to the immobility aspect of 'stuckedness'. In lines 27 to 33, we learn that David's 'stuckedness' is involuntary, as it is advocated and governed by his organisation as part of their quest for resilience. In his entire narrative, we understand that the organisation uses his 'expatriate' category to generate resilience via an advocacy of 'stuckedness', as it is he—the expatriate—who receives all the updates and instructions to keep a low profile during the crisis. Thus, I advocate that 'stuckedness' should be defined as a willingness to endure a particular situation or event. Moreover, I agree with Hage's (2009) notion that 'stuckedness' is more than just 'waiting out' a crisis.

During the first revolution, the organisation arranged evacuation for all its expatriates within three to four days. Bob stated the following:

> *The Company still has very good—what do you call it—security organisation and procedures which were put into operation and we followed those. After I think three or four days there were various evacuation flights. Initially I declined one of those but then the second day it was made very clear that one ought to take it so I did.*

Remembering Bob's membership to the 'military' category (he was an officer in the Royal Navy once), his last sentence stating that he initially wanted to 'stick around' or be 'stuck', so to speak, makes sense. As a member of the military category device, Bob surely is familiar with the concept of 'stuckedness': keeping a low profile to assess and 'weather out' a crisis. Thus, we can affirm that stuckedness is indeed an encouragement to governmentality, heroism and resilience (Hage 2009; Vignehsa 2014). Like Bob, by becoming accustomed to be governed into stuckedness, one becomes resilient. Last, stuckedness as a form of resilience is experienced through the category devices we owe as part of the capabilities and resources of that particular category device. From David's account, we have observed that organisations use the 'expatriate' category as a vehicle to governmentalise organisational resilience through the experience of 'stuckedness'.

Moreover, organisations should empower their employees in voicing their commitment to the organisation's resilience efforts without any fear of negative consequences. In the case in which an employee has to endure 'stuckedness' then it should be the employee who decides for how long their endurance would last and which resources and skills they require to perform such an act of resilience—not the organisation. Only under these circumstances would we see true resilience being constructed as an act of 'stuckedness'.

People enact membership of various categories concurrently and it is understandable that categories can be in competition with each other (Hugenberg & Bodenhausen 2004). Moreover, it was hypothesised that categories could decay over time (Hugenberg & Bodenhausen 2004)

or they could become disowned as inefficient or spoiled (Sacks 1992a). As with all the other interviewed expatriates, Doug was asked what uncertainties he experiences while working in Egypt. The following extract is Doug's answer to that question.

Extract 16: Doug (page 2)

Doug: *Well certainly at the moment, the oil and gas price. Well, not so much the gas price, but the oil price affects the whole industry and also the cultural differences that you experience for local workforces.*

Doug: *Yeah. Just—for example, just the work ethic the different regions have. The work ethic in, certainly in Egypt, is totally different to Europe, for example.*

Katrin: *You are originally from England?*

Doug: *Yes I am. Yes.*

Well, it's mainly associated with expectations and the ability to actually get the work done. This particular culture here in Egypt needs constant supervision and it is very, very frustrating at the speed at which they work, the speed at which anything gets done.

Katrin: *So is it so much different, the Egyptian social cultural element than let's say to the one you experienced in South Africa?*

Doug: *Yeah. My experience in South Africa was twofold. Sorry, was contrasting. We were fabricating some large subsidy structures and we had two different firms that were doing the fabrication. One firm that was managed by a white [older]—he was on top of his workforce. He knew what he needed to get done and he kept on top of them and*

15 *the work got done well. Very much in line with our expectations for what we've*
16 *experienced in Europe typically. Another company was 100 per cent black and that*
17 *was not managed very well and had similar experiences to [my] experience here in*
18 *Egypt.*

In lines 4 to 6, Doug identifies himself as a member of the categorisation membership device 'European'. In lines 13 to 18, he elaborates on the 'European' membership device by adding the identifier 'white' (line 13) and 'work got done well' (line 15). This contrasts with the 'African' membership device that he describes as '100 per cent black' and 'not managed very well' (lines 16 to 17). Due to his condescending and judgemental tone and word choice (in lines 2 to 18) towards other countries, it is plausible to also assign Doug membership to the 'racist' category device.

In Doug's case (in Extract 15), it is clear that he is comfortable to own the membership of 'European' because he directly identifies himself on numerous occasions with this category. Regarding the 'racist' membership device, Doug deploys the category by making discriminative comments about other countries that are typical of actions attributed to the 'racist' category device (Sacks 1992a; Sacks 1992b). Moreover, Doug does not make any attempt to clarify and detoxify his condescending remarks about other nations, strengthening the listener's assumption that Doug belongs also to the 'racist' category. Although one might argue that Doug favours the 'European' category over the 'racist' category, he is still able to own both categories. Consequently, the idea of a 'dominating category' will depend on whether categories and their subsequent attributes are compatible. In Doug's case, the 'European' and 'racist' category devices are perfectly compatible and he is able

to enact both at the same time. This contrasts with Hugenberg and Bodenhausen (2004), who argued that categories would compete for dominance.

In this chapter, I have investigated how participants generate resilience while aligning decision-making with changes occurring in their environment. I have illuminated how, under high uncertainty, employee identities are activated and used as sources of resilience. I have also demonstrated how resilience, when mobilised at an organisational level, can entrap its employees into a form of 'stuckedness' that should be clearly distinguished as a negative form of resilience.

Chapter 7: Wrapping it up

In this chapter, I will discuss the research contributions and associated implications in light off perceived uncertainty, sensemaking and resilience. The discussion of each concept will conclude with suggestions for future research.

Crises are not new phenomena—the world has witnessed crises and disasters for many centuries. In more recent years, events such as 9/11, the Fukushima tsunami and Hurricane Katrina have led some researchers to argue that the 'frequency, nature, and consequences of these adverse events are changing' (Boin 2009, p. 367). These consequences demand a shift in our crisis management thinking (Quarantelli 2005; Boin & McConnell 2007). I agree that there is a need to continuously further our understanding of crises management. As societies change, so do adverse events because many crises, like climate change and the Syrian Civil War, are human-made. Thus, each new generation of people construct, witness and manage a 'new' series of crises.

In this research, I interviewed 13 expatriates that have worked for a European oil and gas company in Egypt and Libya during the Arab Spring. By using MCA, perceived uncertainty, sensemaking and resilience have emerged as primary concepts that expatriates construct in conversations when asked to talk about a crisis situation they have experienced. Moreover, as mentioned, readiness theory, contingency theory and organisational learning theory contribute to our understanding of crisis management. However, it is the higher-level theories and concepts such as perceived uncertainty, sensemaking and resilience that enable us to capture and advance our crisis management knowledge.

Regarding the three perspectives of defining a crisis by Pearson and Clair (1998), I have assumed mostly a 'psycho-social' and 'social–political' view. The psychological view defines crisis in respect to the perceptions and sensemaking of the person who is experiencing the crisis. Research that embraces this perspective emphasises that a crisis can force individuals to disillusion and reorganise their assumptions about themselves, the organisation, their culture, structural relationships and corporate role identities (Pearson & Clair 1998; Norris et al. 2008; Boin 2009; Rosenthal et al. 2001). Concerning the social–political perspective, a crisis is the basis of cultural and institutional symbols, meanings and ideologies. The reasons of a crisis are a collective collapse of sensemaking and corporate identity construction, resulting in a breakdown of social order and followership (Pearson & Clair 1998; Weick 1993, 2010). Since this study was motivated in investigating these effects on expatriates' cognitive and behavioural experiences regarding their uncertainty perceptions, sensemaking and resilience construction, I embedded my research with psychological and social–political perspectives. Although I agree with Pearson and Clair (1998), who formulated their research in alignment with all three perspectives, I was unable to integrate the 'technological–structural' perspective. The 'technological–structural' perspective states that an interaction failure of the technology used in organisations and management practices and procedures, or a combination of both aspects, can be a source of organisational crises. Consequences associated with a failure of the management of organisational machinery and organisational practices are employee injury, death, destruction and pollution of the natural environment (Pearson and Clair 1998; Weick 2010; Vogus et al. 2010). Examples of these include the Chernobyl disaster and the Shell oil spill into the Gulf of Mexico. Although four engineers participated

in this study's interviews, only one remarked on the crisis factors relating to the 'technological–structural' view:

> *There are technical factors as everywhere, especially I said before [brown oil], so all our—or most of our equipment is beyond design. Normally equipment is designed 25 to 30 years and it is producing 30 years, it's beyond design so you have to do inspections for recertification and reissue or issue the usage of the equipment for further years. So you have to look carefully at the maintenance, on that side. On the greenfields, it's basically start-up so no procedures are available so you have to prepare them and you have to bring certain standards into the organisation (Werner, p. 3).*

Here he discusses how in a 'brownfield development', a mismanagement of equipment in terms of maintenance can create a crisis. Conversely, a 'greenfield development' imposes uncertainty in terms of managerial procedures addressing the structural aspect of the 'technological–structural' view. Nonetheless, the oil and gas company that participated in my study was not subjected to a failure of technology use or management procedures. Thus, this restricted my consideration of the 'technological–structural' perspectives.

From my interviews with the expatriates, I know that the organisation was present and operating before January 2011 and beyond June 2015 while Egypt underwent three major political changes as part of the Arab Spring. This fact allowed me to investigate how the expatriates of the organisation perceived, experienced and managed each political change. Moreover, the fact that each change was political in nature and occurred in the same location enabled me to draw conclusions as to the organisation's ability to incorporate sensemaking from previous crises. This

allowed the organisation to alter its responses to minimise the effect of subsequent crises.

7.1 Perceived Uncertainty

In this thesis, I followed Milliken's (1987) view of understanding environmental uncertainty as a perceptual construct. A major issue with perceived environmental uncertainty is the lack of a common definition. Early research in the field used the term to describe an objective state of an organisation's environment or as a state of an individual's perception about the environment (Milliken 1987). Describing environmental uncertainty as an objective state means that it is plausible to assign certain characteristics to the environment, including its uncertainty (Downey et al. 1975). Describing environmental uncertainty as a perceptual phenomenon implies that uncertainty derives from a person's state of mind on how uncertain they perceive their environment (Duncan 1972; Downey et al. 1975; Milliken 1987).

Some researchers have strongly advocated to study environmental uncertainty as a perceptual construct (Child 1972; Downey & Slocum 1975; Milliken 1987). Others have cautioned that such a construct could condemn it to become a study of 'psychoanalysis' (Tinker 1976, p. 507). Milliken (1987) defined perceived environmental uncertainty as an individual's lack of adequate information to make precise predictions about their environment.

Another problem identified by Milliken (1987) was the inconsistency and difficulty of interpreting results from prior studies. This issue is related to the disagreement of a mutual definition on environmental uncertainty. Thus, researchers have often measured the construct as both an objective and perceptual state, leading to confusing and often invalid results (Milliken, 1987). Researchers that measure the

an objective state of an environment such as its complexity or volatility are not assessing environmental uncertainty because it is not change in the environment that creates uncertainty but rather 'unpredictable change' (Milliken, 1987). Consequently, it is essential to distinguish between measurement scales that assess an objective state or perceptual state.

Even existing measurement scales that seem to measure environmental uncertainty as a perceptual phenomenon are questionable concerning their accuracy (Milliken 1987). For instance, the measurement scale developed by Duncan (1972) measures a lack of information and inability to predict forthcoming events in an environment. The scale by Lawrence and Lorsch (1967) measures job performance and requirements (Milliken 1987). Further, past research has re-examined the sub-scales of these environmental uncertainty measures and claimed an absence of correlation between them, suggesting that each measurement might assess different types of environmental uncertainty (Downey & Slocum 1975; Milliken 1987).

