The critical incident technique reappraised: using critical incidents to illuminate organizational practices and build theory

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STRUCTURED ABSTRACT

**Purpose:** To offer a reconceptualization of the critical incident technique and affirm its utility in management and organization studies

**Design methodology/ approach:** Utilising a case study from a leadership context, the paper applies the critical incident technique to explore various leadership behaviours in the context of non-profit boards in Canada. Semi-structured critical incident interviews were used to collect behavioral data from 53 participants - board chairs, board directors, and executive directors - from 18 diverse nonprofit organizations in Alberta, Canada.

**Findings:** While exploiting the benefits of a typicality of events, in some instances we were able to contextually validate existing organizational theory, while in other instances we found that current theory falls short in explaining the relationships between organizational actors. We argue that the CIT potentially offers the kind of ‘thick description’ that is particularly useful in theory building in our field.

**Research limitations/ Implications:** Drawing on interview material, we suggest that incidents can be viewed as typical, atypical or prototypical of organizational phenomena, and explore the utility of this distinction for broader theory building purposes.

**Practical Implications:** Principally, the paper proposes that this method of investigation is under-utilised by organization and management researchers. Given the need for thick description in our field we suggest that the approach outlined generates exceptionally rich data that can illuminate multiple organizational phenomena.
Social Implications: The role of non profit boards is of major importance for those organizations and the clients that they serve. This paper shed new light on the leadership dynamics at the top of these organizations and therefore can help to guide improved practice by those in senior Board and management positions.

Originality/ value: The CIT is a well established technique. However, it is timely to revisit it as a core technique in qualitative research and promote its greater use by researchers. In addition, we offer a novel view of incidents as typical, atypical or prototypical of organizational phenomena that extends the analytical value of the approach in new directions.

Key words: Critical incident technique; problematization; theory building; leadership
INTRODUCTION

Our intention in this paper is to position the Critical Incident Technique (CIT) as a major tool of qualitative organizational research. Researchers are increasingly interested in people’s subjective impressions of organizational life, and the stories that they construct in order to make sense of the environment in which they work (see contributors to Symon and Cassell, 2012a). This is also true of our main sub-field – leadership studies. In this context, where social constructionist perspectives are more frequently brought to bear, the field benefits from research techniques that highlight the subjectivity of experience, the multiplicity of meanings attached to leader and non-leader action, and the kinds of experiences that are most characteristic of organizational life more generally (Tourish & Barge, 2010).

We have a further concern in this paper. There is a growing interest in what has been described as a ‘problematization’ rather than a ‘gap spotting’ approach to theory development (see Alvesson and Sandberg (2011) for full discussion of this distinction). Problematization seeks to challenge existing theories in some fundamental way, rather than take their postulates for granted while limiting research to resolving incidental gaps in aspects of established theories (Alvesson & Sandberg, 2013). Stand out incidents and thick description offers a greater opportunity to shed new light on old phenomena, and thus to challenge long established theoretical accounts (Geertz, 1994). Conventionally, leadership research relies on a well-tested battery of tools and protocols, particularly behavioral description questionnaires such as the Multifactor Leadership Questionnaire (Bass & Avolio, 1997). These generally assume that leadership phenomena are already well delineated, and that the primary task of research is to identify causal (law-like) relationships between already known variables. For example, traditional leadership scholars have long contended influence to be unidirectional (top-down), whereby leaders influence those below them with a prescribed list of successful
leadership behaviors. We seek to encourage approaches that are more likely to uncover practices that do not fit into pre-existing schema, ultimately creating a space for fresh theory development – a proposition that we suggest could usefully be embraced by all sub disciplines of organizational research.

Accordingly, our paper is structured as follows. We briefly review the origins and development of the CIT approach. We then introduce the notion that the utility of critical incidents in theory building can be enhanced if analysts consider the extent to which they are atypical, typical or prototypical of a given phenomenon. In seeking to make this a core contribution of our paper, we utilize an illustrative study where it was central to the analysis made of the data in question. To illuminate how the distinction between types of critical incidents that we are seeking to establish was made in practice, we structure the remainder of the paper that details the study around accounts of our research design, sample selection, interview protocol development, and data collection and analysis. We then discuss how the particular characteristics of the CIT are useful in problematizing existing theory and can lay the foundations for the development of new theories. Discussion of this last issue is intentionally limited, since this is primarily a research methods paper. But our intention is to indicate how the type of data collected by utilizing the CIT may assist researchers to problematize existing theoretical assumptions and so develop new research questions, insights and theories.

**ORIGINS AND APPLICATIONS**

The CIT was formally advanced by Flanagan (1954) in a seminal paper where he credited a series of studies in the Aviation Psychology Program of the United States Army Air Forces during World War II as the primary agent for its inception. Although the flexibility of the CIT has allowed it to be used outside of this initial scope, Flanagan (1954: 327) summarized the purpose and application of the CIT to be as follows: ‘The critical
incident technique consists of a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles.’

Many of the original studies were therefore intended to collect a set of observations around an incident, or series of related incidents. Leading up to Flanagan’s (1954) paper, prior applications of the CIT included (i) measures of typical performance criteria, (ii) measures of proficiency, (iii) training, (iv) selection and classification, (v) job design and purification, (vi) developing operating procedures, (vii) equipment design, (viii) motivation and leadership, and (ix) counseling and psychotherapy (Flanagan, 1954). A number of these early studies attempted to identify a list of successful behaviors, giving the researcher the ability to identify desirable traits for candidate selection. For example, one study led to important changes in the Air Force’s selection and training procedures of combat leaders after identifying reasons for failures in missions (Flanagan, 1954). With this in mind, the CIT focuses the participant onto a limited area of interest in order to elicit rich data about that particular area (Bradley, 1992; Sharoff, 2008). The fact that it centers on actual events while discouraging hypothetical situations, whether observed or recalled, ensures the corresponding behavioral data is more likely to relate to actual behaviors (Collis & Hussey, 2009; Moss et al., 2003).

