DIALOGIC REGULATION:
THE TALKING CURE FOR CORPORATIONS

by

Michael Cody

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Abstract

The corporations of our future will be whatever we can collectively imagine and work together to make a reality. Dialogic law and regulation is a generative tool that can build the bridge between the present and an imagined future. Regulators keep people on the bridge by identifying the kinds of dialogues we want corporate actors to have and by encouraging, coaching, and sometimes assisting them to have those dialogues. This approach works because small changes in the way corporate actors talk to and interact with each other can have dramatic effects on the emergent corporate culture.

This thesis develops and tests a theory of Dialogic Regulation. The theory assumes that corporate law and regulation is about attaining or maintaining a desired corporate behaviour, the best way to change behaviour is to learn a new one, and learning is a social process that involves dialogue. The model was tested using an experimental game where the rules of the game were treated as proxies for the “law” and the authority figure directing the experiment was treated as a proxy for the corporate “regulator”. The game was called the “Pay-Off” game. Half-way through the game the rules were changed using one of three different regulatory techniques: 1) Rules: a simple rule change, 2) Audit: a rule change combined with an audit and punishment procedure for infractions, and 3) Dialogic: a rule change combined with a dialogic intervention about the rules. Participants were tested not only for their behavioural reactions to the interventions (Compliance to the rules) but also to determine if they learned anything about the rules (Adherence to the rules).

The games experiment showed that for simply behavioural outcomes the Audit Based Regulation approach was the most effective. The experiment also showed that there is significant
promise in a Dialogic Regulation approach if the regulatory desire is to have participants learn. While Dialogic Regulation shows promise, a lot more work needs to be done to refine the application of the theory before it is used in real-life regulatory settings.
Preface

The work presented in this thesis is mine. I identified and designed the research program, performed all parts of the research (including the experiment) and analyzed the research data. The research required ethics approval from The University of British Columbia (BREB No. H12-02737) and Simon Fraser University (Study No. 2012S0958).

The case study mentioned in Chapter 6 relating to Suncor’s Firebag facility creative sentence was part of a study conducted by a team from the University of Calgary and Simon Fraser University. I was not a member of the core research team. My participation in the study was extremely limited. I was invited to assist only at the two-day knowledge forum and my participation was limited primarily to the closed-door session on the second day. I have co-authored an article on the case study with Professor Stephanie Bertels and Simon Pek from SFU entitled: “A Responsive Approach to Organizational Misconduct: Rehabilitation, Reintegration, and the Reduction of Reoffense”. It covers topics other than what is presented in this thesis but some of the descriptions of the background of the case are the same.
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Glossary

**Adherence**  Faithful support for a cause, idea, etc.; steady devotion, allegiance or attachment. Used in this study to refer to a participant’s learning of the new regulatory outcome (as opposed to simple compliance where their behaviour changed but they did not learn why the new behaviour is more desirable).

**Change (Dialogic)** Change results from changing the conversations that shape everyday thinking and behaviour through involving more and different voices, altering how and which people talk to each other, and/or by stimulating alternative or generative images to shape how people think about things.¹

**Compliance** To comply with the wishes of another; to do what you are told even though you do not agree. Used in this study to represent a participant’s change in behaviour to comply with the new rules even though they do not agree with them.

¹ Bushe & Marshak (2013) *infra* note 309 at 290.
Container  A time and space where normal, “business as usual” ways of interaction are suspended, so that different generative conversations can take place.²

Corporate Culture  The shared beliefs and assumptions created, maintained and changed through conversations that lead to patterned interactions among the individuals within the corporation.

Corporation (Dialogic Definition)  The corporation is a socially constructed reality that consists of the patterns of interactions and conversations between the organization members.

Dialogic OD  Dialogic OD is constructivist in its methodology, tends to view organizations as dialogic or meaning making systems,³ does not assume the existence of a discernable reality but rather multiple versions of reality by organizational participants, and focuses on change in what people think and say, not what they do.⁴

A planned change process that improves organizational effectiveness by changing collective narratives in order to change collective thinking and action.

² Ibid at 15.
Dialogic Regulation

An approach to regulation that argues that the best way to regulate corporations is to have laws that are positive statements about the way we want corporations to be (the “law”) and that the role of corporate regulators is to have ongoing dialogue with corporate participants about how they are working toward those goals (“regulation”).

Double-Loop Learning

Learning in a way that involves the modification of an organization’s underlying norms, policies, and objectives.\(^5\)

Experimental Games

A controlled experiment or simplified scenario where decision-making can be observed and the variables that might affect decision-making can be varied. A game consists of a set of players, a set of decisions (or strategies), and a set of outcomes (pay-offs) for adopting each set of strategies.

Game Theory

A body of theory that has created a mathematical language to describe and predict social interaction.\(^6\)

Generativity

[Generativity is] . . . the capacity to challenge the guiding assumptions of the culture, to raise fundamental questions regarding contemporary social life, to foster reconsideration of that which is

\(^5\) Argyris (1978) infra note 140 at 3.

“taken for granted” and thereby to furnish new alternatives for social action.\(^7\)

**Generative Image** Ideas, phrases, objects, pictures, manifestos, stories, or new words with two properties: (1) that allow us to see new alternatives for decisions and actions, and (2) that are compelling and generate change.\(^8\)

**Non-Zero Sum Game** A game where one player’s gain does not necessarily mean another player’s loss (and vice versa). The gains and the losses in the game do not always add up to zero. It is possible for both players to win or for both players to lose.

**Prisoner’s Dilemma** The classic game theory game. Two conspirators are arrested and interrogated separately. If one implicates the other, he may go free while the other receives a life sentence. Yet, if both confess, bad fate befalls them. If both stay silent, insufficient evidence will lead to them being charged with and convicted of a lesser crime. It is in each person’s self interest to defect on the other prisoner because they will receive a lesser sentence. If both prisoners stay silent then

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they both go free. Often used to measure the amount of cooperation people are willing to show in experimental game situations.

**Single-Loop Learning**
Simple error correction that permits an organization to carry on its present policies or achieve its present objectives. Like a thermostat that feels it is too hot or cold and adjusts.9

**Social Dilemma**
A situation or game where individuals find their own interest in conflict with what is best for their relationships, work organizations, community, nation, and perhaps, most abstractly, their own species.10 Social dilemmas are formally defined by two outcome-relevant properties: (1) each person has an individual rational strategy which yields the best outcome (or pay-off) in all circumstances (the non-cooperative choice, also known as the dominating strategy); (2) if all individuals pursue this strategy it results in a deficient collective outcome – everyone would be better off by cooperating (the deficient equilibrium).

**System**
A system is simply a combination of parts that are interrelated.11

**Trust**
A willingness to make oneself vulnerable to another, based on the

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belief that the trusted person will choose not to exploit one’s vulnerability (that is behave trustworthily).\footnote{Blair & Stout (2001) \textit{infra} note 420 at 1739-1740.}

\textit{Trustworthiness}  
Unwillingness to exploit a trusting person’s vulnerability even when external rewards favour doing so.\footnote{\textit{Ibid} at 1740.}

\textit{Zero-Sum Game}  
A game where the sum of all gains by a player or group of players is equal to the sum of all losses for every possible outcome of that game. In a zero sum gain one player’s gain is another player’s loss. For example, in poker your wins equal your opponent’s losses.
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Chapter 1: Introduction

Carl Jung and Sigmund Freud stand side by side at the railing of a passenger liner on their first trip to New York. They are discussing their ideas on the Talking Cure (Psychoanalysis):

Carl Jung: “Take it from me. What you are looking at is the future.”

Sigmund Freud: “You think that they know we are on our way bringing them the plague?”

Scene from the movie A Dangerous Method (2011)

The tension in this exchange between Carl Jung and Sigmund Freud perfectly illustrates the vexingly dichotomous nature of dialogic regulation and other dialogic systems. On the one hand, they offer an exciting paradigmatic shift in understanding that makes all kinds of imagined, and unimagined, futures possible. Dialogic processes can cause the kind of transformational change that we all want to believe is possible and they can do this in the lives of individuals, the operations of organizations and corporations, and the regulatory systems that oversee them. You can stop smoking. You can overcome your issues with your parents or siblings. A failing company can transform itself into a profitable company. Investment bankers can transform their culture. Regulators can create a space where all oil companies are continuously working to improve their environmental practices. The financial markets can transform their culture from one of advisor greed to one of protecting the interests of the investors. Past experiences with dialogic practices show the exciting promise that warrants Jung’s optimism: What we are looking at is the future.

But, that future is frightening. One of the underlying features of a dialogic understanding of the world is that it is a complex place that we do not yet fully understand and cannot control.
While dialogic processes create containers in which transformational change can occur, it is often very difficult to predict exactly what that change will be. This resonates well with what we would intuitively think. If 100 people were brought into a room and asked “What would this company look like to you if it was at its best?” the result would be very difficult to predict until all the conversations had taken place. In the scene from *A Dangerous Method* above, Freud knew this about his dialogic practice. While Jung was new to Freud’s methods, Freud had been practising them with his patients for a number of years already and was all too aware of the dangers dialogic practice presented. It is fitting that the producers chose to call the movie “A Dangerous Method” and not its original title “The Talking Cure”.

As human beings, we are scared of things that we cannot control. Lack of control especially scares our corporate managers, who in our current culture are supposed to be in “control” of everything all the time. Think back to the Deepwater Horizon Oil Spill and scathing criticism levelled at Tony Heyward, the CEO of a $375 billion corporation, because he did not know what was happening on one specific drill rig in the Gulf of Mexico. Lack of control also scares lawmakers and regulators, because they are in the control business. They make the rules and they enforce the rules. In their world-view, it is difficult to conceive of a situation where a corporation designs its own environmental regulations; the regulator needs to do that, even though the regulator does not understand the business as well as the people who do it every day. Is it possible to overcome this fear of lack of control?

Freud’s theory of psychoanalysis was a paradigm shift for psychology. At the time that he conceived it, we were treating psychological patients in a very “command and control” way. We knew (or at least we thought we knew) how they were supposed to act, we asked them to do it, and if they did not we forced them to – even if it meant electrocuting them, isolating them
from society, or removing portions of their brain, etc. The paradigm shift occurred when Freud asked the questions: What if we asked them what was going on inside their head? What if we listened to their internal conversations? What if we had a dialogue with them? The result was that everything changed. We no longer prescribe electro-shock therapy for hysteria. Instead, when someone starts to develop psychological symptoms we recommend that they get counselling. Freud created the dialogic revolution for the individual.

The theory of Dialogic Regulation offered herein highlights the same kind of paradigm shift in the realm of organizations and corporations and their regulation. In our current regulation of corporations, we are still using command and control regulation. We pass laws to tell them what to do. We watch vigilantly (or not so vigilantly) to see when they break those laws, then we swoop in to punish them with fines, publicly humiliate their leaders, and throw a few bad apples in jail. It is as if we are still stuck in a 19th-century version of psychology. The reality is that these practices are working about as effectively as the old-school psychology practices. We pass more laws, fine more companies, and put more corporate actors in jail every year – but things seem to be getting worse.

The problem lies not with the regulatory practices, but in our underlying conception of what corporations are and how they change. In our effort to understand what corporations are we have over-simplified them and we believe that we can change them using overly simple techniques. We have, to a great extent, underappreciated the complexity of what a corporation is. A corporation cannot be changed simply by passing a law. The only way the corporation changes is if someone within that corporation becomes aware of that law, begins to talk about that law, and develops a strategy for getting that law into the daily conversations and routines of some of the people in that corporation. The reason is that individuals and corporations are dialogic
systems. They are not mechanical devices, living organisms, a nexus of contracts, or a formalized legal entity. Our internal lives consist of conversations with ourselves and our organizational lives consist of conversations with other people. These conversations are real and complex and it is only by embracing the existence and recognizing the significance of these conversations that we can move forward. The terms “corporation” and “organization” in this thesis have a very specific dialogic meaning. A corporation or organization is a socially constructed reality that consists of the patterns of interactions and conversations between the organization members. This is a pre-existing law and structure definition of corporations and it does not come with the baggage of the existing legal structure or history.

The theory of Dialogic Regulation embraces the complexity and non-linear aspects of social systems and the importance of language, conversations, and dialogue in creating change. It asks the same questions of corporations that Freud asked of individuals: What if we asked them what was going on in their management meetings? What if we listened to their internal conversations (their manager meetings)? What if we had a dialogue with them? Dialogic regulation is a trans-disciplinary approach to corporate law and regulation based on insights from law, regulatory theory, corporate theory, systems theory, complexity theory, chaos theory, organizational theory, organizational development, psychology, and social psychology. The model assumes that: the purpose of corporate law is to change or affect behaviour; the best way to change behaviour is to learn a new behaviour; and learning is a social process that involves dialogue. The model hypothesizes that the best way to regulate corporations is to have principle-based laws that are positive statements about the way we want corporations to be (the “law”) and that the role of corporate regulators is to have ongoing dialogues with corporate participants about how they are working toward those goals (“regulation”).
This thesis explores dialogic regulation in three parts: an extensive literature on dialogic change practices, an experiment to see how those practices work within the context of a game where the rules are changed, and then finally the insights from the literature review and experimental game will be used to offer a framework for a theory of dialogic regulation.

In part 1, a literature review will be provided of the materials that are required to gain a good understanding of dialogic systems and dialogic regulation. This literature review is extensive and much larger than normal but it is important because many of the materials reviewed are not normally cited in the legal or regulatory literature. Chapter 2 begins with a literature review of our current understanding of corporate regulation and recent developments in regulation, with an emphasis on illustrating how these new theories embrace complexity and advocate for a learning approach to corporate regulation. The chapter ends with the question: How do organizations learn?

In Chapter 3, that question is answered utilizing materials from the field of organizational development (OD), the field focused on studying how organizations change. I begin by summarizing some of the important theories about how individuals and organizations learn and then provide a detailed description of a new emerging field of OD called Dialogic OD that shows the promise to create the transformational changes that corporate regulation desires. In order to place Dialogic OD in its historical and theoretical context, I first provide a literature review of the theories that influenced it the most: chaos theory and the study of non-linear dynamic systems, and post-modern language theory, social constructionism and the theory of generativity. I conclude the chapter by highlighting that a dialogic approach to corporate change assumes that the individual and his or her relations to other individuals in small groups are the key unit of change in an organization.
In Chapter 4, I change the focus of the unit of analysis to the individual level and look at the question: How do individuals behave and, more importantly, change their behaviour when relating to other individuals? I do this by reviewing the literature from experimental games and in particular social dilemma experiments. In this review I rely heavily on three meta-analysis articles published in the last twenty years that summarize many of the findings of social dilemma experiments. I then explain how these findings are consistent with the principles of Dialogic OD described in Chapter 3 but conclude that while experimental games taught us a lot about compliance they did not tell us much about adherence or about dialogic processes. Finally, I develop a set of hypotheses around three different and distinct approaches to regulation (rules-based regulation, audit based regulation, and dialogic regulation) predicting how individuals will behave when the rules are changed during an experimental game. These are the hypotheses I tested in the experimental game that I conducted as part of this thesis.

In part 2, I provide a summary of the “Pay-Off” game experiment I conducted. I discuss the methods and the results, and I provide a discussion of what occurred. The games experiment showed that for behavioural outcomes the Audit Based Regulation approach was the most effective and most people in this group followed the rules. It also showed that there is significant promise in a Dialogic Regulation approach if the regulatory desire is to have participants learn. In the implications for future research section I caution that even in this controlled experiment there were unintended consequences and that a lot more work needs to be done to ensure that the learning in the dialogic condition is the desired learning. A hypothesis is made that some combination of dialogic intervention followed by an audit process might be the most effective way to use a dialogic process to have the participants learn the rules.
In part 3, I use the results from the experiment and the materials from the literature review to develop the basic components of a theory of dialogic regulation for corporations. I talk about the two different components of the theory: the law – the written language and regulation – and the conversations and dialogue that take place about the law. I situate each component within the corporate law literature of the area to differentiate how the dialogic approach is different from the other narratives. I also provide some concrete examples of what would be required to bring dialogic regulation into effect including how to draft laws and what processes would be required to use dialogic interventions effectively in corporate regulatory setting. I then use the novel case of Suncor’s creative sentencing project for its Firebag facility to provide an example of what dialogic regulation could look like. Finally, I critique that case to show the potential pitfalls in dialogic regulation and the inherent tensions of using dialogic processes within the command and control regulatory system.

Finally, a conclusion is offered about the prospects of Dialogic Regulation. Its future is promising and exciting, but its application is frightening because the results cannot be predicted. It is the future, however, so let us hope that it is not the “plague” and that instead when a corporation starts to develop symptoms, we can send it for “counselling”.
Chapter 2: Developments in Regulatory Theory: The Potential of a Complex World

We live in great cities without knowing our neighbors, the loyalties of place have broken down, and our associations are stretched over large territories, cemented by very little direct contact . . . Our schools, churches, courts, governments were not built for the kind of civilization they are expected to serve . . . The world is so complex that no official government can be devised to deal with it, and men have had to organize associations of all kinds in order to create some order in the world. They will develop more of them, I believe, for these voluntary groupings are the only way yet proposed by which a complicated society can be governed.  
Lippmann (1914)

Underlying almost every conversation on corporate law and regulation is a set of assumptions about the law and human behaviour, the most common of which goes something like this: pass a law and behaviour will change. This assumption is usually associated with arguments calling for the creation of a new piece of legislation or a new legal right or legal obligation. A slightly more complex set of assumptions looks something like this: pass a law, create a regulator, watch vigilantly, punish when appropriate, and behaviour will change. This set of assumptions is usually associated with calls for more regulatory resources, the creation of a regulator, or the punishment of certain corporate actors. A third assumption also shows up from time to time: forcing corporations to disclose information will change behaviour. This is usually associated with arguments calling for corporate social responsibility reporting, environmental reporting, or reporting on human rights.

14 As quoted from Rees (2008) infra note 96 at 12.

15 I would like to thank the Canadian Business Ethics Research Network (CBERN) for its financial assistance in preparing this chapter. I would also like to thank the following people for their insightful comments: Bruce MacDougall, Bob Paterson, David Duff, Dirk Matten, and Gervase Bushe. Any errors or omissions remain my own.
Most of the time, these assumptions are lurking in the arguments of corporate law and regulation advocates in an unstated, unexplored, and un-challenged state. The problem with these assumptions is that they assume causal chains that are too direct and too simplistic. Laws do not on their own change behaviour. Punishment, on its own, does not change behaviour. Disclosure, on its own, does not change behaviour. These assumptions do not take into account the complexity of corporate law regulation systems, the complex way corporations actually learn new behaviours, or the complex way human beings actually learn new behaviours. This is evident in the reality of our current corporate regulation efforts: we have passed a lot of laws; we have resourced many regulatory agencies; we have watched vigilantly (a lot of the time); we have punished a lot of corporate actors; and corporations have disclosed millions of pages of information. And still, undesired corporate activity continues and actually appears to be increasing in frequency.

The only way to transform this failed pattern of corporate regulation is to reconsider the basic assumptions underlying the regulatory system. At least two questions need to be debated: What is corporate law and regulation? And, how do corporations actually learn new behaviour? Recent developments in both regulatory practice and regulation theory have opened up the potential to answer these questions in novel ways that will allow us to develop regulatory systems that are far more effective than previous ones. The common thread to all of these developments is the acknowledgement of complexity in the regulatory system and the movement away from direct causal relationships to complex interdependent causal relationships. In short, the regulation of corporations is a complex task that we do not yet fully understand. However, simply acknowledging complexity allows us to provide different answers to the assumptive
questions and to develop an approach where we can explore, from a learning perspective, what corporate law and regulation is and how corporations learn new behaviour.

This chapter summarizes some recent developments in corporate regulatory practice and regulatory theory that acknowledge the complexity in the regulatory system. It then provides a framework from organization theory to help understand that complexity and advocates a learning approach to corporate law and regulation that will allow exploratory activities leading to the development of more effective regulatory practices and theories. This chapter is structured in five sections. In section 2.1, developments in the practice of corporate regulation will be summarized. In section 2.2, developments in regulation theory will be discussed. In section 2.3, the learning approach to corporate law and regulation is explored in more detail. In section 2.4, the complexity in the corporate law and regulatory system is discussed with reference to systems theory and the application of complexity to organizations. The conclusion of the chapter advocates for a learning approach to corporate law and regulation and proposes a research agenda focused on understanding how corporations learn new behaviour.

2.1 Developments in Corporate Regulation

The number of dramatic market failures in the last decade has caused some corporate regulators and legal scholars to reconsider their traditional command and control approaches to corporate regulation. Command and control regulation is characterized by mandatory rules combined with fines and criminal sanctions for breaches of the rules. In North America, we have been following this approach to corporate regulation for some time. We have a heavy reliance on the passing of laws or texts in which the rules and incentives are laid out and the role of the
regulator has traditionally been one of a watchdog vigilantly looking for transgressions and punishing transgressors.

Command and control regulation should more accurately be described as “direct” regulation because under this approach the government actually gets involved in regulating the behaviour – the regulators try to do the “rowing”. The best examples of this approach were the large specialist regulatory agencies set up by F.D.R. during the New Deal, such as the Securities and Exchange Commission (the “SEC”). In these agencies, experts analyzed problems and then designed universal legislation to restrict behaviour. In the case of the SEC, this took the form of voluminous amounts of legislation and rules, backed up by criminal sanctions and large monetary penalties and an enormous regulatory agency to enforce them.