Prior research asserts the existence of at least four different types of uncertainty: state uncertainty, effect uncertainty, response uncertainty (Milliken 1987) and outcome uncertainty (Regan 2012) (see Figure 4). In my study, expatriates expressed all four types of uncertainty during both the first and second revolutions. Consequently, people's perceptions of uncertainty do not necessarily diminish by repeated exposure. Political unrest and instability were named by all interviewed expatriates as the primary external sources of uncertainty and the contributing factors of their crisis perception. I can also claim the existence of an additional uncertainty because the organisation did alter its response to the second revolution, causing the expatriates to feel a 'corrected response uncertainty'.

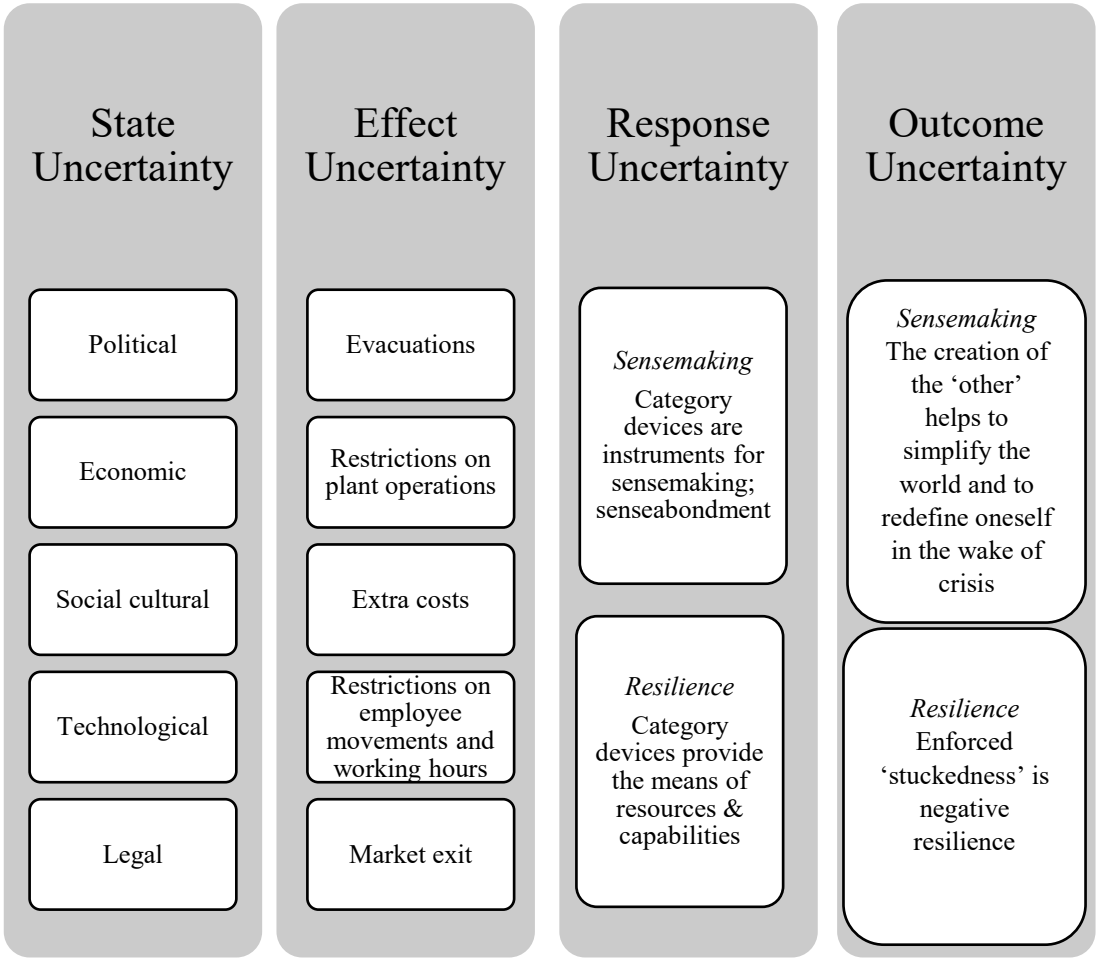

Figure 1: Basic Overall Research Framework

Since there is a close interrelationship between other external sources of uncertainty (Ashill & Jobber 2001, 2014), it was not surprising that factors relating to the economy were voiced by some of the expatriates. Some expatriates also named social–cultural aspects as sources of their uncertainty perception, such as the Egyptian society having a different business hierarchy and working culture. Employees who work closely with legislation and government departments due to their corporate roles voiced legal matters as a source of their perceived uncertainty. Employees who are engineers stated technology and its use as an important uncertainty factor.

Last, some expatriates also named the natural environment as a potential uncertainty factor. This includes environmental issues that are created by the

organisation's business procedures (i.e., fracking and waste management) and the effect of the environment on the organisation's drilling efforts (i.e., the density and composition of different earth layers).

We know from the crisis management literature that a crisis is the 'result of multiple causes, which interact over time to produce a threat with devastating potential' (Boin & McConnell 2007, p. 46). The classic strategic management literature discusses all the factors the expatriates in this study have voiced as potential crisis factors. From my interviews, I asserted that the different sources of crises are in a complex relationship and that the sources, in isolation or in combination, have the potential to both trigger and contain or even prevent crises. Consequently, I stress that it is important for each factor to be assessed in conjunction with its threat and crisis prevention potential, shifting our negative view of those factors.

Regarding the effects of the Arab Spring, all expatriates named expatriate evacuations during the first and second revolution in Egypt as the primary uncertainty factor. Other examples of uncertainty effects experienced due to the Arab Spring were an increase of costs, loss of time, changes to contracts, project delay and market exit in Libya. Last, restrictions on employee movement and a reduction in productivity were named as additional uncertainty effects of the Arab Spring.

Andrew's statement is a great example of how felt emotions are an integral aspect of experiencing uncertainty. We have observed similar emotions in Bob's earlier statements:

> *Yes and it was a little bit worrying when all communications were cut off, mobile phones and so on. We were relying on information from the*

satellite television news and so on. Gunfire every evening, vigilantes in the streets, yeah very interesting [laughs] (p. 7).

In crisis situations, people are often pushed to their limits concerning their information processing ability and decision-making, yet in the literature on uncertainty and sensemaking there is limited application of felt emotions (Hernes & Maitlis 2010; Maitlis & Sonenshein 2010; Weick 2010). This shortcoming will be addressed in greater detail in the remainder of this chapter. We again observe that the construct of uncertainty effects is multifaceted. Each effect is interrelated with the other effects in that it can influence its magnitude and even function as a trigger of other effects. For instance, the need for an evacuation of expatriates is an effect of the Arab Spring. However, it also functioned as a cause of project delay and extra costs (i.e., evacuation flights, accommodation and car rental for expatriates during their time working at headquarters).

From my interviews, I asserted that all interviewees constructed narratives when they reported on the effects of the Arab Spring. Further, all accounts illustrated a complex and close relationship between sources and effects of crises. These interviewees also made meaningful distinctions between the different sources and effects of crises, advocating a multidimensional conceptualisation of perceived uncertainty.

Further, the way some interviewees reported about the sources and effects of uncertainty almost suggests a linear relationship between the different uncertainty constructs. Thus, one might think that people would first experience state uncertainty and then effect uncertainty followed by response uncertainty. Indeed, when regarding the perceived uncertainty literature, this linear interrelationship between the constructs is being echoed by some researchers (Ashill & Jobber 2001,

2010; Gerloff et al. 1991), who stated that an increase in state uncertainty would lead to an increase in effect uncertainty. However, I advocate that the relationship between the different uncertainty constructs are far more complex, as multiple constellations are possible. For instance, if we told a person living in California that there will be an earthquake in their region at 5 am tomorrow morning but withhold the exact magnitude of the earthquake, the person could experience state and effect uncertainty without experiencing response uncertainty. This is because someone living in California is expected to know how to respond to an earthquake threat. Each construct is experienced because of a lack of information or restricted processing ability relating to that particular construct. Hence, one does not experience effect uncertainty because they have previously experienced state uncertainty but because they lack information regarding the state and effects of the crisis. I do not disagree that someone can indeed experience all three types of uncertainty concurrently. In other words, it is possible that a person experiences each uncertainty in a linear fashion. However, I claim that there are many more possible constellations as to how people can experience uncertainty other than state uncertainty first then effect uncertainty followed by response uncertainty.

I defined environmental uncertainty as an individual's lack of adequate information to articulate precise predictions about their environment. Moreover, I assessed perceived uncertainty as a multidimensional construct (Ashill & Jobber 2010, 2014; Milliken 1987; Regan 2012). I found that the different conceptions of uncertainty are member categories—members of the profession of organisational behaviour. A distinction of which membership category device people use to express their perceived uncertainty has crucial consequences. Not only do the obligations, rights and beliefs (Fitzgerald 2015; Sacks 1992b; Schegloff 2007; Schnurr et al. 2014) of

categories differ but also the perceptions and consequent actions enacted by the category.

In research question 1 I asked, 'Which mechanism do people choose to construct and navigate their perceived uncertainty, sensemaking, and resilience?' I found that people experience and voice their uncertainty as perceptions by assembling narratives about their uncertainties using distinct MCDs. Each MCD comes with its unique set of rules, obligations norms and beliefs (Fitzgerald 2015; Psathas 1999; Schegloff 2007; Stokoe 2012), shaping the foundation of the category's perceptions. Thus, the distinction of which MCD people use to construct their perceived uncertainty is crucial. Not only do the perceptions of uncertainty differ for each category but the enacted actions will also differ because they are in alignment with the perceptions of each category.

In research question 2 I questioned, 'How do people express their uncertainty states?' Employees perceive and express different types of uncertainty through their category devices. It is important not to overestimate the expertness of employees in coping with uncertainty during a crisis.

When interviewees were asked about their perceived uncertainty states, they expressed their uncertainty as 'tokens' through their category devices by constructing narratives for their conceptualisation of uncertainty as a perceptual state. The choice of category device also determined the types of uncertainty they experienced. We know that people perceive, react and manage situations differently. Thus, come category devices are not compatible, creating a classical example of conflict of interest for the person. This would also explain why we saw some variance among employees. Each category device comes with its own objectives and mindset. Hence, we saw a natural bias among employees in their

perception of uncertainty factors based on their corporate identity and associated roles. This selectiveness in their consideration set of potential uncertainty factors showed that some concepts like scenario planning can create 'bias' and 'blind spots' in people. If the process of selecting crisis factors is already biased because people only concentrate on the factors that have an immediate association with their corporate roles then the creation of actual scenarios and subsequent strategies will also be biased. I argued that the selectiveness of uncertainty factors is multifaceted because it is dependent on the corporate category membership people enact that determines their selectiveness of perceived uncertainty factors. For organisations, this selectiveness and its associated risk of creating 'blind spots' has implications for the crisis perception of uncertainties and also sensemaking and resilience construction. I found that organisations should encourage its employees to widen their perceptions of potential uncertainty factors through their different corporate category devices. A reservoir engineer will perceive different uncertainty factors compared to someone working in the procurement department. However, if both are expatriates and both are asked to report about uncertainty factors relating to that particular corporate role then there would be major similarities in their perceptions of uncertainty factors. If organisations require a broadening of their employees' perceptions, the easiest way is to encourage them to view a situation through the different corporate category memberships people hold. If organisations require their employees to co-construct their uncertainty perception, sensemaking and resilience creation as a collective, the organisation shall select and appeal to the MCD that unites them. For instance, if the organisation needs all its expatriates to play a particular role during times of crisis then they shall address their expatriates through that particular MCD. If the organisation requires all employees, including expatriates and local Egyptian staff members to unite to manage the crisis, they

would address them as ‘Egypt branch employees’ instead of distinguishing between ‘expatriates’ and ‘local employees’.

