



LUND
UNIVERSITY

Department of Political Science

STVK02
HT2012
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Framing Corporate Social Responsibility in the Chemical Industry

The Bhopal Disaster

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List of Abbreviation

BASF Badische Anilin- und Soda-Fabrik
BGTR Directorate of Gas Relief and Rehabilitation
CSB United States Chemical and Hazard Investigation Board
CSR Corporate Social Responsibility
CEFIC the European Chemical Industry Council
EPA Environmental Protection Act
ICIS Chemical Industry News and Chemical Market Intelligence
ISO International Organization for Standardization
MIC Methyl Isocyanate
MNC Multi-National Corporation
NCEC National Chemical Emergency Centre
UC Union Carbide
UCC Union Carbide Corporation
UCIL Union Carbide India Limited
UOP Universal Oil Products

Abstract

The concept of Corporate Social Responsibility (CSR) has been around for many years and has been viewed in different forms, aspects and by different actors because of the ever changing society. In 1984 a terrible incidence happened when a leaking chemical by the name of methyl isocyanate (MIC) was leaking in and outside of the Union Carbide India Limited (UCIL) Pesticide Plant in Bhopal, India. This thesis will describe the disaster as being an external shock of creating an enriched concept of CSR when placed in the context of the chemical industry. By using framing theory by Chong & Druckman, Goffman, and Schön & Rein, it is possible to frame CSR with using the CSR layers by Carroll as guidance. A massive chemical disaster as Bhopal can, in fact, happen today. However, chemical regulations as Responsible Care and product stewardship that emerged after 1984, to satisfy the economic responsibility layer of chemical companies, combined with the CSR-risk that companies are aware of, have made this unlikely.

Key words: CSR, Framing Theory, Conceptual Stretching, Responsible Care, Product Stewardship.

Words: 10 023

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1 The External Shock

The Bhopal disaster cannot be known as being the starting point of CSR as a whole concept, considering CSR have been around, amongst different actors for hundreds of years (Webb, 2012). However, this thesis will make the disaster as having the effect of being an external shock in order to have changed/developed the CSR concept when referring to the chemical company industry. To clarify, the aim will not lie in how the Bhopal disaster happened, but rather to follow the aftermath of it in different stages when referring to the chemical industry.

1.1 The Bhopal Disaster

Andrew J. Hoffman and William Ocasio argue that the Bhopal disaster can be known as an external event that had the impact of changing the industrial chemical industry in the US (Hoffman & Ocasio, 2001: 413-414). Hoffman & Ocasio discuss what an external event, shock, jolt and discontinuities are, and refer to Miles (1982) and Liblebici et al. (1991) with explaining that “critical events have played a central role in fostering institutional change and industry evolution” (Hoffman & Ocasio, 2001: 414).

The Bhopal disaster is known being a tragedy affecting human health and the environment (Sheoin, 2003) and further being “The world’s worst industrial disaster” (R. Varma & D.R Varma, 2005: 37). According to the U.S. Chemical Safety and Hazard Investigation Board (CSB) out of Gerald V. Poje, more than six thousand people died from a leaking chemical in the Union Carbide India Limited (UCIL) pesticide plant that was a half owned affiliate to Union Carbide (UC) (Browning, 1993: 1-15). Furthermore, the numbers of people being affected outside of the pesticide plant are unknown, but may count as high as hundreds of thousands (Poje, 2004: 120-121). The UCIL had, according to Union Carbide Corporation (UCC), its focus in making pesticides for Indian agricultural purposes (Browning, 1993: 1-15). The UCC implies that the disaster was created by a so-called ‘disgruntled plant employee’ that made a mistake when handling the chemical, methyl isocyanate (MIC) (Browning, 1993: 1). According to Sheoin, UC blamed the employee and had further another explanation for the disaster and this being an attempt of Sikh terrorism (Sheoin, 2003: 22).

1.2 Problem Formulation

The problem or political science puzzle that this thesis will address is how the concept of CSR has been enriched by Bhopal, and the disaster being seen as an external shock on setting this. The ambition will be questioned without putting values in/and not discussing whose responsibility it was, but rather to investigate if the UCC followed any sort of CSR and if chemical companies today follow a different sort of CSR because of the Bhopal disaster.

The ambition is to frame the CSR layers by Carroll, onto the Bhopal disaster and in the aftermath (in different stages) and combine this with investigate a limited amount of chemical acts and restrictions within the chemical industry, that can be proven to be a result of the Bhopal disaster. This, in theory, one can discuss whether the loss of thousands of people in Bhopal 1984, have lead up to anything being regulated when concerning chemical company responsibility. And, if these chemical regulations are enough for the chemical industry, in order to prevent anything like Bhopal happening ever again.

1.3 Thesis Question

By introducing the problem of formulation, empiricism and method this sums up to the thesis question being:

Has the Bhopal disaster changed the chemical industry's CSR?

And if so,

How can this enriched concept of CSR be framed?

The focus will be in how the chemical industry has reacted to the Bhopal disaster and how chemical companies have come to implement new regulations because of it. Furthermore, it is important to investigate this in different stages in the aftermath of Bhopal, and if these aftermath-regulations still apply for the chemical industry in present time. Lennart Lundquist discusses the level of abstraction and the main focus in this specific case, being the empirical case of the Bhopal disaster. The disaster provides a substantial reasoning when referring to the abstraction of CSR and hence a balance in the thesis question is created that makes it possible to answer (Lundquist, 1993: 64).

1.4 Disposition

The aim with the thesis is to frame CSR when referring to the aftermath of different stages of the Bhopal disaster. Considering CSR is a wide concept, this will be discussed with framing theory by Chong & Druckman, Goffman and

Schön & Rein, combined with interpreting and understanding the CSR layers of Carroll and the reasoning of CSR-risk, to view a frame of the concept of CSR, in the aftermath of the Bhopal disaster, in different stages. This thesis will address the Bhopal disaster as being an external shock and furthermore, the chemical industry and the companies UCC, Dow, DuPont, and BASF, of being the empirical examples, in order to understand and interpret the outcome of the Bhopal disaster and the chemical industry's CSR in today's society. This is relevant considering the reasoning; can today's society expect another Bhopal disaster?

2 Method

Two central concepts for this thesis choice of method is hermeneutic and epistemology. With having a hermeneutic approach, that is to use an interpretive approach where the empiricism can be understood, is desirable (Teorell & Svensson, 2007: 24-25). According to Teorell & Svensson, epistemology is the knowledge of the world and epistemological probabilism is how the world works randomly without any limited amount of knowledge of it (Teorell & Svensson, 2007: 217).

By following the Walter Wallace's figure out of Hollis, one can create an overall thesis view and create a red thread that follow the entire thesis (Hollis, 1994: 60). This figure is explained by having a theory, followed by a logical deduction, hypothesis, operationalization and instrumentation, observations, scaling and measurement, empirical generalizations, logical induction that sum up to the theories. To place this circle figure onto the Bhopal disaster, CSR and framing theory and furthermore to do this with referring to the thesis question, this can be summarized with: Framing theory lead to a formulation of deduction, where something logical sums up to consequences (Teorell & Svensson, 2007: 49). When referring to this study, the logical reasoning is finding what the Bhopal disaster have come to enrich CSR in the chemical industry, the aim is to interpret this change when referring to large chemical companies.

The Wallace figure of methodology is aiding the thesis in understanding how to connect the different parts, however, the reasoning of conceptual stretching needs to be developed into the model, in order to interpret and understand the concept of CSR in the aftermath of Bhopal, in different stages.