The command and control approach to corporate regulation does not seem to be working. The outcome of this approach for the SEC was that it ran out of resources to prosecute offences, it could only prosecute the worst cases, and its success rate on those cases was low. In fact, a repetitive cycle of failure has emerged over the last few decades that regulatory scholar John Braithwaite refers to as boom, bust, regulate. “Boom” refers to a time of economic prosperity largely driven by businesses that have innovated a new way of avoiding regulation. This is followed by a “bust” where those businesses fail because of a lack of regulation. Finally, the

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16 John Braithwaite first applied the terms “rowing” and “steering” to describe regulation approaches. See John Braithwaite, “The New Regulatory State and the Transformation of Criminology” (2000) 40 British Journal of Criminology 222 at 223.

17 See Dorf and Sabel (1998) infra note 68 at 270.


regulators step in to “regulate” the business or market after the fact. In this context, all too often, “regulate” means to identify a few bad apples, punish them to act as a deterrent for future behaviour, and then pass a whole new set of laws to prohibit the now discovered wrong behaviour. The belief that the problems in the market system occur because of a few “bad apples” and lax regulatory oversight is widespread, as evidenced in this quote from Business Week after the Enron collapse: “In many ways, Enron and its dealings with Arthur Andersen are an anomaly, a perfect storm where greed, lax oversight, and outright fraud combined to unravel two of the nation’s largest companies.”

Unfortunately, there have been too many perfect storms over the last decade, including the tech bubble, the ImClone insider trading scandal, the corporate fraud scandals (including Enron, Arthur Anderson, Worldcom, Qwest, Adelphia, Global Crossing, Tyco, and others), the Hollinger executive pay scandal, the sub-prime mortgage meltdown, the global financial crisis, and the BP Deepwater Horizon oil spill. The bad apples that were blamed and punished

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21 Between 1997 and 2000 technology stocks rose more than 500% before crashing and losing significant amounts of money for individual investors. For a detailed description of what might have caused the tech bubble and who was involved, see John Griffin, Jeffrey Harris, Tao Shu, & Selim Topaloglu, “Who Drove and Burst the Tech Bubble?” (November 15, 2010) Journal of Finance. Online SSRN: <http://ssrn.com/abstract=459803>.

22 For a brief summary of the corporate fraud scandals and the ImClone trading scandal together with summaries of the corresponding European scandals, see Manish Gupta, “Comparative Corporate Governance: Irish, American, and European Responses to Corporate Scandals”, Bepress Legal Series - Working Paper 1310 (February 3, 2006) at 3-6.

23 For a detailed description of the events leading up to the sub-prime mortgage meltdown, see Michael Lewis, The Big Short: Inside the Doomsday Machine (New York: W.W. Norton & Company, 2010).


25 For a description of the events leading up to the Deepwater Horizon blowout, see Robert Cavnar, Disaster on the Horizon: High Stakes, High Risks, and the Story Behind the Deepwater Well Blowout (USA: Sterling, 2010).
for these scenarios included Frank Quattrone\(^{26}\), Conrad Black\(^{27}\), Martha Stewart\(^{28}\), Kenneth Lay and Jeffrey Skilling\(^{29}\), Bernard Ebbers\(^{30}\), Angelo Mozilo\(^{31}\), Geir Haarde\(^{32}\), and Tony Hayward\(^{33}\), to name a few. The major legislative packages that were passed to solve these problems included

\(^{26}\) Frank Quattrone was an American investment banker who was a key player in the “Hot IT” IPOs of the 1990s. He was charged with interfering into a government probe into Credit Suisse First Boston’s behaviour in allocating IPOs. The charges were eventually dropped. See, Greg Farrell, “Frank Quattrone Gets All Charges Dropped” \textit{USA Today} (August 22, 2006) online USA Today: [http://www.usatoday.com/money/industries/brokerage/2006-08-22-star-banker_x.htm](http://www.usatoday.com/money/industries/brokerage/2006-08-22-star-banker_x.htm) (accessed May 4, 2014).


\(^{29}\) Kenneth Lay and Jeffrey Skilling were the Chairman, CEO, and COO of Enron. They were both found guilty of securities fraud and wire fraud and sentenced to an extended period of jail time. Lay died shortly after his conviction. Skilling was sentenced to 24 years in jail. See Alexei Barrionuevo, “Enron Chiefs Guilty of Fraud and Conspiracy” \textit{The New York Times} (May 7, 2008) online The New York Times: [http://www.nytimes.com/2006/05/25/business/25cnd-enron.html?pagewanted=all&_r=0](http://www.nytimes.com/2006/05/25/business/25cnd-enron.html?pagewanted=all&_r=0) (accessed May 4, 2014).


\(^{31}\) Angelo Mozilo was the founder and CEO of Countrywide Credit a key sub-prime mortgage lender in the sub-prime crisis. He was charged with securities fraud and insider trading by the SEC. The charges were eventually dropped. See “Angelo Mozilo” \textit{The New York Times} (October 15, 2010) online The New York Times: [http://topics.nytimes.com/top/reference/timestopics/people/m/angelo_r_mozilo/index.html](http://topics.nytimes.com/top/reference/timestopics/people/m/angelo_r_mozilo/index.html) (accessed online May 4, 2014).

\(^{32}\) Gier Haarde was the Prime Minister of Iceland during the Global Financial Crisis. He has been charged with negligence for his perceived role in the collapse of Iceland’s three main banks. See  

the Sarbanes-Oxley Act\textsuperscript{34}, the Dodd-Frank Act\textsuperscript{35} (including the Economic Emergency Stabilization Act\textsuperscript{36}), and the response to the Deepwater Horizon Oil Spill included the Outer Continental Shelf Reform Act and the Big Oil Bailout Prevention Liability Act.\textsuperscript{37}

Even the most casual observer of these events is now able to reasonably conclude that there are not just a few bad apples out there and that there is a systemic problem with corporate and market culture.\textsuperscript{38} By corporate culture, I mean the basic assumptions, conversations, and patterned interactions among the individuals within the corporate and capitalist market system.\textsuperscript{39}

\begin{itemize}
\item\textsuperscript{34} This act was passed in 2002 in response to a wave of corporate scandals including Enron, Tyco, Adelphia, and Worldcom. For a discussion of SOX as a legislative response to corporate scandals, see Gupta (2006) \textit{supra} note 9 and Jennifer Hill, “Regulatory Responses to Global Corporate Scandals” (2005) 23(3) Wisconsin International Law Journal 367.
\item\textsuperscript{37} For a brief description of the legislative response to the Deepwater Horizon Oil Spill, see Sally Doremus, “Legislative response to the Deepwater Horizon disaster” Legal Planet (July 6, 2010) online Legal Planet: http://legalplanet.wordpress.com/2010/07/06/legislative-response-to-the-deepwater-horizon-disaster/ (accessed November 22, 2010).
\item\textsuperscript{38} The organizational development (OD) approach to issues discussed later in this thesis would assume that every problem is a system problem. OD practitioner Edgar Schein would always assume that when a client came to him with a “problem person” he would usually find larger systemic problems in the investigation of the problem person. See Jean-Francois Coget, “Dialogical Inquiry: An Extension of Schein Clinical Inquiry” (2009) 45(1) The Journal of Applied Behavioral Sciences 90 at 93. The minute there is a statement that there are a few “bad apples”, an organizational development practitioner would immediately assume that there is some kind of systemic problem.
\item\textsuperscript{39} For a classic definition of “corporate culture”, see Charles Hampden-Turner, \textit{Corporate Culture: From Vicious to Virtuous Circles} (London: Random House, 1990) at 21 quoting from Edgar Schein, “Organisational Culture: What is it and How to Change it” in Paul Evans, \textit{Human Resource Management in International Firms} (New York: Macmillan, 1990) where it is stated that culture is: “A pattern of basic assumptions invented, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration that has worked well enough to be considered valid, and to be taught to new members as the correct way to perceive, think, and feel in relation to these problems.”
\end{itemize}
It is not what corporate and market actors are doing, or did, which is the real problem – it is the way that they think and relate to each other and to non-market actors that is the problem. The way market participants think affects all of their actions: past, present, and also, most importantly, the future. If the focus of regulation remains only on past behaviour, then regulation will always be one step behind.

Corporate regulators in the United States and Australia have realized this and have begun to broaden their roles conceptually as regulators to include the need to change corporate culture. Agencies in both countries have started sending in experts as part of settlement agreements to assist offending corporations to change. In the United States, the Department of Justice (DOJ) has begun sending monitors into corporations under deferred prosecution agreements and the SEC has been sending monitors in connection with reform undertakings. In Australia, the Australian Securities and Investment Commission (ASIC) has also been sending monitors in under reform undertakings. While the success of these monitors to date has been questionable, it is an important first step for regulators to begin to acknowledge that there may be systemic issues in the corporate system and to envision a broadening of their traditional role into actively trying to change corporate culture.

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41 For a description of ASIC’s reform undertakings, see Marina Nehme, “Enforceable Undertakings in Australia and Beyond” (2005) 18 Australian Journal Corporate Law 70.

But, changing corporate culture is difficult. Failures may occur in any attempt to change corporate culture. Corporate leaders and corporate counsel have long known that implementing changes in law into the culture of their organization is a difficult and complex task. The frustrating fact of this process is that the outcome is not necessarily linked to the amount of effort put in. Even if a corporation diligently tries to change its culture, it may fail simply because change is a very complex process. Now that regulators are starting to engage in the change process and realize how complex and difficult it is, corporations and regulators can start working together, dialoguing, and learning better ways of being successful. The hope is that if both parties work together, they can learn together, and eventually succeed.

2.2 Developments in Regulatory Theory

In parallel to the developments in corporate regulation, regulation theory has, over the past two decades, developed new learning approaches to regulation. The new approaches focus on regulating corporations by building regular and flexible interaction between regulators and corporations based on dialogue where both sides are working together to continuously improve the processes and culture of the corporation.43

These new regulatory theories include responsive regulation, smart regulation, self-regulation combined with meta-regulation, democratic experimentalism, new governance, and nodal governance. Each is briefly outlined below in terms of what it is, how it differs from the command and control approach, and how it differs from the other new approaches. The relative place of each theory in the historical development of regulation theory is depicted in Appendix

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43 The term “learning approach” to corporate regulation was coined by Brian Head and John Wright. See Brian Head & John Wright, “Reconsidering Regulation and Governance Theory: A Learning Approach” (2009) 31-2 Law & Policy 192.
A: “Theories of Regulation.” At the end of this section, the similarities amongst the new approaches will be discussed.

2.2.1 Responsive Regulation

Responsive regulation was developed by Ayres and Braithwaite in the early 1990s as an attempt to bridge the gap between the command and control regulatory theorists and the deregulation theorists.44 Responsive regulation brought sociological insights into the debate. It recognized that it is a complex world out there and no single regulatory solution was sufficient. In the responsive regulation approach, regulation needs to be tailored to the specific situation. Responsive regulation advocates the use of a “responsive regulation pyramid”. The assumption behind the pyramid is that most people want to follow regulation. Therefore, regulators should always begin interaction with a business organization in the least interventionist way (i.e. conversation or dialogue). The presumption is to start at the base of the pyramid and escalate up the pyramid only when more modest forms of intervention or punishment fail. This approach allows cheaper and more respectful regulatory strategies to be used first. As less interventionist modes of regulation fail, the regulator escalates up the pyramid to more and more interventionist modes of regulation. The theory argues that the more clout at the top of the pyramid the more effective the regulator will be at the bottom. The pyramid is shaped to reflect the fact that the number of transgressors who will deliberately contravene the regulations gets increasingly smaller as the severity of the regulatory reaction increases and, therefore, the most interventionist punishments and incentives need only be used with a few parties. The intention of the responsive

44 Responsive regulation was presented in Ian Ayres & John Braithwaite, Responsive Regulation: Transcending the Deregulation Debate (New York: Oxford University Press, 1992).
regulation approach was to replace criminal and economic sanctions at the lower part of the pyramid with more responsive approaches consistent with the intentions of the actors. The Ontario Securities Commission uses a version of responsive regulation in its enforcement division.45

Legal scholars Julia Black and Robert Baldwin have taken this theory a step further. They argue that what is required is “Really Responsive Regulation” that takes into account the institutional and contextual circumstances of the corporate environment and engages in feedback and learning loops to change regulation to match the contextual circumstances.46

There are four main differences between responsive regulation and command and control regulation. First, it assumes that most people will follow regulation if given the chance. Second, it acknowledges that the informal processes, self-regulatory structure, and culture within an organization are important and can be leveraged by regulators at the bottom of the pyramid.47 Third, this is one of the first works that started to talk about regulation being “de-centered” or removed from the state as the sole source of regulation.48 Fourth, including the work done by Black and Baldwin, it was one of the first theories to promote learning and feedback loops in the regulatory process.


47 Ayres and Braithwaite (1992) supra note 46 at 5.

48 Ibid at 7.
Responsive regulation was the first new approach to regulation that really began to gain popular support, and, not surprisingly, it is consistent with most of the other learning approaches to regulation. All of them can easily fit within its framework. For example, each of the other new approaches can be included in any specific regulatory pyramid.\(^49\)

2.2.2 Smart Regulation

Smart regulation was based on two previous bodies of work: responsive regulation and legal pluralism.\(^50\) Legal pluralism posits the idea that law is only one element in a web of constraint on behaviour and that there are many other non-governmental constraints. Under this theory, most regulation is not in the hands of the government but rather in the hands of private sector individuals. Smart regulation is based on the idea that more can be accomplished by harnessing self-regulation within corporations than by using governmental command and control.\(^51\)

Smart regulation has three key ideas: use multiple regulatory instruments,\(^52\) involve as many stakeholders as possible,\(^53\) and design regulatory policy to meet specific situations.\(^54\) It

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\(^{49}\) For an example of this see Braithwaite’s article on using the regulatory pyramid for health care. This pyramid includes self-regulation, meta-regulation, etc. Judith Healy & John.Braithwaite, “Designing Safer Health Care through Responsive Regulation” (2006) 184(10) Medical Journal of Australia S56-S59.


\(^{51}\) Ibid at 35.

\(^{52}\) Examples of types of regulatory instruments in this approach include command and control, economic, self-regulation, and voluntarism.

\(^{53}\) Including second party (industry) and third party (community) participants.

\(^{54}\) Gunningham & Sinclair (1999) supra note 52 at 70.
argues that, in the majority of circumstances, the use of multiple rather than single regulatory instruments and a broader range of regulatory actors will produce better regulation. It also argues that all instruments have strengths and weaknesses so it is best to use them in combinations so that the strength of one can cover over the weakness of the others.55 The Government of Canada launched a smart regulation initiative in 2004.56

Smart regulation differs from command and control in its acknowledgement of the power of non-governmental actors in the regulatory environment. In fact, in smart regulation the regulatory pyramid becomes three-dimensional and the regulator, the industry, and the community each has a face. Any of the three can choose to escalate regulation up the pyramid with their own set of sanctions for the transgressors.57 This approach is different to responsive regulation in that instead of talking about instruments being used in an increasing order of intervention, it focuses on using combinations of instruments and approaches. Therefore, it is concerned with which specific combinations work well together or do not work well together.58

2.2.3 Self-Regulation and Meta-Regulation

The self-regulation and meta-regulation model argues for self-regulation inside corporations combined with meta-regulation by state regulators. Christine Parker advocated this

56 For a description of this initiative, see External Advisory Committee on Smart Regulation, Smart Regulation: A Regulatory Strategy for Canada: Report to the Government of Canada (Ottawa: External Advisory Committee on Smart Regulation, 2004) and Government of Canada, Smart Regulation: Report on Actions and Plans (Ottawa: Government of Canada, 2005).
57 Braithwaite adopted this idea of a non-governmental actor side to the regulatory pyramid in his 2009 book Regulatory Capitalism when he discussed Qui Tam. See John Braithwaite (2008) supra note 21.
58 Gunningham, Grabowsky, & Sinclair (1999) supra note 52.
approach in her 2002 book *The Open Corporation*.\textsuperscript{59} The three key ideas to this approach are: a) the open corporation: management decision making should be open to democratic influences because corporations are powerful and their actions can have serious political and social consequences;\textsuperscript{60} b) self-regulation: once corporations are open, we can start to rely on their internal regulation systems to regulate behaviour;\textsuperscript{61} and c) meta-regulation: the duty of the regulator then becomes simply judging the outcomes of the self-regulatory systems against some objective societal standards.\textsuperscript{62} The key of the whole system is learning. Parker talks about triple learning loops where the self-regulatory professionals, corporate management, and the regulators move forward in waves of continuous improvement. In the triple learning-loop model corporate self-regulatory systems innovate and learn a new way of complying with or exceeding a regulatory requirement, the corporation’s management systems then learn from that innovation, and the regulator, in turn, learns from the corporate management systems.\textsuperscript{63}

This theory is different to command and control because, similar to the other theories, it advocates government stepping back from “rowing” and focusing instead on “steering” regulation.\textsuperscript{64} It is unique in that it places an extraordinary emphasis on the role that internal


\textsuperscript{60} Ibid at 1.

\textsuperscript{61} Ibid at Chapter 2.

\textsuperscript{62} Ibid at Chapter 9.

\textsuperscript{63} Ibid at 279.

\textsuperscript{64} Ibid at 41.
governance structures within corporations can play in the regulatory process.\textsuperscript{65} It should be noted, though, that Parker only advocates reliance on self-governing systems if the corporation has become “open” to the influences of other stakeholders.

### 2.2.4 Democratic Experimentalism

Democratic experimentalism seeks to take advantage of local knowledge to encourage local experimentation to find tailored solutions to complex problems.\textsuperscript{66} The role of government, in this approach, is to “orchestrate” the experimentation process rather than to dictate top-down universal rules. Government does this by encouraging broad participation at the local level involving input from a variety of actors that are affected by the actions and have differing perspectives on the problem, as well as different areas of expertise. This is called “directly deliberative polyarchy”.\textsuperscript{67} Through experimentation these actors attempt to find the best solution to a problem that takes into account the relevant aspects of that unique situation (e.g. the specific corporation, industry, issue, or geographic area). Any solutions that are developed from this experimentation are understood to be provisional and will be updated based on new knowledge and changing circumstances or societal expectations.

This approach was based on the three ideals of the Japanese production system: benchmarking (goals that can be achieved), concurrent engineering (experimenting with

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\textsuperscript{65} While this may look very similar to market-based regulation or deregulation, it is actually quite different because its assumptions are different. First, it clearly states that the corporation is a public entity (not a private one) and is legitimately subject to regulation. Second, it supports self-regulation only after other stakeholders have had a say in the regulation of the corporation.


\textsuperscript{67} \textit{Ibid} at 288.
solutions for error-resolution), and learning by monitoring. Democratic experimentalism is a centrally coordinated system of parallel local experiments, networked and disciplined through structured information disclosures and monitoring requirements. All the experiments are subject to rolling minimum performance benchmarks but, as long as they meet those benchmarks, they are otherwise free to experiment in a continuous and ceaseless effort to improve, learn, and revise to find the best regulatory structure.

The main difference between democratic experimentalism and the command and control approach is the emphasis it places on specific solutions generated by local actors as opposed to universal legislation created by specialist regulatory agencies. Its main difference from the other approaches is that democratic experimentalism is advocating not only a regulatory approach but also a political approach. It has linked politics and regulation. In all fairness to the authors, this piece was a political piece in its original form. However, for the purposes of regulation theory, the idea of local experimentalism can be separated from democratic principles. For example, China has a long history of regulatory experimentalism without any link to democratic principles. In fact, China used an experimental approach like this to introduce corporations and stock exchanges into their socialist economic system by allowing regional experimentation for long periods of time before collecting the most successful practices into the national corporations and securities laws.

68 Ibid.
69 Ibid.
70 Ibid.
2.2.5 New Governance

New governance is not a single model or theory but a transatlantic family of governance innovations. Each of the innovations associated with it are a move away from command and control regulation toward a new model of collaborative, multi-party, multi-level, adaptive problem solving. The most interesting articles on new governance are Hess and Ford’s articles on how the theories relate to the practices of the SEC and Reform Undertakings in particular. In these articles, the authors explain that the SEC came to realize that there were systemic corporate culture problems and that there were not just a few bad actors out there. The SEC also realized that part of its mandate was to change or “clean up” those corporate cultures and that meant that they needed to get inside the “black box” that was the corporation to be able to cause real change. The SEC’s initial attempt to cause such corporate change involved sending in third party monitors to cause the change. As mentioned previously, this practice has had limited success because the monitors were too often lawyers and not change agents, the focus was too often on rules and codes of conduct, and the change processes were largely de-coupled of how this process was applied to the development of corporate law and securities law in China, see Michael Cody, “Corporate Governance Reform in the PRC: The Layered Approach to Convergence” (2007) 3(4) The Corporate Governance Law Review 366.

72 For a description of the theories that are considered to be included in the term “new governance”, see Bradley Karkkainen, “New Governance’ in Legal Thought and in the World: Some Splitting as Antidote to Overzealous Lumping” (2004–2005) 89 Minn. L. Rev. 471. Democratic experimentalism is included within new governance.


75 Ibid at 14.
as opposed to transformational events for the large majority of the corporate employees. However, while the success of this approach has been limited to date, it is a promising example of a new approach to regulation based on the realities of what corporations are and how they change.