As stated previously, the experience of uncertainty is attributed to a lack of information or inability to process information (Milliken 1987, 1990). Due to increasing amount of new information sources, employees are often confronted with having to process vast amounts of information. This excess of information and stimuli can be a cause of confusion, leading to uncertainty. Employees that are limited in their information processing ability due to time constraints are likely to experience uncertainty, bearing cognitive, affective and behavioural consequences (Mitchell et al. 2005; Walsh et al. 2007; Wiedmann et al. 2001). I believe that uncertainty could be provoked by the absence of information, the presence of imperfect or ambiguous information or the presence of excessive information. In this study, I did not directly access if excessive information and stimuli were really linked to the experience of uncertainty. However, we know that the experience of confusion, induced by an information overload, is reported to evoke negative dissonance, frustration, dissatisfaction and negative word-of-mouth (Mitchell & Papavassiliou 1999; Mitchell et al. 2005; Walsh et al. 2007). Further, individuals that are confused are inclined to make irrational decisions (Mitchell & Papavassiliou 1997; Walsh & Mitchell 2008). Dhar (1997) stated that if an individual experiences an overload of stimuli, there is a chance that the individual will not commit to an action. Moreover, it is said that individuals would seek additional time in an attempt to process the overwhelming stimuli, leading to decision delay (Mitchell et al., 2005). I believe that uncertainty could be induced by the experience of overload confusion and that the consequences of that overload confusion. This confusion could have a dramatic effect on an organisation during times of crisis in which fast decisions and actions are critical. The need for

distinctions between uncertainty induced by an overload of information or the absence of information is valid by regarding the associated coping mechanisms. Uncertainty that is triggered by the absence of information or presence of ambiguous information would demand a search for more or clearer information. However, in the case of overload-induced uncertainty, a search for more information would only increase or maintain the experience of confusion-induced uncertainty.

Another discovery of my research was that some expatriates expressed negative comments (i.e., toxication) towards their organisation when voicing their uncertainty experience. We saw Andrew and Bob voice some emotions regarding their crisis experience. Crises are events that are typically associated with intense emotions such as fear, stress, confusion, anxiety and panic (Maitlis & Sonenshein 2010; Weick 2010). In Weick's (1990) analysis of the Tenerife air disaster, we are informed of two interferences to the pilot's initial plan. The first interruption is the change of the plane's route and the second is a cloud that was preventing take-off. Each diversion generated arousal in the pilot's autonomic nervous system, decreasing his stimuli processing ability and attention to cues (Maitlis & Sonenshein 2010). Thus, if people lack or are restricted in their perception and understanding of a situation, negative emotions such as frustration and anger can arise as a result. Once such negative emotions manifest themselves, individual's enact behaviours that are inappropriate (Weick 1990) and could contribute to an escalation of the situation. In a further example, Weick (1988) attributed a superintendent's lack of requisite expertise as a reason for his mismanagement of the Bhopal crisis, while Maitlis and Sonenshein (2010) asserted that the superintendent's state of panic might have restricted his response choices.

According to Brehm (1966), an individual experiences a negative motivational state called reactance if their freedom of choice and behaviour is being threatened or restricted. The occurrence of reactance is often associated with defensiveness, aggression, hostility, discomfort and frustration towards the source of the restriction (Brehm 1966; Brehm & Brehm 1981; Dowd 1993; Dowd et al. 1991; Fitzsimons & Lehmann 2004; Miron & Brehm 2006). Further, Dillard and Shen (2005) postulated that reactance should be regarded as a latent construct that consists of anger and negative cognitions. During a crisis, people are often restricted in engaging in behaviours and freedoms they hold dear. If the strictness of the threat to their preferred freedom of choice is severe and the restriction could threaten other freedoms, a person will then experience reactance (Brehm 1966; Brehm & Brehm 1981; Clee & Wicklund 1980; Edwards et al. 2002; Mazis et al. 1973; Ringold 1988; White et al. 2008). Once an individual experiences reactance, feelings of frustration and antagonism can be evoked (Brehm 1966; Mazis et al. 1973; Zemack-Rugar et al. 2007). An urge to re-establish the restricted freedom is likely to trigger favouring the threatened choice, disclaiming a threat or engaging in other behaviours that restore the feeling of choice (Brehm & Brehm 1981; Darpy & Prim-Allaz 2009; Dillard & Shen 2005). It has also been suggested that individuals in these circumstances engage in commitment refusal (Clee & Wicklund 1980; Darpy & Prim-Allaz 2008). Hence, to restore feelings of choice, a reactant employee could refuse to commit to the organisation's coping strategies by exercising decision delay or by downplaying the crisis. Any of these behaviours could undermine or alter an organisation's overall success of managing any crisis. None of the interviewed expatriates mentioned that the organisation took any steps in identifying, minimising or eliminating their emotional distress during or after the Arab Spring. This is despite European and Australian occupational health and

safety laws that demand appropriate steps to eliminate any health and safety risks in the workplace (Human Rights Commission 2014). Hilton et al. (2008) depicted that nearly half of all senior managers believe that their workers will not experience anxiety or panic during a crisis even though one in five Australians are already dealing with mental health conditions, such as depression and burnout. The anxiety and panic employees might experience during a crisis are short-lived and should not to be confused with an anxiety and panic disorder (Beyond Blue Australia 2018). In a crisis situation, the extent to which a person experiences anxiety or panic is trivial. The coupling of intense feelings with the immediacy of the decision-making demanded by a crisis occurs because the experience of those emotions will influence a person's perception, sensemaking and judgement. As an example, airlines provide professional counselling to employees and family members after an air crash. However, I believe that grief and shock are not the only intense emotions that require psychological management. Thus, I promote that organisations should become more progressive in addressing and understanding employee emotions during times of crisis. Organisations should implement an overall culture that acknowledges work-related emotions and make professional services, in the form of a counsellor, available to its employees that have to deal with crisis situations.

7.2 Sensemaking

With the experience of ambiguity, the need of sensemaking arises (Weick et al. 2005). As Weick (1969) postulated, organisations know their environment through their actor's perceptions and sensemaking—the environment is enacted. Moreover, Daft and Weick (1984) asserted that organisations differ in their assumptions about their ability to understand their environment. Therefore, organisations must realise

the dynamics of their environment (Hall & Saias 1980) and make sense of their environment (Daft & Weick 1984; Maitlis 2005). Further, organisations must learn from previous and present changes in their environment to make appropriate strategic choices that will ensure the organisation's competitiveness and survival (Child 1997; Gephart 1993; Levinthal & March 1993). Organisational sensemaking is a process whereby organisational members interpret their environment through interactions with others, both within and outside the organisation (Maitlis 2005). It is important to highlight that sensemaking can be implicit, taking place unconsciously when situations are at an expected norm (Weick et al. 2005). Explicit sensemaking is effortful, occurring during eventful times (Weick et al. 2005). Sensemaking is also about 'noticing and bracketing' a crisis and about labelling and categorising to simplify the crisis and stabilise one's actions. As such, people subjectively identify and delimit the boundaries of a crisis as an act of sensemaking (Weick et al. 2005). In this research, expatriates established that the start of the Arab Spring was January 2011 until the conclusion of their last expatriate assignment. For those expatriates that left at the end of 2013, the crisis had concluded even though there were other expatriates who were working and struggling with the ongoing effects and consequences of the Arab Spring.

In research question 3, I asked, 'How is the "others" category, as a standard relational pair, a mechanism for people to facilitate and justify their need to change their thinking and actions to manage a crisis situation?' In this thesis, I demonstrated how category devices are activated and altered and how new categories are created in the process and wake of sensemaking. According to Weick et al. (2005, p. 411), 'categorises have plasticity because they are socially defined, because they have to be adopted to local circumstances, and because they have a radical structure'. Moreover, each category holds prototypic features that are more equivocal. When

a person's action is based on the prototypic features of categories then their enactment becomes more stable. Consequently, categorisation and stereotyping often simplifies the world. The creation or redefinition of the 'otherness' category can serve to simplify an ambiguous world. Moreover, I argued that since the 'otherness' category is constructed as a relational pair, it also helps to redefine oneself in the wake of a crisis. Leudar et al. (2004) demonstrated how political figures created the 'enemy' by focusing on the use of pronouns 'us' and 'them' as membership categories in political speeches just after 9/11. In their research, 'us' and 'them' were regarded as 'standardised relational pairs'. With standardised relational pairs, the use of one pair implies the existence and associated obligations, rules and rights of the other pair (Leudar et al. 2004; Sacks 1992a). The redefinition of one pair would also function as a redefinition of the other pair with its associated obligations, rights and actions. Thus, we observed how expatriates have created and redefined the 'otherness' category as an instrument for their sensemaking and redefinition of themselves and their subsequent actions to their crisis experience. Caution should be voiced when employees stereotype and belittle the 'otherness' category. Such an action could create an additional or even bigger crisis than the one the organisation is already trying to manage. We shall remember how Ian blamed the 'Egyptian public' as the cause for the Arab Spring. Such a statement could be easily perceived as politically offending to some of his local Egyptian co-workers, causing unnecessary tensions within his organisation and adding additional pressure to the crisis they were facing from dealing with the Arab Spring.

Ian's blaming of the 'other' category is also a form of expressing felt emotions. In the traditional sensemaking literature, emotions have been regarded as a hindrance to cognitive processing (Maitlis & Sonenshein 2010; Shiv et al. 2005; Weick, 1993). Weick (1990) argued that it is not the interferences to an ongoing stream of

activity that cause explicit sensemaking but rather the arousal from the interferences (Maitlis & Sonenshein 2010). Since arousal is integral in sensemaking then any intense emotions felt during a crisis have the potential to trigger sensemaking. Yet, intense emotions also have the power to restrict a person's cognitive ability, hindering their sensemaking. Sensemaking also involves the bracketing of a crisis so another person's expressed negative emotions such as stress and panic can influence one's sensemaking of the situation (Maitlis & Sonenshein 2010). Mass hysteria is one extreme example in which expressed emotions fuel the panic of others. During a crisis, expressed emotions can provide insightful data and feedback for organisations to understand employees' perceptions of crises and their subsequent coping strategies. Thus, I advocate that organisations should monitor and direct expressed emotions to avert an escalation of a situation and to ensure the successful implementation of crisis management strategies.