2.1.1 Conceptual Stretching

Conceptual Stretching is according to Teorell & Svensson when a concept is stretched out of the ordinary context of the concept (Teorell & Svensson, 2007: 237). This may be biased with being positive or negative considering the concept can lose its original context and furthermore to refer to Collier & Mahon, the original purpose that was aimed for the conceptual understanding may be loss when stretching a concept (Collier & Mahon, 1993: 846). Collier & Mahon's aid for this problem of conceptual stretching is to generalize the research question in order to create a conceptual understanding (ibid). This generalization of Collier & Mahon can be further mentioned to be the limitation that is referred to in the thesis question (section 1.3) by Lundquist (1993). The concept of CSR get a different meaning and is stretched out as it turns into being something else than what meaning it had before it is used onto the empiricism (ibid). What outcome,

or what type of new meaning the stretched concept of CSR, combined with CSR-risk can come to have, will be analysed, investigated and, developed further throughout this thesis to follow the reasoning of conceptual stretching by Collier & Mahon (1993), Teorell & Svensson (2007), and with using the methodological pathway of Hollis (1994).

2.1.2 Operationalization

A concept can be described as being of substantial meaning combined with being on an abstract level (Teorell & Svensson: 35-43). By forming an operationalization of CSR and how to make this measurable, it is possible to interpret how the chemical industry changed after the Bhopal disaster. A correct form of operationalization needs to be fulfilled in order to have the aim of having the study as being valid (Teorell & Svensson, 2007: 71). The operationalization will aid the thesis interpretation and understanding and can be properly developed by using framing theory and to connect the different parts, and this will mainly take place in section 4-4.4.1, about CSR.

2.1.3 Empirical Generalization

Empirical generalization is given by studying a specific example, the aim is to somewhat generalize, so that the reasoning may be used onto other examples (Hollis, 1994: 58-60).

With having the Bhopal disaster combined with what type of CSR type that was used at the time as the empiricism, it makes it possible to view how other larger companies within the chemical industry have come to adopt the thinking of CSR because of the Bhopal disaster. Furthermore, the thesis aim to interpret what the Bhopal disaster have lead up to in terms of changing the chemical industry, combined with how chemical companies chose to use the new interpretation of CSR, or not.

2.1.4 Induction

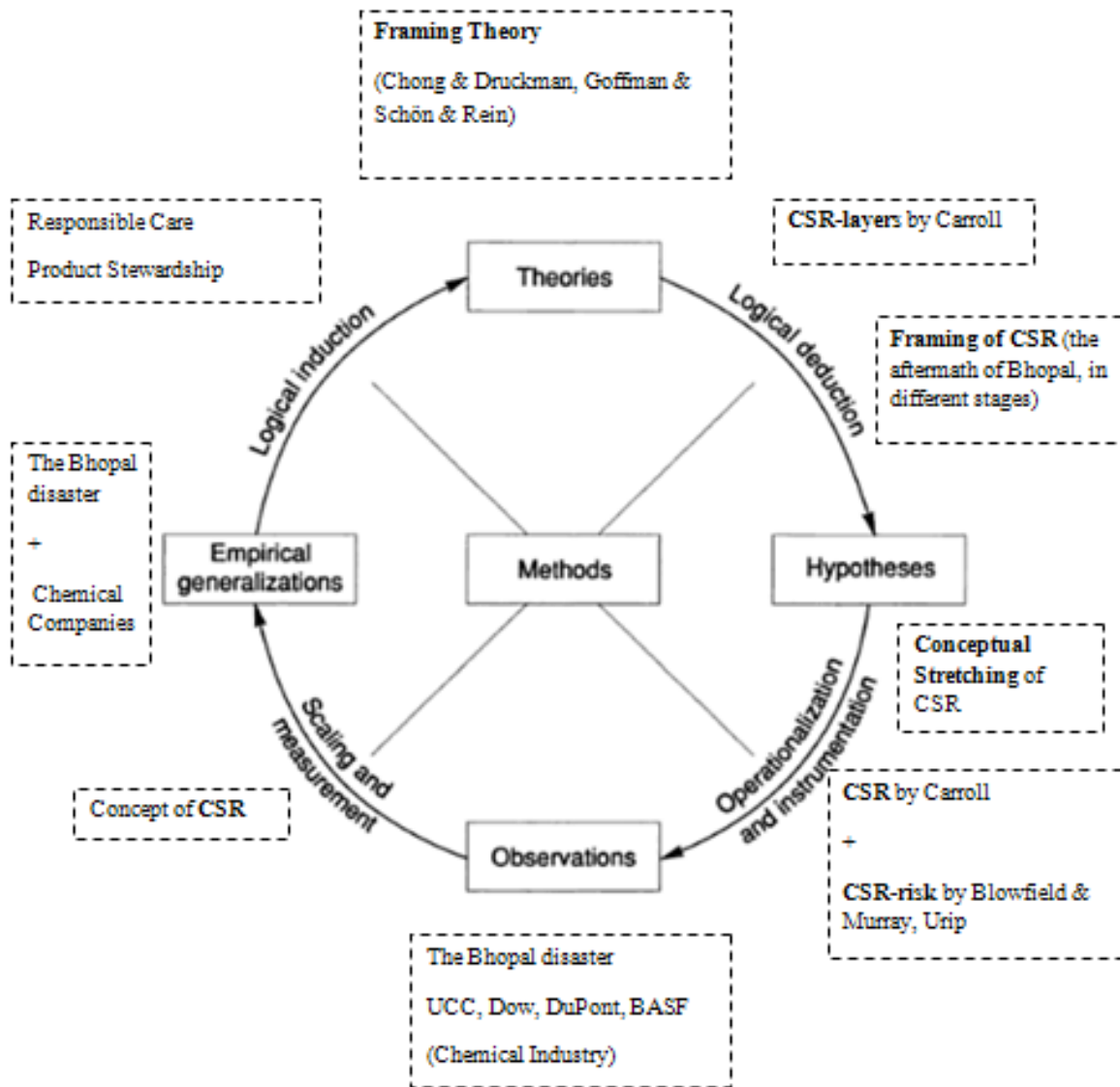
The logical induction is defined by Teorell & Svensson as being to study repeated observations concerning the empirical example to create a better understanding of it (Teorell & Svensson, 2007). However, the Bhopal disaster being out of the ordinary, the reasoning of having it as a generalized example is irrelevant. The focus is rather to focus in how CSR concept can be framed in the aftermath in different stages of the Bhopal disaster, and how this in turn can create a generalized reasoning of how chemical companies (UCC, Dow, DuPont and BASF) have chosen to adapt to the enriched CSR concept (Teorell & Svensson, 2007: 53).

2.1.5 Summary of the Circle Figure

When having described the circle figure of Wallace out of Hollis, the disaggregation of the parts of the thesis, this can create an understanding of the thesis aim and how to structure the model (Hollis, 1994: 60). The aim is to create stretch the concept of CSR and to create an enriched CSR by using framing theory. By following the model of Wallace out of Hollis (1994) this will aid the thesis in having a higher amount of validity and reliability. Validity is the accuracy of using the layers of CSR by Carroll correctly and combining these with framing theory and the empirical example. High reliability can make the reasoning of having the accuracy of framing theory, CSR-layers, CSR-risk and the empirical example as leading up to something being correct when generalizing how the chemical industry have chosen to adapt to this (Teorell & Svensson, 2007: 71). Both validity and reliability, naturally, need to interact in order to make a study worthwhile (ibid). To sum up the Wallace model out of Hollis (1994) this provide: the theory used is framing theory, the logical induction is explained as being the CSR-layers of Carroll, the central operationalization is consisting of making the CSR concept and CSR-risk measurable by placing it in a substantial context of the CSR-layers and empirical examples being UCC, Dow, DuPont and, BASF. A valid scaling and measurement of the concept of CSR and CSR-risk, combined with how to connect the parts of the Wallace model can sum up to how the concept of CSR can be framed after Bhopal and how the chemical industry adapted to the enriched concept of CSR.