The CIT has been used in many sub disciplines of organizational studies and further afield, including studies spanning such disciplines as counseling psychology (e.g. Butterfield et al., 2005), healthcare and clinical studies (e.g. Kvarnstrom, 2008; Pena & Rojas, 2014; Schluter et al., 2007; Sharoff, 2008), service settings (e.g. Bitner et al., 1990; Grove & Fisk, 1997; Keaveney, 1995; Petrick et al., 2006), marketing (e.g. Gremler, 2004), and entrepreneurship (e.g. Cope & Watts, 2000). Similarly, it is a technique that can, and has been, employed within multiple methods (e.g. observation, questionnaire, interviews, and
focus groups). Thus, the CIT is a flexible technique that researchers can apply within a number of research frameworks, depending on the type of research, the research question, and the phenomenon being studied.

The CIT has considerable advantages over other approaches, including the traditional semi-structured interview. First, the technique has inherent inductive properties, as it does not force the respondent into a particular framework, does not require a hypothesis, and is relatively culturally neutral (Gremler, 2004; Petrick et al., 2006). Each of these characteristics is particularly important to a full appreciation of the technique’s usefulness as a means of theory problematization. With respect to the illustrative study, the inductive properties of the critical incident interview questions allowed for the collection of multiple ‘surprises’ in the empirical material. In some instances, as we illustrate in the discussion that follows, behavioral themes were found which were not prominent in traditional theories (theory building). The thick descriptions provided in the respondents’ recollection of the critical incident allowed for a deeper understanding of the intricacies and contextual factors surrounding such behaviors.

When properly devised, the critical incident interview question does not require the researcher to specify a list of potential incidents or behaviors *a priori* (Gremler, 2004). Using the CIT in this manner, the researcher and the participants are discovering *together* an understanding of the participants’ behaviors (Keatinge, 2002), ultimately encouraging respondents to tell their story, with minimal researcher presupposition (Sharoff, 2008). Similarly, allowing the respondent to choose the incident elicits events that are important to those who lived them (Cunha et al., 2009). By inductively employing the technique, the researcher is able to identify organizational phenomenon (e.g. behaviors) that may not have been discovered by more traditional methods (Keaveney, 1995).
To illustrate these issues, our paper moves forward as follows. First, we argue that the value of uncovering critical incidents is enhanced if we analyze them in terms of the extent to which they suggest atypical, typical and prototypical features of the phenomenon under analysis. We detail the research design of an illustrative study which sought to utilize these distinctions. Our paper then outlines how an inductive, interpretivist, approach to analysis of the empirical material helps to retain the benefits of the CIT while enhancing our ability to problematize existing theory and contributes to the development of new theoretical insights.

THE NATURE OF CRITICAL INCIDENTS – A TYPOLOGY OF TYPICALITY

Observing, recording, reinterpreting and theorizing events that stand out from the norm is an increasingly widespread practice within organization studies. Yet authors do not always provide a clear framing for such research. It has been argued that what appear as ‘extreme’ cases are useful foci of analysis since they contain a great deal of information beyond a statistical average or a hypothetical norm (Marti & Fernandez, 2013). They may thus exemplify, in a sharp form, organizational dynamics and actions that are more widely distributed. For example, Stinchcombe (2005) argued in favor of studying extreme religious groups, since they occupy the time of their members to a greater extent than do mainstream groups, and have the potential to tell us more about religious life, conviction and organization. Tourish (2013) applied this principle to the study of leadership dynamics within a variety of cultic organizations that included the suicidal Jonestown cult in Guyana in the 1970s and the suicidal Heaven’s Gate cult in California in the 1990s. He argued that such studies illuminate the dynamics of conformity to authority and the downsides of concentrating power in the hands of a few leaders in ways that exemplify similar processes within more routine organizational configurations, albeit with particular sharpness. Likewise, Marti and Fernandez (2013) studied the institutional work of oppression and resistance - widely occurring organizational processes - in the extreme context of the Holocaust.
We argue that the analytic value of these approaches, and the CIT specifically, can be enhanced if researchers distinguish between three types of critical incidents (categorized in a framework of ‘typicality of events’) that are likely to emerge. Firstly, we suggest that many occurrences within organizations are what could be described as ‘atypical’ in nature. This is not merely a matter of their frequency, but of the extent to which they have any perceived and enduring significance by actors. An act of terrorism, for example, may be a rare and atypical event, but it is likely to have long lasting consequences and high significance for all involved, including the development of psychiatric disorders among a significant percentage of those directly affected (Rubin & Wesseley, 2013). Organizational theorists may be interested in how actors make sense of the event in question, how organizations such as rescue services respond, or how the organization is reconstituted in its aftermath. Such incidents are more likely to direct attention to underlying processes that are less familiar to analysts and actors alike, and may disclose either new dynamics or direct attention to more recurring issues (such as leader-follower dynamics, or sensemaking in crisis).

