# Once upon a time in Västmanland – the power of narratives or how the "truth" unfolds

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### ABSTRACT

In 2014 a small fire started in a forest in central Sweden. Within a few days it developed into the largest wildfire in Sweden in the last 50 years. As the scale of the fire increased, so did the need for direction and coordination of the resources engaged in the response operation. Both official investigators and the research community have studied the challenges and come up with recommendations for improvements of the Swedish crisis management system. All authors of this paper have been involved in such efforts. This paper is a result of us trying to formulate lessons learnt based on several written reports and official discussions. The development of the narratives constructed by individuals involved in the response, investigators and researchers is analyzed. We conclude that researchers need to pay attention to their own role in this development. Maybe there is a need for a game changer on the methodological side?

### Keywords

Case study, Choice of methodology, Evaluation of direction and coordination.

#### INTRODUCTION

Case studies are probably the most common source of data in crisis management research (Philips, 1997). Case studies can roughly be based in the following data sources; observations made by researchers on-site, interviews, archived material such as log-files, recordings or text-based information exchange, or reports written by others than the researcher conducting the case studies. Of course, there are combined approaches where the researchers triangulate data sources. What is common to almost all case studies produced in the field is that they depart from a description of the events that unfolded during a crisis so that the reader can attain an understanding of the event(s). Thereafter an analysis follows which hopefully provides some valuable insights.

The focus of this paper is to reflect upon how such descriptions, or *narratives*, come about and how they potentially focus the attention of the researcher, the interviewees, and other readers, to certain events that took place in the concerned case/crisis. The six authors, who all have conducted research on a single case here serving as an illustrating example, critically reflect on their own roles and biases.

This paper should be viewed as an academic discussion paper stimulating a critical debate concerning the validity of findings from crisis management case studies, and consequently the rationales behind normative suggestions following such findings. The reader should bear in mind that the authors represent different research traditions and thus different ways to approach the studied context. Expectantly such heterogeneity adds value to what can be seen as a necessary critical discussion. The process (method) leading to the reasoning below includes two forms of multidisciplinary interactions. It started with an informal discussion on the potential of sharing our individual experiences from the work with studying a single case. This informal meeting led to an organized discussion where the authors unconditionally shared their thoughts and exposed critical quandaries. During this meeting the broad outline for this paper was drawn. After this meeting the authors have continued the joint discussion via mail and over the phone.

#### DESCRIPTION OF THE EXAMPLE CASE

The wildfire in Västmanland 2014 is considered to be the largest wildfire in modern Swedish history. It covered an area of ca 150 km2 in the municipalities of Fagersta, Norberg, Sala, and Surahammar, all in the province of Västmanland. The wildfire started on 31/07/2014 and was formally declared "extinguished" on 11/09/2014. During this time the fire changed character significantly from day to day and during the most intensive periods from hour to hour.

The wildfire resulted in one fatality and one person seriously injured. Approximately 1,000 people and 2,000 animals were evacuated from the affected areas. Approximately 70 buildings were damaged or destroyed (Henningsson & Jacobsen, 2014; MSB; 2015; Uhr et al, 2015). Most reports point out the following events or phases as particularly significant; (1) the "initial" phase when the fire started and developed from a minor event to a large (31/7-3/8), (2) the "Black Monday" (4/8) when the fire went completely out of control and for the first time was considered as a major crisis by the authorities, and (3) the "control" phase where the joint function for direction and coordination was created and established in Ramnäs.

During the first days the response was conducted as two separate rescue operations (affecting two municipalities) with separate field-staffs and separate staffs at strategic level. On the 2<sup>nd</sup> of August the Chief Fire Officers decided that the ongoing response operation should be run as one single operation with one Incident Commander. Despite this the response in reality proceeded as two separate operations with no coordination. Not until the third day the response in reality was conducted as one operation. Still there were separate staffs at strategic level. The lack of a common operational picture is considered to have complicated the coordination of the efforts to limit and take control over the fire (Henningsson & Jacobsen, 2014; Ministry of Justice, 2015).