To summarize Wallace's circle figure out of Hollis, this thesis will be provided with an interpretation of the original model of Wallace's circle model out of Hollis (see section 2.1.6), and this in order to answer the thesis question. The dashed line boxes have the function of guidance to create an understanding for the methodology choice to this thesis. To clarify, this is an interpretation of the original model of Wallace's out of Hollis, and not the original model.

2.1.6 Figure 1



(Hollis, 1994: 60)

3 Material

The material will be explained in this section of the thesis. An interview with an expert on CSR will be used as the direct primary observations and material, whilst texts and research about the company will be secondary material (Teorell & Svensson, 2007: 87). The primary material will be used in this thesis to back up the already existing secondary material (Esaiasson et al. 2007: 258-261).

3.1 Text Documents

Text documents are secondary material and are being the existing sources and information that is provided by someone else (Teorell & Svensson, 2007: 87). Text documents of chemical companies (UCC), (Dow), (DuPont), (BASF), reports of Indian Government (BGTR) and US government (EPA), searching the chemical companies websites, and viewing ICIS, will create a view of how the chemical industry, and will be used as secondary material. Furthermore, text documents will be of the ambition in trying to find out more about the CSR and how the concept has changed.

3.2 Interview with Expert on CSR

The expert on CSR provided as an interview object for this thesis is Tobias Webb, the Founder of Ethical Corporation and Stakeholder Intelligence and a lecturer in Corporate Responsibility Birkbeck College, University of London.

The interview used for this thesis will be of informant-character and that being only used as empiricism to back up the additional secondary material that is used for the thesis (Esaiasson et al, 2007: 258-259). Tobias Webb will, as an interview object, aid with providing how one can come to interpret and understand CSR, and the concept being a part of the aftermath (in different stages) of the Bhopal disaster (ibid).

3.2.1 Interview Technique

According to Alvesson & Deetz, it is important that one tries to focus on not to upset, or to lead the questions onto the person that one may interview (Alvesson & Deetz, 2000: 215). Alvesson & Deetz argue for when one choose to interview,

the approach that is most appropriate is a partial ethnographic in order to have a pure focus on the meeting and the task is in focus, rather than the attitudes or characters (Alvesson & Deetz, 2000: 223). This is to not fill in to the interview object's reasoning or to interrupt, but moreover to interpret and to be open minded for what different empiricism that the interview objects may want to contribute to the research question (Alvesson & Deetz, 2000: 215-232). Naturally, the authors criticize the reasoning of just having focus in a specific situation, in this thesis it is the Bhopal disaster in focus, and the context of the empirical example may create difficulties considering there is a risk in that the interview object may focus too much in providing that the Bhopal disaster is central. One ought to not lead the interview object in meaning that the Bhopal disaster is the most central (ibid). The interview technique by Alvesson & Deetz will be used for this thesis and will provide a conceptual understanding of CSR. Additional to this, focus will lie in to use the interview as being a part of a puzzle that is connected to create a better understanding and explanation in the social sciences scientific attempt to answer the thesis question (ibid).

4 Corporate Social Responsibility

4.1 CSR in Theory

Howard Bowen explains Corporate Responsibility, as having its emergence in the 1940-1950s (Bowen, 1953: 254) Bowen means that the individual is in focus and that this is following the reasoning of Milton Friedman that referred to the thought of individuals being responsible, considering many individuals create a group. Therefore, the individual is responsible for its actions (Friedman, 1970: 1). Edward Freeman introduced in the 1980s the reasoning of MNC's having responsibility and this lie beyond the individual or the stakeholder, hence a more common accepted view of CSR was created (Freeman, 2010: 38-40).

The definition of Corporate Responsibility by International Guidance Standard, International Organization for Standardization (ISO, 2009) on Social Responsibility out of Michael Blowfield & Alan Murray is:

"[Corporate responsibility is the] responsibility of an organization for the impacts of its decisions on society and the environment, through transparent and ethical behaviour that (a) contributes to sustainable development, health and the welfare of society; (b) takes into account the expectations of stakeholders; (c) is in compliance with applicable law and consistent with international norms of behaviour; and (d) is integrated through the organization and practiced in its relationships."

(Blowfield & Murray, 2011: 8)

The definition is based on and out of the reasoning from larger companies and actors as Starbucks, Chiquita, PrivatewaterhouseCoopers. Furthermore, to put a profound reasoning of the definition, non-company actors have stated what they believe is CSR as well. These actors are: the Confederation of British Industry combined with the European Commission, Directorate General for Employment and Social Affairs (ibid).

This thesis will refer to the modern definition of CSR, where organizations and MNC's are in focus by the reasoning of Freeman, and Blowfield & Murray. And this instead of following the reasoning of Bowen and Friedman, that choose to state Corporate Responsibility as having the individual in focus. Additional to this, the term of Corporate Responsibility will, via the reasoning of Freeman's reasoning of the concept placed on MNC's, have the definition of being Corporate *Social* Responsibility (CSR). However, it is to mention that the concept of Corporate Responsibility and the concept of CSR can through following the definition mention above, go hand in hand.

4.2 The CSR-Pyramid by Carroll

The illustration of the CSR-pyramid, provided by Carroll, can be viewed in the end of this section (4.2), however, in this first section, an explanation for how the different responsibility layers can be interpreted will follow.

There are according to Archie B. Carroll four layers to corporate responsibility and these being; philanthropic responsibility, ethical responsibility, legal responsibility and economic responsibility (Carroll, 1991: 40-42).

According to the modern interpretation of Carroll (1991) by Blowfield & Murray (2011), discretionary responsibility, also known as philanthropic responsibility, is the responsibility that a company take on the thought that they want to give back to the society in form of donating a part of their own gain from the company to the society. It can beyond being a company donation, be in form of tax money or being the development of foundation for charity (Blowfield & Murray, 2011: 25). Although as being referred to as something as such, companies have the ability of knowing how to develop the outcome of their donation to something that is naturally contributively for themselves (ibid). The action will be referred to as being part of CSR and go under the philanthropy responsibility layer of Carroll in the CSR-pyramid (ibid). Furthermore, to clarify, this thesis will address the discretionary responsibility as being the philanthropic responsibility layer.