At this point, new governance is not really a regulatory theory. It is instead a set of innovations that acknowledge that the corporation is a complex social system and some suggested tools that could be of use in adopting such an approach. It is different to command and control in that it acknowledges that in order to change behaviour the regulator may need to become involved in the internal workings of corporations. It is different from the other new approaches because it does not advocate a new system of regulation – rather just some tools for the regulatory toolbox.

2.2.6 Nodal Governance

Nodal governance is an elaboration on the information network theory of Manuel Castells. It argues that information flows across networks but that it is only transformed into action at “nodes” – places that are organized to turn information into action. This is important to regulation because regulatory networks are information networks characterized by complexity, a plurality of actors, the complex interconnectedness of actors, a multitude of mechanisms to transform information into action, and rapid adaptive change. The key is to understand how the

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information on regulation that flows through a network gets translated into regulation. The authors argue that it happens at nodes, or sites within the regulatory or information network where knowledge, capacity, and resources are mobilized to manage a course of events.\textsuperscript{79}

Nodes have four essential characteristics: a) mentalities: a way of thinking about the matters the node has emerged to govern; b) technologies: a set of methods for exerting influence over the course of events at issue; c) resources: to support the operation of the node and the exertion of influence; and d) institutions: a structure that enables the directed mobilization of resources, mentalities, and technologies over time.\textsuperscript{80} Nodes can be legislatures, government agencies, neighbourhood associations, NGOs, corporations, gangs, etc. Not all nodes are equal. The capacity of a node to influence or regulate depends in large part on its resources, which broadly defined include a wide range of social capital. One example of a node is the pharmaceutical lobby in the United States, who Drahos, Burris and Shearing argue are responsible for causing the TRIPS intellectual property rights to be brought into being at the World Trade Organization.\textsuperscript{81}

Nodal governance theory differs from command and control in the same ways as the other theories. It acknowledges that the state is no longer the sole source of regulation, it acknowledges the complexity in the system, and it has a focus on learning. It is different from the other new approaches because it focuses on exactly how regulation is generated and it does not assume that the process is democratic or that the government is in a position to “steer” it.

\textsuperscript{79} Ibid at 37.

\textsuperscript{80} Ibid at 37-38.

\textsuperscript{81} Ibid at 40-49.
Any strong node can steer regulation and that node could just as likely be a corporation (or an association of corporations) as a government agency.

2.2.7 The Similarities of the New Approaches

All of the theories discussed above are interesting advances over the command and control regulatory approach and they share certain characteristics that are important for a learning approach to regulation. Their similarities include:

i. **An Acknowledgement of Complexity**: All of the new approaches acknowledge that regulating corporations and markets is a complex thing and that managing a complex system to a desired end state is very difficult.\(^{82}\)

ii. **A Broader Definition of Regulation**: All of the new approaches adopt a broader definition of corporate law regulation that includes far more than just government laws and regulations.\(^{83}\)

iii. **The Idea of the De-centered State**: All of the new approaches acknowledge that the state is not the sole source of regulation and that other parties have a role in regulation: industries, corporations, communities, individuals, etc.\(^{84}\)

iv. **Tailoring Specific Solutions**: Most of the new approaches deal with the complexity in the system by allowing regulatory solutions to be tailored to specific situations.\(^{85}\)

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\(^{82}\) For example, responsive regulation acknowledges that regulators need a set of tools and different approaches to use to change behaviour; smart regulation acknowledges that different sets of instruments will be more effective with certain regulated corporations and that communities, NGOs, and industries all play a role in the regulatory system; meta-regulation acknowledges that corporations have self regulatory systems that play a large part in the regulatory system; democratic experimentalism acknowledges that no universal regulatory rules are sufficient and that local solutions need to be found to local problems; and nodal governance acknowledges that information on its own is not sufficient and that any party can mobilize itself to turn information into power within the regulatory system.

\(^{83}\) This idea is best illustrated by meta-regulation and smart regulation where the non-governmental portions of the regulatory system are leveraged to obtain regulatory results.

\(^{84}\) Examples of this are Braithwaite’s Regulatory State and Regulatory Capitalism, Black’s polycentric regulatory regimes, Braithwaite and Drahos’ epistemic communities, Christine Parker’s self regulating open corporation, and nodal governance’s non-government nodes.

\(^{85}\) Examples of this include democratic experimentalism and smart regulation’s goal of specific solutions and combinations of instruments.
v. **Escalating Regulatory Pyramid:** All of the new approaches advocate a toolbox of instruments for regulators to accomplish their tasks. These tools are either ordered in an escalating manner or talked about as being used in combination with each other.  

vi. **A Focus on the Positive:** Implicit in all of these approaches is a movement away from the negative and a commitment to working in a positive fashion on solutions. Rather than focus on punishing wrongdoers, some of the new approaches are focused on preventing the behaviour ahead of time. They are focused on generating “good outcomes”. In some theories, they are also focused on generating those outcomes in the least interventionist way.

vii. **Learning:** This is the most important similarity that binds the new approaches to regulation. All of the new theories realize that regulation is simply getting people and corporations to change their behaviour to be consistent with whatever it is that society normatively wants it to be. Therefore, regulation is about causing behavioural changes and the best way for people to change their behaviour is to learn a new one. In almost all of the new theories there is an emphasis on learning – if individuals, groups, corporations, and regulators can all learn together then any normative outcome is possible.

### 2.3 The Learning Approach to Corporate Regulation

Brian Head and John Wright advocated the concept of a learning approach to regulation in their 2009 article surveying contemporary regulation theories. They concluded...
that each theory was useful in explaining certain things but that no single perspective was sufficient on its own. 91 As a result, they advocated a pragmatic learning approach to regulation where specific designs are implemented for specific issues with monitoring and feedback loops to allow for learning in the regulatory process. 92 They argued that regulatory theory needs to remain “flexible” if it is going to assist real world actors in finding solutions to concrete regulatory problems. 93

This pragmatist approach was based on the insights of Joseph Rees and his study of the American College of Physicians and Surgeons hospital standardization process. 94 In this study, Rees found that the hospital system in the United States might have been the first self-regulatory system “steeped in the pragmatist principles of self-ordering.” 95 At the heart of the system was a “critical community of inquirers” – the medical staff that developed ideas and hypotheses that could be verified only “through a process of social interaction.” 96 As a result of his findings, Rees argued that regulatory scholars needed to take notice of the growing signs of a pragmatist revival in regulatory landscapes including nuclear energy, chemical manufacturing, natural resource management, and health care. 97 The common thread of pragmatism in these regulatory

regulation); and post-cultural theories (that trace the ebb and flow of regulatory interactions across sector-specific networks and through nodes of influence – for example nodal governance).

91 Head & Wright (2009) supra note 45 at 212.
92 Ibid at 193.
93 Ibid at 196.
95 John Dewey was one of the key drivers behind the process. Ibid at 10.
96 Ibid at 21.
97 Ibid at 12.
landscapes is “a spirit of self-correction built into regulatory process by means of a well-developed organizational capacity to learn from experience.” 98 These regulatory regimes have a natural skepticism about the habitual way of doing things and construct constant feedback loops to systematically review and change routines. 99

The learning approaches offered by Wright and Head and Rees are similar to the learning approaches suggested in some of the other new regulatory theories that were summarized earlier, most notably Christine Parker’s triple loop learning model and Democratic Experimentalism’s “directly deliberative polyarchies.” These future visions of the regulatory system as complex and interdependent learning environments are compelling and exciting. They create a vision of the future where instead of detailed rules that set a minimum standard of behaviour, all of the actors in the regulatory system can be working together in continuous learning loops of improvement to exceed regulatory goals and set new levels of regulatory standards and performance.

Regardless of its future potential, the reality is that there has been some serious frustration in putting the ideas contained in the new learning approaches to regulation into practice. Christine Parker has recently written on how the self-regulatory/meta-regulatory system breaks down when the corporation is not “open” to influence from outside stakeholders and when the regulatory agencies are not sure what principles or goals they should include in their meta-regulatory agenda. 100 She has also written on the questionable success of corporate

98 Ibid at 11.
99 Ibid at 11-12.
monitorships in Australia.\textsuperscript{101} Christie Ford and David Hess have similarly written on the limited success of corporate monitorships in the United States.\textsuperscript{102} Keith Marquis has authored a critical study of the OSC’s responsive regulatory approach\textsuperscript{103}, and the smart regulation Initiative in Canada quietly disappeared before its final report was due.\textsuperscript{104}

These trials and failures are to be expected if a pragmatic learning approach to regulation is adopted. Changing corporate behaviour is a complex and difficult task. The biggest lesson from all of these early learning approaches to corporate law and regulation is that we still have a lot to learn about learning.

2.4 Systems Theory, Organization Theory, and Complexity

One reason why these new approaches to corporate regulation may be gaining in popularity is that the advances they are offering are consistent with the advancements being made in other disciplines about our understanding of what corporations (and organizations) are. In other words, this movement in corporate regulation and regulatory theory is part of a larger movement in the social sciences accommodating the insights of complexity theory to include more human and social complexity in our theories about what corporations are.

In order to effectively regulate a corporation we must have an understanding of what a corporation is. Failed regulatory approaches are often approaches that have misconceived

\begin{flushleft}
\textsuperscript{102} David Hess & Christie Ford (2009) \textit{supra} note 75.
\textsuperscript{103} Keith Marquis \textit{supra} note 47.
\textsuperscript{104} The Smart Regulation initiative documents can be found online at the Government of Canada: \textless http://dsp-psd.pwgsc.gc.ca/Collection/CP22-78-2004E.pdf \textgreater (accessed May 4, 2014).
\end{flushleft}
assumptions about the internal workings of a corporation. For example, if our accepted theory of the corporation conceives it as a “nexus of contracts” of the inputs and outputs of production whose sole purpose is to maximize profits, then it would make sense for us to design a command and control regulatory system with large financial penalties to corporations if they fail to comply.

Organization theory is the discipline devoted to answering the question: what is a corporation? Organization theory has a lot to offer the corporate law and regulation field because over the last 40 years it has embraced complexity theory and moved past the “nexus of contracts” theory of the corporation. Unfortunately, mainstream corporate law scholarship has not kept pace.

Organizational theory has advanced past the types of theories related to the “nexus of contracts” theory of the corporation because they were not descriptive of what was occurring in real life, largely because they ignore the human and social portions of organizations. Organizational theorist W. Richard Scott has written about the development of organizational theory over the past 50 years and argued that it had developed from closed rational systems theories, to closed natural systems theories, to open rational systems, to open natural systems.\(^\text{105}\) Appendix B provides a summary of each of these types of theories.

Rational systems theories conceive of corporations as formal entities with sets of rules that are designed to achieve specific purposes.\(^\text{106}\) Rules in these systems are more important than people or culture. The metaphor here is that of a stopwatch. Many economic theories are rational theories. Natural systems theories conceive of corporations as collectivities of human actors each


\(^{106}\) *Ibid* at 35-58.
with their own dreams, desires, and motivations. In these theories, people and culture are more important than rules and these corporations are far more complex than rational corporations. The metaphor here is that of an organism like a tree. Open systems theories acknowledge that it is difficult to draw boundaries around where the corporation ends, especially in an increasingly complex world. Who is a part of the corporation? Employees? Creditors? Suppliers? Managers? Directors? Shareholders? Joint venture partners? The community? Open systems theories adopt a more expansive approach to where the boundary of a corporation lies. Scott has argued that organizational theory advanced from rational open theories to natural open theories in the late 1970s. In essence, they moved towards incorporating more human complexity into their theories.

These same stepped advancements of complexity in theory can also be seen in the new regulatory theories. The natural systems perspective can be found in the acknowledgement of complexity, the focus on individual actors and cultures, and the need to get inside the corporation in order to change it. The open systems perspective can be found in the acknowledgement that the government is not the only source of regulation and that everyone involved in the system has the ability to impact the outcome. These advancements in regulatory theory are similar to the advancements in corporate theory and organization theory. A chart summarizing the timeframe of the advancement from rational to natural systems is attached as Appendix C.

107 Ibid at 59-86.
108 Ibid at 87-106.
109 Ibid at 113-123.
110 This chart is based on a chart linking the development of corporate theory with organizational theory. See Michael Cody, Social Theories of the Corporation (forthcoming) (on file with author).
The development stage can be linked back to systems theorist Kenneth Boulding’s hierarchy of complex systems. This hierarchy organizes types of systems into nine levels with increasing complexity and increasingly indirect causality, from a static simple system at level 1 to an unknowably complex system at level 9. A chart of Boulding’s complex systems hierarchy is attached as Appendix D. Rational systems theories are simpler theories that think of the corporation in a mechanical and rational way. They are good at explaining simple systems in Boulding’s hierarchy, for example level 1 and 2 systems. Natural systems theories are able to explain more complex systems and are level 3 or 4 theories. Open systems theories acknowledge that corporations interact with their environment and are at least level 4 theories.

Human social systems, including the corporation, are complex social systems. Boulding argued that they are the most complex systems we are capable of identifying. He classified them as level 8 systems in his hierarchy of complex systems. Human social systems are so complex that our theories (our attempts to describe, understand, and predict them) are not complex enough to encompass the whole system. This explains why there are so many different theories that try to explain complex human social phenomenon like organizations, corporations, markets, etc. For example, in my own work on corporate law and regulation, I have identified 23 significant organization theories, 16 corporate theories, and 12 regulation theories. While there are a

111 Boulding defines level 8 systems as “Multicephalus systems comprising actors functioning at level 7 who share a common social order and culture”. Level 7 systems are “Systems that possess self-consciousness and so are capable of using language”. See Cody (forthcoming) supra note 112 at 44. Therefore, human social systems are complex systems of human beings who have the capacity for free will and language interacting with each other.
112 Ibid at 255 and 296.
113 See the Corporate Theory chart in Ibid at 172.
114 See Appendix A.
lot of theories, none of them are sufficient on their own because they are not capable of explaining, understanding, and predicting all of the complexity in a level 8 social system. At most, each theory is good at explaining a certain type of organization, a certain practice, or a certain aspect of organizing. The most advanced theories we have to date are probably level 3 or level 4 theories.

The problem with applying simple theories to complex systems is that the simple theories often do a good job of explaining a small proportion of the system but a poor job when applied as a general theory for the whole system. In the context of regulatory theories, direct regulation and command and control regulation are examples of regulatory approaches suitable for simple systems because they postulate direct causal relationships. Most economic theories of regulation are rational systems (level 3 theories). The new learning regulatory theories are more complex and may be level 3 or level 4 theories. However, all of our current regulatory theories are a long way from being able to explain level 7 or level 8 social systems. When we apply simple theories or solutions to complex systems it often leads to unintended consequences. For example, sociologist Neil Fligstein has argued that the U.S. Anti-Trust laws actually helped create the modern multinational corporation.

To overcome this weakness, organization theorist Richard Scott has advocated using a layered approach to understanding organizations and using each theory for that portion of the

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115 For example, deeming a corporation to be a “person” to allow it to sue and be sued was a great idea and a quick fix until corporations started using their existence as a “person” to argue for rights of free speech.

organization (corporation) it is best at explaining. This is simply the same as arguing for a learning approach to regulation. Until we have level 7 or level 8 theories that explain the functioning of complex human social systems, we should all be working together to learn how regulation works.

2.5 Conclusion – Learning in a Complex World

A learning approach to corporate law and regulation is the natural way to come to grips with the realization that corporate regulation is a complex task we do not yet fully understand. Changing the behaviour of a complex human social system (like a corporation) is likely to fail more times than it succeeds. Therefore, regulators, corporate actors, and other actors need to work together to experiment and explore the complex interdependencies of the regulatory system. If they fail, they need to resist the urge to punish or reprimand actors (corporate or regulatory) and instead engage again with a different approach. Together the participants in the system can learn how to regulate and change the behaviour of corporations. In this approach, corporate regulators become experts in assisting corporations and other actors in how to learn.

Learning is one of the biggest areas of potential in corporate regulation but also one of the biggest issues, because many regulatory scholars do not seem to know very much about how organizations and people learn. In other words, legal and regulatory scholars have not

\[117 \text{ For examples of using the layered approach to understand corporate law and regulation, see } \text{Cody (2007) supra note } 74 (outlining the layered approach to corporate law convergence); \text{Michael Cody, “Evaluating Australia’s Corporate Law Reform from an Organizational Theory Perspective” (2008) 21(3) Australian Journal of Corporate Law 210 (evaluating Australia’s corporate law reforms using the lens of organization theory); and Michael Cody, “Hostile Takeover Bids in Japan? Using the Layered Approach to Understand Convergence” (2010) 9(1) Richmond Journal of Global Law and Business 1 (understanding the importation of U.S. Takeover laws to Japan using the layered approach).} \]
sufficiently leveraged the literature and practice on how complex human social systems (whether corporations, organizations, or otherwise) learn. The key questions for corporate law and regulation going forward are: How do corporations learn? How do people learn? Is there a difference between the two?

There are a lot of disciplines that can assist in this effort, including complexity theory, systems theory, chaos theory, organization theory, organizational development, psychology, and social psychology, just to name a few. In particular, organizational development is the discipline that is devoted to understanding how organizations learn and change. It has a rich history of both theory and practice. The organizational development literature and practice can be of great use to regulatory scholars in strengthening the new learning models of corporate law and regulation. It is not enough to argue for a learning approach to corporate law and regulation – we need to understand how the learning takes place. Therefore, regulatory scholarship should add to its agenda: learn about learning. In the next chapter, we explore the question: How do organizations learn?

Most people define learning too narrowly as mere “problem-solving”, so they focus on identifying and correcting errors in the external environment. Solving problems is important. But if learning is to persist, managers and employees must also look inward. They need to reflect critically on their own behaviour, identify the ways they often inadvertently contribute to the organisation’s problems, and then change how they act.

Chris Argyris, Organizational Psychologist

Changing corporate behaviour is extremely difficult. Most corporate organizational change programs fail: planning sessions never make it into action; projects never quite seem to close; new rules, processes, or procedures are drafted but people do not seem to follow them; or changes are initially adopted but over time everything drifts back to the way that it was. Everyone who has been involved in managing or delivering a corporate change process knows these scenarios all too well. Just how difficult is it to change corporations? It is estimated that:

- 75% of all change efforts fail to make dramatic improvements\(^{118}\);
- success rates for major change efforts in Fortune 1000 companies range from 20-50%\(^{119}\);
- 50-75% of all mergers and acquisitions fail to meet expectations\(^{120}\);
- 15% of IT projects are successful\(^{121}\);
- 50% of firms that downsize experience a decrease in productivity instead of an increase\(^ {122}\), and

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• Less than 10% of corporate training affects long-term managerial behaviour.\textsuperscript{123}

One organization development OD textbook acknowledges that, “organization change presents one of the greatest challenges in modern organizational life”\textsuperscript{124}

Because of these difficulties, successful change agents are among the most valuable resources in corporations, and, correspondingly, there are innumerable corporate consultants and change processes that companies leverage to try to create change. These include Change Management\textsuperscript{125}, Program Management\textsuperscript{126}, Lean Manufacturing (TPS)\textsuperscript{127}, Six Sigma\textsuperscript{128}, Good to

\begin{itemize}
\item Bushe (2009) \textit{infra} note 176.
\item Rothwell et al. (2010) \textit{infra} note 136 at 21.
\item Change Management is the process of helping a person, group, or organization implement a desired change. A good definition of it is: “a set of principles, techniques, and prescriptions applied to the human aspects of executing major change initiatives in organizational settings. It is not a focus on ‘what’ is driving change (technology, reorganization plans, mergers/acquisitions, globalization, etc.) but on ‘how’ to orchestrate the human infrastructure that surrounds key projects so that people are better prepared to absorb the implications affecting them”. See L. Anderson & D. Anderson, \textit{The Change Leader’s Roadmap: How to Navigate Your Organization’s Transformation} (San Francisco, Pfeiffer, 2001) at xxviii. Change Management is usually more mechanistic than organizational development approaches. Many business schools offer executive education programs on Change Management that provide managers with a framework and toolkit for managing change. For a description of change management, see Rothwell et al. (2010) \textit{infra} note 136 at 16-17.
\item Program Management is a methodology for delivering projects. The industry standard for Program Management is now the Program Management Institute (PMI). For a description of Project Management methodologies, see Sebastian Nokes, \textit{The Definitive Guide to Project Management} (2nd Ed) (London: Financial Times / Prentice Hall, 2007).
\item Lean Manufacturing is the North American term that refers to the manufacturing process pioneered by Taichi Ono at Toyota. It is also called the Toyota Production System. For a description of Lean Manufacturing, see James Womack & Daniel Jones, \textit{Lean Thinking: Banish Waste and Create Wealth in Your Corporation} (New York: Free Press, 2003).
\item Six Sigma is a change approach focused on applying basic statistics to business processes to reduce variation in process outputs. A Six Sigma company aims to have 3.4 defects per million in their processes or, in other words, all of their processes run effectively to within 6 standard deviations from the mean. This approach was pioneered by Motorola and has been used by many other Fortune 500 companies. It is often combined with Lean Manufacturing or the Total Quality Manufacturing (TQM) approach. For a description of the Six Sigma approach See Peter Pande Robert Neuman & Cavanagh Roland. \textit{The Six Sigma Way: How GE, Motorola, and Other Top Companies are Honing Their Performance} (New York, NY: McGraw-Hill Professional, 2001). For a more detailed description of the Six Sigma methodology, see Geoff Tennant, \textit{SIX SIGMA: SPC and TQM in Manufacturing and Services} (Aldershot, UK: Gower Publishing, Ltd, 2001).
\end{itemize}
Great\textsuperscript{129}, Process Reengineering\textsuperscript{130}, Operational Excellence, and the Balanced Scorecard\textsuperscript{131}, just to name a few. While each of these approaches has been successful in certain situations there is no silver bullet or proven change method that works in all situations. In effect, we are still learning how to learn within corporations.