During the fourth day of the fire the field command post was moved to the parking lot outside Ramnäs Hotel & Conference. The County Administrative Board of Västmanland began to establish their crisis organization in Västerås. On the next day (4<sup>th</sup> of August) the command post moves into a conference room at the hotel and the staff reorganizes. At this time several official organizations (Fire and Rescue Services from other parts of Sweden, the Armed forces, the Police and other governmental organizations etc.) together with private companies and voluntary groups became engaged in the response. (Henningsson & Jacobsen, 2014; Uhr et al, 2015)

Given the extensive fire spread during the "Black Monday" the County Administrative Board of Västmanland

decides Tuesday morning (according to the Civil Protection Act, 2003:778) to take over the responsibility for the ongoing response operation and set up a function for multi-agency direction and coordination at Ramnäs Hotel & Conference. They also appointed a new Incident Commander who coordinated both the Rescue operation and the crisis response operation (Västmanland County Administrative Board, 2014).

The joint function for multi-agency response was (according to the Incident Commander) designed and reorganized to meet the most essential needs and to minimize the consequences of the fire in the society (Uhr et al, 2015).

#### THE AMBIGUITY OF ASSUMED RESPONSIBILITIES

When studying the operation in more detail, events are not always clear, as illustrated by this example.

On Tuesday morning, five days into the fire, there is a meeting between the South Stockholm Fire Chief who just arrived to the site, and the Västmanland County Governor. The Governor had just decided to assume control of the municipal operations and he wanted to discuss the design of a new organization with the South Stockholm Fire Chief. The Governor confirms the South Stockholm Fire Chief's appointment as Incident Commander and signs the official decision for the County to assume control of operations (Västmanland County Administrative Board, 2015; Skogö 2015). Before the decision, the County had contacted the Swedish Civil Contingencies Agency (MSB) advisability of a take-over (Skogö, 2015). This led to a process that never addressed the legal ownership of the new organization.

The decision by the Governor to assume operational responsibility created confusion as to who really hadownership of the command center. The take-over was unchartered territory, and the sharp tools on the Civil Protection Act (2003:778) only concerned firefighting in this case, not the far-reaching new mandates of the organization, such as logistics and evacuation (von Knorring, 2015). Two versions existed: The County assumed control over the Rescue Services and as the Governor had appointed the Incident Commander, he acted on the County's mandate and the Governor was his boss, or 2. The County assumed the responsibility, but the Incident Commander acted on his own legal mandate as specified in the Civil Protection Act (2003:778). Even months away from the events, interviewees were not certain which was the more authoritative interpretation (Uddholm, 2015; Skogö, 2015; Västmanland County Administrative Board, 2015). What is more, had serious missteps been made, this would have to be resolved in court and it would have impacted compensation and a number of other issues. Even the staff of the County Administrative Board was divided on this issue: did they "own" the command center or not? (Åhnberg 2015) The Governor described his role as "a working chairman of the board" (Skogö 2015).

The South Stockholm Fire Chief demanded in the early conversations with the Governor to be appointed the only Incident Commander. This is unusual for Swedish standards, as a rotation process is usually imposed in order to have rested commanders in place at all times. Commander *x* delegated authority for the few occasions he was not around. He became the foremost spokesperson of the organization, creating the image of a "unified command" and managing to turn the media image of the operations around. The Governor upheld contacts with the Government Offices and individual ministers, as well as the Royal Court. For researchers to interpret and draw conclusions from this process, it becomes clear that the lack of clarity in that first meeting and the subsequent decisions created uncertainty on the legal ramifications of the new organization. The rationalizations by different actors after the fact have to be part of that analysis for the pattern to protrude.

#### **POST-EVENT EVALUATIONS**

The complexities associated with the management of the response to the large-scale wildfire became the subject of numerous activities in terms of research studies, evaluations, accident reports, lesson learnt seminars, and expert-panels. All of these activities had the ambition to cast light on interesting and important aspects, that could describe the effectiveness of the Swedish crisis response system or to be used as evidence when debating the need for structural changes of the current system.

The eagerness to form lessons learned, craft insightful comparisons to similar events, as well as discussing possibilities for improvement resulted in a situation where personnel that were deeply involved in the response operation became invited 'celebrities' to panel discussions and seminars long before any systematic studies were completed.

In the few months after the wildfire, three major seminar events were organized where individuals shared their

experiences about the response work. One should note that two of the three events were organized by the county administrative board that had a significant and controversial role in the response work.