One way to achieve the redirection of negatively expressed emotions would be to instil and emphasise positive emotions, such as excitement and hope. We observed how Bob expressed his concerns about the events leading up to the first evacuation:

> *That was probably the biggest crisis that I've experienced. Yes, I'm trying to think. Yes and it was a little bit worrying when all communications were cut off, mobile phones and so on. We were relying on information from the satellite television news and so on. Gunfire every evening, vigilantes in the streets, yeah very interesting [laughs] (p. 7).*

Bob mentioned that he felt a little worried about the lack of communication, hearing gunfire and vigilantes on the street. In an earlier account, he spoke about his perceived uncertainty, turning those felt uncertainties into 'fantastic advantages':

> *The concomitant security issues, a lot of people would say the personal risk is a little bit higher or it can be perceived to be higher. But I think as an expatriate we are a little bit more aware perhaps of these things and perhaps we have survived those, to put it in a word. So there we are, the contractual financial risks for a project and on a personal basis possibly security risks but personally I don't count it very highly, it's there but not so high. Those are risks but on the other hand there are fantastic advantages, which I think, more than out way such risks. Not that you asked that but there it is [laughs] (Bob, p. 3).*

As such, Bob illustrated how one can change negatively felt emotions into positives, influencing a change in the perception and understanding of a crisis. Employees like Bob could easily function in a supportive role to redirect other employees' negatively expressed emotions by partaking in a sensegiving role. In addition, organisations should appraise and instil positive emotions like 'pride' by celebrating even the small accomplishments of their employees during times of crisis. Pride and honour are powerful positive emotions that motivate people for endurance, which is often required during a crisis.

Closely related to the idea of felt emotions is the level of involvement of people. When talking about involvement levels, I understand it as a state of mind not a state of organisational position. One might argue that managers, due to their higher corporate position, would express higher levels of involvement. However, the level of involvement is more determined by a person's cognitive processing ability, a particular need or that person's stake concerning the situation. In my study, I did not explicitly assess the level of involvement of the interviewed expatriates but rather assumed that they were highly involved in the management of the crisis. For

future research, I believe that it might be beneficial to distinguish between employees high and low levels of involvement in a crisis. Highly involved individuals are said to be more active in their search for information to make informed decisions (Laurent & Kapferer 1985; O'Cass 2000; Zaichkowsky 1985). As previously stated, an increase in the amount of information might induce the experience of confusion and more uncertainty, becoming counterproductive for one's sensemaking purposes. Conversely, individuals with low involvement in a crisis might be prone to overlook or ignore crucial cues, causing 'false optimism' in their sensemaking efforts. Depending on the employee's involvement level, the support mechanisms to facilitate their sensemaking could differ accordingly.

7.3 Resilience

Research question 4a asked, 'How do people generate resilience while aligning decision-making with changes occurring in their environment?' Social identity theory focuses primarily on the relations between an individual's social environment and their social identities (Briesacher 2014; Hogg & Reid 2006; Hogg et al. 1995). Perceived negative judgement towards a person's specific role identity can lead to a reduction in role commitment (Serpe & Stryker 2011; Thoits 2012). The reduction in role identity could also lead to a decline in a person's self-efficacy (Thoits 2012) and restrict their role performance (Briesacher 2014). I defined resilience as an ongoing process deployed to make sense and cope with adversity. Further, resilience involves 'attitudes, beliefs, behaviours, and even physical functioning' (Pfefferbaum et al. 2008 p. 349). According to Pooley and Cohen (2010), sense of belonging, social support and self-efficacy are major factors contributing to the construction of resilience. A crisis situation always means a change to the 'status quo' and a person's selection and commitment to categories

are determined by accessibility and situational fit (Ashforth & Mael 1989; Hogg & Reid 2006; Hornsey 2008). I argued that any crisis has the potential to elicit a reduction in a person's commitment to a particular category device with a negative effect on her self-efficacy. As self-efficacy is an important factor in the creation of resilience, I asserted that a reduction in commitment to category devices is linked to an individual's ability to create resilience. I advocate that people's constitution of the membership of categories plays an important role in the creation of resilience. These people use the memberships they espouse and the associated knowledge and skill sets of each category to build resilient responses to adversity.

Regarding resilience, I advocate that it is essential to distinguish at which level—individual, group or organisational—resilience is exercised. Although each level has the potential to create resilience, there is only true resilience if all involved actors are in alignment. In this study, we saw that a discrepancy existed at all levels.

In research question 4b it was asked, 'Should enforced resilience be distinguished from resilience that comes from within of people?' After the first revolution, the organisation established a list of expatriates, known as the 'essentials', who were not to be evacuated in the case of another political revolution. I believe that during times of crisis, subdividing a particular group of employees could lead to misalignment and confusion within that group, as they are used to working together under normal circumstances. During the second revolution, it was confusing when the organisation then decided that not all expatriates were to be immediately evacuated regardless of whether they were classified previously as 'essentials'. The organisation decided to 'wait out' the second revolution as an act of resilience at an organisational level (Hage 2009). Such an enforcement of 'being stuck' by the organisation led to the experience of 'entrapment' for its expatriates. The

expatriates became ‘stuck’ in the resilience efforts of the organisation. The actions of the organisation were belittling their autonomy and choice of freedom to decide if and when the pressure of endurance is excessive. I found that such an act of ‘entrapment’ could invoke the fear of negative ramifications or belittling from the organisation or other expatriates if an individual expatriate decided not to comply with the act of ‘being stuck’ and leave the situation. I found that enforced ‘stuckedness’—‘entrapment’—from an organisation onto its employees should be distinguished as a negative form of resilience because the expatriates were not given the autonomy to choose if and when they wanted to stay or leave the country.

Regarding resilience at an individual level, we observed how Bob, as a former Royal Navy officer, was less concerned about his own wellbeing compared to Claus and David who had no prior military training. Bob’s ‘soldier’ category device and all associated skills, knowledge and experience with that particular category device provided him with the identity and capabilities needed for his perception, sensemaking and resilience to understand and manage the crisis he experienced. Further, since Bob seemed at an advantage in his coping with the crisis compared to some of his colleagues, he could have functioned in the capacity of sensegiving to support others sensemaking efforts. Concerning resilience construction, Bob could have performed as the ‘support’ giving element of resilience.

During his interview, Andrew mentioned that he was relocated to a fellow expatriate’s home during the time leading up to the second evacuation because of security reasons:

> *What happened then also was that I moved into a friend’s place that was much closer to the office which was seen as a safe location. It was further away from a possible area where something could occur and it would have*

> *made my evacuation easier. That I think was one thing that actually helped me actually being able to share that experience with someone, not going through it alone. Even hours I was not at work there was someone who was going through the same situation so we could talk about it and therefore in a way comfort each other(Andrew, p. 6).*

During his stay with his colleague, Andrew pointed out that this arrangement helped him in his sensemaking and resilience process because he had someone who was in the same situation to share his experiences, concerns and thoughts. In contrast, Ian stressed how he felt alone in his decision-making process during the crisis. Ian voiced openly his frustration about the lack of support from headquarters. We know that people tend to engage in informal conversations in corridors, canteens or the company kitchen to enhance their sensemaking and resilience process. During times of crisis, I believe that the need to engage in co-construction efforts for sensemaking and resilience with others is even higher. Organisations can encourage such co-creation of sensemaking and resilience by formally communicating and dedicating time and space to employees for such purposes. Such an action would also serve as an example for the organisation in their role of support and governance. I recommend that organisations should clearly communicate with all employees their intensions and means of creating resilience as a coping strategy.

Further, as mentioned earlier, the expatriates created an 'other' category as an instrument of their sensemaking and redefinition of efforts about themselves. The 'other' category also exists during normal times. However, the stereotyping efforts that are often accompanied with the creation of the 'other' category enables people to simplify their world in particular during times of adversity.

Consequently, I suggest that more research is needed into understanding the complexity of category dominance and category compatibility. In my research, I did not study when or why people actually own or disown a membership but rather that they use various memberships to create resilience. Future research could prove beneficial to our understanding of how and when people accept membership in categories and how they use them in their resilience creation.

In this study, I focused only on understanding and articulating the relationship between individual and organisational capabilities and resources to construct resilience. I believe that it would be even more insightful to distinguish and highlight the interplay of resources and capabilities at the individual, group and organisational levels. Last, I note that different types of organisations and industries might have different levels of reliance on employees (Fee et al. 2017). This could have significant implications for the resilience of individuals, groups and organisations.

Scholars have cautioned that 'the study of crisis may lead to oversimplified models of sensemaking that take only a few factors into account' (Hernes & Maitlis 2010; Maitlis & Sonenshein 2010, p. 552; Weick 2010). The same applies also to most studies of perceived uncertainty and resilience in that each concept is studied as one aspect of a crisis. However, people in crisis situations do not experience uncertainty, sensemaking and resilience in the absence of the other. In this study, I extended on existing knowledge by integrating all these concepts. A summary of the research findings is presented in Table 2.

Table 2: Summary of Research Findings

Research Questions	Research Insights	Management Implications
Research question 1: Which mechanism do people choose to construct and navigate their perceived uncertainty, sensemaking, and resilience?	During times of crises people use their membership categorisation devices to manage their uncertainties, engage in sensemaking and create resilience.	Membership categorisation plays a crucial role as a construction mechanism. People use their category devices as instruments for their sensemaking, uncertainty experience and expression and as resources and capabilities for resilience creation.
Research question 2: How do people express their uncertainty states?	People express their uncertainty as 'tokens' through their category devices by constructing narratives for their conceptualisation of uncertainty as a perceptual state. Depending on the membership device used, their uncertainties will vary accordingly.	Ambiguity might have a high emotional consequence for employees who feel restricted in their behaviour. People have a personal 'threshold of uncertainty'. This means that up to their personal threshold, people may perceive uncertainty as a challenge or spurn to their everyday business routine. However, once uncertainty exceeds their threshold, it is experienced as counterproductive. Organisations should offer assistance and encourage bricolage and autonomous problem-solving behaviour by providing employees with relevant information and resources. Since the experience of

Research Questions	Research Insights	Management Implications
		uncertainty varies among individuals, I believe that assistance in managing uncertainty should also be personalised rather than formulating a 'one fits all' approach.
Research question 3: How is the 'others' category, as a standard relational pair, a mechanism for people to facilitate and justify their need to change their thinking and actions to manage a crisis situation?	The creation of the 'others' standard relational pair to the 'us' membership categorisation device functions as a catalyst to clarify the social world in times of crisis. 'Sense-abandonment' is as an additional sensemaking construct whereby employees are being rejected by the organisation to co-construct their sensemaking of a crisis.	I advocate that organisations should monitor and direct expressed emotions to avert an escalation of a situation and to ensure the successful implementation of crisis management strategies. Organisations should monitor employees' expressions of the 'otherness' category carefully and try to redirect it to non-discriminative terms. Clear communication and providing a space for sensemaking and sensegiving should be encouraged among all employees.
Research question 4a: How do people generate resilience while aligning decision-making with changes	People use the membership categorisation devices they espouse and the associated knowledge and skill sets of each category to build resilient responses to adversity.	Organisations should advocate that, together with a sense of belonging, social support and self-efficacy, people's constitution of membership of categories plays an important role in the creation of resilience. Clear communication to

Research Questions	Research Insights	Management Implications
occurring in their environment? 4b: Should enforced resilience be distinguished from resilience that comes from within of people?	Enforced stuckedness from upper management without due commitment from employees; 'being stuck' leads to the experience of 'entrapment' that should be regarded as a negative form of resilience.	all employees about the need for resilience and which mechanisms will be used to achieve it (e.g., being proactive or 'waiting it out') is needed. Employee capabilities on an individual level but incorporate a collective unity should be regarded.

Perceived uncertainty is the result of imperfect or missing information. However, I argued that an information overload can also lead to confusion and uncertainty. Thus, in the case of uncertainty induced by information overload, an organisation should refrain from providing additional information. Further, an organisation should encourage employees to concentrate on key sources and allow them sufficient information processing time.