The corporate fascination with change is so prevalent that almost any manager in North America will have been introduced to, or will be a part of, one of the above change processes at some point in their career. For example, in the course of my eight-year tenure with one large corporation, I was trained on project management, an executive course on change management, and a green belt in Lean Manufacturing and Six Sigma methodologies, Good to Great, and the Balanced Scorecard. Consistent with the data presented earlier, most of those programs were unable to accomplish the intended change.

Which raises an interesting question about corporate regulation: if corporations are so challenged to change for core business reasons (including profitability or survival), why do we expect them to be able to change in response to changes in the law and regulation? Legal scholars, practitioners, lawmakers, and regulators have long overestimated corporations’ capacity to change. This is especially true of any regulatory theory that purports to rely on the internal

\textsuperscript{129} Good to Great is a recipe for successful and sustainable change that was created by Jim Collins. See Jim Collins, \textit{Good to Great: Why Some Companies Make the Leap . . .and Others Don’t} (New York: Harper Collins, 2001).


\textsuperscript{131} The Balanced Scorecard is a strategic performance management tool that can be used by managers to track the performance of teams and the outcomes of their activities. It is one of the most widely adopted corporate management tools. For more information on the Balanced Scorecard, see Robert Kaplan & David Norton, “The Balanced Scorecard – Measures That Drive Performance” (Jan 1992) The Harvard Business Review 71.
governance systems of the corporation as the primary method of regulation.\textsuperscript{132} That is why the learning approach to corporate law and regulation is so promising. It makes it possible for regulators and corporations to work together on the difficult task of corporate change. In order to be successful it requires legal scholars, lawmakers, and regulators to become more familiar with what corporations are, how they change, and how the law and regulation can assist them in changing.

The corporate change approaches outlined above are some of the more scientific and systematic approaches to organization change. They tend to undervalue the role that individuals, individual personalities, and interpersonal conflict have on change processes.\textsuperscript{133} They also tend to be more of the “quick fix” type of solution. It may be that most corporate change initiatives fail because these approaches fail to take into account the human components of change in corporations. This is where organization development and organizational learning comes in.

3.1 Organizational Learning and Organizational Development

Organization Development (“OD”) is the discipline devoted to helping organizations change by teaching them how to learn. It is a difficult discipline to define and describe because it

\textsuperscript{132} Examples of these types of theories include self-regulation, market-based regulation, and meta-regulation combined with self-regulation (that is not dialogic).

\textsuperscript{133} Conflict is an often under-emphasized issue with corporate change. Most of the change models talk about managing stakeholders but when significant or transformational changes are happening in a corporation, the power structure is also changing, which inevitably will lead to conflict. In addition, in order to have significant changes in a corporation the people within the corporation need to learn new behaviours. To learn something new requires an individual to unlearn something that exists – which can be a very uncomfortable process. Therefore, effective change processes have to have ways to manage and engage with conflict productively.
encompasses such a broad range of practical and theoretical approaches. However, most OD approaches share several similarities:

- They adopt a long-term approach to change.
- They are focused on learning and education.
- They are based on the collaborative participation of organization participants in the change process.

The following two quotes offer example definitions of Organizational Development:

[A] process that applie[s] a broad range of behavioral science knowledge and practices to help organizations build their capacity to change and to achieve greater effectiveness. . .

[A] systemic and systematic change effort, using behavioral science knowledge and skill, to change or transform the organization to a new state.

There are three OD approaches that are of interest for the purposes of developing the dialogic approach to regulation: Chris Argyris and Donald Schon’s models of individual and organizational learning, Peter Senge’s 5th discipline approach to the learning organization, and, most importantly, the new emerging dialogic OD practices. Each of these approaches offers a different perspective on how corporations learn that is important to dialogic regulation.

3.1.1 Theories of Action

Psychologist Chris Argyris and philosopher Donald Schon developed the Theory of Action learning perspective that offers insights into how both individuals and organizations


135 Ibid at 12.


137 Quoted from Rothwell (2010) supra note 136 at 13.
learn. The Theory of Action learning perspective acknowledges that there is a difference between what people say and what they do, or their “espoused theory” and what they actually do, their “theory in use”. They argue that every individual has a set of mental maps that tell them how to act in certain situations and it is these maps that guide what they do, rather than the theories or reasons they tell others as rationalizations. While most people are aware of the theories they espouse to explain their own behaviour, few are aware of the maps or theories they actually use. Argyris and Schon call these two types “Theories of Action”. These theories govern behaviour in implicit ways and they contain assumptions about the self, others, and the environment. The “espoused theory” is made up of the words that we use to convey what we do or what we like others to think we do. The “theory-in-use” is the theory that governs what we actually do. Reflection is the process by which individuals engage in thinking about the mismatch between what they say they do (their intentions) and what they actually do (their outcomes). Argyris and Schon argue that personal effectiveness lies in developing the reflective capacity to reduce the distance between the espoused theory and the theory-in-use.
3.1.2 Single- and Double-Loop Learning

Argyris and Schon also outlined two different kinds of learning: single-loop learning and double-loop learning. Single-loop learning is adaptive learning that focuses on incremental change within an existing system. It is about error detection and correction. It solves problems but ignores the question of why the problems arose. This kind of error correction permits an organization to carry on its present policies or achieve its present objectives; in other words, it allows people to maintain the current theory-in-use. Single-loop learning functions like a thermostat that detects that it is either too hot or too cold and adjusts. The criterion for success for single-loop learning is effectiveness.

Double-loop learning is learning that focuses on transforming the existing way things are done. Double-loop learning uses feedback from past actions to question the assumptions underlying current views and the current system structure. Double-loop learning detects and corrects errors in ways that involve the modification of the organization’s underlying norms, policies, and objectives. It often involves individuals having to understand how they

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143 Note: single- and double-loop learning should not be confused with Christine Parker’s triple learning loop referenced in Chapter 2. Parker’s loops simply involve three different participants. Argyris and Schon’s loops are the depth to which learning takes place – either within the framework of the existing assumptions and system or changing the existing assumptions or system.


145 Argyris (1978) supra note 140 at 18.

146 Ibid at 3.

147 Ibid at 29.


149 Argyris (1978) supra note 140 at 3.
themselves contributed to the problem they are trying to correct. It can involve a lot of reflective activities and may require modifications to the current theory-in-use.

The difference between single-loop learning and double-loop learning can best be described as the difference between learning a new way to do something and learning a new way to think about something. Single-loop learning is safe and allows individuals to follow routine or some pre-set plan. It is usually present when “goals, values, frameworks and, to a certain extent, strategies are taken for granted”. Reflection in single-loop learning is limited to making the strategy more effective. In contrast, double-loop learning “involves questioning the role of the framing and learning systems which underlie the actual goals and strategies”. Double-loop learning is more creative, reflective, and, more importantly, risky. It is risky because it often involves questioning the underlying assumptions of a goal or strategy – in a public or group forum. The diagrams of single- and double-loop learning are attached as Appendix E.

3.1.3 Compliance and Adherence

The difference between single- and double-loop learning is extremely important for corporate law and regulation because if individuals can engage in double-loop learning related to desired regulatory outcomes then they will have learned not only to change their behaviour but also to change the way they think about behaving. The difference between single-loop and double-loop learning in relation to dialogic regulation will be referred to as the difference between “compliance” and adherence”. Compliance is simply single-loop learning of desired


151 Ibid.
regulatory outcomes and refers to the regulatory participants’ ability to change their behaviour to match the new regulatory outcomes. Compliance, as used in this way, is doing what someone else wants you to do whether you believe it is the right thing to do or not.\textsuperscript{152} Adherence is the outcome of a double-loop learning process of the desired regulatory outcomes and refers to the participants’ changed way of thinking about the regulatory outcomes, or, in other words, learning why the regulator changed the outcomes and accepting those changed outcomes into their own mental maps. Adherence has a different meaning than compliance. Adherence means support for a cause or idea or faithful attachment and devotion.\textsuperscript{153} Dialogic regulation argues that adherence is a better regulatory outcome than compliance and that dialogue and dialogic coaching is better at generating adherence than traditional regulatory approaches.

Traditional command and control and market-based types of regulation are only designed to coerce (or incent) single-loop learning or changes in behaviour and it is unlikely that they will promote double-loop learning. One way to understand this is to conceive of three different kinds of behaviour modification: coercion, inducement, and persuasion. Coercion is forcing a modification in behaviour through threat of punishment. This is the approach to behaviour modification built into the assumptions of command and control regulation: “do this – or else.” Inducement is behaviour modification through providing incentives or rewards (financial or otherwise) for desired behaviour. This is the approach to behaviour modification built into the assumptions of market-based regulation: “if you research a technology important to the

\textsuperscript{152} For example, Webster’s defines compliance as: “1) Act or practice of complying; yielding as to a desire, demand, or proposal, 2) a disposition to yield to others.” See \textit{Webster’s New Collegiate Dictionary} (New York: Merriam Webster, 1959) at 169.

\textsuperscript{153} For example, Webster’s defines adherence as: “Quality, act or state of adhering; . . . steady or firm attachment; fidelity as to party or principle.” See \textit{Webster’s New Collegiate Dictionary} (New York: Merriam Webster, 1959) at 11.
government, you will get a tax credit.” Persuasion is behaviour modification by getting someone else to adopt your view. This is the assumption behind the new learning approaches to regulation: “we comply with safety regulations because we believe that safety is our number 1 priority.” Both coercion and inducement are relying on external factors to force behavioural change; they are not focused on internally changing the way people think. Only persuasion focuses on internal behaviour modification, and that kind of modification is greatly increased with double-loop learning.

Unfortunately, double-loop learning is extremely difficult to accomplish. Argyris has shown, through years of research, that the way individuals act in organizations inhibits double-loop learning – especially when there is something important at stake. The result is that double-loop learning rarely occurs when it is most needed.

Argyris and Schon set up two models that described individual theories-in-use that either inhibit or enhance double-loop learning. They referred to them as Model I and Model II.¹⁵⁴ They believed that people used these theories-in-use when confronted with problematic situations. Model I involves “making inferences about another person’s behaviour without checking with whether they are valid and advocating one’s own views abstractly without explaining or illustrating one’s reasoning.”¹⁵⁵ This theory-in-use is shaped by individual desires to win and not to be embarrassed because exposing our “actions, thoughts, and feelings can make us vulnerable

¹⁵⁴ There are similar organizational versions of these models called O(I) and O(II).

to the reaction of others.”¹⁵⁶ It is usually associated with action strategies dominated by unilateral control and unilateral protection of the self and others.¹⁵⁷ Model I often leads to deeply entrenched defensive routines at the individual, group, or even organizational level.¹⁵⁸ Model I is summarized in Appendix F-1.

Argyris has stated that most of the participants in his studies operated from theories-in-use or values consistent with Model I¹⁵⁹, but when asked they would usually espouse Model II. Model II is based on an approach that looks to include the views and experiences of participants rather than imposing one’s own view on a situation. In this model, positions are reasoned and open to exploration by others. It is a more dialogic approach to problem resolution that involves shared leadership. OD scholars Edmundson and Moingeon have argued that employing Model II in difficult interpersonal situations “requires profound attentiveness and skill for human beings socialized in a Model I world.”¹⁶⁰ Model II is summarized in Appendix F-2.

Chris Argyris’ research focused on how to assist organizations in learning how to increase their capacity for double-loop learning, which involves teaching individuals how to move from Model I theories-in-use to Model II theories-in-use. He coined the term “deutero learning” to refer to the process of learning to learn better.¹⁶¹ In this perspective an organization

¹⁵⁶ Mark Smith (2001) supra note 152.
¹⁵⁷ Ibid.
¹⁵⁹ Chris Argyris, Strategy, Change and Defensive Routines (Boston: Pitman, 1985) at 89.
¹⁶¹ This term applies to learning either single- or double-loop learning.
is the rules and interactions of individuals who have organized themselves, and organizational learning is changes to those rules.\textsuperscript{162} Argyris and Schon call this the group’s theory of action, which is “a complex system of norms, strategies, and assumptions” embedded in their processes of interaction.\textsuperscript{163} In the case of the corporation, it can be argued that the corporation’s theory of action is the corporation’s culture. This theory of action resides in the thoughts of each individual in the organization and manifests itself in the form of physical images, texts, and maps – for example, organizational charts, corporate procedures, codes of conduct, corporate values, vision statements, etc. Each member of the organization is constantly trying to complete their version of the organizational theory-in-use, because as humans we are all sense-making beings who constantly try to understand the world around us. However, each member’s understanding of the organization theory-in-use is always incomplete.\textsuperscript{164}

For Argyris and Schon organizational learning is “a process mediated by the collaborative inquiry of individual members”\textsuperscript{165} and organizational learning is a continuous process that is required by all organizations in order to ensure their survival.\textsuperscript{166} Organizational learning is different to individual learning.\textsuperscript{167} The difference is one of agency. The individual is the agent of organizational learning.\textsuperscript{168} Organizations require individuals to exist and

\begin{flushleft}
\textsuperscript{162} Argyris (1978) supra note 140 at 13.
\textsuperscript{163} Ibid at 15.
\textsuperscript{164} Ibid at 16.
\textsuperscript{165} Ibid
\textsuperscript{166} Ibid at 9.
\textsuperscript{167} Ibid at 9.
\textsuperscript{168} Ibid at 19.
\end{flushleft}
organizations can only learn through the experience and actions of individuals.\textsuperscript{169} However, organizations are not simply collections of individuals, nor is organizational learning merely individual learning. There are lots of examples where the organization knows less than the individuals involved. Individuals reaffirm the existing patterns of the organization when their own theories of action are consistent with the organization theory-in-use. Individuals are agents of change when changes in their theories of action run counter to the existing organization theory-in-use. Organizational learning occurs when “individuals, acting from their images and maps, detect a match or mismatch of outcome to expectation which confirms or disconfirms organizational theory-in-use.”\textsuperscript{170} They continually change the theory in use, which is then recorded in the images and maps of the organization. As a result, organizing is a reflexive inquiry of collaborating individuals.\textsuperscript{171}

Because of the personal and emotional risk involved in that kind of reflective process, conflict plays an important role in organizations that are actively engaged in double-loop learning.\textsuperscript{172} Therefore, double-loop learning is the process by which groups of managers confront and resolve conflict. If the conflict takes the form of a fight with one side winning all, which is not double-loop learning because neither side emerges from the conflict with a new meaning of the organization, more likely the organization’s dominant theory-in-use will prevail. If they

\begin{footnotes}
\item[169] Ibid at 9.
\item[170] Ibid at 19.
\item[171] Ibid at 17.
\item[172] Ibid at 22 where they state that in organizational double-loop learning, “incompatible requirements in organizational theory-in-use are characteristically expressed through a conflict among members and groups within the organization.”
\end{footnotes}
engage with each other collaboratively, they can solve the problem and come to a new understanding of what that means for the way they interact with each other.

Individuals, organizations, and societies are built to inhibit double-loop learning. This creates stability and avoids conflict. We tend to keep our conflicting ideas private, we let failures lie buried, and we do not share our mental maps with others. The result is that so many of our views of others and the organization remain fragmented, incomplete, and often incorrect. All of this limits the possibility for collaborative inquiry and inhibits learning. Learning also gives rise to anxiety because it causes one to shift one’s individual and collective identity, which is existentially threatening. Therefore, it becomes really important to understand how people respond to anxiety and shut down learning processes to make themselves feel comfortable.

The skills to engage in double-loop learning can be learned. It is possible to intervene in organizations to reduce these inhibitions to learning. Such interventions are focused on decreasing the defensiveness of individuals and groups within the organization. They also encourage people to take risks and confront inconsistencies, and they teach people that public testing of assumptions, plans, and strategies is not harmful.

These types of learning ideas were made popular and available to corporate actors with the publication of Peter Senge’s book The Fifth Discipline in 1990. Senge took a novel approach in combining the psychological work on learning from Argyris and Schon with the emerging

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173 Ibid at 4.
174 For a discussion of these defensive behaviours, see Gervase Bushe, Clear Leadership: Sustaining Real Collaboration and Partnership at Work (Boston, MA: Davies-Black, 2009).
176 Argyris has engaged in this practice for a few decades.
thoughts from systems theory to develop an overall systematic approach to organizational learning. He coined his ideal organization the “Learning Organization”. For Senge a learning organization is an organization where “people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.”\(^{177}\) For Senge, a learning organization is an organization that has mastered the five disciplines of a learning organization, which are:

1. The Discipline of Personal Mastery  
2. The Discipline of Mental Models  
3. The Discipline of Building a Shared Vision  
4. The Discipline of Team Learning  
5. The Discipline of Systems Thinking

The discipline of personal mastery is the discipline of “continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively.”\(^{178}\) This refers to the ability of individuals in the organization to become better learners. For Senge an “organization’s commitment to and capacity for learning can be no greater than that of its members.”\(^{179}\)

Mental models “are deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action.”\(^{180}\) These are very similar to the models about learning proposed by Argyris and Schon. Other scholars refer to

\(^{177}\) Senge (1990) *supra* note 146 at 3.  
\(^{178}\) *Ibid* at 7.  
\(^{179}\) *Ibid* at 7.  
\(^{180}\) *Ibid*
these maps as cognitive schemata or percepts.\textsuperscript{181} A learning organization is able to explore mental models and engage in meaningful dialogue that allows these models to change.

The discipline of building a shared vision is important because “[w]hen there is a genuine vision . . . people excel and learn, not because they are told to, but because they want to.”\textsuperscript{182} Senge agrees with Argyris & Schon that “teams, not individuals, are the fundamental learning unit in modern organizations.”\textsuperscript{183} He built this into his discipline of team learning. He argued that if teams could not learn, the organization could not learn. For Senge, the discipline of team learning is based on the ability of team members to engage in dialogue. Dialogue has a specific meaning for him: it is “the capacity of members of a team to suspend assumptions and enter into a genuine ‘thinking together’.”\textsuperscript{184} The word dialogue comes from the Greek word “dialogus”, which meant “a free-flowing of meaning through a group, allowing the group to discover insights not attainable individually.”\textsuperscript{185} Dialogue can be contrasted to discussion, which is simply the hurling of ideas back and forth at each other with a “winner take all” attitude.\textsuperscript{186}

Finally, systems thinking is the ability to step back from a fragmented linear understanding of a situation and take a holistic and complex view that includes indirect and interdependent causality.\textsuperscript{187} Senge calls systems thinking the “5th Discipline” because it is the

\textsuperscript{181} See Bushe (2009) supra note 176 at 7.
\textsuperscript{182} Senge (1990) supra note 146 at 9.
\textsuperscript{183} Ibid at 10.
\textsuperscript{184} Ibid at 10.
\textsuperscript{185} Ibid at 10.
\textsuperscript{186} The word discussion has its root in percussion or concussion. See Ibid at 10.
\textsuperscript{187} Social processes are circular and filled with feedback loops but we tend to think in linear ways, so we still use the term causality in systems thinking.
discipline that brings all the other disciplines together. None of the five disciplines on its own is enough – but when they are all drawn together with systems thinking they fuse into “a consistent body of theory and practice” that when used makes organizational learning possible.\textsuperscript{188}

The switch to become a learning organization is a significant shift of mind for organizational participants: a shift from seeing themselves as separate from the world to connected to the world, and from seeing problems as caused by external forces to seeing how they themselves create their own problems. For Senge, a learning organization “is a place where people are continually discovering how they create their reality” and how they can change it.\textsuperscript{189} Senge shares the view of Argyris and Schon that the primary things that get in the way of organizational learning are conflict, mental maps, and defensive routines.

The influence of complexity theory and postmodern language theory can be seen throughout Senge’s work. One significant example is his discussion of the three core learning capabilities for teams inside a learning organization, which Senge describes as: “fostering aspiration, developing reflective conversation, and understanding complexity.”\textsuperscript{190} He argued that as the world becomes more complex and dynamic we all must work together to become more “learningful”.\textsuperscript{191}

One major drawback of the early attempts to integrate systems theory into organizational learning, including Peter Senge’s approach, was that when it was put into practice the organization tended to be anthropomorphized. For example, Senge’s work led to a practitioner

\textsuperscript{188} \textit{Ibid} at 12.

\textsuperscript{189} \textit{Ibid} at 12. He refers to this “shift in mind” as metanoia – the Greek word meaning shift of mind.

\textsuperscript{190} \textit{Ibid} at xii.

\textsuperscript{191} \textit{Ibid} at 4.
boom about “learning corporations” and what the corporation needed in order to learn. When the corporation becomes anthropomorphized it is easy to forget that organizations do not learn – people do. An organization is not an organism – you cannot point to it. It is more like an ecosystem. It is the system that results from the interaction of all the things you can point at. So, if learning involves people, then the focus of organizational learning needs to be down at the individual interaction level (the level of small groups) and not the system level.