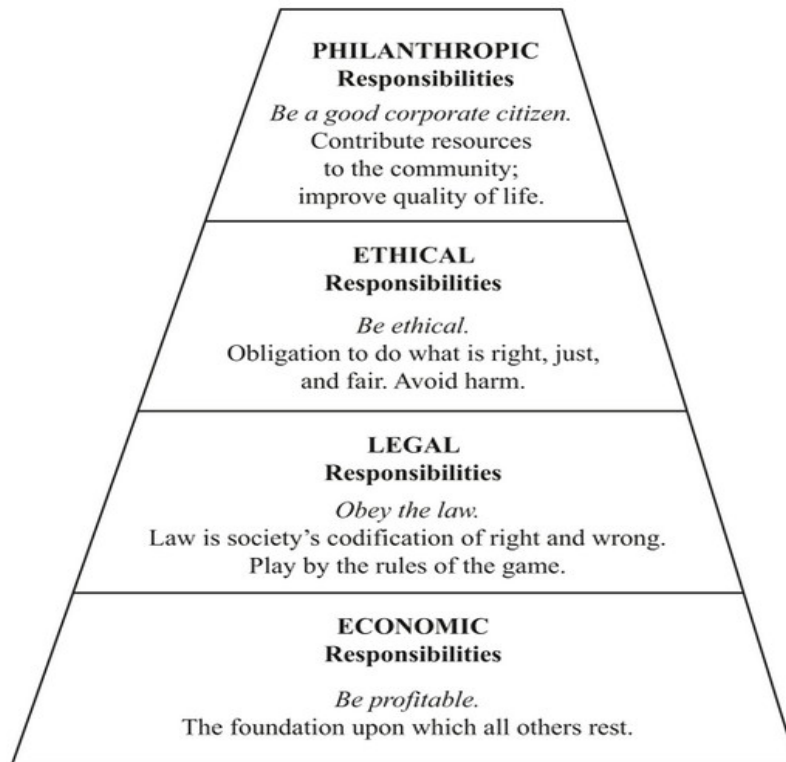
Ethical responsibility discusses the issues of what is environment ethical correct. Furthermore, this type of responsibility was highlighted during the 1990's and it focuses on companies' responsibilities towards the society and the environment and put pressure onto the companies from the consumers (Blowfield & Murray, 2011: 23).

Legal responsibility means that a company need to fulfil its businesses within the frame of following the law. However, Blowfield & Murray underlines that CSR ought to be voluntarily and not a cause of coercion, hence the law restrictions considering CSR are diffuse. The legal responsibility does naturally create complications between different countries considering they may have different laws that they apply to (ibid).

Economic responsibility has its reasoning in that all companies want to profit from what they are making which in its turn sums up to that companies produce what the society asks for. This is the foundation and goal for all companies and according to Carroll out of Blowfield & Murray, this is in turn all what companies need to fulfil when it comes to their responsibility role (ibid). Philanthropic, ethical and legal responsibility is as important for a working business and that these cannot be left out of the company, however economic responsibility is the base (Blowfield & Murray, 2011: 19).

By referring to Tobias Webb and how to place the different responsibility layers of Carroll onto the Bhopal disaster, with trying to reflect and make sense of what layer of responsibility being of greatest importance, Webb argues "No responsibility layer of Carroll is any more important than any else, they are all important to some extent" (Webb, 2012). However, it is necessary to clarify, as

Webb states the difficulties of separating the different responsibility layers apart (Webb, 2012).



(Carroll, 1991: 42)

4.3 The Shift of CSR

This section will provide short information about the CSR-concept's history with providing a graphical example of a CSR-timeline (see Attachment 1). This section is necessary in order to create a more profound understanding of the concept, to make it possible to frame.

When referring to the CSR in theory (section 4.1), one can discuss the names of Bowen and Friedman (1950s) followed by Freeman in the 1980s, and in the 1990's Archie Carroll (section 4.2). Webb argues how the 1980s sort of CSR had focus on mainly environmental matters, whales, and war/famine in Africa combined with the emergence of nuclear power (Webb, 2012). Blowfield & Murray agrees with this reasoning with arguing that there were few matters on the CSR-agenda (Blowfield & Murray, 2011).

Anette Cerne states that CSR has become more globalized because of international trade (Cerne, 2008: 1-5) and Webb argues that CSR differ internationally, different parts of the world and companies have different types of priorities and these being of cultural or economic interest (Webb, 2012). In the 1990s, globalization, transparency and, of course, the internet being the greatest reason for why CSR spread to various actors and to local and global differences in

CSR (Webb, 2012). The few issues that were earlier central, developed into hundreds, and this was a shift towards a more progressive and influential CSR-debate (Webb, 2012). Sri Urip argues, as Webb, that globalization has lead up to multiple business challenges which have developed the concept of CSR (Urip, 2010: 4).

Hence to clarify, the debate of CSR have developed since the 1950s, and this because of globalization, transparency and the internet. The development of CSR took another turn in the 1980s considering this progression. The CSR-debate had its focus on few issues, towards changing into a focus on many actors and many issues with multiple views and angles after 1980s (Webb, 2012). What has been described in this section above explains the overall context of CSR, and not what happened with CSR after the Bhopal disaster. This because the aim is to create an enriched concept of CSR, hence an introduction of CSR is provided in order to do so.

4.4 CSR-risk

Risk is a wide concept and hence this thesis ambition will aim to limit risk when referring to solely CSR. CSR-risk is necessary to understand order to make a reliable frame of the concept of CSR in the chemical industry today.

Blowfield & Murray refer to CSR and the risk of reputation that companies work towards when working with poverty issues (Blowfield & Murray, 2011: 97). Blowfield & Murray argue, how there is a risk when companies need to deal with poverty issues, and that a company does not act upon poverty issues if there is no concern for risk, because the philanthropic, ethical and legal layer may not be enough if the company cannot profit from the new implementation. Additional to this, to quote Blowfield & Murray: “risk is often seen as a driver of defensive corporate responsibility” (Blowfield & Murray, 2011: 383)

The interpretation of CSR-risk is to clarify how companies have an economic interest, and if it is not contributive for the company to implement new chemical regulations, why would it? If UCC would not bother to implement anything after the Bhopal disaster, it is clear that consumers and the society would react negatively to this, and the company could have been exposed to risk of losing their costumers and influence on the market.

According to Sri Urip, the CSR Reputation risk can be described as when a company cares about what is at stake concerning its reputation (Urip, 2010: 10-11).

“Reputation risk is the current and prospective impact on earnings and capital arising from adverse perception of the image of the company by stakeholders, regulators, and the public. [...] This risk may expose the organization to litigation, financial loss or a decline in its customers’ base”.

(Urip, 2010: 10)

One can discuss whether the CSR Reputation risk has an impact on chemical companies, in order of wanting to change their risk reasoning, to make sure that their economic interests can be satisfied. This is, when referring to Blowfield & Murray and Carroll (section 4.2) to satisfy the economic layer of responsibility.

5 Theories

Considering multiple aspects on framing, it is important to clarify that the usage of framing theory for this thesis is to define the theory and make it applicable onto a case and the case (concept) being CSR. CSR is in its turn applicable on the empirical examples of chemical companies (UCC, Dow, DuPont and BASF). Hence, by using a framing definition (Chong & Druckman), a framing analysis reasoning (Goffman) and a framing reflection reasoning (Schön & Rein), the ambition is to use these in creating a full overview of framing theory, in order to make it applicable on CSR. This thesis will not use the different views on framing as being separate, but rather to have them complementing each other.

5.1 Framing Theory

5.1.1 Framing Definition by Chong & Druckman

The description of framing is according to Dennis Chong & James N. Druckman:

“The major premise of framing theory is that an issue can be viewed from a variety of perspectives and be construed as having implications for multiple values or considerations. Framing refers to the process by which people develop a particular conceptualization of an issue or reorient their thinking about an issue.”

(Chong & Druckman, 2007: 104)

Furthermore to this definition, Chong & Druckman mean that it is possible to avoid judgemental normative arguments when using framing theory (Chong & Druckman, 2007: 101-117). In the analysis of this thesis (section 8), there will be a normative discussion. However, the aim with this thesis is to understand and to interpret as referring to the method (section 2).

5.1.2 Framing Analysis by Goffman

According to the reasoning of Erving Goffman, framing can be described as:

“My aim is to try to isolate some of the basic frameworks of understanding available in our society for making sense out of events and to analyze the special vulnerabilities to which these frames of reference are subject.”