This study's literature review brought to our attention numerous research into the relationship between perceived environmental uncertainty and innovation (Ellis & Shpielberg, 2003; Freel 2005; Jalonen 2011). It is surprising that most of these studies adopted the view that uncertainty should be regarded as a threat to innovation. I raised concerns regarding this negative view of uncertainty and argued that acceptance to uncertainty and ambiguity could be drivers to innovation (Johnson 2001). Moreover, innovation could actually be a means of reducing uncertainty while uncertainty is a necessary condition for innovation (Foster 2010; Rogers 2003; Rield et al. 2004; Souder & Monaert 1995).

The rationality behind this view is that organisations operating in more volatile environments are propelled to adapt more aggressive strategies, such as the development of new products, services and processes (Özsomer et al. 1997). Consequently, organisations are said to be more likely to embrace innovation compared to those organisations that operate in more benign environments (Freel 2005; Russell & Russell 1992).

To date, it remains unclear if only some sources of perceived uncertainty, such as changes in customer preferences and the discovery of new technological advancements, are triggering organisational innovativeness (Freel 2005; Miller & Friesen 1982). Further, it is unclear whether all sources of perceived environmental uncertain would contribute to innovativeness. For instance, organisations operating in environments that are characterised by fierce price competition are less likely to engage in costly innovation projects (Freel 2005; Lumpkin & Dess, 2001). It is unknown if this limited innovativeness is induced by the experience of uncertainty or rather as a cost saving strategy to engage in price competition.

We shall remember how Efe, one of the expatriates, pointed out that he has a 'threshold' or acceptance limit of uncertainty. As a true engineer, he stated, 'If I feel the uncertainty is more than 80 per cent, I will definitely stop, I will not carry on'. The fact that people have a threshold of uncertainty enabled us to align the competing arguments that uncertainty is counterintuitive versus that it is a driver for innovation. Thus, until uncertainty exceeds a person's acceptance limit of uncertainty, they can use their own uncertainty as a motivator to engage in bricolage (Di Domenico et al. 2010; Weick 2003) and innovation. Once the acceptance limit has been exceeded, uncertainty would become overwhelming by forcing the person to engage in behaviours that are more conservative. In this study, I did not

investigate the direct link between an individual's acceptance level of uncertainty and its link to innovation. However, I strongly believe that it would be valuable for advancing future research into the conceptualisation of perceived uncertainty.

The actual threshold of uncertainty varies among individuals. This explains why I observed variances in uncertainty perceptions among individuals that experienced the same crises. This idea of a 'threshold of uncertainty' also informed us that people will continue with their tasks and absorb any experienced uncertainty until their perceived uncertainty is reached or their threshold of uncertainty is surpassed.

This dynamism and threshold of uncertainty enabled us to suggest a link between studies that viewed uncertainty as a counterproductive construct to those that see uncertainty as a driving force to innovation.

Last, crises often demand a change in a person's actions and behaviour that can be perceived as a restriction of freedom of choice. This experience of reactance in particular can be experienced if coping strategies are being dictated by headquarters without the input and opinions of all employees. Reluctance against headquarters might occur on an emotional level through frustration, aggression, decision postponement and hesitancy. To eliminate or prohibit reactance, organisations should ensure clear communication, including representation of all involved parties, resulting in consensus decision-making.

In terms of sensemaking, categorisation and stereotyping often simplify the world. The creation or redefinition of the 'otherness' category during a crisis can serve to simplify an ambiguous world. When the 'otherness' category is constructed as a relational pair it also helps to redefine oneself in the wake of a crisis. Stereotyping and emphasis of the 'otherness' category have the potential to create a crisis within a crisis. If people overstress the 'otherness' category, they can appear

discriminating, causing political tensions and legal lawsuits for themselves and the organisation. Hence, organisations should monitor employees' expressions of the 'otherness' category carefully and try to redirect it to non-discriminative terms.

Regarding resilience, I advocate that, together with a sense of belonging, social support and self-efficacy, people's constitution of membership of categories plays an important role in the creation of resilience. People use those memberships they espouse and the associated knowledge and skill sets of each category to build resilient responses to adversity. Clear communication to all employees of the need for resilience and which mechanisms will be used to achieve it (e.g., being proactive or 'waiting it out') is needed. Regarding employee capabilities on an individual level while also incorporating a collective unity is also required.

Enforced stuckedness from upper management without due commitment from employees—'being stuck'—leads to the experience of 'entrapment' that should be regarded as a negative form of resilience. Ensuring consent and commitment from all that are directly affected by a crisis and organisational resilience efforts is needed. Further, organisations should ensure access and training to resources (e.g., information, finances and support team) and employee autonomy to co-create resilience rather than just dictate it upon employees.

In this study, I have demonstrated how membership categorisation plays a crucial role as a construction mechanism. People use their category devices as instruments for their sensemaking, uncertainty experience and expression and as resources and capabilities for resilience creation.

I acknowledge that a major limitation of this study was its small sample size. I initially aimed to interview different stakeholder groups that were operating in the oil and gas industry in Northern Africa. Unfortunately, I was only granted access to

13 expatriates working for one organisation. While there is no set number of interviews that constitutes an adequate sample, 13 interviews might be regarded as to too few. However, most studies that used MCA analysed a small number of interviews, speeches or other conversations that involved between two and four people (Silverman, 2016, Leudar et al., 2004, Whittle et al., 2015, Stokoe, 2010, Stokoe, 2012). Consequently, the use of single interviews with 13 different participants, combined with the analysis of five years of company annual reports provided sufficient data for this MCA study.

Further, since my research was conducted with expatriates from the oil and gas industry who were more vulnerable to uncertainty and crisis situations, it was likely that they were comprehensive in their uncertainty, sensemaking and resilience experiences than other employees working in less vulnerable and uncertain contexts might have been. Consequently, more research should be conducted to examine potential variances across different employee groups (expatriates versus local employees; corporations versus government departments) during times of crisis.

Furthermore, my study did not consider the role of leadership during times of crisis. During the two crises the organisation and its employees experienced because of the Arab Spring, there was a change in the CEO position. The rationale was that strategic decision-making of the CEO would be based on a crisis management plan that would have been updated by the time the second crisis occurred. Unfortunately, I was not granted permission to interview either of the two CEOs. However, there was an observable difference in the management of the two crises experienced by the organisation and its employees. Consequently, it would have been worthwhile to interview and examine how strategic decision-makers experienced and expressed

their uncertainty, sensemaking and resilience through their membership category devices.

Lastly, I did not measure the magnitude of each construct or the strength of the relationship between them. One of the aims of this thesis was simply to demonstrate the mechanism people choose to construct and navigate their perceived uncertainty, sensemaking and resilience. Therefore, for future research, it might be of interest to examine the strength of the relationship between these concepts. Further, I demonstrated the relevance of negative emotions such as reactance as potential variables. Exploration of how reactance and other felt emotions influence people's uncertainty perception and resilience creation could provide additional explanatory power, in particular regarding the feeling of 'stuckedness'.

Bibliography

ABU KHADRA, M.F. & RAWABDEH, I.A. 2006, 'Assessment of development of the learning organization concept in Jordanian industrial companies', *The Learning Organization,* vol. 13, no. 5, 455–74.

ACHROL, R.S. & STERN, L.W. 1988, 'Environmental determinants of decision-making uncertainty in marketing channels', *Journal of Marketing Research*, vol. 25, no. 1, 36–50.

AHERN, N.R., ARK, P. & BYERS, J. 2008, 'Resilience and coping strategies in adolescents', *Paediatric Nursing,* vol. 20, no. 10, 32–6.

AIKEN, D.E. 2013, 'Collaboration experiences and expatriate assignment success', PhD thesis, Walden University, MN, <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=3081&context=dissertations>.

ARGYRIS, C. & SCHÖN, D.A. 1978, *Organizational learning: A theory of action perspective*, Addison-Wesley, Reading, MA.

ASHILL, N.J. & JOBBER, D. 2001. 'Defining the domain of perceived environmental uncertainty: An exploratory study of senior marketing executives', *Journal of Marketing Management,* vol. 17, no. 5, 543–58.

ASHILL, N.J. & JOBBER, D. 2010, 'Measuring state, effect, and response uncertainty: Theoretical construct development and empirical validation', *Journal of Management,* vol. 36, no. 6, 1278–1308.

ASHILL, N.J. & JOBBER, D. 2014, 'The effects of the external environment on marketing decision-maker uncertainty', *Journal of Marketing Management,* vol. 30, no. 3–4, 268–94.

BATTILANA, J. & CASCIARO, T. 2013, 'Overcoming resistance to organizational change: Strong ties and affective cooptation', *Management Science,* vol. 59, no. 4, 819–36.

BELL, M.A. 2002, *The five principles of organizational resilience*, Gartner (Research), Stamford, CT, <https://www.gartner.com/doc/351410/principles-organizational-resilience>.

BERNARD, H.R., WUTICH, A. & RYAN, G.W. 2016, *Analyzing qualitative data: Systematic approaches*, Sage Publications, Thousand Oaks, CA.

BHAMRA, R., DANI, S. & BURNARD, K. 2011, 'Resilience: The concept, a literature review and future directions', *International Journal of Production Research,* vol. 49, no. 18, 5375–93.

BOCCIA, A.M.J. 2009, 'An empirical analysis of environmental uncertainty, realoptions decision patterns and firm performance', PhD thesis, University of Massachusetts, Amherst MA.

BOIN, A. 2009, 'The new world of crises and crisis management: Implications for policymaking and research', *Review of Policy Research,* vol. 26, no. 4, 367–77.

BOIN, A., COMFORT, L.K. & DEMCHAK, C.C. 2010, 'The rise of resilience', in L.K. Comfort, A. Boin & C.C. Demchak (eds), *Designing resilience: Preparing for extreme events*, University of Pittsburgh Press, Pittsburgh, pp. 1–12.

BOIN, A. & MCCONNELL, A. 2007, 'Preparing for critical infrastructure breakdowns: The limits of crisis management and the need for resilience', *Journal of Contingencies and Crisis Management,* vol. 15, no. 1, 50–9.

BORDIA, P., HOBMAN, E., JONES, E., GALLOIS, C. & CALLAN, V.J. 2004, 'Uncertainty during organizational change: Types consequences and management strategies', *Journal of Business and Psychology,* vol. 18, no. 4, 507–32.

BRAUN, V., CLARKE, V., HAYFIELD, N. & TERRY, G. 2019, 'Thematic analysis', in P. Liamputtong (ed.), *Handbook of research methods in health social sciences*, Springer, Singapore, pp. 843–60.

BREHM, J.W. 1966, *A theory of psychological reactance*, Academic Press, Oxford.

BREHM, J.W. 1989, 'Psychological reactance: Theory and applications', in T.K. Srull (ed.), *NA—advances in consumer research volume 16*, Association for Consumer Research, Provo, UT, pp. 72–5.

BREHM, S.S. & BREHM, J.W. 2013, *Psychological reactance: A theory of freedom and control*, Academic Press, Oxford.

BROWN, A.D., COLVILLE, I. & PYE, A. 2015, 'Making sense of sensemaking in organization studies', *Organization Studies,* vol. 36, no. 2, pp. 265–77.

BROWN, A.D. & JONES, M. 2000, 'Honourable members and dishonourable deeds: Sensemaking, impression management and legitimation in the "Arms to Iraq Affair"', *Human Relations,* vol. 53, no. 5, pp. 655–89.

BURNES, B. 2004, *Managing change: A strategic approach to organisational dynamics*, Pearson Education, London.

BURNS, T.E. & STALKER, G.M. 1961, *The management of innovation*, Travistock Publications, London.