The anthropomorphization of the corporation can be seen in some of the recent corporate law and regulation initiatives, for example the SEC’s corporate monitorships. The attempts by corporate monitors to change corporate culture have often focused around implementing a new code of conduct for the subject corporation. This is a system level fix that is not focused on individuals. In the Theory of Action learning perspective, that new code of conduct will only exist in the corporation to the extent that it is taken up into each individual employee’s theory of action for the corporation. Often the code of conduct is introduced with a simple training exercise and the signing of the code. This may not be enough because the kinds of changes intended with a change in the code of conduct are only possible in double-loop learning. But double-loop learning is most inhibited under the circumstances in which the corporate monitors are trying to make these changes: meaningful and stressful situations that are existentially challenging to corporate employees. To our knowledge, none of the corporate monitors to date have engaged in any OD practices to assist the employees with double-loop learning while engaged in their monitorships.

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193 Ibid at 238.
Therefore, the question remains: How do you cause the kind of transformational organizational change that requires double-loop learning? It has been an elusive goal for many OD practitioners and approaches. However, a developing movement in OD called Dialogic OD has the potential to cause these kinds of transformational changes by leveraging important insights from two additional intellectual movements in the social sciences to cause change in organizations. OD theorist Gervase Bushe has identified those two intellectual movements as chaos theory’s understanding of dynamic non-linear systems and the postmodern focus on the importance of language and discourse. In the next two sections, I will summarize the influence of these movements on Dialogic OD and then describe Dialogic OD.

3.2 Chaos Theory – Self-Organizing Systems

In modern science, the term “Chaos Theory” is used to refer to the study of complex, non-linear, and dynamic systems. Chaos theory emerged from the study of non-linear systems and the ability of computers to model non-linear equations over millions of interactions. Then people began making the link between physical non-linear systems, like the weather, and living systems. The application of systems theory to living things is called complex adaptive systems theory (CAS). CAS has four basic principles:

1. Complex adaptive systems are at risk when they are in equilibrium because equilibrium is a precursor to death;
2. Complex adaptive systems exhibit the capacity for self-organization and emergent complexity;

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195 A lot of work came out of the New Mexico Santa Fe Institute.
196 In the context of organizational development and corporate change CAS is often associated with the work that Arie de Gues did at Royal Dutch Shell. His most recognized book evidencing a natural systems approach is Arie de Gues, *The Living Corporation* (London: Nicholas Brealey, 1997).
3. Complex adaptive systems tend to move toward chaos when confronted with a complex task; and
4. Complex adaptive systems cannot be directed only disturbed.\textsuperscript{197}

While CAS is a natural systems perspective, these four principles can also be applied to dialogic systems. OD and business scholars have leveraged its insights to understand how organizations change. These four principles will be applied to the corporation as a dialogic system in four sections below: surfing the edge of chaos; emergence, including a discussion of the “butterfly effect”; learning complex tasks; and disturbing complex systems.

3.2.1 Surfing the Edge of Chaos – The Myth of Equilibrium

Richard Pascale is a business scholar who uses complexity and chaos theory to understand business organizations. In 1999, he wrote an important article called “Surfing the Edge of Chaos.”\textsuperscript{198} He argued that organizations exist in one of three states: organized, self-organizing, and chaotic. A diagram of these states is included as Appendix K. An “organized” organization is an organization that is in equilibrium – one where everyone knows what to expect all (or most) of the time. In chaos theory, an “organized” organization is one that is in trouble because it will have a hard time learning and generating the new ideas that are crucial for its survival. A “self-organizing” organization is one with a certain amount of emergent qualities. Centralized organizational patterns are present but they are more like guidelines and individuals are allowed to organize themselves. This state allows for the generation of novel organization


\textsuperscript{198} Ibid.
patterns, the generation of new ideas, and promotes the learning that is necessary for the organization to survive. A “chaotic” state is problematic for an organization because without any structure it will cease to exist. Pascale’s term “Surfing the Edge of Chaos” refers to the delicate balance that is required to maintain an organization in a self-organizing state without tipping over into chaos.\(^{199}\)

Corporate theory, corporate law, and economics assume that organizations, markets, and economies are naturally in an equilibrium state. This idea is really just an assumption and it has never been proven to be true.\(^{200}\) In fact, as we learn more about complex social systems comprised of interdependent human actors interacting, the more we realize that corporations, markets, and economies are anything but in equilibrium and we do not want them to be. When conceived of as complex, dynamic and non-linear systems, most corporations are self-organizing systems that must constantly learn and innovate or else they fail in the same way complex adaptive systems do. This is one of the well-known paradoxes of corporations. On one hand, they need to have a vision, value system, and culture that creates strong bonds amongst corporate participants. On the other hand, they need to create dis-equilibrium in order to promote uncertainty, learning, and innovation in order to survive. It is a delicate balancing act and straying too far in either direction may result in the failure of the organization. OD scholar Gervase Bushe calls this “learning while performing” and it is the holy grail of OD and most corporate management teams.

\(^{199}\) For the description of surfing the edge of chaos see Ibid at 67-72.

\(^{200}\) This assumption is part of the dominant narrative in philosophy that social systems are stable with periods of change. This assumption is now under attack from many different sources that contend that social systems are ever-changing with periods of stability.
“Surfing the edge of chaos”\textsuperscript{201} is very important from an organizational perspective because when an organization is in that state it is at its peak performance in three major components of organizational success: engaging the processes of self-organization and emergence, leveraging sensitive dependence and changing the initial conditions of its organizing patterns (or what has popularly become known as the “butterfly effect”), and learning and generating new ideas.

\textbf{3.2.2 Emergence and Self-Organization}

In chaos theory, emergence is the capacity of complex non-linear systems to have an orderly state emerge out of a chaotic state.\textsuperscript{202} This idea was first postulated by chemist Ilya Prigogine when he argued that order could appear out of chaos in a seemingly natural and inexorable manner without the benefit of an external organizer.\textsuperscript{203} He based this idea on his observation of how chemicals acted in a self-organizing way – for example, the way molecules act in the boiling water of a teapot: at first they move around frantically in seemingly random patterns until they hit the boiling point, when they all organize into stable and repeated patterns of movement.

Emergence is best illustrated by describing an experiment conducted by geneticist Stuart Kaufman at the Santa Fe Institute. Kaufman was interested in discovering how individual genes that execute their instructions simultaneously fall into regular patterns that allow the replication


\textsuperscript{202} Pascale (1999) supra note 200 at 58.

of a species. To investigate this he designed a simple replication of a genetic system. He had 100 light bulbs. They all had instructions to turn on or off independently according to their own instructions. No governing system existed and so his hypothesis was that the random behaviour of the light bulbs would settle into random patterns. The results of the experiment were astonishing. Within a few minutes the system always settled down into a few more or less orderly states. This is emergent complexity – orderly systems that arise out of chaotic states where independent nodes are all operating according to their own instructions.

Another example of how to explain emergence is to use the concept of fractals from geometry. A fern has a simple set of initial rules on the construction of its body – its genetic code. As it repeats the set of instructions on a strand of a leaf, a leaf, a branch, or the overall plant, a complex system emerges that resembles the initial structure specified by the genetic instructions. The single pattern of the initial genetic instructions is repeated at ever-greater levels of complexity. The complete fern is the emergent complexity from the replication of the initial set of instructions at increasing levels of complexity, with higher levels of complexity emerging from lower levels of complexity.

OD practitioner Harrison Owen has used these insights from chaos theory to create the self-organization hypothesis: “All human systems are self-organizing and naturally tend toward high performance provided that the essential preconditions are present and sustained.” The implicit idea in this hypothesis is that self-organization is the key to high performance. But how

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204 This analogy was taken from an article by Margaret Wheatley, see Margaret Wheatley, “Chaos and the Strange Attractor of Meaning” in Ralph Stacey, et al, Complexity and Organization: Readings and Conversations (New York: Routledge, 2006) at 101.
does emergence work? In human social systems (like corporations) the process of emergence works in a predictable pattern:\(^{205}\)

1. The organization moves out of an equilibrium state because of an internal or external event (usually a complex problem it is unable to solve with current patterns of organization).

2. There is a breakdown of existing structures and events occur that sever possibility of ever going back to the previous equilibrium state.

3. There is a period of experimentation with new organizing patterns.

4. Order re-emerges in the system.

The key to this process is that organizations learn when they are confronted with complex new situations and in order to learn they are required to confront and consider the assumptions they have about the way they organize or do business. In order for this to work the social system needs to have rich networks for communications to flow.

### 3.2.3 Learning Complex Tasks and Generating New Ideas

Corporations that surf the edge of chaos learn better because they are leveraging the power of self-organization and emergence. That is because the most meaningful learning (double-loop learning) involves the challenging of assumptions and plans.\(^{206}\) In an “organized” organization this kind of challenge is often not accepted or there are programmed responses or feedback loops designed to stop this kind of questioning from occurring. In a “self-organizing” organization these kinds of conversations are often normal. As an organization is challenged with

\(^{205}\) When chaos theory ideas have been applied to small groups it has generated interesting results where systems had transformative change – there appears to be a common set of events. For examples see Priorogine & Stengers (1984) * supra* note 206 and C. Smith and G. Gemmill, “A Dissipative Structure Model of Organization Transformation (1985) 38(3) Human Relations 751.

\(^{206}\) This statement is based on Chris Argyris and Donald Schon’s theory of action learning model, which was described in detail earlier in this chapter. See note 140.
complex tasks they move towards chaos because the normal responses and procedures in the organization cannot find a suitable solution for the task. A new solution is required and that often means changing the basic ways that the organization functions. One way to understand the underlying organizational assumptions from a chaos theory perspective is to conceive of them as the initial conditions of the system – the pattern of organizing that then gets repeated as a fractal. For example, if the rules of interaction or cultural fractal contain distrust, self-interest, and a preference for competition it is almost certain that the emergent organization or social system will also contain those characteristics – often in an amplified way. In contrast, if the fractal contains trust, dialogue, and temperance the emergent social system may be different.207

3.2.4 The Butterfly Effect

Complex non-linear systems are extremely sensitive to variations in their initial set of conditions. Tiny variations in the initial conditions can be amplified through repetition and cause unpredictable and disproportionate outcomes in the system. This property of non-linear systems is called “sensitive dependence”. It was made famous by Lorenz, who labelled it the “Butterfly Effect”. In 1963, Lorenz was working on a computer model that predicted weather patterns. In setting up the model he accidentally entered an initial variable as .506 instead of .506127. The result was a completely different weather pattern than the one generated using the full number.208 Lorenz coined the metaphor “butterfly effect” to explain this sensitivity to initial conditions. The metaphor goes something like this: Does the flap of a butterfly’s wings in Brazil set off a tornado

207 It is interesting to note that this is not a new idea at all. In fact, this is one of the oldest ideas we have – and many of the word’s religions are based on this idea.

208 He published this finding that complex non-linear systems are extremely sensitive to initial conditions in his 1963 paper, see Edward Lorenz, “Deterministic Nonperiodic Flow” (March 1963) 20(2) Journal of the Atmospheric Sciences 130–141.
in Texas? The answer is yes.209 Sensitive dependence states that complex non-linear systems (like organizations and social movements) are extremely sensitive to the initial sets of conditions (the conversations people have that replicate the organizational culture). Small changes in the initial set of conditions can have dramatic non-proportional (non-linear) effects on the emergent systems.

In the context of organizations, sensitive dependence means that if an organization is surfing the edge of chaos, small changes in the way people interact with each other or in the conversations they have with each other can have dramatic and transformative effects on the organization. The “tipping point” or “bifurcation point” is the point at which enough small changes have happened that the system switches over and a new pattern emerges.

Complex non-linear systems are not random. They still follow deterministic laws. They are in effect path dependent and future states depend on prior states.210 However, because of their sensitivity to initial conditions it becomes very difficult to predict long-term outcomes in complex non-linear systems because each component of the system is caught in a complex non-linear feedback loop. Each time the component engages in a feedback loop it can carry out the initial set of conditions or it can vary them. If the initial conditions are repeated it leads to stable (and predictable) outcomes. If the initial conditions are varied it can lead to unstable (and

209 In fact, Lorenz did not refer to a butterfly at all but rather a seagull. The more elegant butterfly was developed through later speeches. For a description of Lorenz’s contribution to chaos theory and the butterfly effect, see Tim Palmer, “Edward Norton Lorenz” (2008) 61 (9) Physics Today 81. For Lorenz’s papers containing the ideas that would lead to the butterfly effect, see Edward Lorenz, “Three approaches to atmospheric predictability” (1969) 50 Bulletin of the American Meteorological Society 345 and Edward Lorenz, “Atmospheric predictability as revealed by naturally occurring analogues” (1969) 26 Journal of the Atmospheric Sciences 636.

unpredictable) outcomes. The feedback loops are the deterministic structure of the system. The ability to vary the initial set of conditions is the non-deterministic property of the system. The interaction of these two effects is referred to as “bounded instability”. Short-term predictions of chaotic systems are possible because the ability for the variation in the short term will most often be limited. For example, weather predictions are usually good up to about a week.

3.2.5 Directing vs. Disturbing Complex Systems

The consequence of applying the lens of chaos theory to corporations is that the difficulty in predicting the end result of an intervention or change in a complex non-linear system becomes understandable. In every conversation the current patterns may be reinforced or they may be changed. The result of all those conversations just emerges. Emerging complexity creates multiple futures. Chaos theorist Richard Pascale said it this way:

One consequence of emerging complexity is that you cannot see the end from the beginning. While many can readily acknowledge nature’s propensity to self-organize and generate more complex levels, it is less comforting to put oneself at the mercy of the process with the foreknowledge that we cannot predict the shape that the future will take. Emerging complexity creates not one future but many.²¹¹

It also means that it is very difficult to direct complex systems because there are weak cause and effect relationships. Greater precision is neither sought nor possible. This idea, when applied to corporate law and regulation, calls into question the whole idea of command and control regulation that is attempting to direct corporations towards specific regulatory outcomes. The idea also calls into question the notion of managerial control and strategic planning because it may not be possible to plan and control activities in a corporation.

²¹¹ Pascale (1999) supra note 200 at 65.
Harrison Owen has presented a few examples of how control and planning are really just illusions in corporations. His first example is that of the corporation’s organizational chart – how come it always seems to be out of date and should not be trusted? His second example illustrates further the limits of the formal system within a corporation: he uses the example of a labour union’s “work to rule” campaign where workers are only doing what the rules say they should do. In this situation, management should be happy – but they rarely are. That is because “if we actually did business the way we say we did business, we would be out of business.”212 Owen goes so far as to argue that control is really the enemy of high performance. In his words, the only way to make sure his OD practice Open Space will not work is for someone to take control.213 As a result of these realizations there are new types of corporate planning called improvisational planning and leadership within corporations being developed.214

The result of attempts at planning and control in self-organizing systems is usually unintended consequences. This is because the attempt at control is unable to understand the full complexity of the system and while it may cause the effect desired in the direct relationships, it will usually have counter-effects in other areas not considered when the control was designed or planned. Pascale provides two examples of attempted interventions in complex systems that had dramatic unintended consequences. In the first, the Forest Service in Yellowstone Park attempted to eliminate forest fires by putting them out every time they happened. In effect, they wanted to maintain the ecosystem of the park in an equilibrium state. The result was that 100 years of dead


213 *Ibid* at 130.

material accumulated until eventually the fire that erupted could not be put out and living things and top soil that otherwise might have survived was destroyed. In the second example, the U.S. Fish and Wildlife Service tried to control the coyote to protect sheep and cattle ranchers. They spent $3 billion over 100 years for a variety of measures, including bounty hunters, traps, poison, and genetic technology. The result was that the modern-day coyote is 20% larger and significantly smarter than its predecessors and can be found in 49 of the 50 states instead of the 12 states that were its traditional habitat.

Emmanuel Ogbonna and others have studied the impact of unintended consequences on organizational interventions. They argue that there will always be anticipated consequences and unanticipated consequences of every managerial action and that unintended results come from the divergences in the ways individuals intervene in or take up the managerial action. In a case study in culture change initiatives in eight companies where they were looking for unintended consequences, they found that “in each company, the desired change had been undermined by at least one unintended consequence, which was accepted by members to have either slowed or even stopped the change programme.” The conclusion of the study was that practitioners “should be wary of culture change programmes or models that promise totally predictable change, and should embrace guidance that appreciates and incorporates unpredictable

216 Ibid at 69-70.
219 Ibid at 37.
effects.”\textsuperscript{220} A second case study of attempted culture changes in the grocery retailing industry showed the same results for change initiatives aimed at corporate managers who, the authors hypothesized, should have been more accepting of culture change processes.\textsuperscript{221} The conclusion of that study included the following: “we find it difficult to accept any notion that changing the organizational context would be easy, or indeed would be considered suitable for systemic pursuit.”\textsuperscript{222}

In the realm of corporate regulation there are many examples of unintended consequences. For example, sociologist Chalmers Johnson has argued that the United States’ attempt to legislate away the Zaibatsu in Japan after the Second World War just led to the creation of the Kieretsu\textsuperscript{223} and sociologist Neil Fligstein has argued that U.S. anti-trust laws attempt to break monopolies of trust power in the U.S. triggered the creation of the large multi-national corporations.\textsuperscript{224}

3.2.6 Chaos Theory and the Corporation

The application of chaos theory concepts to the corporation has a long history.\textsuperscript{225} One of the first was Peter Viall in 1975 in his article “Towards a Behavioral Description of High Performing Systems.” His ideas led to the famous work by Peters and Waterman, \textit{In Search of Excellence}, where they argued that excellence kept showing up in organizations – just not where

\begin{itemize}
\item \textsuperscript{220} \textit{Ibid} at 46-47.
\item \textsuperscript{221} \textit{Ibid}.
\item \textsuperscript{222} Ogbonna & Wilkinson (2003) \textit{supra} note 220 at 1174.
\item \textsuperscript{223} See Chalmers Johnson, \textit{MITI and the Japanese Miracle} (Stanford: Stanford University Press, 1982).
\item \textsuperscript{224} See Fligstein (1990) \textit{supra} note 118.
\item \textsuperscript{225} These historical notes are summarized from Harrison Owen, \textit{supra} note 215 at 26-40.
\end{itemize}
it was expected and not according to plan. Their book and the OD practice that resulted from it called Operational Excellence led to a revolution in management practice and theory. Jerry Collins also found that excellence occurs not according to plan and where it is least expected in a popular recent study, described in his book *Good to Great*. After studying a large sample of Fortune 500 companies to determine what made great companies become great while their competitors floundered, Collins’ team identified what they called Level 5 Leadership as one of the characteristics of great companies.\(^\text{226}\) Collins argued that the way to identify these leaders in an organization is to look for excellence where no one is taking credit for it.

In a more recent example, the properties of self-organizing systems were used by AT&T during the preparation for the 1996 Olympics when they used Harrison Owen’s Open Space Technology to fast track 10 months of design and planning for their pavilion in Olympic Village into a 2 day contractor summit. 25 contractors came to the summit with lots of difficult history and a blank page to design from.

Open Space, developed by Harrison Owen, is an example of a self-organizing dialogic process that leverages the insights of chaos theory. It involves collecting a large group of people in an empty room, with no agenda, and letting them do whatever they want. The rules are simple: anyone can suggest a topic and become the leader for that topic in a breakout session. Four principles then apply: 1) whoever comes are the right people; 2) whatever happens is the only thing that could have; 3) whenever it starts is the right time; and 4) when it’s over, it’s over. One

\(^{226}\) Level 5 leaders are leaders who “build enduring greatness through a paradoxical blend of personal humility and professional will.” See 131.\(^{2001}\) *supra* note at 20.
law also applies: the law of two feet. If you are not contributing or getting value where you are, use your two feet to go somewhere else.227

In order for Open Space to work a few characteristics need to be present:

1. Need a real issue – something people care about.
2. Voluntary self-selection – people come because they cared to come.
3. High levels of complexity – a situation that is so complex no one person can figure it out.
4. High levels of diversity in participant group.
5. Presence of passion and conflict combined with urgency.228

The outcome of Open Space is a community of people that are drawn together in a “nexus of caring.” Owen describes the magic of Open Space in the following way: “When caring people gather around something they care about there is a high likelihood that useful things will happen.”229

But all of this may be hard to believe for some because it is so far removed from conventional thinking about the way to manage corporations and to run change initiatives in corporations. OD practitioner and theorist Peggy Holman stated this the best when she said that you need to fall flat on your face in a change effort to understand the power of emergence.230 Holman’s work is focused on how to leverage the capacity of corporations to self-organize and exhibit emergence. She argues that there are two types of change in an organization: small

229 Ibid at 76.
230 Peggy Holman, Engaging Emergence: Turning Upheaval Into Opportunity (San Francisco: Berrett Koehler, 2010) at xi.
incremental change with foreseeable outcomes, or spontaneous transformational change that occurs with emergence.\footnote{Ibid.}

Holman also argues that it may be possible to create “applied emergence” or actually create the conditions for emergence in an organization. She argues that in an emergent change no one is in charge and simple rules can engender complex behaviour. Peggy Holman’s argument is that to cause emergent change you simply need to change the rules of interaction. By interaction she means the social interactions between the organizational participants and she is using an expansive use of the word “rules” here that includes not just the formal rules of the organization but also the informal ones. In a corporation people follow simple rules to organizational assumptions. In order to do the least to cause the greatest change and benefit you just need to focus on changing those organizational rules and assumptions. For Holman, emergent change processes are “methods that engage the diverse people of a system in focused yet open interactions.”\footnote{Ibid at xi.} She uses the phrase “designing conversations that matter” to describe this.\footnote{Ibid at 47.}

Her model of change is very similar to the model of change for self-organizing systems in CAS:

1. Disruption: Change starts with disturbance – a new complex problem that the corporation is unable to solve.
2. Differentiation: Accentuate the differences that matter among people. Things start changing while in a state of chaos.
3. Coherence: A new understanding or system emerges.\footnote{Ibid at 10-18.}

This is the model of change within corporations adopted here for the dialogic regulation model.
3.2.7 **Chaos Theory, the Corporation, and Dialogic Regulation**

The insights of chaos theory when applied to the corporation as a complex human social system hypothesize that the initial set of rules (or fractal structure) of the corporation are the daily interactions, dialogues, and conversations amongst corporate actors. Corporate culture then is the context within which daily interactions are made possible and the emergent social system that is the result of all of those daily interactions. If the emergent corporate culture is not desirable the root cause of that problem probably lies in the interactions, conversations or dialogues happening at the small group level within the corporation. It also means that to change the corporate culture by leveraging the emergent properties of the corporations one needs to change the daily interactions of the corporate participants because any small change in those initial conditions can be repeated and taken up by many individuals and then emerge as a property of the overall corporate culture. How to change it in a desired direction is the question that Dialogic OD takes up. At some point, if small changes are repeated enough times a bifurcation or “tipping” point will be reached and a new culture will emerge.