(Goffman, 1974: 10)

Goffman develops this reasoning with explaining how frames are part of the world and reality. The question of what really happened combined with a reasoning of defining reality and world out of the shapes of a frame (ibid).

5.1.3 Framing Reflection by Schön & Rein

According to Donald A. Schön and Martin Rein

“There is no way to making sense of social reality except through a frame, for the very task of making sense of complex, information-rich situations requires an operation of selectivity and organization, which is what ‘framing’ means.”

(Schön & Rein, 1974: 30)

The reasoning of frame reflections by Schön & Rein may sum up to the reasoning of being in three steps and these being; how the change in policy contexts can lead to differences in power relations, such being powerful actors wanting to implement frames on those being naive (Schön & Rein, 1994: 1-30). Furthermore another example that Schön & Rein choose to refer to is how the frame may have difficulties in being implemented, there is a problem in between planners and users and that there is complications with having a consensus of the frame (Schön & Rein, 1994: 21-23). The final example or ‘problem’ of framing can be described in the difficulties of reshaping a policy dialogue because of practitioners of framing, that being how people can affect the policy dialogue in order to provide a change in the policy (ibid).

6 The Framing of CSR

The ambition is to frame CSR in the aftermath in different stages of the external shock, being the Bhopal disaster, combined with developing the reasoning on how the chemical industry have implemented the outcome of the frame, being implementations of regulations.

By complementing Chong & Druckman's basic understanding of framing with the more profound understanding of framing when referring to events, by Goffman, it may be interpreted what the frame can consist of, and the framing of CSR being applicable on specific events, such as the external shock of Bhopal, and how this can be connected to the real world. Schön & Rein aids the thesis in how to stand critical towards the placing of framing theory onto the CSR responsibility layers by Carroll and provide three framing criteria.

Chong & Druckman's reasoning aids the thesis on how framing theory and CSR can be combined with the different layers being philanthropic responsibility, ethical responsibility, legal responsibility and economic responsibility (Carroll, 1991: 42). When referring to section 4 to 4.5 of this thesis, framing can be interpreted as how the different various actors, being chemical companies, take the layers of CSR into consideration. An example is to question how the UCC, being a chemical company, take into consideration philanthropic, ethical and legal responsibility? And the main focus is how the different section of this thesis can be combined with framing theory, in order to sum up the conclusion that have a theoretical connection to create a profound reasoning of the ambition of this thesis.

By using the reasoning of Goffman, it is possible to follow the screen of a frame as being substantial and having CSR that may be combined with interpreting an event as the Bhopal disaster, being an external shock for companies reacting to it. The event of Bhopal is not what is framed, but rather the special vulnerabilities that the Bhopal disaster created when referring to CSR. Additional to this, Goffman's framing analysis provides an isolation of making sense of what the event of the external shock being Bhopal, did in fact, create. The defining of reality and what really happen is as explained earlier, how to frame the external waves that were created out of the event of the Bhopal disaster.

By using the reasoning of Schön & Rein, the importance of being critical towards a frame is highlighted. Schön & Rein aids the thesis in being critical towards placing the layers of Carroll onto practical examples, such being events and companies. The Bhopal disaster may be referred as being a very information-rich situation, and this is as Schön & Rein mean, most specifically developed by using framing theory. Besides the first criteria by Schön & Rein, it is important to stand critical towards the reasoning of; though companies choose to implement a new concept of CSR after the Bhopal disaster, do they act upon it? Or to follow

the second criteria, can a CSR concept even be implemented by a company, and in this case what can be the evidence? The second criteria can be developed in the reasoning; what has happened with CSR after Bhopal and what implementations have been developed as a cause of the disaster? The result of Bhopal is what is to be framed via Schön & Rein. To follow the third criteria that there are others that can provide an input to change the policy, is; how CSR have changed because of the Bhopal disaster and the different arguments for this being important. That is, with the new frame of CSR after the Bhopal disaster; how can the policy dialogue be discussed? If the new framing of the concept of CSR have created implementations in the chemical industry, was the new frame of CSR simple to implement, or how did this affect the layers of CSR? That is to say; what forced chemical companies to adapt to the enriched frame of CSR?

The ambition with adding CSR-risk to the framing of the concept of CSR will provide an enriched conceptual understanding that the responsibility layers of Carroll, cannot solely provide. Without adding CSR-risk, the CSR-concept will only be of the purpose of concept using, and not having the interpretive enriched purpose that this thesis addresses.

The enrichment of the concept of CSR, provided by adding risk, is to create an overall frame, via the reasoning of framing theory. Chong & Druckman aid interpret the layers of CSR, being of importance (section 5.1.1) combined with the effect of the external waves and reflection of the reality by Goffman (section 5.2.2), and furthermore, with the reasoning of Schön & Rein and the three criteria for framing theory (section 5.1.3), of why chemical companies choose to implement chemical regulations after the Bhopal disaster. When answering the thesis question, CSR-risk is necessary to include, to clarify, how chemical companies have come to adapt to the new frame of CSR, and what forced companies in doing so.

7 The Aftermath of Bhopal

This section is provided to investigate if the chemical industry's CSR, with having the example of the chemical companies as the UCC, have come to change, or not, because of the Bhopal disaster.

7.1 Union Carbide Corporation

By investigating the UCC, the ambition is to view how the company acted because of the Bhopal disaster. According to Santinath Sarangi, middle-class activists made the government of India act upon what was caused in forms of regulation and rehabilitation (Sarangi, 1998: 88-93). In 1984 the Bhopal disaster happened and UCC claims that it happened because of some sort of sabotage (UCC, 2012). Furthermore to this, the UCC explains how it was, indeed, a tragedy that needed to be prevented from happening again (UCC, 2012). The UCC chooses to explain that in 1998 the Indian government (Madhya Pradesh) took over the investigation and rehabilitation of the disasters victims (BGTR, 2012).

When referring to the Directorate of Gas Relief and Rehabilitation the figures noted of the people of Bhopal in 1984 were 894 539 people (BGTR, 2012). Out of these, in 2008, 574 366 cases have gotten compensated from the suffering of Bhopal. However, 1 029 517 cases were registered (BGTR, 2012). To draw some sort of conclusion out of this can be described as in even though there were 894 593 people living in Bhopal at the time during the accident, many more were affected in the surroundings around Bhopal, or alternatively that people got affected in many ways from the MIC chemical (ibid). According to Jasanoff (1994) the UCC spent \$200 million annually up to the year 1995 on safety and environment technology (Jasanoff, 1994: 34).

7.2 The Safety Procedures after Bhopal

Andrew Wood means that according to the CEO of UCC in the aftermath of the Bhopal disaster, the UCC tried to improve safety regulations and risk assessment in order to create a safer health environment (Wood et al. 1993).

According to UCC when referring to the aftermath of the disaster:

”Since the time of the incident, the chemical industry has worked to voluntarily develop and implement strict safety and environmental standards to help ensure that an incident of this type never occurs again.”

(UCC, 2012)

Despite the fact that the UCC means that they have implemented a change in company agenda, they do not really provide any specific examples of this that are easy to find on the website. In 1985, GAF Cooperation makes the attempt to buy UCC (ibid). However, UCC did not get bought by GAF Cooperation in 1985, but the company chooses to buy Amerchol from CPC International (ibid). Amerchol is a subsidiary to the Dow Chemical Company, which is interesting, considering in 2001, UCC become a fully owned subsidiary of The Dow Chemical Company (UCC, 2012). During the years of 1984 and 2001, UCC is cooperating with Shell, UOP, Rohm & Haas, Mitsubishi Corporation, Alberta & Orient Glycol Company Ltd, Exxon Chemical Company and Petronas to name some (UCC, 2012).