Seminar title	Organizer	Date
Seminar on the wildfire in Västmanland	Conference on social unrest organized by County administrative board Västmanland	2014-10-01
The massive wildfire	The Accident site conference 2014	2014-10-02
The wildfire in Västmanland – a national interest	Conference organized by County administrative board Västmanland	2014-11-24

#### Table 1. Seminars organized to evaluate the response work.

The table below lists a selection of reports that were produced as a consequence of the need to describe, evaluate, debate and ultimately learn from the wildfire response operations. As is evident in the table, these reports were produced for different reasons, by different actors and over a significant period of time. The reports have been included in this paper since they all cover the complete time-period from the start of the wildfire until the response operations were completed. One exception is made – the accident investigation focusing on the first five days of the response (1<sup>st</sup> in the table below). The authors behind this paper have been involved in writing the fourth and the sixth reports from above.

Report	Reason	Producers	Method	Data collection	Publication date
Accident investigation – Local municipalities	By law mandatory investigation	Nerike fire service on behalf of local affected fire services	Retrospective interviews and document studies	Unknown	2014-12-16
Government inquiry	Politically appointed investigation	Aud Sjöqvist – Government Office	Retrospective interviews and document studies	Unknown	2015-03-06
The MSB-support to the wildfire	MSB appointed evaluation	MSB – Swedish civil contingencies agency	Retrospective interviews and document studies	After October 2014	2015-05-26
The seven- analyses	Researcher driven activities	Lund University and Chalmers University	Observations and informal interviews during the events, and retrospective interviews	2014-08-05 2014-08-06 to 2014-08-12 2015 February	2015-06-09
Accident investigation – County administrative board	By law mandatory Investigation	Professional accident investigators Henning, Jacobsson, Björkman, Thelberg	Retrospective interviews and document studies	Unknown	2015-06-25
Only the forest on fire?	Municipality appointed evaluation	National Defense University - Crismart	Retrospective interviews and document studies	Between March 2015 and May 2015.	2015-09-11

Table 2. Official reports evaluating the response work.

#### **Observations:**

- Retrospective interviews and document analysis are the dominating data collection techniques.
- Data collection activities are in most cases done months or several months after the wildfire. Only one of the reports is based on observations and interviews from the time of the wildfire.
- The different reports are produced and published over a time-period of approximately 7 and 13 months after the wildfire.

The result of a meta-analysis of the selected reports could be summarized as following:

- A. Critique regarding how local and regional actors managed their formal responsibilities
- B. Critique regarding ambiguities when the county administrative board took over responsibility of the emergency response.
- C. Critique regarding how Swedish civil contingencies agency (MSB) provided method-, technical- and information- support to the response work
- D. Observation that the work at the field command post was characterized by ad-hoc solutions and improvisation
- E. Observation that many organizations had difficulties in establishing efficient communications between their personnel at the field command post and the home-organization.

These topics are described in all the reports. Even if each of the reports also covers additional topics, one could argue that above topics could be viewed as crystalized themes in the evolving narrative that brings forward the key insights from the response operation.

Producing these reports was a significant task for the Swedish crisis response system in general and the Swedish civil contingencies agency specifically. In the relatively small community of Swedish crisis response, the dominating topic during the autumn of 2014 and winter 2015 was what the formal inquiries might present. The sheer number of people interviewed as well as involved as experts in the various investigations and studies, did also contribute to fuel the discussion about how the wildfire had been managed, long before any report actually had been published.

#### **CRITICAL REFLECTIONS CONCERNING THE RESEARCHERS' APPROACH**

"A consideration of self as a researcher and self in relation to the topic of research is a precondition for coping with bias." (Norris, 1997, p. 174)

The research conducted during and after the wildfire can be considered as descriptive with normative components, such as recommendations. These recommendations are frequently used in the public discussion on how to improve the Swedish crisis management system, also by the six authors behind this publication. We like to see ourselves as neutral observers delivering objective analyses, but is this true?

In this paper we reflect on phenomena that might interfere with our "neutral ideal"; (1) paradigm as a limiting lens of analysis, and (2) biases associated with methodology.