In organizations, there are expected institutionalized interactions, which take the form of roles and scripted relationships between corporate actors. These institutions can be thought of as the bounded instability of the system. Corporate actors have no choice but to engage in the non-linear feedback loops which these institutions constitute. For example, corporate managers have to go to the weekly managers’ meeting, do annual performance reviews with all of their direct reports, etc. To the extent that there are institutionalized feedback loops or scripted interactions within which the corporate actors operate, the corporation social system is deterministic. Each

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time a corporate actor engages in these feedback loops, however, that agent is free to vary, ignore, or alter the institutional arrangements. Corporate actors still have the capacity for freedom of choice. For example, what they say or do at the weekly managers’ meeting or in their performance review meetings with their employees is their choice. Depending on the extent to which corporate actors change the rules or scripts, stable or unstable outcomes are possible. Complexity theorist Ralph Stacey refers to this as “transformative causality” because cause and effect links are circular and can lead to unexpected outcomes. In his words, patterns of interaction between human agents either reconstitute themselves though repetition or transform and evolve. If they evolve they can get amplified if many people take them up. Small immeasurable changes in patterns of interaction can escalate into major changes in the system but the direct causal relationship is lost in the complexity of what happens.

The idea that cultural change can happen simply by changing conversations probably seems a bit naive and hard to believe. So, I have developed a simple participatory exercise that can be completed in fifteen minutes that illustrates all of the basic ideas of emergence and corporate regulation firsthand for audiences. I use this exercise at conferences and workshops when I am talking about how changing conversations can change culture. The exercise is based loosely on the “Helium Stick” exercise used by consultants as a team building exercise. The exercise is perfect for illustrating emergence because it recreates a self-organizing system with

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238 Ibid at 82.
initial conditions, emergence, and an attempt at control, unintended outcomes, and the learning of a complex task.

The exercise works like this. You need at least eight people and a light stick like a broom handle. You get the people to stand in two lines facing each other with the arms out at chest height. Each person should make a “gun” sign in each hand and extend his or her hands into the middle. The stick then gets laid across everyone’s fingers so that their fingers are underneath the stick. At this point you have a system in equilibrium. Everyone is standing facing each other, the stick is flat, and everyone’s fingers are in contact with the stick and holding it up at chest height.

We normally proceed at this point by explaining the system we just created by telling the team that they are a corporation and the stick represents their environmental performance. If the stick is on the ground they are having no impact on the environment. If the stick gets to shoulder height they will have an environmental catastrophe like the Deepwater Horizon. Everyone is asked to acknowledge that the stick is in equilibrium and then it is removed for the next few minutes (it can have a tendency to act like helium during the instructions that follow).

The next step is to create the initial conditions in the culture of their organization. This is when the team is told that there is one rule in the corporation – your fingers must always be in contact with the stick. Next, the attempt at control is introduced. The facilitator states that they are the environmental regulator and that the environmental performance of the corporation is unacceptable. The regulator then instructs the team that a new law has been passed and that they need to put the stick on the ground. Simple? Understood? Great.

The stick is then put back on people’s hands and the regulator watches diligently. Every time someone’s fingers are off the stick they remind them to “keep your fingers in contact with the stick”. The result – without exception – is that the stick rises, usually very fast to above
shoulder height. At this point we take the stick away and we say, “You failed. What happened? Were we not clear enough? Did you not hear us? We want the stick on the ground. Let’s try again.” People are usually surprised and willing to try again. If it is done quickly before people are allowed to start a “self-organization” process, the same result will occur. If they do start self-organizing – we usually play a trick on them after the second failure by stating that as regulators we need to punish the corporation and so we are going to put the CEO in jail, and we always pick the person who was beginning to organize people – it has the effect of slowing down the self-organizing process.

The exercise gets really interesting at this point because the only way to solve the problem is for the team to start challenging its own assumptions and to self-organize under new assumptions. Often they start by setting a count to lower the stick or agree to bend their knees to lower at the same time – and it usually involves someone taking the lead. While they will make progress doing this, it is not the solution to the problem because the stick can never get on the ground while their fingers are under it. Inevitably, after about ten minutes, someone will ask one of the two crucial questions: “Why do our fingers always need to be in contact with the stick?” or “Why are we holding our hands like guns? Why don’t we just grab the stick in our hands and put it on the ground?” This solution came via a demonstration at the Canadian Business Ethics Research Network and it is a brilliant solution. That team was able to put the stick on the ground within two seconds after struggling with the exercise for the previous ten minutes after having lost their CEO member to jail in the corner. The CEO continued to try to organize them by lobbing instructions to the team from jail. If we want a different outcome we should just question our own assumptions, change our behaviour, and achieve the future we want.
The exercise is also interesting at this point for what it shows us about the behaviour of the regulator. If the regulator is vigilant and active and does not provide the team the time to organize, the same result will keep happening over and over. More rules, laws, or re-stating the rules may not be helpful. Putting the CEO in jail, punishing and humiliating them, just shuts down conversation, slows down the self-organizing process, and usually prolongs the time until the solution is found. When the regulator steps back and asks the team “Do you understand the objective?” “Is everyone honestly trying to put the stick on the ground?” and the key one “What is stopping you from doing that?” and when these questions are combined with some time between attempts, the team can usually solve the problem very quickly.

This exercise illustrates all of the concepts introduced in this section on self-organizing systems and it also provides a quick insight into the change to regulation that will be required if corporations are considered to be self-organizing systems. To summarize the insights of the exercise:

- It creates a human social system in an equilibrium state.
- It sets initial conditions: hands in “guns” and fingers in contact with the stick.
- It introduces a new complex task to the system that cannot be solved with the current sets of organizing principles.
- It involves an attempt at control in a complex system (the regulatory outcomes).
- That attempt at control leads to unintended consequences – the stick goes up instead of down.
- The system goes into chaos and confusion until someone starts to ask the questions about the assumptions built into the initial conditions.
- Once the initial conditions are changed, the result is a dramatic and transformative effect on the system and the desired regulatory outcomes are achieved easily.
3.2.8 Conclusion

To summarize, in a chaos theory perspective of the corporation, the corporation is a self-organizing system: a complex human social system that is non-linear and dynamic. Therefore, it shares many of the characteristics of other self-organizing systems:

1. Corporations exhibit emergent qualities.
2. They are sensitive to initial conditions.
3. They are replete with feedback loops (both negative and positive).
4. There is no proportionality between cause and effect.
5. More complex levels of organization arise out of lower levels of complexity organization – for example actions and outcomes may arise out of corporate culture.
6. The patterns and content of the conversations and interactions between system participants are the initial conditions of the system.
7. Small changes in the initial conditions can have dramatic non-proportional effects on the resulting system.

If these characteristics are true, it means that we have been approaching corporate law and regulation with the wrong approach and from the wrong perspective and we will have to reconsider and redesign our attempts to generate regulatory outcomes by focusing on the patterns of interactions of the individuals in the corporation and leveraging the corporation’s self-organizing properties.

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239 There is no settled definition of a chaotic system. However, there are three properties that are generally associated with chaotic systems: 1) sensitivity to initial conditions; 2) topologically mixing (components of the system blend into each other over time); and 3) periodic orbits are dense (components come into contact with each other on a regular basis). These three properties are what allow small changes in the initial conditions to spread in a non-linear fashion. The corporation, as a human social system, exhibits all three of these properties.

240 This list closely mirrors Ralph Stacey’s list for the application of chaos theory to organizations: 1) fractal structure – irregular forms are scale dependent; 2) recursive symmetries between scales and levels – repeat a basic structure or fractal at different levels; 3) sensitive to initial conditions – small changes in the system send the system in a wildly different direction; and 4) replete with feedback loops. Systemic behaviour is the emergent outcome of multiple chains of interaction. See Stacey (2006) supra note 207 at 255.
3.3 Language, Narrative, and Discourse

There are a lot of similarities between chaos theory, which focuses on the chaotic properties of systems, and dialogic systems theory, which focuses on the chaotic forces of language. It should come as no surprise then that language, narrative, and discourse analysis should have similarities with chaos theory and this pattern is emerging more and more all the time. For example, Harrison Owen (the inventor of Open Space Technology), one of the leading OD practitioners in the application of chaos theory to corporations, had a background in narrative analysis.\textsuperscript{241} The benefit of the link between narrative analysis and chaos theory is that it highlights the fact that ideas about chaos are not new and that “serious thinking about chaos and order has been ongoing for about three or four thousand years.”\textsuperscript{242} In fact, Owen has argued that “the eternal dance of chaos and order” is the fundamental social process and that chaos, confusion, and conflict are essential to living.\textsuperscript{243}

The idea of the importance of language came from the postmodern thinkers, including Foucault, Derrida, and Wittgenstein.\textsuperscript{244} These thinkers rejected the idea of objective truth and global meta-narratives and they argued that language was important because, among other things, we cannot imagine something that we do not have the words to describe\textsuperscript{245} and our

\textsuperscript{241} This similarity will be seen again in the law section. The leading thinker of dialogic laws was Robert Cover, whose background was also in analyzing scripture.

\textsuperscript{242} Owen (2008) supra note 215 at xiv-xv.

\textsuperscript{243} Ibid at xvi.


\textsuperscript{245} Wittgenstein wrote; “The limits of my language mean the limit of my world”. See Wittgenstein (1922) \textit{Ibid} at 5.6.
language limits our ability to think of possibilities by not taking into account the other side of meaning. These postmodern thoughts are beginning to have a larger effect on many disciplines including, among others, sociology, law, and organizational development.

Within organizational development these thoughts have had an impact on two particular theories that form the theoretical basis of Dialogic OD: social constructionism and the theory of generativity. The application of these two theories to organizations is referred to as Organizational Discourse Studies. These theories are summarized below.

3.3.1 Social Constructionism and the Theory of Generativity

Social constructionism posits that social reality is constructed by the interaction of the participants. In a social constructionist view, nothing has inherent meaning in any objective way, it only gains meaning in the context of a particular social group who derive and maintain its meaning through social interactions. Social constructionism can be applied to things and to beliefs. For example, in the world of corporate regulation, the significance of the thing “tree” depends on the social group to whom you are speaking or you are a part of. Corporate managers in the forest sector could conceive of it as a “revenue generating unit” or simply “lumber”.

246 See the concept of deconstruction from Jacques Derrida, See Derrida (1997) supra note 247.


248 There are two different strands of social constructionism: weak-form social constructionism accepts that there are some physical and certain things in the world that are not socially constructed, that socially constructed things and beliefs build upon; and strong-form social constructionism argues that nothing exists until it is talked about. For a discussion of weak- and strong-form social constructionism, see Searle (1995) supra note 250 at 56. He refers to facts that exist without social construction as “brute facts”. See also Stephen Pinker, The Blank Slate: The Modern Denial of Human Nature (Penguin: New York, 2002) at 202.

economists could conceive of it as a “carbon off-set”, environmentalists as natural living thing, or First Nations people might consider it a spiritual entity. Similarly, beliefs such as “the corporation” are also socially constructed and depend on what social actors think corporations should be at any given time in any given group. For example, in previous work I have shown how the understanding of what a corporation is, for the purposes of the law, has changed over the last one hundred years to encompass at least a dozen or so theories of the corporation, each linked to the context of society at the time the understanding was created. Over a hundred years ago, a corporation was thought to be a body politic or organization of people. Now it is thought of as a nexus of contracts that govern the inputs and outputs in the production process. In this thesis, it is argued that the corporation is a socially constructed reality that consists of the patterns of interactions and conversations between the organization members. A social constructionist view argues that the patterns of organizing within corporations are not dependent on biological or physical reality but are constructed simply from the interactions of the participants. This is a dramatically different view than the economic view of the corporation that asserts that corporations exist in their current form because they are objectively the most efficient way of organizing economic activity.

250 For a description of this history, see Cody (forthcoming) supra note 112 at Chapter 3.
252 Ibid.
The social constructionist perspective can support anything from extreme nihilism to extreme generative capacity. It can support nihilism because it can be used to argue that nothing is real and the world only exists to the extent that we create it. It can also be incredibly generative because it can be used to argue that we can create any future we want. In fact, when it comes to the structure of corporations, the social constructionist view allows the possibility that “the only limitation to how people organize is their imagination and collective agreement about what is expected and possible.” Therefore, to change the corporation, we need only envision a new type of corporation and work together to make it a reality.

The idea of generativity used in this thesis was first presented in 1978 by social psychologist Kenneth Gergen. He argued that the positivist-empiricist approach to social science, with its pre-eminent focus on facts, the demand for verification of theory, the assumption of temporal irrelevance, and the commitment to objective status for the scientific researcher, limited the ability of contemporary social science to generate new theories and ideas that had the capacity to transform social life. He argued that there was a difference in the approaches between the American social psychologists engaged in “stimulating research within an elite, professional circle” and the approach of European social theorists who “challenged the

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assumptive bases of social life”. In Gergen’s words, “[Generativity is] . . . the capacity to challenge the guiding assumptions of the culture, to raise fundamental questions regarding contemporary social life, to foster reconsideration of that which is ‘taken for granted’ and thereby to furnish new alternatives for social action.”

3.3.2 Organizational Discourse Studies

Within organizational behaviour (OB), the application of the postmodern concepts of language and study of the implications of social constructionist theory in understanding how language, discourse, and narrative within organizations contribute to organizational change is referred to as organizational discourse studies (ODS). ODS conceptualizes organizations not as machines or living systems but “more like an ongoing conversation or dialogic system” where the reality of the organization is continually created by the interactions among the organization’s actors. In this approach, organizational change is driven by changing the discourse in the corporation, in its many forms. For example, changes can be made to how conversations unfold, what narratives define the way things are done, and what new ideas or

258 Ibid at 1345.
259 Ibid at 1346.
262 Ibid at 3.
conversations might enable new ways of thinking to emerge.264 There are four concepts that are important to understanding ODS: discourse, text, context, and conversations.265 Discourse is “a set of inter-related ‘texts’ that along with the related practices of text production, dissemination and consumption brings an idea or way of thinking into being.”266 Texts are forms which convey content or meaning and include speech, documents, pictures, gestures, and symbols.267 All discourses are dependent on their temporal, historical, and social context. For example, while the thumbs-up hand gesture is positive in Western cultures it has a more negative meaning in Middle-Eastern, African, and South American cultures. Discourse takes place through conversations. A conversation is defined as “a set of texts that are produced as a part of a dialogue between two or more people.”268 This means it is possible to cause organizational changes by making changes to the everyday conversations of the organizational actors.269

Applying ODS theory to OD, ODS theorists Marshak, Grant and Floris recently wrote an article outlining the main implications of the field to understanding how change occurs in organizations. In that article they argued that:

- Organizational discourse (and discursive processes) play a central role in the continuous and iterative social construction of organizational reality.270
- There is a diversity of discourses latent in any organizational situation.271

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264 Marshak et al. (2013) supra note 266 at 5.
265 Ibid at 7.
266 Ibid.
267 Ibid.
268 Ibid.
269 Ibid.
270 Ibid at 17.
271 Ibid at 9.
Organizational discourse includes more modalities than just text and speech and can include things like visual representations, gestures, and symbols, etc.\textsuperscript{272}

Power has an impact on organizational discourse by favouring certain dominant discourses over others.\textsuperscript{273} Organizational change involves conflict because there is tension between two different discourses.\textsuperscript{274}

Changing the existing dominant organizational discourse will lead to organizational and behavioural change.\textsuperscript{275}

Discourse operates at multiple social and psychological levels simultaneously that impact how actors think and act: intrapersonal (internalized stories and beliefs), personal (how individuals use language, stories, gestures, etc.), interpersonal and group (direct interaction among organizational actors), organizational (the dominant thinking and organizational practices e.g. mission statement, values etc.), and socio-cultural (standard ways to refer to phenomena at the societal level, e.g. the market, social responsibility, etc.).\textsuperscript{276} Because the discourse at any level is linked to and informed by the discourse at other levels, multiple levels of discourse must be affected at the same time in order to cause change.

Change is an ongoing iterative process and not an episodic process.\textsuperscript{277}

The similarities between chaos theory and ODs are notable. Both argue that organizations are complex non-linear systems created from basic organizing patterns that are the everyday interactions the organization actors have with each other. Both also posit that organizational change can occur by simply changing those everyday patterns of interaction. ODS takes the analysis a step further, though, and argues that it is the discourse that needs to change: the speech, the texts, the pictures, images, and symbols. Dialogic OD is based on these common similarities.

\textsuperscript{272} Ibid at 20.
\textsuperscript{273} Ibid at 6.
\textsuperscript{274} Ibid.
\textsuperscript{275} Ibid.
\textsuperscript{276} Ibid at 10-12.
\textsuperscript{277} Ibid at 22.
3.4 Dialogic OD

In 2009, Gervase Bushe and Robert Marshak wrote an important article arguing that a new dialogic organization development practice has emerged in the last 25 years.\textsuperscript{278} They argued that these new dialogic practices are not just developments in previous open systems theories of organization development,\textsuperscript{279} but departures based on different underlying assumptions about people, social systems, and change. Bushe and Marshak compared these new practices, which they referred to as “Dialogic OD”, to traditional organization development practices, which they referred to as “Diagnostic OD”.

Traditional Diagnostic OD is positivist in its methodology and tends to view organizations as if they were living systems.\textsuperscript{280} It assumes the existence of a discernable objective reality that can be investigated or researched to produce data. The data is then used to compare a given team or organization to a prescriptive model of what a “healthy” team or organization looks like. Any deficiencies or problems with the current system are identified and problem-solving skills are engaged to bring the team or organization into the desired state. This Diagnostic OD approach is focused on changing people’s behaviour.\textsuperscript{281} It is also focused on finding problems and proposing solutions, so the tone of the approach can often be negative. The kinds of statements that are associated with this approach are: you can only change what you can

\begin{footnotesize}
\begin{enumerate}
\item I explain the term “open systems theory” in the section on complexity that follows this section.
\item In my previous work I refer to this approach using W.R. Scott’s terminology: natural open systems perspective.
\item Bushe & Marshak (2009) supra note 283 at 355.
\end{enumerate}
\end{footnotesize}
measure; diagnosis should precede plans and actions; organizing is a problem to be solved; change behaviour and a change in thinking will follow.\(^{282}\)

In contrast, Dialogic OD is based on the ideas of social constructionism, postmodernism, complexity theory, and linguistic and narrative approaches to organizations.\(^{283}\) Bushe and Marshak refer to it as “post-positivist”.\(^{284}\) Dialogic OD is a planned change process that improves organizational effectiveness by changing collective narratives in order to change collective thinking and action. It views organizations as dialogic or meaning making systems.\(^{285}\) It does not assume the existence of a discernable reality but instead the existence of many versions of reality – one for each organizational participant. Dialogic OD focuses on changing what people think and say, not what they do.\(^{286}\) In this way, Dialogic OD practices are more conducive to double-loop learning. Rather than attempting to diagnose and manage change, dialogic approaches to OD focus on generating new ideas that will self-organize change towards the desired end state. Instead of facts, the key data in this approach are people’s narratives of the potential future. David Cooperrider’s Appreciative Inquiry approach is a good example of this type of Dialogic OD. Other examples include Clear Leadership, Open Space, and World Café.\(^{287}\) These Dialogic OD practices did not emerge from any grand theory; instead, they emerged from


\(^{283}\) Bushe & Marshak (2009) \textit{supra} note 283 at 349.

\(^{284}\) \textit{Ibid} at 349.


\(^{286}\) Bushe (2009) \textit{supra} note 176 at 353.

\(^{287}\) Each of these dialogic approaches, together with AI, is summarized in the next section on social constructionism.
what worked in practice.288 The differences that Bushe and Marshak identified between Diagnostic OD and Dialogic OD are summarized in Appendix G.