CASTO, C.A. 2014, 'Crisis management: A qualitative study of extreme event leadership', PhD thesis, Kennesaw State University, Kennesaw GA.

CHILD, J. 1972, 'Organizational structure, environment and performance: The role of strategic choice', *Sociology,* vol. 6, no. 1, pp. 1–22.

CHILD, J. 1997, 'Strategic choice in the analysis of action, structure, organizations and environment: Retrospect and prospect', *Organization Studies,* vol. 18, no. 1, pp. 43–76.

CHIVA, R., GRANDÍO, A. & ALEGRE, J. 2010, 'Adaptive and generative learning: Implications from complexity theories', *International Journal of Management Reviews,* vol. 12, no. 2, 114–29.

CHRISTOPHERSEN, M. 2007, *Defining the other*, <http://www.ayampe.de/wp-content/uploads/2011/06/Defining-the-Other_Merlin-Christophersen.pdf>.

CLAYMAN, S. & HERITAGE, J. 2014, 'Benefactors and beneficiaries: Benefactive status and stance in the management of offers and requests', in P. Drew & E. Couper-Kuhlen (eds), *Requesting in social interaction*, Studies in Language and Social Interaction 26, John Benjamins Publishing Company, Amsterdam, pp. 55–86.

COMFORT, L.K., BOIN, A. & DEMCHAK, C.C. 2010, *Designing resilience: Preparing for extreme events*, University of Pittsburgh Press, Pittsburgh.

CROSSAN, M.M., LANE, H.W. & WHITE, R.E. 1999, 'An organizational learning framework: From intuition to institution', *Academy of Management Review,* vol. 24, no. 3, pp. 522–37.

CURTIS, W.J. & CICCHETTI, D. 2007, 'Emotion and resilience: A multilevel investigation of hemispheric electroencephalogram asymmetry and emotion regulation in maltreated and nonmaltreated children', *Development and Psychopathology,* vol. 19, no. 3, pp. 811–40.

DAFT, R. 2006, *Organization theory and design*, Cengage Learning, Boston.

DAFT, R.L. & WEICK, K.E. 1984, 'Toward a model of organizations as interpretation systems', *Academy of Management Review,* vol. 9, no. 2, pp. 284–95.

DAY, D. 2010. Membership Categorization Analysis. *Retrieved January,* 19**,** 2010.

DE BEAUVOIR, S. 2014, *The second sex*, Random House, New York.

DENZIN, N. 1970. Strategies of multiple triangulation. *The research act in sociology: A theoretical introduction to sociological method,* 297**,** 313.

DENZIN, N. K. 2017. *The research act: A theoretical introduction to sociological methods*, Routledge.

DIMAGGIO, P. & POWELL, W.W. 1983, 'The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields', *American Sociological Review,* vol. 48, no. 2, pp. 147–60.

DODGSON, M. 1993, 'Organizational learning: A review of some literatures', *Organization Studies,* vol. 14, no. 3, 375–94.

DONALDSON, L. 2001, *The contingency theory of organizations*, Sage Publications, Thousand Oaks, CA.

DOWNEY, H.K., HELLRIEGEL, D. & SLOCUM JR, J.W. 1975a, 'The effects of individual differences on managers' perceptions of environmental uncertainty', *Academy of Management Proceedings*, pp. 200–2.

DOWNEY, H.K., HELLRIEGEL, D. & SLOCUM JR, J.W. 1975b, 'Environmental uncertainty: The construct and its applications', *Administrative Science Quarterly,* vol. 20, pp. 613–29.

DOWNEY, H.K. & SLOCUM, J.W. 1975, 'Uncertainty measures, research, and source of variation', *Academy of Management Journal,* vol. 18, no. 3, pp. 562–78.

DUNCAN, R.B. 1972, 'Characteristics of organizational environments and perceived environmental uncertainty', *Administrative Science Quarterly*, vol. 17, no. 3, pp. 313–27.

EDMONDSON, A. & MOINGEON, B. 1998, 'From organizational learning to the learning organization', *Management Learning,* vol. 29, no. 1, pp. 5–20.

EDSTRÖM, A. & GALBRAITH, J.R. 1977, 'Transfer of managers as a coordination and control strategy in multinational organizations', *Administrative Science Quarterly*, vol. 22, no. 2, pp. 248–63.

EISENHARDT, K.M. & MARTIN, J.A. 2000, 'Dynamic capabilities: What are they?', *Strategic Management Journal,* vol. 21, no. 10–11, pp. 1105–21.

ELLIS, S. & SHPIELBERG, N. 2003, 'Organizational learning mechanisms and managers' perceived uncertainty', *Human Relations,* vol. 56, no. 10, pp. 1233–54.

ELSBACH, K.D., BARR, P.S. & HARGADON, A.B. 2005, 'Identifying situated cognition in organizations', *Organization Science,* vol. 16, no. 4, pp. 422–33.

ER, N. 2003, 'A new flashbulb memory model applied to the Marmara earthquake', *Applied Cognitive Psychology,* vol. 17, no. 5, pp. 503–17.

FEDERAL MINISTRY OF ECONOMICS AND TECHNOLOGY. 2012, *Germany's new energy policy: Heading towards 2050 with secure, affordable and environmentally sound energy*, Federal Ministry of Economics and Technology, Berlin, <https://cleanenergyaction.files.wordpress.com/2012/10/germanys-new-energy-policypropertypdfbereichbmwispracheenrwbtrue1.pdf>.

FEE, A., MCGRATH-CHAMP, S. & BERTI, M. 2017, 'Protecting expatriates in hostile environments: Institutional forces influencing the safety and security practices of internationally active organisations', *The International Journal of Human Resource Management*, <https://www.tandfonline.com/doi/full/10.1080/09585192.2017.1322121>.

FIOL, C.M. & LYLES, M.A. 1985, 'Organizational learning', *Academy of Management Review,* vol. 10, no. 4, pp. 803–13.

FOLEY, G. 2001, *Strategic learning: Understanding and facilitating organisational change*, Centre for Popular Education, Sydney.

FORD, J.D., FORD, L.W. & D'AMELIO, A. 2008, 'Resistance to change: The rest of the story', *Academy of Management Review,* vol. 33, no. 2, 362–77.

FRANCIS, D. & HESTER, S. 2004, *An invitation to ethnomethodology: Language, society and interaction*, Sage Publications, Thousand Oaks, CA.

FREEMAN, C. & PÉREZ, C. 1988, 'Structural crises and adjustments', in G. Dosi, C. Freeman, R. Nelson, G. Silverberg & L. Soet (eds), *Technical change and economic theory*, Pinter, London.

GARVIN, D.A. 1993, 'Building a learning organization', *Harvard Business Review,* vol. 71, no. 4, pp. 78–91.

GEPHART, R. 1997, 'Hazardous measures: An interpretive textual analysis of quantitative sensemaking during crises', *Journal of Organizational Behavior*, vol. 18, pp. 583–622.

GEPHART, R.P. 1993, 'The textual approach: Risk and blame in disaster sensemaking', *Academy of Management Journal,* vol. 36, no. 6, pp. 1465–1514.

GERLOFF, E.A., MUIR, N.K. & BODENSTEINER, W.D. 1991, 'Three components of perceived environmental uncertainty: An exploratory analysis of the effects of aggregation', *Journal of Management,* vol. 17, no. 4, pp. 749–68.

GIBBONS, P.T. & CHUNG, L.H. 1995, 'Defining uncertainty: The implications for strategic management', *Irish Journal of Management,* vol. 16, no. 1, p. 17.

GIOIA, D.A. & CHITTIPEDDI, K. 1991, 'Sensemaking and sensegiving in strategic change initiation', *Strategic Management Journal,* vol. 12, no. 6, pp. 433–48.

GLAZER, R. & WEISS, A.M. 1993, 'Marketing in turbulent environments: Decision processes and the time-sensitivity of information', *Journal of Marketing Research*, vol. 30, no. 4, pp. 509–21.

GOFFMAN, E. 1981, *Forms of talk*, University of Pennsylvania Press, Pennsylvania.

GOULD, J.M. 2009, ‘Understanding organizations as learning systems’, in R.L. Cross Jr. & S.B. Israelit (eds), *Strategic learning in a knowledge economy*, Elsevier, London, pp. 119–40.

GRAFTON, E., GILLESPIE, B. & HENDERSON, S. 2010, ‘Resilience: The power within’, *Oncology Nursing Forum*, vol. 37, no. 6, pp. 698–705.

GREEN, I.C. 2015, *Fukushima Daiichi power plant disaster: How many people were affected? 2015 report*, ReliefWeb, New York, viewed 2018, <https://reliefweb.int/report/japan/fukushima-daiichi-power-plant-disaster-how-many-people-were-affected-2015-report>.

GUEST, G., MACQUEEN, K.M. & NAMEY, E.E. 2012, *Applied thematic analysis*, Sage Publications, Thousand Oaks, CA.

HAGE, G. 2009, ‘Waiting out the crisis: On stuckedness and governmentality’, in G. Hage (ed.), *Waiting*, Melbourne University Press, Melbourne, pp. 97–106.

HALL, D.J. & SAIAS, M.A. 1980, ‘Strategy follows structure!’, *Strategic Management Journal,* vol. 1, pp. 149–63.

HAMBRICK, D.C. 1982, ‘Environmental scanning and organizational strategy’, *Strategic Management Journal,* vol. 3, no. 2, pp. 159–74.

HANNAH, S.T., UHL-BIEN, M., AVOLIO, B.J. & CAVARRETTA, F.L. 2009, ‘A framework for examining leadership in extreme contexts’, *The Leadership Quarterly,* vol. 20, pp. 897–919.

HARZING, A.-W. 2002, ‘Of bears, bumble-bees, and spiders: The role of expatriates in controlling foreign subsidiaries’, *Journal of World Business,* vol. 36, no. 4, pp. 366–79.

HATCH, M.J. & CUNLIFFE, A.L. 2006, *Organization theory: Modern, symbolic and postmodern perspectives*, 2nd edn, Oxford University Press, Oxford.

HATCH, M.J. & CUNLIFFE, A.L. 2013, *Organization theory: Modern, symbolic and postmodern perspectives*, 3rd edn, Oxford University Press, Oxford.

HERITAGE, J. 2001, 'Goffman, Garfinkel and conversation analysis', in M. Wetherell, S. Taylor & S.J. Yates (eds), *Discourse theory and practice: A reader*, Sage Publications, London, pp. 47–56.

HERITAGE, J. 2013, *Garfinkel and ethnomethodology*, John Wiley & Sons, New York.

HERNES, T. & MAITLIS, S. 2010, *Process, sensemaking, and organizing*, Oxford University Press, Oxford.

HOGG, M.A. & TINDALE, R.S. 2001, *Blackwell handbook of social psychology: Group processes,* Blackwell Publishers, Oxford.

HOGG, M.A., TURNER, J.C. & DAVIDSON, B. 1990, 'Polarized norms and social frames of reference: A test of the self-categorization theory of group polarization', *Basic and Applied Social Psychology,* vol. 11, no. 1, pp. 77–100.

HORNSEY, M.J. 2008, 'Social identity theory and self-categorization theory: A historical review', *Social and Personality Psychology Compass,* vol. 2, no. 1, pp. 204–22.

HOUGH, J.R. & WHITE, M.A. 2004, 'Scanning actions and environmental dynamism: Gathering information for strategic decision making', *Management Decision,* vol. 42, no. 6, pp. 781–93.