‘Typical’ incidents, in contrast, are ongoing and regular features of organizational life. These do not stand out from the norm and are therefore not an ‘extreme’. But they can have a high or low salience for actors, depending on their impact on affective and cognitive states, the level of importance that is attached to them, and the manner in which they are managed. Examples of typical incidents from the illustrative study include strategic planning, fundraising campaigns, and annual appraisals of the executive director. Their status as typical or frequently occurring events means that their effects are likely to be more predictable than atypical phenomena, but not necessarily diminished in analytic value as a result of this. For example, studies that seek to explore the effects of annual appraisal interviews may be concerned with assembling data on incidents that may be completely routine, and even mundane (e.g. Narcisse & Harcourt, 2008). The incidents therefore are ‘critical’ in the
broader sense of exemplifying the phenomenon in question. For example, our illustrative study uncovered incidents of board members meddling into previously delegated territory. This shed additional light on routine and on-going power dynamics, and further highlighted occurrences of role clarity, autonomy, and trust. Each of these factors are constants in organizational life, but were better understood by focusing the participant onto a particular event. Such incidents occurred frequently in the illustrative study, had high or low salience for organizational actors (depending on the specific incident), were indicative of widely recognized and enduring phenomenon, and tended to produce predicable and widely recognized effects. Thus, a researcher wanting to undertake this type of research may seek out the collection and analysis of typical events.

Finally, we suggest that some incidents and events in organizations could be deemed as prototypical in nature. They may be infrequent, but derive their significance from the fact that they share major characteristics with more frequently occurring incidents, and from this have high analytic value. This conception goes at least as far back as Weber (1948), who argued that what he termed an ‘ideal type’ was able to express in extreme or pure form what was most characteristic of a phenomenon of interest, such as bureaucracy. Examples of prototypical incidents from the illustrative study include the unionization of organizational staff, reacting to a major funding cut, amalgamation with another organization, and the replacement of the executive director. Interestingly, replacing the executive director occurred more frequently than one would expect, but it is classified here as prototypical due to its high salience for the actors involved and its consequent analytic value. One board member noted that CEO succession ‘would probably be one of the biggest changes and decisions for the organization as a whole that we have gone through in my tenure. The most profound impact to the organization for sure.’ In other organizations, a well-planned internal transition had a less salient impact on organizational members.
Respondents from one organization told of a prototypical event when they received notice of their employees’ efforts to unionize. Unionizing is an extreme event that characteristically occurs once in the life span of an organization. This event had high salience for the respondents, and for other organizational actors, and produced well-known and widely recognized effects. The event also brought forth behavioral leadership findings that share characteristics with more typical organizational phenomenon. For example, the respondents’ recollection of the event highlighted behavioral characteristics of board members of positivity and a long-term orientation. Although our particular study did not intend to exclusively elicit a particular ‘typicality of event’, some influential studies have specifically sought to identify a number of prototypical events due to the perceived high analytic value that can be derived.

From an organization studies perspective, it is this which makes such work as that of Marti and Fernandez (2013) on the Holocaust of such enormous significance. The Holocaust can arguably be characterized as a rare event. But beyond its philosophical, historical and enduring human significance, organizational scholars can draw insights from it about much more widespread aspects of conformity, oppression and resistance. Likewise, Weick’s work on sensemaking, using the examples of the Mann Gulch disaster (Weick, 1993) and the Tenerife air disaster (Weick, 1990), derives much of its importance from what the exceptional events in question reveal about the prototypical dynamics of how organizations unravel, how they can become more resilient and how incidents that are small in themselves can often cumulatively lead to disastrous outcomes. From this perspective, the CIT approach facilitates the collection, analysis and theorization at a broad macro level (organization wide events) and at a micro level (the interpersonal and personal experiences of organizational actors).

Table 1 further outlines the distinctions between atypical, typical, and prototypical events, and provides some examples of each from our illustrative study. These distinctions do
not represent mutually exclusive categories. There are several characteristics, such as frequency and salience, which overlap. They can be viewed as a continuum. However, we contend that analysis is enriched if the researcher acknowledges where they fit, is therefore clearer about what the goals and purposes of the research and analysis are, and is in consequence more sensitized to the prospects for theory building that are opened up.

**Insert Table 1 here**

**RESEARCH DESIGN OF THE ILLUSTRATIVE STUDY**

For illustrative purposes, we draw on the research design and findings of a recent empirical study of the leadership behaviors of nonprofit board members. An under-examined context in leadership research is that of the leadership process at the board-level, and especially in the nonprofit sector (Bott, 2014). Given that Board members reside at the highest level of an organization, and are potentially distant from other organizational actors, we questioned the extent to which existing theory adequately explained their behaviors. We utilized inductively designed critical incident interviews in order to fully appreciate not only board member behaviors, but also potential alternative influences (e.g. contextual factors and influences from organizational actors other than formal leaders). Semi-structured critical incident interviews were used to collect behavioral data from 53 participants - board chairs, board directors, and executive directors - from 18 diverse nonprofit organizations in Alberta, Canada.

Consistent with most qualitative research, organizations were purposefully selected (Eisenhardt, 1989; Pratt, 2009). The organizations conduct business in diverse areas of the nonprofit sector and range widely in age and amount of annual revenue. Studying board member behaviors from diverse organizations increases the representativeness (Alvesson & Achcraft, 2012) and generalizability of research findings (Brown & Guo, 2010; Maxwell
1992), thereby producing results that have relevance to a broad range of nonprofit boards (Miller, 2002).

Interview Protocol Development

Having a clear definition of a critical incident, suited for the purpose, is important for clarity in the interview. However, this understanding is not always as explicitly recognized in research designs as we believe it should be. In a review of research being conducted in a variety of service contexts using the CIT, Gremler (2004) found that 27 percent of the studies clearly specify what behaviors or events constitute a critical incident, while ten percent of the studies refer to previous studies for borrowed definitions. In the majority of studies, the authors do not explicitly define what constitutes a critical incident (Gremler, 2004). Flanagan (1954: 327) defined the term as follows:

By an incident is meant any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act. To be critical, an incident must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects.