Dow is active, and has been active in the manufacturing of chemicals in India since 1957 and continued doing so after buying UCC (Dow.1, 2012).

7.3 How did Bhopal Happen?

Andersten argues that countries such as India, Brazil and South Africa have fewer regulations for pesticides and these are no longer approved in USA and Europe. The example that Andersten refers to is the insecticide monocrotophos that is not allowed in USA since 1988, but is in Asia (Andersten, 2004).

E.L Quarantelli discusses how technology transfer was a major problem that came to lead to the Bhopal disaster happening (Quarantelli, 1997). Furthermore to this, Quarantelli states that the safety regulations in the UC-plant in the US never were transferred to the Indian plant. Hence, it was a great reason for why the Bhopal disaster happened in India and not in the US (ibid).

Sheila Jasanoff refers to the Bhopal as increasing the awareness of having the right to know of the safety procedures of risk assessment (Jasanoff, 1988: 1121-1122). The author means that the Bhopal disaster was lack of knowledge rather than a technology failure (ibid). In technology transfer, the aim is to create awareness of communication gaps. Jasanoff makes it clear, that there was a lack of information about MIC by the people working at the UCIL pesticide plant (ibid).

Kletz means that accidents do not just happen. It is complicated to blame anyone for accidents, considering that there are often many individuals being involved causing an accident (Kletz, 2001: 111).

“There are many lessons to be learnt from Bhopal but the most important is that the material which leaked need not have been there at all. It was an intermediate, not a product or raw material, and while it was convenient to store it, it was not essential to do so”

(Kletz, 2001: 111)

Kletz explain that it was meant for other chemical companies like DuPont to change their production after Bhopal:

“Du Pont intended to eliminate intermediate storage from a similar plant that they operated. Instead they use the MIC as soon as it is produced, so that instead of 40 tonnes in a tank there will be only 5-10 kg in a pipeline.”

(Kletz, 2001: 111).

DuPont is a chemical company and when referring to Webb (2012), DuPont is today a progressive international corporation that aids the chemical industry with having the role of influencing other chemical companies, when referring to safety procedures (Webb, 2012).

Kletz discusses that accidents ought to be investigated more in detail to avoid such event happening again and this by creating a scheme over how to carry out the reports in the aftermath of the disaster (ibid). This reasoning can be correlated with the reasoning of Quarantelli, earlier mentioned in this section, which argues for how the Bhopal disaster could have been prevented by using the correct safety regulations (ibid).

8 The Outcome of Framing CSR

The chemical industry's CSR turned towards a more profound consideration in the aftermath of the Bhopal disaster, in different stages. This section, will argue for examples of implemented chemical regulations and guidelines, being proof of the developed CSR-thinking in the chemical industry, and this, being part of the framing of the concept of CSR.

8.1 Responsible Care

According to the Chemistry Industry Association of Canada, Responsible Care “[...] was established in 1985 to address public concerns about the manufacture, distribution and use of chemicals following the chemical spill in Bhopal, India in December 1984” (CIAC, 2012). According to Delmas & Montiel (2008)

“[...] the Responsible Care program was initially set up by the chemical industry to avoid potential regulations following the Bhopal accident (King & Lenox, 2000; Prakash, 1999)”

(Delmas & Montiel, 2008: 66)

Webb argues for how chemical companies being the ones most involved in safety regulations, and that the Bhopal disaster having a great impact on setting this (Webb, 2012). When investigating Dow (previous UCC), it is proven that the company wants to improve itself progressively and had the attempt of doing this through following the principles of Responsible Care which is described by Dow

”Responsible Care® is a voluntary initiative of the global chemical industry to safely handle our products from inception in the research laboratory, through manufacture and distribution, to ultimate reuse, recycle and disposal, and to involve the public in our decision-making processes. Born in Canada in 1987, Responsible Care has quickly spread to 53 countries.”

(Dow, 2012)

Furthermore the European Chemical Industry Council (CEFIC) states that “Responsible Care® is the global chemical industry's unique initiative to improve health, environmental performance, enhance security, and to communicate with stakeholders about products and processes” (CEFIC, 2012). According to CEFIC, the program has been enabled by 60 economies (CEFIC, 2012). The countries that Responsible Care have spread to, can be considered as being rather irrelevant,

considering a large company that is placed in India, can be owned by, for example, Dow. Hence, this thesis will not provide additional information about which countries that have enabled Responsible Care, but rather to focus on the specific large chemical companies being part of the chemical industry and how CSR are considered after the Bhopal disaster, and today, with implementing Responsible Care. In 2006, another improvement of Responsible Care was launched, called Responsible Care Global Charter that was enabled, to create an even more safe chemical awareness when referring to the value chain. In 2010, CEFIC choose to advance into creating and adopting another program in Europe, called European Responsible Care Security Code (CEFIC, 2012). These progressive implementations and updates of Responsible Care, in the 21st century, are proof of how the external shock, being the Bhopal disaster, still have relevance in today's society.

8.2 Outcome 1 - Responsible Care

When referring to CSR and the definition of the concept given in section 4.1, it is clear that Responsible Care is a part of the CSR-thinking, and has come as a result of the external shock, being the Bhopal disaster. Hence, by referring to framing theory, it is possible to argue for Responsible Care, being a regulation implemented, as a part of the process of framing CSR.

By framing CSR and the 4 layers of the concept (section 4.2), with the quotes by Delmas & Montiel, combined with Dow, and CEFIC (section 8.1), one can argue for the reduction of chemicals and the consideration of safety regulations via Responsible Care, have led to companies being more aware of the philanthropic, ethical, and the legal layer after the Bhopal disaster, and in today's chemical industry.

When referring to the philanthropic layer of CSR, this layer can aid interpret why companies adopt such a program as Responsible Care. If companies are good and improve the quality of life, combined with showing their consumers this, more consumers choose to buy products from them. The more interest consumers show for spending, the more money the company can make, and out of this, the economic responsibility layer is taken into consideration.

The ethical responsibility of doing right and to avoid harm can be seen as taking part of the Responsible Care program when referring to the chemical industry. However, one can question, why a company would want to implement regulations to satisfy the ethical layer, if the company cannot profit from it.

It is possible to imply that an awareness of the legal responsibility (section 4.2), when referring to Responsible Care is having the result of being aware of specific chemicals, and the reduction of them, has increased after chemical companies implementing it. However, it is clear that Responsible Care cannot enable any sanctions. Without the possibility of punishing companies for breaking the rules of Responsible Care, creates a biased reasoning of the program's global effects (CEFIC, 2012). As Blowfield & Murray implies; different countries have

different law systems, and this can be discussed considering companies, such as Dow may apply to Responsible Care and its values. However, when placing an affiliate of Dow, in India, there are different law regulations compared to USA, and hence, the Responsible Care program can be question of having any effect in developing countries. So why do companies even consider to regulate Responsible Care? This reasoning goes beyond the responsibility layers and is moreover a question of the CSR-risk that will come to be further analyzed in the analysis of section 8.

All layers of CSR are, naturally, as important. Hence, despite the fact that the philanthropic responsibility layer may influence the implementation of Responsible Care the most, by chemical companies. The economic responsibility layer has always been, of the most significant importance.