HREBINIAK, L.G. & SNOW, C.C. 1980, 'Research notes: Industry differences in environmental uncertainty and organizational characteristics related to uncertainty', *Academy of Management Journal,* vol. 23, no. 4, pp. 750–9.

HUGENBERG, K. & BODENHAUSEN, G.V. 2004, 'Category membership moderates the inhibition of social identities', *Journal of Experimental Social Psychology,* vol. 40, no. 2, pp. 233–8.

JASSAWALLA, A. & SASHITTAL, H.C. 2011, 'Chapter 6 Integrating repatriated managers in MNCs', in S. Mariano, M. Mohamed & Q. Mohiuddin, *The role of expatriates in MNCs knowledge mobilization*, vol. 27, Emerald Group Publishing Limited, West Yorkshire, UK.

JAUCH, L.R. & KRAFT, K.L. 1986, 'Strategic management of uncertainty', *Academy of Management Review,* vol. 11, pp. 777–90.

JOFFE, H. 2003, 'Risk: From perception to social representation', *British Journal of Social Psychology,* vol. 42, no. 1, pp. 55–73.

JØRGENSEN, L., JORDAN, S. & MITTERHOFER, H. 2012, 'Sensemaking and discourse analyses in inter-organizational research: A review and suggested advances', *Scandinavian Journal of Management,* vol. 28, no. 2, pp. 107–20.

KANTUR, D. & İŞERI-SAY, A. 2012, 'Organizational resilience: A conceptual integrative framework', *Journal of Management & Organization,* vol. 18, no. 6, pp. 762–73.

KAYES, D.C. 2004, 'The 1996 Mount Everest climbing disaster: The breakdown of learning in teams', *Human Relations,* vol. 57, no. 10, pp. 1263–84.

KENNY, J. 2006, ‘Strategy and the learning organization: A maturity model for the formation of strategy’, *The Learning Organization,* vol. 13, no. 4, pp. 353–68.

KIM, D.H. 1998, ‘The link between individual and organizational learning’, in D.A. Klein (ed.), *The strategic management of intellectual capital*, Elsevier, London, pp. 41–62.

KIMCHI, J., POLIVKA, B. & STEVENSON, J. S. 1991. Triangulation: operational definitions. *Nursing research,* 40**,** 364-366.

KOBAYASHI, T. 2011, FY2020 nuclear generating cost treble pre-accident level—huge price tag on Fukushima accident clean-up, Japan Center for Economic Research.

KÜHLMANN, T. & HUTCHINGS, K. 2010, ‘Expatriate assignments vs localization of management in China: Staffing choices of Australian and German companies’, *Career Development International,* vol. 15, no. 1, pp. 20–38.

LANE, P.J. & LUBATKIN, M. 1998, ‘Relative absorptive capacity and interorganizational learning’, *Strategic Management Journal,* vol. 19, pp. 461–77.

LANT, T.K., MILLIKEN, F.J. & BATRA, B. 1992, ‘The role of managerial learning and interpretation in strategic persistence and reorientation: An empirical exploration’, *Strategic Management Journal,* vol. 13, pp. 585–608.

LAWRENCE, P.R. & LORSCH, J.W. 1967, ‘Managing differentiation and integration’, *Organization and Environment,* vol. 2, no. 2, pp. 267–74.

LEI, D., HITT, M.A. & BETTIS, R. 1996, ‘Dynamic core competences through meta-learning and strategic context’, *Journal of Management,* vol. 22, no. 4, pp. 549–69.

LEUDAR, I., MARSLAND, V. & NEKVAPIL, J. 2004, 'On membership categorization: 'Us', 'them' and 'doing violence' in political discourse', *Discourse & Society,* vol. 15, no. 2–3, pp. 243–66.

LEVINTHAL, D.A. 1991, 'Organizational adaptation and environmental selection—interrelated processes of change', *Organization Science,* vol. 2, no. 1, pp. 140–5.

LEVINTHAL, D.A. & MARCH, J.G. 1993, 'The myopia of learning', *Strategic Management Journal,* vol. 14, suppl. 2, pp. 95–112.

LEVITT, B. & MARCH, J.G. 1988, 'Organizational learning', *Annual Review of Sociology*, vol. 14, pp. 319–40.

LEWIN, K. 1951, *Field theory in social science: Selected theoretical papers*, Harper & Row, New York.

LIMNIOS, E.A.M., MAZZAROL, T., GHADOUANI, A. & SCHILIZZI, S.G. 2014, 'The resilience architecture framework: Four organizational archetypes', *European Management Journal,* vol. 32, no. 1, pp. 104–16.

LINNENLUECKE, M.K., GRIFFITHS, A. & WINN, M. 2012, 'Extreme weather events and the critical importance of anticipatory adaptation and organizational resilience in responding to impacts', *Business Strategy and the Environment,* vol. 21, no. 1, pp. 17–32.

MACRAE, C.N., BODENHAUSEN, G.V. & MILNE, A.B. 1995, 'The dissection of selection in person perception: Inhibitory processes in social stereotyping', *Journal of Personality and Social Psychology,* vol. 69, no. 3, pp. 397–407.

MAITLIS, S. 2005, 'The social processes of organizational sensemaking', *Academy of Management Journal,* vol. 48, no. 1, pp. 21–49.

MAITLIS, S. & CHRISTIANSON, M. 2014, 'Sensemaking in organizations: Taking stock and moving forward', *The Academy of Management Annals,* vol. 8, no. 1, pp. 57–125.

MAITLIS, S. & SONENSHEIN, S. 2010, 'Sensemaking in crisis and change: Inspiration and insights from Weick (1988)', *Journal of Management Studies,* vol. 47, no. 3, pp. 551–80.

MASTEN, A.S. & NARAYAN, A.J. 2012, 'Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience', *Psychology,* vol. 63, no. 1, pp. 227–57.

MATURANA, H.R. & VARELA, F.J. 1980, *Autopoiesis and cognition: The realization of the living*, D. Reidel Publishing Company, Dordrecht, HL.

MAYO, A. 2007, 'What are the characteristics of a true learning organization?', *Strategic HR Review,* vol. 6, no. 2, p. 4.

MCEVOY, G.M. 2011, 'Reducing the cost of expatriation in austere times: A case study of two organizations', *Journal of International Management Studies,* vol. 6, no. 1, pp. 1–9.

MCHUGH, P. 1968, *Defining the situation: The organization of meaning in social interaction*, Bobbs-Merrill, Indianapolis.

MCMANUS, S., SEVILLE, E., VARGO, J. & BRUNSDON, D. 2008, 'Facilitated process for improving organizational resilience', *Natural Hazards Review,* vol. 9, no. 2, pp. 81–90.

MEYER, A.D. 1982, ‘Adapting to environmental jolts’, *Administrative Science Quarterly*, vol. 27, no. 4, pp. 515–37.

MEYER, A.D., BROOKS, G.R. & GOES, J.B. 1990, ‘Environmental jolts and industry revolutions: Organizational responses to discontinuous change’, *Strategic Management Journal,* vol. 11, pp. 93–110.

MEYER, J.W. & ROWAN, B. 1977, ‘Institutionalized organizations: Formal structure as myth and ceremony’, *American Journal of Sociology,* vol. 83, no. 2, pp. 340–63.

MILES, R.E., SNOW, C.C., MEYER, A.D. & COLEMAN, H.J. 1978, ‘Organizational strategy, structure, and process’, *Academy of Management Review,* vol. 3, pp. 546–62.

MILLIKEN, F.J. 1987, ‘Three types of perceived uncertainty about the environment: State, effect, and response uncertainty’, *The Academy of Management Review,* vol. 12, no. 1, pp. 133–43.

MILLIKEN, F.J. 1990, ‘Perceiving and interpreting environmental change: An examination of college administrators' interpretation of changing demographics’, *Academy of Management Journal,* vol. 33, no. 1, pp. 42–63.

MISSBACH, A. 2013, ‘Waiting on the islands of ‘stuckedness’. Managing asylum seekers in island detention camps in Indonesia: From the late 1970s to the early 2000s’, *Austrian Journal of South-East Asian Studies,* vol. 6, no. 2, pp. 281–306.

MITCHELL, V.-W. & KEARNEY, I. 2002, ‘A critique of legal measures of brand confusion’, *Journal of Product & Brand Management,* vol. 11, no. 6, pp. 357–79.

MITCHELL, V.-W., WALSH, G. & YAMIN, M. 2005, 'Towards a conceptual model of consumer confusion', in G. Menon & A.R. Rao (eds), *NA—advances in consumer research volume 32*, Association for Consumer Research, Duluth, MN, pp. 143–50.

MONIN, P., NOORDERHAVEN, N., VAARA, E. & KROON, D. 2013, 'Giving sense to and making sense of justice in postmerger integration', *Academy of Management Journal,* vol. 56, no. 1, pp. 256–84.

MOYNIHAN, D.P. 2008, 'Learning under uncertainty: Networks in crisis management', *Public Administration Review,* vol. 68, no. 2, pp. 350–65.

MOYNIHAN, D.P. 2009, 'From intercrisis to intracrisis learning', *Journal of Contingencies and Crisis Management,* vol. 17, no. 3, pp. 189–98.

NONAKA, I. 2008, *The knowledge-creating company*, Harvard Business Review Press, Brighton, MA.

NORRIS, F.H., STEVENS, S.P., PFEFFERBAUM, B., WYCHE, K.F. & PFEFFERBAUM, R.L. 2008, 'Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness', *American Journal of Community Psychology,* vol. 41, no. 1–2, pp. 127–50.

OAKES, P.J., TURNER, J.C. & HASLAM, S.A. 1991, 'Perceiving people as group members: The role of fit in the salience of social categorizations', *British Journal of Social Psychology,* vol. 30, no. 2, pp. 125–44.

PAL, R., TORSTENSSON, H. & MATTILA, H. 2014, 'Antecedents of organizational resilience in economic crises—an empirical study of Swedish textile

and clothing SMEs', *International Journal of Production Economics,* vol. 147, pp. 410–28.

PASCALE, R.T. 1990, *Managing on the edge*, Simon and Schuster, New York.

PAVITT, K. 1991, 'Key characteristics of the large innovating firm', *British Journal of Management,* vol. 2, no. 1, pp. 41–50.

PEARSON, C.M. & CLAIR, J.A. 1998, 'Reframing crisis management', *Academy of Management Review,* vol. 23, no. 1, pp. 59–76.

PELTOKORPI, V. 2008, 'Cross-cultural adjustment of expatriates in Japan', *The International Journal of Human Resource Management,* vol. 19, no. 9, pp. 1588–1606.

PFEFFERBAUM, B.J., REISSMAN, D.B., PFEFFERBAUM, R.L., KLOMP, R.W. & GURWITCH, R.H. 2008, 'Building resilience to mass trauma events', in L.S. Doll, S.E. Bonzo, D.A. Sleet & J.A. Mercy (eds), *Handbook of injury and violence prevention*, Springer, Boston, MA, pp. 347–58.

POOLEY, J.A. & COHEN, L. 2010, 'Resilience: A definition in context', *Australian Community Psychologist,* vol. 22, no. 1, pp. 30–7.

POTTER, J. 2003, 'Discourse analysis and discursive psychology', in P.M. Camic, J.E. Rhodes & L. Yardley (eds), *Qualitative research in psychology: Expanding perspectives in methodology and design*, American Psychological Association, Washington, DC, pp. 73–94.

PRAHALAD, C.K. & HAMEL, G. 1990, 'The core competence of the corporation', *Harvard Business Review,* vol. 68, pp. 79–91.