Since this time, a number of authors have tailored this definition in order to adapt it to the needs of their specific study. Some authors have argued that the term ‘incident’ often ‘trivializes the diversity of critical experiences’ (Cope & Watts, 2000: 112). Norman et al. (1992) recommend the term revelatory incident over critical incident, claiming that the term critical incident implies both a discrete event (as opposed to allowing for a discussion of happenings) as well as a crisis. Although such events are important, they may limit potential findings. The authors claim the distinction to be especially important in their research field of the healthcare profession, suggesting the term critical incident can trigger thoughts of crisis
events. Similarly, Schluter et al. (2007) suggest the term *significant event* after a number of nurses participating in the study commented that they had not been involved in an incident.

Studies using the CIT vary between not specifying whether the critical incident should be positive or negative (e.g. Cunha et al., 2009; Kaulio, 2008; Krause et al., 2007), and requiring both negative and positive incidents in their examples of critical incidents (e.g. Bryman et al., 1996; Druskat & Wheeler, 2003; Lapidot et al., 2007; Moss et al., 2003; Wolff et al., 2002;). When the researcher does not specify the type of incident to be discussed, the respondent is more likely to recall negative incidents (Dasborough, 2006). This is consistent with the overall finding to the effect that ‘bad is stronger than good’ (Baumesester et al., 2001). It follows, as these authors go on to note that ‘bad events will have longer lasting and more intense consequences than good events’ (p325). In some contexts, this is not an issue. For example, when researching customer switching behaviors, or failures in customer service, it is bad events that form the focus of inquiry, and select seminal studies in these domains have focused exclusively on negative incidents (e.g. Keaveney, 1995). However, most studies request both a negative and a positive incident from the respondent in order to reveal a range of challenges and situations commonly experienced (Wolff et al., 2002). Researchers thus need to consider whether boxing the respondent into select types of incidents is necessary, or whether the subject being explored is better served by obtaining a breadth of situations encountered. It is also relevant at this point to restate that the critical incident question can similarly target a specific ‘typicality of events’ or be broadly posed to elicit a range of event types.

In this instance, after a thorough review of the literature, the following question was posed in the illustrative study to each respondent:

Please describe a *significant situation* that occurred during your term as the [position title] of this organization, which resulted in a [positive] outcome. A significant
situation is a situation outside of routine events, which triggered the board’s attention to discuss or make a decision, which later resulted in a [positive] outcome. Please think of a situation that you can easily remember.

An identical question was then posed which asked for a negative outcome. This question is not limiting in time, does not limit the discussion to a discrete event, and by asking for a positive and a negative outcome allows for a breadth of situations experienced. The question also minimizes any presuppositions by the interviewer of how it might be expected that the board is likely to behave. Specifically, this open question allows for identifying specific behavioral themes, which may vary across contexts. It does not presume that all (or any) leadership behaviors will be relevant (e.g. the research design does not deductively consider behaviors prescribed by a particular leadership theory) in the context of nonprofit board leadership and governance or during the specific situations faced by the organizational actors under analysis.

Critical incident research approaches that ask respondents to ‘indicate if they had engaged in the described behaviors following each incident’ (Moss et al., 2003: 502) specify the behaviors *a priori*, not allowing for the exploration of additional behaviors or alternative influences. Given the inductive (and exploratory) nature of the illustrative study, a broad question was initially posed. However, this requires a trade-off of breadth over depth. It is no secret that inductive research tends to be less cumulative. Similarly, the unstructured approach taken in this study poses a risk that the interviews may not shed any light on the research question (Cope & Watts, 2000). Researchers therefore need to be cognizant of the nature of the study, their *a priori* epistemological and ontological assumptions, and the intended use of the empirical material when crafting the critical incident question.

Interviews using the CIT generally comprise of semi-structured interview questions. It has been argued that such ‘an open-ended approach is essential for the critical incident
technique because data has to be categorized inductively, without reference to pre-existing
theories’ (Bradley, 1992: 98). However, because ‘it is a two-way conversation, interviewing
is always unavoidably interactional’ (Silverman, 2008: 143). Due to this unavoidable
interaction with the interviewee, ‘it is virtually impossible to free any interaction from those
factors that could be construed as contamination’ (Silverman, 2008: 155). Although
controlling for such factors is not the focus of interpretivist research, recognizing the level of
interviewer engagement is still important. Regardless of philosophical stance, during the open
questions, as much as is practically possible, the interviewer does not want to lead the
respondent in any way. This is to mitigate against what is commonly referred to as bias or
contamination (Silverman, 2008).

In an attempt to find a balance between being able to provide clarity and dialogue
without invoking unnecessary response bias, the use of generic probes can be of benefit
(Chell, 2004; Schluter et al., 2007). The probes used in our illustrative study included:

- What happened next?
- Who was involved?
- What did the board do?
- What was the outcome?
- How did that make you feel?
- How would you describe his/her behavior in handling this situation?
- How would you describe your behavior in handling this situation?
- Who was driving this decision?
- What could have made the action more effective?

A similar list of probes for critical incident interview questions can be found in
Dasborough (2006), Druskat and Wheeler (2003), Wolff et al. (2002), and Pescosolido
(2002). The probes used in the illustrative study were therefore designed to minimize
structure in the interview process and ‘to ensure that the discussion was driven by what the respondent felt was important, in order to stay as close as possible to their lived experiences’ (Cope & Watts, 2000: 112). However, it would be limiting to stick exclusively to such probes. We were therefore flexible in asking for clarification, or exploring unexpected tangents.