Various research traditions have their own paradigms. According to Kuhn (1962) a paradigm defines the practices that define a scientific discipline at a certain point in time. He means that paradigms are discrete and culturally based. A paradigm influences what questions to be asked, and what questions not to be asked. According to Kuhn a paradigm also influences what answers that are relevant. Based on the idea that paradigms work as analytical lenses in research it is reasonable to believe that also researchers may suffer from the consequences followed by the phenomena "if you are a hammer, every problem will look like a nail.

The impact of research paradigms have earlier been discussed in the field of disaster research, e.g. in Rodriguez, Quarantelli & Dynes (2007), here called "the structural bias (p. 431), and in Leavy (2014). However, joint multidisciplinary critical discussions appear to be quite rare.

Uhr et al.

A relevant, and perhaps radical, question we must ask ourselves is if our existing paradigms make us partly blind when assessing the relevance of the problems we have identified and keep cuddling with. We argue that researchers attempting to analyze crisis response need to better take advantage of heterogeneous research groups combining and challenging various paradigms. Each normative claim should be scrutinized and put into a broader context. Epistemological pluralism (see e.g. Bergström, Uhr & Frykmer, 2016) should take priority over dogmatism.

In the current research focusing on the response to the wildfire we have tried to stimulate intellectual, challenging and multidisciplinary debates, however we realize that practical circumstances set the limits of what can be accomplished. If case study research is associated with the problems reflected on here we must also consider how the funders perceive research. Do they believe in the "completely objective" researchers? How critical should they be?

Biases associated with methodology are to a certain degree linked to the reasoning above, e.g. confirmation bias (Rabin & Schrag, 1999) or selection bias (Collier & Mahoney, 1996). In addition we need to reflect on leading question bias, question order bias, wording bias and other methodological pitfalls. We consider ourselves as experienced researchers, but when a crisis occur and you with short notice, or with no notice at all, arrive in a command central and conduct spontaneous interviews in order to avoid interviewees' rationalizations in hindsight, the methodological "rules" are partly set aside. For obvious reasons it is difficult to assess the negative consequences of ad-hoc design of interview guides.

#### DISCUSSION

As can be seen in the examples given earlier, the understanding and interpretation of the events was ambiguous. However, interviewees often related their answers and stories to a "bigger picture", and this "bigger picture" was more or less given to them during the initial seminars and from the first report from the fire (MBR 2014/336) published ca 5 months after the fire (December). This means that the interpretations made in the first report probably influenced the results of all the following reports, even though these interpretations not necessarily were complete or correct in all detail. Furthermore, there was tendency to focus on anecdotes, meaning that small details that often represented deviations from the normal operations were given more attention than the main events leading to the establishment of functioning direction and coordination.

Since the research community in Sweden in this field is quite small, there was a large interaction among the researchers, causing a risk for groupthink among the researchers. Additionally, there was a relatively low number of interviewees being interviewed a large number of times, probably due to the fact that they were considered the most important in the process, a partly self-reinforcing perception. There is a risk that this caused the interviewees to become more certain of their story after telling it several times than they probably were from the start. We also observed that there was a tendency to view "good coordination" as following guidelines, but following rules is not necessarily the best measure. Instead, more attention should be given to finding better measures of "good coordination" and focus interviews on these aspects. Finally, the choice of interviewing stakeholders means that there is a possible reluctance to admit errors of their own behalf.

In addition to these methodological challenges, and potential pitfalls, researchers' biases might have a negative impact on the validity of findings and conclusions. Such biases are partly general in their natures, however this makes them no less important in the current case study. The current case worked as an important reminder.

#### CONCLUSIONS

Based on the Västmanland 2014 forest fire case presented above and the following discussion, we postulate that the narratives produced in crisis response investigations and research is subject to the following claims:

- There is a degree of ambiguity when it comes to the understanding of what really happened. This ambiguity may risk the validity of recommendations following investigations and research.
- The first reports that are published after a crisis event tends to "set" the narrative. Facts pointed out as important in such reports repeatedly pointed out as important in later reports/studies.
- As only a limited set of persons usually are in command/authority during a crisis, those persons tend to be interviewed a large number of times. Such interviewees are subject to confirmation bias as researchers often seek to confirm facts they have obtained from other sources. The narratives are, more

or less consciously, cemented into a specific form.