The organization in the dialogic OD approach is a socially constructed reality that consists of the patterns of interactions and conversations between the organization members.289 Dialogic OD approaches adopt conversational approaches to working with people, groups, and larger social systems in efforts to cause change. Instead of diagnosing problems, they build narratives, stories, and conversations “that aid in the establishment of more effective or just patterns of organizing.”290 For example, Gervase Bushe’s Clear Leadership approach to collaborative learning assumes that there are multiple realities in any group and that attempting to agree on one version is counterproductive.291 Change happens in groups when people become “aware of the variety of stories people have about themselves and each other and understand their own part in creating unproductive patterns of interaction”.292 Bushe and Marshak explain the importance of dialogue and conversation to organizational change in the following quote: “What these newer forms of OD also have in common is a search for ways to promote more effective dialogue and conversation and a basic assumption that it is by changing the conversations that normally take place in organizations that organizations are ultimately transformed”.293

288 Bushe & Marshak (2009) supra note 283 at 349.
289 Ibid at 360.
290 Ibid at 353.
293 Ibid at 360.
In their 2009 article, Bushe and Marshak proposed four characteristics for Dialogic OD:

1. Change comes from changing the everyday conversations that take place in the system (who has conversations, how they have the conversations, the skills they bring to the conversations, and/or what the conversations are about).

2. There may or may not be a data collection phase. If there is, it is not about discovering an objective reality or set of facts but to discern the alternate realities of the organizational participants.

3. The aim is to generate new ideas, images, stories, narratives, and socially constructed realities that affect how people in the system think and act. The focus is not on behaviour but on the intersubjective reality.

4. The focus is on collaboration and participation of the people in the organization to allow them to make informed choices.\(^{294}\)

In contrast, Diagnostic OD change processes that are designed to change organizational culture often have negative unintended consequences.\(^{295}\) This is because people resist being told what to do. Dialogic approaches to change encounter less resistance because there is no attempt to change behaviour without the consent of those who must change – just a challenge to change narratives, symbols, and communications to co-construct a more valued future. Change in a Dialogic OD approach becomes self-organizing, or, in other words, the participants collectively identify a desired end state and figure out how to get there themselves without being told exactly what to do. Dialogic approaches elicit new thinking in people that allows them to change themselves. The Dialogic OD approach is empowering to individuals, it is collaborative, it

\(^{294}\) \textit{Ibid} at 356-359.

\(^{295}\) For a study of the unintended consequences of culture change initiatives, see Harris & Ogbanna (2002) \textit{supra} note 220.
increases awareness about a social system in order to change it, and it develops and enhances organizations in humanistic ways.\textsuperscript{296}

Since the 2009 article, Bushe and Marshak have further refined their understanding of Dialogic OD. In 2013 they identified three concepts Dialogic OD is based on: discourse, emergence, and generativity.\textsuperscript{297} They have also offered insights as to what they believe are the characteristics of an OD practitioner’s “Dialogic Mindset”\textsuperscript{298}:

- **Groups and Organizations are Continuously Self-Organizing:** Change is a part of the continuous process of self-organizing. Organizations are not static entities that go through periodic episodic changes – they are in constant flux as organizational reality is constantly created by the interactions of the organizational members. Instead of planning a specific change, dialogic OD practitioners help foster the conditions that lead to new ways of thinking.\textsuperscript{299}
- **Organizations are Meaning Making Systems:** Organizational reality is a social construct that emerges through dialogic processes. How things are talked about by organizational actors is the most significant factor in shaping how people think about any given situation.\textsuperscript{300}
- **Language Matters:** Language does more than convey information. It creates, sustains, and transforms social experience.\textsuperscript{301}
- **Structure Participative Inquiry and Engagement to Increase Differentiation:** Narratives are stories that are shared by a group of people to explain how things are. In any organization there are a variety of narratives. The role of the practitioner is to help people understand that in any situation there are a number of narratives, learn what the consequences of their own narratives are, and recognize which narratives are dominant or suppressed.\textsuperscript{302}

\textsuperscript{296} Bushe & Marshak (2009) \textit{supra} note 283 at 357.


\textsuperscript{298} Bushe and Marshak, “Dialogic Mindset” Article. \textit{Ibid.}

\textsuperscript{299} \textit{Ibid} at 293.

\textsuperscript{300} \textit{Ibid.}

\textsuperscript{301} \textit{Ibid.}

\textsuperscript{302} \textit{Ibid.}
• **Transformational Change is more emergent than planned:** Transformational change cannot be planned – attempts to plan are more obstacles and impediments than resources to transformational change. No top down hierarchical planned changes.

• Dialogic conditions that lead to change include most or all of the following:
  - Disruption to prevailing social conditions.
  - Creating a “container” that provides the right ingredients and space for participants to inquire together to allow new possibilities to emerge.
  - Emphasizing generativity rather than a problem solving approach.
  - Inviting the whole person to the conversation including emotions and not just the rational side.  

### 3.4.1 Appreciative Inquiry and Other Dialogic OD Practices

A good example of a widely used and accepted dialogic OD practice is Appreciative Inquiry (AI). It has been described as a “positive revolution in change” management that focuses on using positive language, framing, and dialogue as an intervention technique to assist groups in finding transformative solutions to difficult situations. AI arose out of the work of David Cooperrider, Frank Barrett, and Suresh Srivastva at Case Western in the 1980s. At the time Cooperrider was a Ph.D. student in the Organizational Behavior program at Case Western and he was engaged in collecting data on the problems in an organization. He realized that simply asking questions about the problems in the organization changed the conversation about the organization to how problematic things were. In reality, the organization was doing very well and he decided to celebrate that. So, he changed his approach and instead of asking about problems he became excited about the organizational processes that gave life and vitality to the organization.

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305 The Cleveland Clinic.
organization, something he later called an “appreciative analysis”.\textsuperscript{306} He decided to focus instead on these positive “life giving” properties of the system.

In 1987, Cooperrider and Srivastva outlined three main theoretical bases of AI: social construction, generativity, and adopting an appreciative approach instead of a problem solving approach.\textsuperscript{307}

3.4.2 Social Constructionism

At the core of AI and the other new Dialogic OD practices is the idea from social constructionism that social reality is constructed by the interaction of the participants. Therefore, to change the corporation, we need only envision a new type of corporation and work together to make it a reality. This is a bold statement but we are going to hold to it and repeat it throughout this thesis because of the concept’s significant generative power.

3.4.3 Generativity

Influenced heavily by Gergen’s work on generativity, Cooperrider thought that organization theory would benefit from a new generative metaphor of human “organization as a mystery and miracle” that can never be fully comprehended. The language we use also limits the extent of the generativity of any endeavour that we undertake. For example, OD theorists David Cooperrider and Frank Barrett have stated, “. . .we live in worlds that our questions create. . .”\textsuperscript{308}

\textsuperscript{306} Bushe & Marhsak (2010) \textit{supra} note 283 at 3.


This may have been the beginning of the difference between dialogic and diagnostic OD practices. Dialogic OD practices are based on eschewing the preeminence of facts, the verification of theory, and the objective status of the scientific researcher. Instead they allow researchers to take an active and participative role in facilitating the generation of new ideas that can transform social systems.\textsuperscript{309} AI is generative when it generates “one or more new ideas arise that compel people to act in new ways that are beneficial to them and others.”\textsuperscript{310}

3.4.4 Appreciative Approach vs. Problem Solving Approach

AI is also very different from a problem solving approach.\textsuperscript{311} Cooperrider and Srivastva argued that problem solving as a tool for social change did a very poor job and that it might actually be counterproductive. This conclusion was based on the belief that “through our assumptions and choice of method we largely create the world that we discover.”\textsuperscript{312} In other words, the questions we ask determine the answers we generate.\textsuperscript{313} Even the “most innocent question evokes change.”\textsuperscript{314} By simply asking questions about what problems exist the researcher can perpetuate the problems. For example, Bushe has stated that “questions about

\textsuperscript{309} Bushe (2010) supra note 283 at 3.

\textsuperscript{310} Ibid at 2.


\textsuperscript{312} Cooperrider & Srivastva (1987) supra note 313 at 129.

\textsuperscript{313} Cooperrider & Whitney (2001) supra note 256 at 15.

\textsuperscript{314} For an argument supporting this statement, see Kenneth Gergen’s critique of the method of Social Psychology, Kenneth Gergen, “Social Psychology as History” (1973) 26(2) Journal of Personality and Social Psychology 309, where he argues that scientific knowledge generated by social scientists actually influences the phenomenon it is meant to passively describe. This idea has been applied to economics with the label “performativity”. For an example of performativity, see Mackenzie (2006) infra note 521.
conflict create more conflict.” \(^{315}\) Cooperrider and Diana Whitney similarly believed that “human systems grow in the direction of what they persistently ask questions about.” \(^{316}\) Inquiry and change are simultaneous. \(^{317}\) This is a major difference from the diagnostic approach, which advocates inquiry before change. By acknowledging that inquiry itself is an intervention into the organization, the nature of the inquiry made becomes paramount. One of the most “impactful things a change agent or [researcher] can do is to articulate questions.” \(^{318}\) By adopting a positive and generative approach to inquiry the possibilities for transformational change are increased. For example, a question like “Why are corporations not more socially responsible?” might end up with a solution that proposes changes to the existing system to make them prove they are being socially responsible, including implementing corporate social responsibility reporting (a problem-solving approach). In contrast, a question like “How can businesses become agents of world benefit?” has the possibility to generate new ideas beyond the scope of the existing system (an appreciative approach). Problem-solving approaches often lead to what Cooperrider calls “deficit discourse”. \(^{319}\) A chart summarizing the difference between a problem-solving approach and an appreciative approach is attached as Appendix H.

In 2001, Cooperrider and Diana Whitney built on the theoretical bases of AI offered by Cooperrider and Srivastva and outlined five theoretical principles that are at the core of AI. \(^{320}\)

\(^{315}\) Bushe (2011) supra note 313 at 4.

\(^{316}\) Cooperrider & Whitney (2001) supra note 256 at 3.

\(^{317}\) Ibid at 15.

\(^{318}\) Ibid (2001) at 5.

\(^{319}\) Ibid (2001) at 20.

\(^{320}\) See Ibid (2001) at 14-21. The five principles were: 1) the Constructionist principle (social realities are constructed by social participants); 2) the Principle of Simultaneity (inquiry itself can cause change in an
Other authors have also proposed additional principles.\textsuperscript{321} Gervase Bushe summarized ten of these principles in his 2012 article on AI theory and critique.\textsuperscript{322} In addition to the social construction, generativity, and problem solving\textsuperscript{323} principles outlined above, three other principles are particularly relevant for dialogic regulation: discourse and narrative, anticipatory reality, and positive affect.\textsuperscript{324}

### 3.4.5 Language, Discourse, and Narrative

Language, discourse, and narrative are important in AI. Language is important because we cannot imagine something that we do not have the words to describe\textsuperscript{325} and our language limits our ability to think of possibilities by not taking into account the other side of meaning.\textsuperscript{326} The language we use also limits the extent of the generativity of any endeavour that we

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\textsuperscript{322} The ten principles outlined by Bushe are: 1) Inquiry as Intervention; 2) Generativity; 3) Discourse and Narrative; 4) Anticipatory Reality; 5) Positive Affect; 6) Building on Strength.; 7) Stakeholder Engagement; 8) Working with Self-Organizing Processes; and 9) Life Giving Properties of Social Systems. See Bushe (2011) \textit{supra} note 3013 at 3-13.

\textsuperscript{323} Bushe refers to this as “Inquiry as Intervention”, Bushe (2011) \textit{supra} note 313 at 4.

\textsuperscript{324} The language used to describe the 5 principles is the language from Bushe (2011) \textit{supra} note 313 at 4-9.

\textsuperscript{325} Ludwig Wittgenstein wrote: “The limits of my language mean the limits of my world”, see note 248.

\textsuperscript{326} See Derrida (1997) \textit{supra} note 247.
undertake. As an example of this, Cooperrider and Whitney stated: “[w]e create the organizational worlds we live in”. 327

Narrative and discourse are important because in dialogic OD practices organizational life is expressed in the stories people tell each other every day. 328 Cooperrider and Whitney posed the “Poetic Principle,” which states that the corporation is an open book whose story is constantly being co-authored by corporate participants. Organizations make themselves understandable to their members and stakeholders through the stories they tell. 329 AI advocates “that organizations consist of multiple stories and perspectives and seek to ensure that no particular story is considered more significant than another”330 because the marginalized voices in an organization are often where innovations reside. Bushe has stated that corporations change when people change and groups change when they change their assumptions through a group learning process and their stories change. Ludema has gone a step further to argue that the “collection, telling, and re-telling of people’s “best of” stories results in a wave of countervailing micro-narratives that combine, over time, to change the prevailing macro-narrative of the organization.”331

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328 Bushe (2011) supra note 313 at 5.
331 Ludema (2002) supra note 337. This is an example of an emergent property in a social system and it will be discussed in more detail in the section on Chaos Theory.
3.4.6 Anticipatory Reality

Anticipatory reality refers to the fact that we bring into reality the futures that we imagine.\textsuperscript{332} For example, think of the hand-held communication devices in Star Trek and then look at their similarity to the very first Motorola flip-phones. The key here is to adopt a possibility-centric approach to organizational change as opposed to a problem-centric approach. Boyd and Bright have argued that the problem-centric approach creates a deficit discourse that makes organizational participants wary of consultants and change and more likely to be defensive and resist change interests and to be more focused on their self-interest than the common good.\textsuperscript{333} Bright and Cameron recently confirmed that human social systems do move towards the affirmative images that they create of the future.\textsuperscript{334}

The idea of anticipatory reality is based on the work of philosopher Martin Heidegger. It means that, with regard to corporations, the corporations of our future will be limited only by our collective imaginations, what we want, what we believe to be possible, and our ability to work together to make them a reality. There is a lot of research that supports the anticipatory principle, including placebo studies in medicine, where people are cured because they think they are getting the drug,\textsuperscript{335} the Pygmalion dynamic in classrooms, where the smartest child in the

\begin{quote}
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\textsuperscript{334} See David Bright & Kim Cameron, “Positive Organizational Change: What the Field of POS Offers to OD Practitioners” in Rothwell et al. (eds) \textit{Practicing Organization Development: A Guide for Managing and Leading Change} (3\textsuperscript{rd} Ed) (San Francisco: Pfeiffer-Wiley, 2009) at 397-410.
\end{quote}

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classroom is whoever the researcher tells the teacher is the smartest child in the classroom, and the importance of a positive inner dialogue to personal and relational well being. The simplest way to state the anticipatory principle is that what we believe will happen shapes our perceptions and actions, making it more likely to happen.

3.4.7 Positive Affect

Positive Affect refers to the ability to build rapport between people that supports and sustains change processes. Creating good feelings among people assists in getting change going because people experiencing positive feelings are more flexible, creative, integrative, open to information, resilient, able to cope with adversity, have an increased preference for variety, and accept a broader array of behavioural options. Bushe has found that positive affect has the greatest impact on what he called “pre-identity” systems or groups where the majority of members do not identify with the group, because positive affect can allow formation without going through the storming phase. Once a group is formed (a “post-identity” group where the majority of the members already identify with the group) positive affect will not have as much of


338 Bushe classifies this as a separate theoretical principle called Building on Strength. He argues that it is more about getting more of what we pay attention to. See Bushe (2011) supra note 313 at 7.


an impact.\textsuperscript{341} Positive affect will also have the biggest impact in organizations where there is little of it.\textsuperscript{342} Positive affect is also very fragile, because the human mind has a predominant propensity to notice and store the negative.\textsuperscript{343} For example, relationship psychologists John and Julie Gottman have found that among partners in happy relationships the ratio of positive to negative comments about each other in simple conversation was 20:1!\textsuperscript{344} That means that to maintain a positive feeling the positive affect has to be overwhelmingly positive. Bushe has argued that this may not be possible in sustained change initiatives and that AI is not just all about being positive.\textsuperscript{345} Social systems are built on paradoxes and oppositions – they must have room for both the positive and the negative.\textsuperscript{346} Systems can move forward and learn from both positive conversations and critical conversations. Bright, Powley, Fry, and Barrett have argued that negative organizational experiences can be inquired into in a generative way if the assumption is made that there is an image of unmet positive expectation in every negative experience.\textsuperscript{347} Bushe has argued that AI is not just action research with a positive question.\textsuperscript{348} The key to AI is not about being positive – being generative is far more important.\textsuperscript{349}

\textsuperscript{341} For a description of the effects of positivity on pre and post identity systems, see Gervase Bushe, “Meaning-Making in Teams: Appreciative Inquiry with Pre-Identity and Post-Identity Groups” in Fry, Barrett, Seilling, and Whitney (eds) \textit{Appreciative Inquiry and Organizational Transformation: Reports from the Field} (Westport: CT Quorum, 2002) at 39-63.

\textsuperscript{342} See Bright & Cameron (2009) supra note 342.

\textsuperscript{343} See Roy Baumeister, Ellen Bratslavsky, Catrin Finkenauer & Kathleen Vohns, “Bad is Stronger than Good” 5(4) \textit{Review of General Psychology} 323.

\textsuperscript{344} See John Gottman & Julie Gottman, \textit{The Art and Science of Love} (Seattle: Gottman Institute, 2009) at 4.


\textsuperscript{346} Boje & Arkoubi (2005) supra note 290 at 12.

\textsuperscript{347} David Bright, Edward Powley, Ronald Fry & Frank Barrett, “The Generative Potential of Cynical Conversations” in Zandee, Cooperrider, and Avital, \textit{Generative Organization: Advances in Appreciative Inquiry} (Vol. 3) (Beingley, England: Emerald Publishing, 2010). Pamela Johnson has also made the argument that AI needs to evolve out of the
3.4.8 The Practice of Appreciative Inquiry

The practice of AI has four phases: Discovery, Dream, Design, and Destiny. This is referred to as the “4-D model”. A diagram of the 4-D Model is attached as Appendix I. The model starts with the Discovery phase, where participants discuss the best of “what is” concerning the object of inquiry. For example, if the inquiry is into corporate social responsibility, participants might inquire into the best examples, experiences, or programs they can find that reflect socially responsible corporate behaviour. Most often this takes the form of cascading interviews where participants are interviewed for their own “best of” experiences and then they become interviewers who ask others about their “best of” experiences. The Dream Phase follows, in which the participants are asked to do three things: imagine their group, organization, or community at its best, identify the common aspirations of the group participants, and symbolize these aspirations in some way. In the Design Phase the participants take their

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349 For a description of the circumstances under which AI is generative, see Ibid at 90 where he states: “. . . but simply a focus on the positive, without a focus on the generative, will likely not produce much change at all.”

350 The 4-D Model was first outlined in 2001 by Cooperrider and Whitney, see Cooperrider & Whitney (2001) supra note 256 at 7-14. For a good summary of the 4-D Model, see Gervase Bushe (2012) supra note 310 at 2-3.

351 This was actually done at the meeting that created the Global Compact.


353 Ibid.
common dream and develop a concrete proposal for the new state of the group, organization, or
community. Finally, in the Destiny\textsuperscript{354} phase all of the new ideas are brought into action. This
phase was initially called Delivery but the name was changed because Delivery evoked images
of traditional change management. The goal here is more improvisational implementation where
widespread understanding of the common dream allows the authorization of individuals to take
whatever actions are necessary to make the dream a reality.\textsuperscript{355} Leadership’s role in this scenario
then becomes “tracking” for wanted behaviour and “fanning” or rewarding desired behaviour to
elicit more of it.\textsuperscript{356} In this approach, leaders cannot control change – they only unleash it.

Some practitioners have modified the model to include a fifth phase that comes first:
Define.\textsuperscript{357} Cooperrider and Whitney referred to the Define step as the “Affirmative Topic
Choice” and believe that it is the most important part of any Appreciative Inquiry.\textsuperscript{358} The
“Affirmative Topic” should be a generative metaphor that creates a “compelling enough image
that it evokes new thoughts, conversations, and actions”.\textsuperscript{359} Barrett and Fry, among others, have

\textsuperscript{354} Cooperrider now calls this stage the Deployment stage.

\textsuperscript{355} Bushe has offered the following four-step model of Improvisational Destiny: 1) organizational members have a
collective sense of the changes they want to make; 2) they believe that they don’t need permission to act but instead
are encouraged to take whatever action they deem necessary to achieve the design; 3) a “launch event” creates
conditions for people to take voluntary, visible action toward the change objectives; and 4) the leader’s role is to
watch what happens and support and amplify what they want more of. See Bushe (2011) \textit{supra} note 313 at 25. For a
description of the improvisational implementation process, see Frank Barrett, “Creativity and Improvisation in Jazz
and Organizations: Implications for Organizational Learning” (1998) 9 Organization Science 605; Gervase Bushe &
Applied Behavioral Science 161 at 9-10 arguing that the improvisational approach is more generative because six of
seven generative studies in the meta-analysis used the improvisational approach.

\textsuperscript{356} Bushe (2009) \textit{supra} note 176 at 218-231.

\textsuperscript{357} AI models with the Define Phase included are referred to as 5-D Models.

\textsuperscript{358} Cooperrider & Whitney (2001) \textit{supra} note 256 at 5.