Interviewers attempt to develop a rapport of trust with interviewees, who will then be more willing to openly discuss sensitive information than they would in responding to a questionnaire (Bradley, 1992; Chell, 2004). This is particularly important when eliciting information from people about sensitive issues, and where they are keen to ensure that other people within their organizations cannot identify them from the incidents that they wish to disclose. This was confirmed early in the interview process when multiple participants spoke about situations of a confidential nature. Upper management and the board of directors can have knowledge of information that is sensitive or confidential in nature. In nonprofit organizations, items such as adherence to a mission, or funding allocations, can also be politically sensitive. In the illustrative study, respondents spoke about the removal of an executive director following an ethical incident, an executive director’s dissatisfaction with board members, and board members struggling with either a physical or a mental health issue. The critical incident approach being conducted as more of a conversation, and a face-to-face interaction, is therefore important in this setting – aspects which allow the researcher to better explain the confidentiality of the results, and so put the participants more at ease.

Using the examples of the illustrative study, we have demonstrated that the semi-structured interview method brings a number of the benefits of the CIT to the fore. Yet it has been under deployed with respect to its inductive, interpretive, and theory building abilities. Employing the CIT through the use of semi-structured interviews allows the stated benefits to be more fully realized. Furthermore, with respect to the illustrative study, we were able to
elicit detailed responses of the context and situations whereby organizational actors find themselves, and more importantly, how such contextual and situational factors affect the leadership process (see Bott, 2014). As more researchers recognize the limitations of overarching theories, an exploration of contextual and situational factors is increasingly important.

THE LIMITATIONS OF RECALL

The CIT relies on the individual participant’s recollection (when not using direct observation) of past events. This has been criticized as an inherent flaw to the approach, leading to scrutiny of its reliability (Chell, 1998; Gremler, 2004). The majority of authors that use the CIT simply acknowledge this limitation, stopping short of taking mitigating steps to stimulate recollection. The length of time since the event occurred, as well as how large of an impression it made at the time, are factors that both play a role in the level of recollection. Flanagan (1954: 339) noted:

The critical incident technique is frequently used to collect data on observations previously made which are reported from memory. This is usually satisfactory when the incidents reported are fairly recent and the observers were motivated to make detailed observations and evaluations at the time of the incident.

A number of authors have recommended telling the participant in advance to think about critical incidents to discuss. Schluter et al. (2007) found that when this step was missed, many participants arrived at the interview and had difficulty in recalling events to discuss. In addition to the obvious problem of not having a successful collection of incidents with in-depth responses, they also noted that valuable interview time was spent thinking about events to discuss (Schluter et al., 2007). In an effort to mitigate for this potential problem in the illustrative study, the section of the interview guide requiring participants to answer open ended questions, recalling events from memory, was sent by email approximately one week
in advance - a process suggested in a number of prior studies (e.g. Bradley, 1992; Schluter et al., 2007). Despite this, three participants (out of 53) arrived at the interview without having read and having thought about the questions in advance. In two instances, the participant’s recollection of events, descriptions of the sequence of events, and descriptions of the behaviors of individual organizational actors were vague. In the third instance, the participant was able to provide detailed descriptions of two critical incidents that occurred in recent memory. It did, however, require clarification from the interviewer, and a minimal amount of interview time was used up to think about the question.

Another tactic used to overcome the limitation of recalling past events is to require that the critical incidents are to have occurred within the past one year (e.g. Druskat & Wheeler, 2003; Kvarnstrom, 2008, Wolff et al., 2002) or past six months (e.g. Pescosolido, 2002). Conversely, Flanagan (1954: 340) noted that ‘in some situations adequate coverage cannot be obtained if only very recent incidents are included.’ We took the latter stance in the illustrative study. Given that board members meet infrequently and their role is strategic in nature, limiting critical incidents to the past one year would have created severe limitations to the findings. This was confirmed during the interviews, as many of the situations respondents chose to speak about took place over multiple years, and were discussed over multiple board meetings. Moreover, temporality is important in leadership research since leadership takes time to observe and have an effect (Shamir, 2011; Waldman et al., 2004). This provides evidence of the advantages and limitations of restricting the time frame of recalled incidents, and of the importance of sensitivity to context in employing the method. Researchers need to consider the intricacies and contexts of the phenomenon being studied when deciding on these seemingly minor, yet extremely important considerations.

*Accuracy, stories and sensemaking*
This poses the question of the ‘accuracy’ of the incidents in question. We make several key points on this issue. Firstly, psychologists have long established that human memory is inherently fallible. Our memories seem to decay rapidly (Hardt et al., 2013), a process facilitated by the numerous ‘interference processes’ we experience daily (Altmann & Schunn, 2012). This may be particularly pertinent when the events in question have happened some time ago. Thus, confabulation – that is, the combining of many different events, pieces of guesswork, inferences and plausibilities into one seemingly coherent narrative that fills memory gaps – is common (Nahum et al., 2012). Given these deficiencies in how memory works, as experimental studies have shown, it is remarkably easy to introduce ‘false memories’ into an interview or dialogue with someone, who then comes to believe that the false memory is in fact something that they have genuinely experienced (Loftus and Ketcham, 1994).

Considering the interpretivist imperatives of qualitative research, these issues are perhaps less troubling than they might be in a purely positivist paradigm. From our perspective the literal accuracy of the events in question is less important than the significance that organizational actors attribute to them. This is consistent with perspectives on storytelling and sensemaking that draw attention to the symbolically charged meaning of narratives and their potential to create forms of hyper reality which blends fact and fantasy to produce its own compelling account of events. As Gabriel (2000) observes in this regard, the challenge for analysts is to engage with the meaning that actors attribute to stories (or, in our case, events), rather than become preoccupied with their factual accuracy. When events become salient for actors, and are repeated and embroidered through retelling, they are expressing people’s perceptions of the truth of life in their organizations. These perceptions are of both practical and theoretical significance. The CIT is one means of exploring them
and thus rendering more clearly the issues that various actors see as central to their experiences of organizational life.