8.3 Product Stewardship

According to Webb, large companies such as Dow, DuPont and BASF, originally Badische Anilin- und Soda-Fabrik, and other large American, German and Dutch companies have after Bhopal, chosen to focus on greater safety regulations. These large companies are set as examples on how to be a company that is aiding other countries and companies, in how to incorporate CSR onto their agenda (Webb, 2012). Product stewardship is moreover, a concept where companies help other companies to dispose chemicals properly, combined with product safety, and environmental health. This does, in turn increase the safety records of the companies, letting consumers and the world having a greater trust for them (Webb, 2012). According to U.S Environmental Protection Agency (EPA, 2012)

“Product stewardship is a product-centered approach to environmental protection. It calls on those in the product lifecycle—manufacturers, retailers, users, and disposers—to share responsibility for reducing the environmental impacts of products.”

(EPA, 2012)

Product stewardship has been developed by larger companies that want to take on a greater CSR-responsibility (Webb, 2012). BASF has continued aiming towards a better health and environment from after Bhopal, till 2009 when the company implemented three new types of Group directives within Responsible Care, and these being; global incidence reporting, corporate and information security and binding on toll manufacturing (BASF, 2012). The National Chemical Emergency Centre (NCEC) has been active with courses about how to handle and improve the safety measures, and to reduce risk concerning chemicals in chemical companies since 1973. NCEC argue for “The consequences of a lack of control when using chemical substances are well known and apparent. Chemical accidents cost companies tens of millions of pounds and often lead to calls for improvement in safety standards” (NCEC, 2012).

Webb empathizes that a company that is solely having an economic interest will lose in the long run, considering no one will trust them, or corporate with them. All responsibility layers by Carroll are, of course, as important, however, there are difficulties in separating them (Webb, 2012). Hence, a discussion of the CSR responsibility layers is mentioned beneath, in section 8.4, to make sense of CSR when referring to product stewardship.

8.4 Outcome 2 - Product Stewardship

As mentioned in section 8.2, Responsible Care is a part of the framing of CSR, and hence outcome 2, being product stewardship, is a proof of the chemical industry's developed CSR-thinking in the aftermath of the Bhopal disaster, in different stages.

Considering the general reasoning of product stewardship by Webb has already been mentioned, and put in context in the previous section 8.3, this section will extend the discussion of the framing of CSR in the chemical industry, and discuss chemical companies aim when implementing product stewardship. It is to mention that to quote NCEC in section 8.3, the importance of the economic responsibility layer of companies, has already been proved. However, by referring to section 4.2 and the responsibility layers of Carroll, it is clear that the other layers of responsibility is important when implementing product stewardship and this will be clarified in this section.

Considering the philanthropic layer consists of improving the quality of lives, to be a good corporate company, this is a fact when referring to product stewardship. By referring to Blowfield & Murray, and the thought of donating something to the society in form of responsibility, this can be developed in the reasoning of one company guiding another company in how to act. It is, naturally, a contribution to the society, and if product stewardship aids the society of providing a safer environment because of this guidance, the philanthropic responsibility can be considered as being part of product stewardship.

The ethical responsibility layer, to do right, and to avoid harm, combined with having consumers pressuring the companies in doing right, is considered when referring to product stewardship. The ethical layer comes as a natural outcome of the previous reasoning of philanthropic responsibility.

The legal responsibility is not the main focus when referring to product stewardship. To follow the law will come with the reasoning as being natural when wanting to do good to the society, and to aid other companies with difficulties with handling chemicals. Because of this, the legal responsibility layer can be viewed as being secondary when referring to product stewardship.

Hence, the reasoning of product stewardship can be mentioned to be rather to promote the chemical company (philanthropic responsibility layer), in order to enhance new consumers, the ethical layer comes as an outcome of the philanthropic layer, and furthermore the legal layer come as an outcome of the other layers. However, it is clear with the philanthropic layer that companies are

having its first aim in how to satisfy the foundation of CSR, the economic layer. When referring to product stewardship, all responsibility layers of Carroll are of importance, however, it is clear that the foundation of CSR is of main interest for the chemical companies, and this reasoning being shared by Webb (2012) and Blowfield & Murray (2011). Outcome 1 and outcome 2 of the framing of CSR in the chemical industry can, with the above mentioned reasoning, come to have similar results when referring to the CSR-pyramid and the responsibility layers of Carroll.

8.5 Can Bhopal Happen Today?

Since 1984, there have been chemical disasters. However, compared to the disastrous outcome of Bhopal, the numbers of affected people are not as many. According to Chemical Industry News and Market Intelligence (ICIS), since 1984, the chemical disasters that have occurred are in 2001 in France, Toulouse by Atofina Grande Parossie, 30 dead, 200 injured; 2003 in Narmadanagar, India by Gurjarat Narmada Valley Fertilisers, 5 dead, 30 injured (Wittcoff et al. 2013) Jan 2004 in Algeria by Sonatrach's Skikda, 30 dead and 70 injured (CV, 2005); April 2004 in US, Illinois by Formosa Plastic, 5 dead, 5 injured; May 2004 in Glasgow, UK by Stockline Plastics', 9 dead, 40 injured; May 2004 in Mihailesti, Romania (a truck with ammonium nitrate) 16 dead, 11 injured; 2004 in Secunda, South Africa by Sasol Synthetic fuel facility, 10 dead ; Feb 2005 in Jiangsu Province, Eastern China by Jiangsu Tianyin Chemical Industry, 5 dead, 11 injured ; Mar 2005 in Texas City by British Petroleum, 15 dead, 170 injured; Nov 2005 in Songua River, eastern China by Jilin Petrochemical's Aniline Plant, 6 presumably dead, 70 injured (CV, 2005). Oct 4, 2010, in the Aluminum Ajka Plant, Vezprém County, Hungary, 4 dead, 6 missing and 120 injured (BBC, 2010). Nov 8, 2012, biochemical plant, Sherbrooke, Quebec, Canada, 2 dead, 19 injured (TGM, 2012); Sep 2012, Karachi, Pakistan, 300 dead (NYT, 2012).

By referring to the chemical disasters explained by ICIS 1984-2010, the people affected cannot combined sum up to the amount of people that died and suffered from the Bhopal disaster. It is clear that, hopefully something has happened in the chemical industry, and this being brought by Responsible Care and product stewardship after the Bhopal disaster that aided chemical companies being more aware of what chemicals can cause. With this, perhaps the Bhopal disaster will not come to happen today when referring to chemicals. However, when referring to the reasoning of Andersten that can be found in section 7.3, some regulations are lacking and there is a divide between developing and developed countries when referring to chemicals (Andersten, 2004: 2-6). Hence, chemical disasters can still happen, however the amount of people suffering from the accidents have lessened since after 1984. It is important to highlight that this is only when referring to the chemical industry and no other type of disasters such being caused by oil spill or nuclear. Chemical companies producing pesticides or are having chemicals in their production, have been forced to increase their

chemical awareness, and with this, reduced the impact of disastrous outcomes by implementing chemical regulations.

When referring to earlier mentioned Kletz (section 7.3), one can argue for that companies might just reduce their use of chemicals that they are already using, in order to not change the whole production chain considering, this is expensive. This reasoning sums up to that the chemical companies are still aware of the economic responsibility by Carroll that lay as foundation for the responsibility pyramid in section 4.2 of this thesis.

9 Analysis

The aim has been to frame CSR with using framing theory by Chong & Druckman, Goffman and, Schön & Rein. The framing of CSR in the chemical industry have been made possible by having the Bhopal disaster being an external shock to provide the frame with an analysis of CSR layers by Carroll and to create an enriched CSR. The concept of CSR has changed from being mainly focusing in the national individual perspective in the 1950s, this according to Bowen and Friedman, towards becoming more multinational internationally company oriented in the 1990s according to Blowfield & Murray and Webb. CSR has developed through transparency, globalization and the internet. This analysis will focus in the framing of CSR when referring to the chemical industry.