PSATHAS, G. 1999, 'Studying the organization in action: Membership categorization and interaction analysis', *Human Studies,* vol. 22, no. 2–4, pp. 139–62.

QUARANTELLI, E.L. 1988, 'Disaster crisis management: A summary of research findings', *Journal of Management Studies,* vol. 25, no. 4, pp. 373–85.

QUARANTELLI, E.L. 1997, 'Ten criteria for evaluating the management of community disasters', *Disasters,* vol. 21, no. 1, pp. 39–56.

READ, S., DEW, N., SARASVATHY, S.D., SONG, M. & WILTBANK, R. 2009, 'Marketing under uncertainty: The logic of an effectual approach', *Journal of Marketing,* vol. 73, no. 3, pp. 1–18.

REGAN, P. 2012, 'Making sense of uncertainty: An examination of environmental interpretation', *International Journal of Business and Management,* vol. 7, no. 6, pp. 18–29.

REVANS, R.W. 1982, *The origins and growth of action learning*, Studentlitteratur, Lund, SE.

ROSENTHAL, U., BOIN, A. & COMFORT, L.K. 2001, *Managing crises: Threats, dilemmas, opportunities*, Charles C Thomas Publisher, Springfield, IL.

SACKS, H. 1992a, *Lectures on conversation*, vol. 1, Blackwell Publishing, Oxford.

SACKS, H. 1992b, *Lectures on conversation I & II,* Blackwell Publishing, Oxford.

SAWYERR, O.O., MCGEE, J. & PETERSON, M. 2003, 'Perceived uncertainty and firm performance in SMEs: The role of personal networking activities', *International Small Business Journal,* vol. 21, no. 3, pp. 269–90.

SCHEGLOFF, E.A. 2007, 'A tutorial on membership categorization', *Journal of Pragmatics,* vol. 39, no. 3, pp. 462–82.

SENGE, P., SCHARMER, C.O., JAWORSKI, J. & FLOWERS, B.S. 2005, Presence: An exploration of profound change in people, organizations, and society, Crown Business, Manhattan.

SENGE, P.M. 1990, 'Prisoners of the system, or prisoners of our own thinking?', in P. Senge, *The fifth discipline: The art and practice of the learning organization*, Doubleday, New York, pp. 27–54.

SEVILLE, E., BRUNSDON, D., DANTAS, A., LE MASURIER, J., WILKINSON, S. & VARGO, J. 2006, *Building organisational resilience: A summary of key research findings*, University of Canterbury, Christchurch, New Zealand, <https://ir.canterbury.ac.nz/handle/10092/649>.

SHIV, B., LOEWENSTEIN, G., BECHARA, A., DAMASIO, H. & DAMASIO, A.R. 2005, 'Investment behavior and the negative side of emotion', *Psychological Science,* vol. 16, 435–39.

SIEMENS. 2012, *One year after Fukushima—Germany's path to a new energy policy*, Siemens, Germany, <http://www.siemens.com/press/pool/de/feature/2012/corporate/2012-03-energiewende/factsheet-e.pdf>.

SILVERMAN, D. 1998, *Harvey Sacks: Social science and conversation analysis*, Oxford University Press on Demand, Oxford.

SILVERMAN, D. 2013, *Doing qualitative research: A practical handbook*, Sage Publications, Thousand Oaks, CA.

SILVERMAN, D. 2016, *Qualitative research*, 4th edn, Sage Publications, Thousand Oaks, CA.

ŠKERLAVAJ, M. & DIMOVSKI, V. 2011, 'Social network approach to organizational learning', *Journal of Applied Business Research,* vol. 22, no. 2, <https://doi.org/10.19030/jabr.v22i2.1440>.

SMITH, D. & ELLIOTT, D. 2007, 'Exploring the barriers to learning from crisis organizational learning and crisis', *Management Learning,* vol. 38, no. 5, pp. 519–38.

SMITS, S.J. & EZZAT ALLY, N. 2003, 'Thinking the unthinkable—leadership's role in creating behavioral readiness for crisis management', *Competitiveness Review: An International Business Journal,* vol. 13, no. 1, pp. 1–23.

SNYDER, P., HALL, M., ROBERTSON, J., JASINSKI, T. & MILLER, J.S. 2006, 'Ethical rationality: A strategic approach to organizational crisis', *Journal of Business Ethics,* vol. 63, no. 4, pp. 371–83.

SOLBERG, C., ROSSETTO, T. & JOFFE, H. 2010, 'The social psychology of seismic hazard adjustment: Re-evaluating the international literature', *Natural Hazards and Earth System Sciences,* vol. 10, no. 8, pp. 1663–77.

SONG, M. & MONTOYA-WEISS, M.M. 2001, 'The effect of perceived technological uncertainty on Japanese new product development', *Academy of Management Journal,* vol. 44, no. 1, pp. 61–80.

SPILLAN, I., PARNELL III, J.A. & JOHN, E. 2014, *Crisis management: Leading in the new strategy landscape*, Sage Publications, Thousand Oaks, CA.

SPILLAN, J.E., PARNELL, J.A. & DE MAYOLO, C.A. 2011, 'Exploring crisis readiness in Peru', *Journal of International Business and Economy,* vol. 12, no. 1, pp. 57–83.

STARBUCK, W.H. & MILLIKEN, F.J. 1988, 'Executives' perceptual filters: What they notice and how they make sense', in D. Hambrick (ed.), *The executive effect: Concepts and methods for studying top managers*, JAI Press, Greenwich, CT, pp. 35–65.

STOKOE, E. 2010, '"I'm not gonna hit a lady": Conversation analysis, membership categorization and men's denials of violence towards women', *Discourse & Society,* vol. 21, no. 5, pp. 59–82.

STOKOE, E. 2012, 'Moving forward with membership categorization analysis: Methods for systematic analysis', *Discourse Studies,* vol. 14, no. 3, pp. 277–303.

TEN HAVE, P. 2007, *Doing conversation analysis*, Sage Publications, Thousand Oaks, CA.

THOMPSON, E. 2010, 'Part one: The enactive approach', in E. Thompson, *Mind in life: Biology, phenomenology, and the science of mind*, Harvard University Press, Cambridge, MA.

THURMOND, V. A. 2001. The point of triangulation. *Journal of nursing scholarship,* 33**,** 253-258.

TINKER, A.M. 1976, 'A note on "environmental uncertainty" and a suggestion for our editorial function', *Administrative Science Quarterly*, vol. 21, no. 3, pp. 506–8.

TODNEM BY, R. 2005, 'Organisational change management: A critical review', *Journal of Change Management,* vol. 5, no. 4, pp. 369–80.

TURNER, J.C. & REYNOLDS, K.J. 2011, 'Self-categorization theory', in P.A.M. van Lange, A.W. Kruglanski & E.T. Higgins (eds), *The handbook of theories in social psychology,* Sage Publications, London, pp. 399–417.

UNGAR, M. 2008, 'Resilience across cultures', *British Journal of Social Work,* vol. 38, no. 2, pp. 218–35.

VENDELO, M.T. & RERUP, C. 2009, 'Weak cues and attentional triangulation: The Pearl Jam concert accident at Roskilde Festival', paper presented to the Academy of Management Annual Meeting, Chicago, IL, 7–11 August.

VIGNEHSA, K. 2014, 'Stuckedness: On the organizational art of forbearance', PhD thesis, University of Technology, Sydney.

VLAAR, P.W., VAN FENEMA, P.C. & TIWARI, V. 2008, 'Cocreating understanding and value in distributed work: How members of onsite and offshore vendor teams give, make, demand, and break sense', *MIS Quarterly,* vol. 32, no. 2, pp. 227–55.

VOGUS, T.J. & SUTCLIFFE, K.M. 2007, 'Organizational resilience: Towards a theory and research agenda', IEEE International Conference on Systems, Man and Cybernetics, Montreal, pp. 3418–22.

VOGUS, T.J., SUTCLIFFE, K.M. & WEICK, K.E. 2010, 'Doing no harm: Enabling, enacting, and elaborating a culture of safety in health care', *The Academy of Management Perspectives,* vol. 24, no. 4, pp. 60–77.

WALSH, G., HENNIG-THURAU, T. & MITCHELL, V.-W. 2007, 'Consumer confusion proneness: Scale development, validation, and application', *Journal of Marketing Management,* vol. 23, no. 7–8, pp. 697–721.

WALSH, G. & MITCHELL, V.-W. 2010, 'The effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction', *European Journal of Marketing,* vol. 44, no. 6, pp. 838–59.

WATZLAWICK, P., WEAKLAND, J.H. & FISCH, R. 2011, *Change: Principles of problem formation and problem resolution*, WW Norton & Company, New York.

WEICK, K.E. 1969, *The social psychology of organizing*, Addison-Wesley, Reading, MA.

WEICK, K.E. 1988, 'Enacted sensemaking in crisis situations', *Journal of Management Studies,* vol. 25, no. 4, pp. 305–17.

WEICK, K.E. 1990, 'The vulnerable system: An analysis of the Tenerife air disaster', *Journal of Management,* vol. 16, no. 3, pp. 571–93.

WEICK, K.E. 1993, 'The collapse of sensemaking in organizations: The Mann Gulch disaster', *Administrative Science Quarterly*, vol. 38, no. 4, pp. 628–52.

WEICK, K.E. 1995, *Sensemaking in organizations*, Sage Publications, Thousand Oaks, CA.

WEICK, K.E. 2010, 'Reflections on enacted sensemaking in the Bhopal disaster', *Journal of Management Studies,* vol. 47, no. 3, pp. 537–50.

WEICK, K.E. & QUINN, R.E. 1999, 'Organizational change and development', *Annual Review of Psychology,* vol. 50, no. 1, pp. 361–86.

WEICK, K.E. & SUTCLIFFE, K.M. 2011, *Managing the unexpected: Resilient performance in an age of uncertainty*, John Wiley & Sons, San Francisco.

WEICK, K.E., SUTCLIFFE, K.M. & OBSTFELD, D. 2005, 'Organizing and the process of sensemaking', *Organization Science,* vol. 16, no. 4, pp. 409–21.

WEINER, B.J. 2009, 'A theory of organizational readiness for change', *Implementation Science,* vol. 4, no. 1, p. 67.

WHITTLE, A., HOUSLEY, W., GILCHRIST, A., MUELLER, F. & LENNEY, P. 2015, 'Category predication work, discursive leadership and strategic sensemaking', *Human Relations,* vol. 68, no. 3, pp. 377–407.

WILDAVSKY, A.B. 1988, *Searching for safety*, Transaction Publishers, New Brunswick, NJ.

WILKINSON, S. & KITZINGER, C. 2008, 'Using conversation analysis in feminist and critical research', *Social and Personality Psychology Compass,* vol. 2, no. 2, pp. 555–73.

WILLIAMS, T., GRUBER, D., SUTCLIFFE, K., SHEPHERD, D. & ZHAO, E.Y. 2017, 'Organizational response to adversity: Fusing crisis management and resilience research streams', *Academy of Management Annals*, vol. 11, no. 2, <https://doi.org/10.5465/annals.2015.0134>.

WORLD NUCLEAR ASSOCIATION. 2016, *Nuclear power in Germany*, World Nuclear Association, London, <http://www.world-nuclear.org/information-library/country-profiles/countries-g-n/germany.aspx>.

ZEVALLOS, Z. 2018, *Other sociologist*, <https://othersociologist.com/otherness-resources/>.