In the illustrative study, organizational actors often differed in their accounts of how organizational events unfolded or in their estimation of the consequences of such events. For example, when one organization brought forward innovative funding ideas in response to funding cuts, the executive director felt that they came from within the senior management team, with the board bringing few ideas to the organization. In a subsequent interview with a board member, the board member had precisely the opposite perception of what had happened. Although we may never know exactly the extent of idea generation and execution thereof with respect to this particular critical incident, we argue that the different perceptions of actors at numerous organizational levels on the issue in question has significant analytical value. In particular, the dominant mode of theorizing (transformational leadership) privileges the agency of leaders over that of followers, tends to assume that formal leaders are the main and sometimes only determinant of organizational success, and accordingly stresses their privileged role in decision making (Collinson and Tourish, In Press). At the very least, the incident being discussed here challenges that framework, and supports the need for more inclusive, nuanced and multi-source accounts of agency in organizations.

There are also differing perspectives of how to order the critical incident question. A number of authors suggest presenting the positive question first in order to relax the interviewer, ultimately helping to elicit richer data. However, when respondents are consistently asked to answer questions in the same sequence there is a strong risk of order bias (Kohles et al., 2012). Given the fact that the CIT question resided in the first section of the interview guide of the illustrative study, alternating between having the positive and negative CIT question come first did not result with the interview ending with a CIT question eliciting a negative incident. This can be particularly important with critical incident
interviews, as incidents often revolve around emotional events. We were therefore able to alternate negative and positive responses, reducing the risk of order bias.

**DATA COLLECTION**

The flexibility of the CIT allows for numerous data collection methods. Flanagan (1954) identified four ways of obtaining recalled data: (i) interviews, (ii) group interviews, (iii) questionnaires, and (iv) record forms. While Flanagan (1954) recommended direct observation, he was pragmatic in recognizing the numerous challenges associated with this approach (Butterfield et al., 2005). In practice, data collection methods of recent studies employing the CIT have varied among direct observation (e.g. Pescosolido, 2002), self-completion questionnaires (e.g. Kaulio, 2008; Krause et al., 2007; Lapidot et al., 2007; Wang et al., 2000), and semi-structured interviews.

With the shift in the social sciences toward the wider adoption of qualitative methods, the CIT is now frequently employed through the use of critical incident semi-structured interviews (e.g. Cope & Watts, 2000; Dasborough, 2006; Druskat & Wheeler, 2003; Ellinger & Bostrom, 2002; Kvarnstrom, 2008; Wolff et al., 2002). Given the current paper focuses on the benefits of the CIT for its inductive, qualitative, and interpretivist approaches, in this section we focus on the use of critical incident semi-structured interviews.

**How Many Incidents?**

When using the CIT, sample size is based on the number of incidents, not the number of participants (Sharoff, 2008). This is an important contention, yet one that is frequently ignored by researchers. In noting that there is no simple answer to the question of sample size, Flanagan (1954: 343) suggested that ‘if the activity or job being defined is relatively simple, it may be satisfactory to collect only 50 or 100 incidents. On the other hand, some types of complex activities appear to require several thousand incidents for an adequate
statement of requirements.’ The general guidance that he provided has been cited by many authors (Butterfield et al, 2005).

Flanagan (1954) further explained that the investigator needs to be cognizant of saturation, whereby once the addition of further participants reveals few new critical incident behaviors, adequate coverage has been achieved. Unless the goal of the research is to quantify a list of incident/events/situations, the incidents themselves should not be the unit of analysis. Saturation should be measured on the phenomenon being examined. In the illustrative study, we ceased the interviews once we had achieved saturation of leadership behaviors. Many authors do not refer to this criterion when explaining their sample size, and some (e.g. Callan, 1998) explicitly admit not meeting Flanagan’s (1954) guidelines for sample size.

Notably, with qualitatively oriented research, there has been little emphasis on obtaining a large sample size. As Sharoff (2008: 306) observes: ‘as with most qualitative studies, sample size is usually small.’ In a review of studies that undertake interviews, De Hoogh et al. (2005: 34) note ‘small sample sizes are due to the amount of work involved in gaining access and conducting, transcribing, and coding the interviews, which is considerable.’ Sample sizes from qualitative leadership studies using the CIT range from 32 to 89 incidents (e.g. Cunha et al., 2009; Dasborough, 2006; Ellinger & Bostrom, 2002; Kaulio, 2008; Kvarnstrom, 2008; Peus et al., 2013). In an in-depth study of how one organization assumed the form and structures that it had, the authors compiled a list of what they saw as 100 key events in its history over a six year period (Perkmann & Spicer, 2014).

When conducting qualitative research there is no magic number of interviews that should be conducted (Pratt, 2009). As with most qualitative research, we did not start with a predetermined sample size. Rather, interviewing and coding occurred until saturation of behaviors was reached. Saturation occurs when additional interviews or coding no longer
provide new behaviors, or new codes of the alternative organizational phenomenon being examined. Given the complexity of leadership behaviors as well as the complex environment board members operate in (e.g. political, regulatory, funding constraints, governance policies), we obtained 106 critical incidents from 53 respondents.

**INDUCTIVE DATA ANALYSIS**

Given that we are positioning the CIT within a broadly qualitative context, and in line with widely held perspectives among qualitative researchers, we also acknowledge that pure objectivity is not the main objective of the research. Rather, as Duberley et al. (2012) acknowledge, subjectivity and interpretation are important. It follows that criteria such as construct validity are, arguably, of little sense (Symon and Cassell, 2012b). To illustrate these issues in the context of this paper, we outline in Table 2 a framework for interpreting data gleaned from the CIT. Clearly, this is indicative rather than exhaustive. Flowing from this, we then take one major incident from our data set and interrogate it using the criteria outlined in our Table.