- Both researchers and interviewees are aware that there is a "correct" way (or at least ways that are downright wrong) of acting in crisis situations, usually by following guidelines/procedure. There may be a reluctance to describe own activities as deviating from these and there may also be reluctance on the behalf of the researcher(s) to describe their responders in a bad way.
- Interviews conducted in groups (focus groups, workshops, or group interviews) are subject to groupthink as the participants may adjust their descriptions of the events that occurred during the crisis so that they align with the group.
- There is a need for critical reflection among researchers and their objectivity and roles in the unavoidable story telling following a societal crisis.

A question that to a large extent has been left open is how we, as researchers, should handle these (and other) methodological problems? When writing this paper, we asked ourselves if a game-changer in method is needed in the crisis response domain? Narratives will always be simplifications where selected parts of events are highlighted, usually with good intentions. Narratives also make it possible to comprehend complex events, and the "creators" of the narratives therefore hold a great responsibility as they shape our view of the world. As verbal accounts are the most common source of data, we need both to triangulate data from different types of sources (interviews, log-files, observations, recordings etc) as well as critically review statements given by interviewees. How the truth unfolds depends not only on what has happened but also on our pre-conceptions of what a crisis response operation is and our methods for gathering data about it. We are not yet in the position to advocate a radical alternative to today's perfunctory case study standard for studying crisis management, however we suggest a continuous method development based on much more critical reflections.

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#### REFERENCES

- 1. Bergström, J., Uhr, C. & Frykmer, T. (2015): A Complexity Framework for Studying Disaster Response Management, Lund University (working paper)
- Collier, D. & Mahoney, J. (1996). Insights and Pitfalls: Selection Bias in Qualitative Research. World Politics, Vol. 49. No 1
- **3**. Henningsson, A., & Jacobsen, U. (2014). *Olycksutredning skogsbrand Västmanland* (Dnr: 2014/336-MBR-196). Örebro: Nerikes Fire and Rescue Service (Nerikes Brandkår).
- 4. Kuhn, T.S (1962) The Structure of Scientific Revolutions, University of Chicago Press, Chicago
- 5. Leavy, P. (2014) The Oxford Handbook of Qualitative Research, Oxford Library of Qualitative Research.
- 6. MBR 2014/336 196 Olycksutredning Skogsbrand Västmanland. Nerikes Brandkår.
- 7. Ministry of Justice (Justitiedepartementet) (2015). Sjöqvist, A. & Strömberg, C. Rapport från skogsbrandutredningen.
- 8. MSB (2015). *MSB:s stöd vid skogsbranden i Västmanland 2014 Utvärdering* (MSB 585 maj 2015). Karlstad: Swedish Civil Contingencies Agency.
- 9. Norris, N. (1997) Error, Bias and Validity in Qualitative research, *Educational Action Research*, 5:1, pp. 172-176
- Phillips, B. (1997) Qualitative Methods and Disaster Research, Int. Journal of Mass emergencies and Disasters, vol. 15. no 1, pp. 179-195
- 11. Rabin, M. & Schrag, J.L (1999) First impressions matter: a model of confirmatory bias. *The Quarterly Journal of Economics*, 114, pp. 37-82.
- 12. Rodriguez, H., Quarantelli, E.L. & Dynes, R. (2007) Handbook of Disaster Research, Springer

- 13. Skogö, I. (2015) Interview on 14 April.
- 14. Swedish Government. (2003:778). Civil Protection Act.
- 15. Uddholm, L.G. (2015) Interview on 9 April.
- 16. Uhr, C. (2015). (editor). Att åstadkomma inriktning & samordning 7 analyser utifrån hanteringen av skogsbranden i Västmanland 2014. Lund: Lund University (Lunds universitet).
- 17. von Knorring, J. (2015) Interview on 22 April.
- 18. Västmanland County Administrative Board (Länsstyrelsen Västmanlands län). (2014). Beskrivning av länsstyrelsens agerande. Skogsbrandens första vecka 31 juli 7 augusti 2014.
- 19. Västmanland County Administrative Board. (2015) *Political relations and the Ramnäs command center*. Focus group on 27 March.
- 20. Åhnberg, P. (2015) Interview on 20 March.