Chong & Druckman have provided this thesis with interpreting what type of responsibility layers that chemical companies have come to consider in the aftermath of the Bhopal disaster, in different stages. The CSR-pyramid has provided guidance that aided in how to interpret a conceptual understanding of CSR. It is clear when referring to section 8.2 and section 8.4, that the main interest of companies is to satisfy the economic responsibility layer (section 4.2). All responsibility layers have been discussed in this thesis, however the tendency when referring to previous discussion of the responsibility layers, has been; the philanthropic layer have lead up to the ethical layer, and the legal layer have come as a natural outcome, because of the other layers being satisfied. Hence, the entire CSR-pyramid cannot be used to its full extent, considering the main focus, always, end up of being of economic character, and hence the other layers become neglected.

Goffman's reasoning of what external waves that the Bhopal disaster as an event, has caused, can be described by the implementations of Responsible Care and product stewardship. Goffman's reasoning of defining reality and having placed the layers of CSR onto the reality via Chong & Druckman, makes it possible to analyze how the CSR-pyramid cannot, to full extent, aid interpret why chemical companies choose to implement an enriched CSR-thinking. Hence, the implementations of regulations by chemical companies have been analyzed (section 7 and 8). The ambition has been to understand how chemical companies come to adapt to chemical regulations, because of Bhopal. To answer, it is important to view CSR as a concept, within the frame, but to develop the reasoning by involving an additional CSR-risk thinking by Blowfield & Murray (2011) and Urip (2010).

As described in the section 8.2 and 8.4, both outcomes of the Bhopal disaster are part of companies wanting to act upon, and to consider CSR. This thesis addresses the new implementations as being an outcome of the companies being scared of risking litigation and financial loss. Because of this reasoning, one can

question; without companies being aware of the CSR-risk, to satisfy their economic responsibility layer, perhaps Responsible Care and product stewardship would not even have been considered?

Considering chemical disasters have happened in the 21st century, one can come to question, who has the right to treasure someone's life? Who is to say that one life during the chemical accident in 2003 in Narmadanagar, is less important than the one, happening in Bhopal in 1984? Despite Responsible Care and product stewardship, it is clear that chemical companies in the chemical industry seem to strive towards a chemical awareness in order to fulfill their economic responsibility. Hence, it is important to wonder; despite the fact that implementations have been made, how come chemical accidents and disasters do still happen?

Schön & Rein argue for three criteria when referring to framing theory (section 6). These criteria have been placed onto the framing on CSR and can be summarized as: 1. By referring to the impact of the implementation of Responsible Care and product stewardship, how can this be criticized? 2. Has the chemical industry adapted to these regulations? 3. What forced chemical companies to adapt to the regulations? To discuss the first criteria, this is argued for in section 7.3, where Jasanoff and Kletz argue that there are differences in the safety culture between developed and undeveloped countries and Quarantelli discusses the difficulties of technology transfer. Hence, there are problems with the implementations and more can be done in order of preventing accidents. Furthermore to discuss the second criteria, Andersten argues for how chemicals that are illegal in USA can be legal to use in other countries, such as India. An American company that chooses to place an affiliate in India is not protected under the same laws, hence dangerous chemicals can reach India, and another chemical accident can happen. Considering there are no specific sanctions for Responsible Care, the real implementation that reflects on the legal responsibility is mainly proven through companies wanting to implement Responsible Care themselves, perhaps through product stewardship. By referring to the third criteria, it is possible to draw a parallel to Goffman's reasoning where, the external waves of Bhopal created implementations that chemical companies adapted to, in order of satisfying the economic responsibility layer by Carroll. Furthermore the CSR-risk that consist litigation and financial loss, for the company, would be a fact if Responsible Care and product stewardship were not enabled.

The implementing of the new enriched concept of CSR makes it clear that the chemical industry can enforce an even greater focus on the philanthropic, ethical and legal responsibility. Otherwise, another chemical disaster may happen again.

10 Conclusion

By having framed CSR because of the Bhopal disaster and the aftermath in different stages, it is possible to sort out via framing theory by Chong & Druckman, Goffman and Schön & Rein what has come to be the most important CSR-responsibility layers, by Carroll, when referring to the chemical industry. The economic responsibility layer has come to be of greatest importance and CSR-risk has been provided to create an enriched concept of CSR. The chemical industry's CSR has changed after the Bhopal disaster in 1984. The external shock created the outcome of Responsible Care and product stewardship which aids this thesis in framing CSR.

Companies choose to implement Responsible Care, and to enforce product stewardship considering this lay in their main interest, and this being; the foundation of economic responsibility by Carroll. Furthermore, chemical companies did not want to suffer from litigation and financial loss, according to the reasoning of CSR-risk, by Blowfield & Murray and Urip.

There have been chemical disasters since 1984 and people have died and suffered from them. However, in the 21st century, no chemical disaster has been identified as being as big as Bhopal, but they have still happened, and this despite the progressive updates and enforcement of the outcomes (section 8.2 and 8.4). Hence, the Jasanoff's right-to-know principle, Andersten's divide between developing and developed countries, Quarantelli's reasoning of technology transfer problem, and Kletz's safety regulations for reports, one can summarize; there can be another Bhopal disaster, however it might not be as large as Bhopal.

To prevent chemical accidents from happening today, the chemical companies must be willing to see beyond their economic responsibility and the reasoning of CSR-risk. They must instead lay more focus on the additional three layers of responsibility; the philanthropic, ethical and legal.

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Attachment 2

Interview with Tobias Webb

Tobias Webb is the Founder of Ethical Corporation and Stakeholder Intelligence and lecturer in Corporate Responsibility Birkbeck College, University of London.

When was CSR created?

Tobias Webb argues that CSR have been around for hundreds of years. There have been different approaches on CSR considering the ever changing society we live in.

Has there been a CSR-debate shift since the 1950s?

Webb mentions Archie B. Carroll and Howard Bowen and this combined with how the CSR-debate has shifted from focusing on the individual responsibility towards becoming a more multiple issue debate. In the 1980s there were few issues on the CSR-agenda and such being whales, war and famine in Africa and the emergence of nuclear power. This compared with today where the debate has been stretch to multiple issue debate. In the 1990s the impact of globalization, transparency and, of course, internet was why CSR spread internationally.

Does CSR differ between countries?

CSR differ internationally, different parts of the world and companies have different priorities and these can be of a cultural or economic interest. Different values and global transparency is important when referring to CSR in an international perspective.

Has the Bhopal disaster had any impact on CSR?

The Bhopal disaster was a tragedy and there is no industrial disaster in modern time that can be compared to it. When referring to progressive chemical companies today, they have implemented so called product stewardship and this is

shown by companies such as large companies such as Dow Chemicals, Du Pont and BASF, and other larger American, German and Dutch companies.

Which responsibility of Archie B. Carroll is the most important one when referring to the Bhopal disaster?

Tobias Webb answer is that “No responsibility when referring to Carroll is any more important than any else, they are all important to some extent”. Economic responsibility obviously has a great influence for the companies concerning these want to gain profit from their business. A company that have an economic interest will lose in the long run because no one will trust them or corporate with them All types of responsibility layers of Carroll are, of course, as important but are more difficult to spot as quickly considering it is difficult to separate them apart.