**Insert Table 2 here**

The vast majority of CIT studies have traditionally used content analysis to quantify critical incident data (Gremler, 2004) and tend to decontextualize the phenomenon under investigation (Bryman, 2004). Even when claimed to be used qualitatively, content analysis’s emphasis on ‘objective, reliable and replicable coding rules exemplifies quantitative research rather than qualitative research’ (Bryman, 2004: 747). With respect to leadership studies, for example, positivist research fails to sufficiently recognize that organizational actors are intertwined within specific contexts and situations (Ford, 2010). Recognizing the benefits of qualitative, inductive, and interpretivist research, we highlight how the use of the CIT is consistent with this type of research, and identifies valuable surprises in the empirical material which can be highly situational and contextual. Additionally, most CIT studies
provide few details on the process of analysis (Butterfield et al., 2005; Gremler, 2004). It is therefore timely to demonstrate, as we seek to do in Exhibit 1, how CIT empirical material can be interpreted. In doing so, we illustrate how thematic analysis (Braun & Clarke, 2006) supports the overall thrust of our argument.

**Insert Exhibit 1 here**

In order to conduct inductive research, it is important that the chosen incidents are not predetermined by, or driven by, the researcher. Rather, themes are driven by the data (Braun & Clarke, 2006). Not only is it difficult to specify all possible components *a priori*, doing so would limit the breadth and scope of findings. This is one of the reasons many authors claim the CIT is an inductive method (Gremler, 2004), when compared to the limitations of traditional interview questions. One of the main benefits of the CIT is that it ‘provides a rich source of data by allowing respondents to determine which incidents are the most relevant to *them* for the phenomenon being investigated’ (Gremler, 2004: 67, emphasis added). It follows that, in order to challenge conventional pre-understandings, a flexible theoretical framework is required. Multiple readings of the empirical material collected in the fieldwork are therefore required. In addition to this, a reflexive approach to empirical material where the researcher remains not only self-aware of his/ her predispositions but also open to alternative theoretical positions is necessary in order to fully engage in a critical dialogue with theory (Alvesson & Karreman, 2007). In this research, staying true to an inductive approach, coding was data-driven, whereby codes were developed through multiple readings of the empirical material (Kvale & Brinkmann, 2009). This is in contrast to theory-driven coding, in which case the theoretical relationship between data and theory is forefront during the coding process (Kenealy, 2012).

It has been argued that a purely inductive approach is not possible in practice (Eisenhardt, 1989; Fine, 2004; Shepherd & Sutcliffe, 2011). It can also be argued that it is
not desirable. Even with an inductive approach, one must have knowledge of the literature so that constructs and relationships important in explaining the phenomena are not overlooked. Despite our earlier criticisms of current leadership theories, specifically the dominant theory of transformational leadership, it is important to recognize the contributions these theories have had in organizational research (van Knippenberg & Sitkin, 2013), while inductively seeking to develop new ones. Additionally, preconceptions can assist a theorist ‘in analyzing data in part because they decrease the possibility that he or she will be overwhelmed by the volume of the data’ (Shepherd & Sutcliffe, 2011: 364). Shepherd and Sutcliffe (2011) outline what they term inductive top-down theorizing. Other authors have provided similar hybrid approaches – e.g. Samuels’ (2000) discussion on abduction. In this model, the researcher develops a comprehensive understanding of the literature, but approaches the data with an ‘openness’, ‘refraining from attending too closely to specific literature, theories, constructs, methods, and so on, and also remains open to alternative routes of interpretation and analysis’ (Shepherd & Sutcliffe, 2011: 368).

Described in its simplest terms, empirical material collected using the CIT is coded into themes based on some commonality. Themes are identified naturally through reviewing the empirical material, but the researcher must also keep in mind the intended uses of the material (Flanagan, 1954). The number of categories (and perhaps subcategories) chosen is a trade-off between specificity and generality. When too broad of themes are chosen, there may be a loss of comprehensiveness and specificity. However, when too many themes are used it may become difficult to reliably categorize incidents (Bradley, 1992), to reach saturation, or to identify generalizations from the data. Coding is arguably the stage of the CIT that attracts the most controversy, as it is both subjective as well as difficult (Sharoff, 2008). Flanagan (1954) clearly stated that there is no minimal criterion or set rules that can be structurally applied in all cases, and that the coding of data is as subjective as it is objective.
Once the themes have been well formed they can then be compared to the existing literature to see if there is support for the themes (Butterfield et al., 2005). This chronological sequence of events does not compromise inductive categorization. The process of ‘theoretical agreement’ (Maxwell, 1992), allows the researcher to scrutinize the themes against a theoretical framework within relevant scholarly literature (Butterfield et al., 2005). Concluding a lack of support or contradiction of the themes in comparison to the literature does not necessarily indicate that the themes are unsound, as the exploratory nature of this approach may mean the study has helped to develop territory that has not been well understood by researchers in the past (Alvesson & Karreman, 2007; Butterfield et al., 2005). Finding contextual extensions to the already well-known theories is possible only through inductive exploratory research (Bryman et al., 1996).

In line with this, during analysis of the empirical material, we followed the convention whereby interviews were coded inductively, but not with an ignorance of current theory. The process of coding follows thematic analysis as outlined by Braun and Clarke (2006). Thematic analysis is a ‘method for identifying, analyzing, and reporting patterns (themes) within data’ (Braun & Clarke, 2006: 6), whereby a theme captures ‘something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set’ (Braun & Clarke, 2006: 10, emphasis in original). This process is also consistent with an interpretivist view, whereby interpretivists ‘use a number of research methods to obtain different perceptions of the phenomena and in your analysis you will be seeking to understand what is happening in a situation and looking for patterns which may be repeated in other similar situations’ (Collis & Hussey, 2009: 60).

During this process, we started with a large number of detailed themes, and later merged, split, and relabeled themes until satisfied with those that remained. For example, themes of opinions heard, opportunities to speak, the valuing of contributions, listening,
openness and tolerance were merged. For purposes of the illustrative study, each of these themes provided a similar and ‘thematic’ contribution. An interesting contribution to the leadership literature was the recognition of a clear distinction between the components of mentoring and coaching and supportive behaviors. Prior research tended to merge these two behaviors into one theme, and quantitative research examined them within the same construct - often termed individualized consideration. While prior deductive research did not make the distinction, our research found that the two behaviors were activated at different times, often leading to different outcomes – in contrast to current theory.

NVivo software was used to assist with the coding process. However, care was taken not to lose context in the coding process (e.g. making notes, ensuring surrounding text was included in the codes (Braun & Clarke, 2006), and re-reading transcripts and documents during the write up process). In the illustrative project, we followed an inductive analysis approach, while being cognizant of current leadership theory. Interview transcripts were read approximately three times in an active way, searching for meanings and patterns (Braun & Clarke, 2006), before initial themes were developed, and approximately six or seven times during the coding process. Repeated readings of transcripts ensure the researcher remains close to the empirical material, ultimately helping to preserve context (Benner, 1994; Schluter et al., 2007).

**IMPLICATIONS FOR THEORY DEVELOPMENT**

Ultimately, inductive data analysis has value insofar as it is a step towards theory development. As we noted at the beginning of this paper, Alvesson and Sandberg (2011) have suggested that most research concerns itself with ‘gap spotting’ rather than ‘problematization.’ That is, many theories become established, with researchers restricting themselves to filling out what are perceived to be ‘gaps’ in aspects of the theory. This tends
to displace the interrogation of its fundamental assumptions. While this can be valuable at times, it is also often intellectually constricting. It frequently means that researchers shoehorn their findings into theoretical frameworks whose explanatory power does not match what would otherwise be revealed by the data.

In terms of leadership, the main theory of the past thirty plus years has been that of transformational leadership (Tourish, 2013). It certainly seeks to explain much. Thus, van Knippenberg and Sitkin’s (2013) critical review identified 58 moderating variables in the literature that purportedly have relationships with 37 dependent variables. They also found 52 mediators predicting 38 different outcomes. At the very least, the theory has become an unwieldy construction. Collinson and Tourish (in press) argue that this diffuseness makes it ever harder to apply. van Knippenberg and Sitkin (2013: 15) caustically note that ‘the causal model implied by empirical research is one in which all dimensions of charismatic-transformational leadership lead to all outcomes of interest, mediated by all mediators identified in research, and moderated by all moderators advanced by research.’ The risk is that in seeking to explain everything the theory ends up explaining precisely nothing.

We have demonstrated, through the use of the illustrative study, that the CIT has the potential to open additional theoretical possibilities. In particular,

- *It enables a greater focus on context.* Arguably, this is currently a failing in much leadership theory, where it is often implied that proposed models (such as transformational leadership) have a universal applicability. Our study identified a context – the board / executive director relationship – in which it is clear that while aspects of transformational leadership theory were appropriate, much of the actual interaction between the people involved is not accounted for by the theory in question, while also contradicting some aspects of it. This paved the way for further theoretical
discoveries.

- *It offers thick description.* Such description identifies incidents, situations and events that are often inadequately explained by existing theory – such as influence from followers to leaders rather than the other way round. Moreover, in many instances, it was far from clear who was playing the role of a leader and who had the role of a follower. These are much more porous distinctions than most leadership theory acknowledges. Fresh theory is needed to fully account for this phenomenon. More broadly, this illustrates how theory can be developed out of the thick description that is provided by the CIT.

- *It offers the prospect of surprise.* Mintzberg (2005: 368), in writing of theory development, opined that the ‘world is so rich and varied, that if you see it as it is, you are bound to appear creative.’ As he advises, this also means that research should *cherish anomalies*. The CIT is ideal for the identification of anomalies, contradictions, and events that fall outside the purview of existing theory.

- *It is ideal for inductive theorizing.* If induction means to proceed from a particular observation to a generalizable theory, then the CIT is inherently favourable to the process. It speaks against taking established theory for granted, and devising elegant experiments that confirm or disconfirm predictions that flow from it. Rather, it produces accounts of vivid events and stories that lend themselves to fresh explanation rather than accommodation within existing theoretical frameworks. Of course, this presupposes an imaginative openness to this possibility on the part of the researcher.

In sum, we suggest that the CIT assists researchers to adopt a more imaginative approach to empirical investigation, data analysis and theory development.
CONCLUSION

The CIT, when used with a carefully considered combination of methods and methodological frameworks, is a powerful research tool. As we have shown, it can elicit multiple types of events (atypical, typical and prototypical) that are important for examining organizational practices. We have further demonstrated how an explicit subscription to a typicality of events framing enriches interpretation of the empirical material. In addition, its strengths lie not only in its utility as an exploratory tool, but also its role in building theories or models (Butterfield et al., 2005; Druskat & Wheeler, 2003; Woolsey, 1986). Given that the technique focuses the respondent onto actual events (Collis & Hussey, 2009; Moss et al., 2003), it elicits rich details of specific situations, including background context, which has been called for in leadership research (e.g. Ford, 2010). We hope that the illustrative study has guided the reader through a journey, demonstrating implications of decision points at each stage of the research design, and to offer a corrective perspective to the positivist assumptions which still regularly impede the full realization of this method’s potential.
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