\textsuperscript{359} Bushe (2010) \textit{supra} note 310 at 16.
argued that engaging the right people and identifying a topic that is of interest to the organization and compelling to stakeholders is critical to success.\textsuperscript{360}

An AI summit is one of the more frequent used AI practices.\textsuperscript{361} An AI summit is a meeting of anywhere between 30 people and tens of thousands who are brought together over a period of 3-4 days to (1) talk about the organization’s strengths, (2) envision opportunities for positive change, (3) design the desired changes, and (4) implement and sustain the changes and make them work.\textsuperscript{362}

AI has been used successfully at many corporations including GTE\textsuperscript{363}, Avon (Mexico)\textsuperscript{364}, Hunter-Douglass,\textsuperscript{365} Nutrimental Foods,\textsuperscript{366} and Roadway.\textsuperscript{367} In the late 1990s, Cap Gemini Ernst

\textsuperscript{360} As referenced in Bushe (2010) supra note 310 at 3 and Frank Barrett & Ronald Fry, Appreciative Inquiry: A Positive Approach to Building Cooperative Capacity (Chagrin Falls: Taos Institute, 2005).


\textsuperscript{364} M. Schiller, “Imagining Inclusion: Men and Women in Organizations” in Fry, Barrett, Seiling and Whitney (eds.) Appreciative Inquiry and Organizational Transformation: Reports from the Field (Westport: CT Quorum, 2002) at 149-164.


\textsuperscript{367} Roadway is a U.S. Trucking firm that has used AI to improve management/employee relations and improve performance. See Ludema et al. (2003) supra note 370.
& Young adopted AI as the core of its human capital consulting practice.\textsuperscript{368} Wal-Mart has also used it to support their goal to become a model of sustainable enterprise. Wal-Mart’s CEO Lee Scott wanted to engage large numbers of employees inside Wal-Mart and large numbers of stakeholders outside of Wal-Mart, particularly suppliers, in the process. Wal-Mart used an AI summit to accomplish this. It was a whole system intervention where over 500 people from a wide variety of industries met with technical experts to create the Wal-Mart sustainability index that measures the sustainability of Wal-Mart 65,000 suppliers.\textsuperscript{369} This is only one of many instances where Walmart used AI summits to further their sustainability agenda.

AI has also been used to engage in the corporate social responsibility debate. In 2004, the United Nations used an Appreciative Inquiry Summit as the structure for its Global Compact Leaders Summit.\textsuperscript{370} UN Secretary Kofi Anan inspired the Global Compact when he met with world business leaders at Davos at the World Economic Forum. The Global Compact is a set of 10 principles in the areas of human rights, labour, the environment, and anti-corruption, which corporations are asked to embrace, support, and enact.\textsuperscript{371} The Global Compact now has over 1,700 participating businesses.\textsuperscript{372} One of the outcomes of the 2004 AI Summit was the addition

\textsuperscript{368} Bushe (2011) supra note 313 at 9.

\textsuperscript{369} For a description of the Wal-Mart AI Summit, see Bushe (2011) supra note 313 at 37-38.


\textsuperscript{371} The Global Compact 10 principles can be found at online: <http://www.unglobalcompact.org/AboutTheGC/heTenPrinciples/index.html> (accessed May 4, 2014).

of the 10th principle regarding anti-corruption. This is what Kofi Anan had to say about the Global Compact AI process in a letter to David Cooperrider after the Summit:

I would like to commend you more particularly for your methodology of Appreciative Inquiry and to thank you for introducing it to the United Nations. Without this, it would have been very difficult, perhaps even impossible, to constructively engage so many leaders of business, civil society, and government.373

Shortly after the 2004 Global Compact Leaders Summit, the Academy of Management, the United Nations Global Compact, and the Case Weatherhead School of Management held a world forum entitled “Business as an Agent of World Benefit: Management Knowledge Leading Positive Change.”374 Business as an agent of world benefit is a generative image created to make people think about new ideas and new ways of engaging corporate enterprise and corporate innovations for world benefit. The forum involved many stakeholder groups, including corporate participants. There were 400 delegates and over 1000 virtual participants.

AI is not the only dialogic OD practice. In fact, *The Change Handbook* by Peggy Holman et al. outlines over 60 ways to construct meetings to assist large groups of people to engage in dialogue.375 World Café and Open Space are examples of other methodologies. World Café is based on the idea that the knowledge to solve all of our issues already lies within our collective knowledge. It is a dialogic process designed to draw out that collective knowledge. In the process, groups of four people sit at a table and talk about a specific question or issue. As they


talk they write down key ideas and insights. After 20 minutes people are invited to switch tables. One host stays at the table and shares the key insights or ideas from previous groups with newcomers. This process repeats itself until desired, often with new questions that build on each other as the café progresses. As people dialogue and become more connected, latent collective knowledge becomes apparent.\textsuperscript{376}

How much of a difference does this type of change intervention make? The truth is that there is not a lot of empirical data that proves this approach works. But, that is because dialogic processes are not about measurement and dialogic researchers believe that any measurement can affect the change process. Bushe has stated that: “[w]hen successful, AI generates spontaneous, unsupervised, individual and group organizational action toward a better future.”\textsuperscript{377} Bushe has also argued that AI is transformational when 1) there is a focus on changing what people think instead of what people do, and 2) there is a focus on supporting self-organizing change processes that flow from new ideas rather than leading implementation of centrally or consensually agreed upon changes.\textsuperscript{378}

3.5 Dialogic Systems Theory and Corporate Law and Regulation

The dialogic approach to organization development outlined above is very important for corporate law and regulation. I have argued in previous work that the key to designing effective corporate laws and corporate regulation is to first explore the answers to two questions: 1) what

\textsuperscript{376} See Holman et al. (2007) \textit{Ibid} at 179. For more information on how to run a World Café event, see Juanita Brown, David Isaacs & the World Café Community, \textit{The World Café: Shaping Our Futures Through Conversations that Matter} (San Francisco: Berrett-Koehler, 2005).


\textsuperscript{378} See Bushe & Kassam \textit{supra} note 363 where the authors found that 7 out of 20 AI processes in the meta-case analysis were transformational. See also Bushe (2011) \textit{supra} note 313 at 4.
is a corporation? and 2) what is the purpose of corporate law? I argued that the answer to the first question determines the answer to the second. For example, if a corporation is a “nexus of contracts” that represents all of the contracts between inputs that together produce goods and services, then the purpose of corporate law will likely be to act as a standard form contract among the inputs that offers efficiency gains and establishes their rights. Similarly, if the answer to the first question is that the corporation is an entity with relationships with many stakeholders, then the purpose of corporate law will be to organize the interests of the various stakeholders. I also argued that organization theory is of primary importance to corporate law because organization theory is the discipline concerned with answering the question what is an organization, and by implication a corporation? I argued that corporate law has fallen behind organization theory because the still dominant theory of the corporation in corporate law – the “nexus of contracts” theory of the corporation – is a rational systems theory, while organization theory has, since the late 1970s, moved on to work more with natural open systems theories.

After analyzing the current corporate theories through this lens of organizational theory, I applauded recent attempts by corporate theorists like Lynne Dallas (Power Coalition Theory) to create level 4 or level 5 natural open systems theories of the corporation for corporate law. I argued that these theories were attempting to keep pace with the understanding of what

379 See Cody (forthcoming) supra note 112 at 3-4. I refer to a theory that answers both of these questions as a “Corporate Theory”.

380 Ibid.

381 Ibid.

382 See Chapter 1 pages 32-33.

383 For Boulding’s hierarchy of systems, see Cody (forthcoming) supra note 112 at 44 and the chart attached as Appendix D. For a description of Power Coalition Theory, see Cody (forthcoming) supra note 112 at 151-157.
corporations are in the other social sciences. However, I criticized Power Coalition theory for being too focused on the conflict perspectives within organization theory and offered the building blocks of a more balanced natural open systems perspective theory of the corporation called The Social Theory of the Corporation.\textsuperscript{384} The adoption of such a theory would have a profound effect on corporate law and regulation and would provide the following two answers to the corporate theory questions: 1) the corporation is a human organization that provides meaning and stability to social life, and 2) the purpose of corporate law is to facilitate the formation, survival, and evolution of corporations and to provide stability to society, markets, and corporations by managing the relationships among corporate participants in a way that is consistent with the normative views of the society in question.\textsuperscript{385} I see now that this argument did not go far enough. I was trying to progress a level 3 or 4 theory to become a level 4 or 5 theory. The question I should have been asking was: “is there a way to develop a level 8 theory?”

The Dialogic OD practices described above hold within them the potential to solve this issue because they can allow us to start to explain, understand, and predict how complex social beings with free choice interact with each other in complex social systems through the use of language, symbols, dialogue etc. The dialogic OD practices outlined in the previous section are all linked to dialogic views of systems because they focus on the collaborative properties of systems, acknowledge the multiplicity of languages, realities, and perceptions within a social system, and have at their core the goal of improving the self-reflexive characteristics of social systems – or the capacity to learn. Double-loop learning is a self-reflective dialogic process. A

\textsuperscript{384} Ibid Chapter 6: “The Social Theory of the Corporation”.

\textsuperscript{385} Ibid at 350 and 358.
“dialogic theory” of the corporation could transcend a level 4 or 5 system theory and become a level 7 or even level 8 theory of the corporation.\(^{386}\)

Organization theorists Boje and Arkoubi have made this argument as it pertains to organization development and dialogic systems theory. They have argued that a dialogic systems theory is possible and that it may be the 3rd cybernetic revolution. The 1st cybernetic revolution was mechanistic systems (or rational systems) and the 2nd cybernetic revolution was based on the law of requisite variety and links the variety in organizations to the variety in the environment (or open systems). The 3rd cybernetic revolution is about the “chaos of language variety” (or dialogic systems). They acknowledge the importance of such a theory to the development of systems theory in general and particularly to organizations:

Third cybernetics takes us beyond open systems theory (level 4) in Boulding’s (1956) nine orders of complexity model. The reason is that lower order system levels [1-5 are] . . . fixated upon sign, upon unified language representations and metaphorizations. . . . At more complex orders, Boulding argues, similar to Bakhtin, that sign-representation gives way to more multi-languaged ways of envisioning human systems: image (level 6), to symbol (level 7), to social networks engaged in history and self-reflexivity (level 8). . .\(^{387}\)

Boje and Arkoubi use Bakhtin’s dialogism theory of language as the basis for their dialogic systems theory. Bakhtin argued that language determines our understanding of systems.\(^{388}\) Systems are not just dialogue between players. They are dialogic in their language forces – they are reflexive and interactive. They contain both orderly language forces and chaotic

\(^{386}\) Boje and Arkoubi argue that there were three earlier attempts to move beyond level 4 systems: Pondy (1976), Chomsky (1975), and Cooper (1989).

\(^{387}\) Boje & Arkoubi (2005) supra note 290 at 3.

\(^{388}\) Stacey refers to this as Second Order Complexity – that our systems become as complex as our understanding of them allows.
language forces. Bahktin referred to this as *heteroglossia*. Boje argued that *heteroglossia* raises two important challenges to standard systems theory based on unified language: 1) there is no unifying single language of system, and 2) there is no system language that is independent of context. Boje and Arkoubi conclude that “a dialogic systems theory, therefore, is about the chaos of language variety.” Boje and Arkoubi describe dialogic approaches as “a form of inquiry into differences.”

A dialogic system is the antithesis of a mono-theory or mono-logic system, it is “an opposition of multiple philosophical views”. Dialogic systems theory is by definition a multi-paradigm theory. It is about building bridges between paradigms by allowing people to internalize other paradigms through dialogue. It requires “bridgers”: specialists in several fields who can master different paradigmatic languages and internalize them all to create new worldviews. The addition of each paradigm changes the overall system through dialogic language processes. This is a difficult task because people have a preference for simple explanations and single languages. In effect, dialogic regulation, as proposed in this thesis, is just such a multi-paradigm “bridge” and the dialogic regulation process built on collaborative learning loops is an institutionalization of that multi-paradigm dialogic process.

Boje and Arkoubi propose three components of dialogic theory: cognition, axiology, and emotions. They outline the constituents of dialogic theory as “[d]ialogue between multiple

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391 *Ibid* at 7-8.
393 This is evidenced in the following quote from Dostoevsky: “But Man is so partial to [monolithic] systems and abstract conclusions that he is willing to distort the truth deliberatively, close his eyes, and plug up his ears, all to justify his [mono] logic” quoted from Boje & Arkoubi (2005) *supra* note 290.
consciousnesses and identities, appreciative and collective inquiry, collaborative learning, tendency toward permanent liberation and transformation, reflexivity and toleration.\textsuperscript{394} They also argue that dialogic systems need AI, which builds on positives, and depreciative inquiry, which helps with the rethinking of a dominant story.\textsuperscript{395} Boje and Arkoubi argue that in the corporate world it was perhaps the focus on competition and the unwillingness to look at collaboration that has held back the move into more complex systems models.\textsuperscript{396}

Complexity theorist Stacey shares the excitement about the possibility of dialogic systems or systems built on the triumvirate of postmodernism, complexity theory, and chaos theory.\textsuperscript{397} He calls them a potential Kuhnian scientific revolution.\textsuperscript{398} This trio of advances in understanding can be seen through each discipline outlined in this literature review. They apply to regulation theory, organization theory, OD practices, corporate theory etc.

A dialogic corporation is an ongoing conversation. Corporate culture is the shared beliefs and assumptions, created, maintained, and changed through conversations that lead to patterned interactions among the individuals within the corporation. Stacey sees the corporation as the patterns of interactions between people in the “here and now”.\textsuperscript{399} These patterns are co-created as people interact. Those interactions can be either consensual or conflictive.\textsuperscript{400} Change inside the

\begin{itemize}
\item \textsuperscript{394} \textit{Ibid} at 10.
\item \textsuperscript{395} \textit{Ibid} at 12.
\item \textsuperscript{396} \textit{Ibid}.
\item \textsuperscript{397} Stacey (2006) supra note 207 at 33.
\item \textsuperscript{398} See Thomas Kuhn, \textit{The Structure of Scientific Revolutions} (Chicago, IL: Chicago University Press, 1962).
\item \textsuperscript{399} Ralph Stacey & Douglas Griffin (eds.), \textit{A Complexity Perspective on Researching Organizations: Taking Experience Seriously} (New York: Routledge. 2005).
\item \textsuperscript{400} \textit{Ibid} at 3.
\end{itemize}
organization emerges from personal and group development. In this view, there is no separate “organizational learning system” and the organization itself is not an anthropomorphized entity. Each person interacts with the others and it is the “net effect” of all of these interactions that creates the organization. It does not exist separate from those human agents; it is simply an understanding that they hold in their heads. In this way, organizations are self-organizing and emergent. “Self-organizing” means that human agents on the local level interact with each other and create their own rules of interaction. “Emergent” means that the higher-level system or global system that emerges is a property of those patterns of interactions among the human agents but is more than the sum of those interactions.\textsuperscript{401} No one is designing the overall system or controlling the evolving patterns of society – they simply emerge as spontaneous choices of individuals and the amplification of small differences in interaction between one present and another.\textsuperscript{402} This is why system level interventions like TQM, Lean, and Six Sigma often do not work or have unintended consequences as they are internalized by each individual into their patterns of interaction.

While no one has yet formulated a dialogic theory of society or the corporation, the possibility now exists and it is just a matter of time. For the purposes of this thesis, prior existence of such a theory is not required; the fact that it is a possibility is enough to support the arguments being made. A dialogic systems perspective theory of the corporation answers the two questions of corporate law in the following way: 1) the corporation is the patterns of dialogue between the participants, and 2) the purpose of corporate law is to assist and promote generative

\textsuperscript{401} \textit{Ibid.}

\textsuperscript{402} \textit{Ibid} at 19.
dialogues within corporations to achieve the normative principles and goals set for corporations by society. A more developed dialogic approach to regulation is offered later in this thesis.

3.6 Conclusion

In this chapter, I explored the question: How do organizations learn? I answered this question by focusing on the literature and practice in OD and tracing its understanding of organizational change up to the current emergence of Dialogic OD in the field. Dialogic OD is based on insights from post-modern language theory and complex non-linear dynamic systems. At the heart of Dialogic OD is that organizational change occurs when everyday conversations change. There are many Dialogic OD practices that have a history of success in causing this kind of change. These change efforts focus on individuals and the way they relate to other individuals in the organization. Therefore, the next question that is important to Dialogic Regulation is: How do individuals change their behaviour in organizational contexts? This question will be addressed in the next chapter.
Chapter 4: Individual Behaviour: The Importance of Communication

“[O]ne of the most important lessons of trust is that cooperation is not always best promoted by promising rewards and threatening punishments. To the contrary, attempts to employ external incentives can often reduce levels of trust and trustworthiness within the firm by eroding corporate participants’ internal motivations.”

- Margaret Blair and Lynn Stout (2001)

This chapter will focus on exploring how individuals act in organizational settings, specifically within corporations. In corporate law and regulation, the traditional approach to understanding how individuals behave in corporations is dominated by an economic model of rational self-interest. In that model, the way to change the behaviour of a corporate actor is to change his or her external incentives through rewards or punishments. This model is focused on behaviours and external circumstances. In contrast, the dialogic understanding of the individual introduced in the last chapter would argue that behaviour in a corporate setting is significantly influenced by the individual’s world-view as it is created on an ongoing basis by his or her interactions with other individuals in the corporation. This model is focused on mindsets and internal circumstances.

This chapter will explore the differences between these approaches by looking at the literature and results from social dilemma experiments to understand which model is more effective at explaining how individuals act in organizations and what hypotheses we can generate from those experimental results that could be useful to a dialogic approach to corporate law and regulation. In section 4.1, I place the social dilemma experiments in context by reviewing a

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403 John Inman & Tracy Thompson, “Using Dialogue Then Deliberation to Transform a Warring Leadership Team” (2013) 45(1) OD Practitioner 35.
pivotal article in the legal literature that explained the usefulness of social dilemma experiments to corporate law and regulation. Section 4.2 provides an introduction to social dilemma experiments. Sections 4.3 and 4.4 describe the current state of the empirical evidence from social dilemma experiments and from “crowding out” experiments exploring what crowds out internal motivation and who this is most likely to happen to. In section 4.5, the weaknesses in the experimental results are discussed using a social constructionist lens. Finally, in section 4.6 I develop a set of hypotheses from the information provided in this chapter that predict how individuals might respond to regulation or rule changes in regulatory settings and in particular where dialogic techniques are used to introduce the rule changes. Those hypotheses will then be tested in the experiment described in the next chapter.

4.1 Social Dilemma Experiments and Corporate Law and Regulation

In 2001, Margaret Blair and Lynn Stout published an important article titled “Trust, Trustworthiness and the Behavioral Foundations of Corporate Law”, in which they argued that the empirical evidence from social dilemma experiments called into question the dominant law and economics approach to corporate law and regulation. In the article, they diverged from the traditional economic analysis of corporate law and its assumption that people always act in their own self-interest and hypothesized that corporate participants cooperate with each other to a much greater degree than can possibly be explained by legal or market incentives. They argued that this cooperation was caused not by external constraints but by the internal constraints


405 Ibid at 1738.
of trust and trustworthiness.\textsuperscript{406} To support their argument they cited the then current set of empirical evidence from social dilemma experiments that showed people trust other people a lot more than the rational choice economic model predicts and that they do not trust randomly. Social context was presented as the most important factor in creating or destroying trust.\textsuperscript{407} They argued that by manipulating social context experimenters could “produce everything from nearly universal trust to an almost complete absence of trust among subjects in social dilemmas.”\textsuperscript{408}

Blair and Stout argued that these behavioural findings had importance for social institutions where cooperation among participants is necessary, like the business corporation. They argued that we need to understand these findings to create effective corporate law and regulation and they also voiced a strong warning that failing to heed the results of the social dilemma experiments might lead to the erosion of internal trust and trustworthiness in corporate participants.\textsuperscript{409} Those were sage words in 2001. It is now 2014, and there is little need to enumerate the numerous corporate governance scandals that have occurred in the decade since those words were written. We are all too familiar with them.\textsuperscript{410} To make matters worse, trust seems to be at the heart of most of these scandals, so much so, in fact, that at least one prominent corporate law and regulation scholar, Tamara Frankel, is lamenting the loss of trust in North

\begin{flushleft}
\textsuperscript{406} Ibid.
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\begin{flushleft}
\textsuperscript{408} Ibid at 1738-1739.
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\textsuperscript{409} Ibid at 1739.
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\textsuperscript{410} The list includes the dot.com collapse, the auditing scandals (Arthur Anderson, WorldCom etc.), insider trading scandals (Martha Stewart), the Sub-Prime Mortgage meltdown, the Global Financial Crisis, and the BP Deepwater Horizon Oil Spill. See Chapter 1.
\end{flushleft}
American business and corporations and prominent business culture expert Geert Hofstede has commented that U.S. business leaders are “greedy, short-term gain oriented, and out for power.”

Did we, as Blair and Stout warned, destroy trust through the way we structured our laws and/or the way we regulated corporations? It is difficult to say – but the empirical evidence from ongoing social dilemma experiments suggests that we might have. The evidence from those experiments is now overwhelming and shows exactly what Blair and Stout argued in 2001: people cooperate more often than economic models predict, and the use of external incentives (rewards and punishments) can erode or “crowd out” internal incentives to cooperate (including trust). Furthermore, we now know which factors are most likely to affect cooperation rates: not just social context but also culture, age, instructions from authority, and, most importantly, communication.

4.2 Introduction to Social Dilemma Experiments

Social dilemma experiments are experimental games that are used to predict social norms and social preferences. They are termed “social dilemmas” because they encompass “societal problems that arise because we often assign higher priority to our own short-term interests than to the interests of others or other longer term considerations.”

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411 For example, see Tamar Frankel, Trust and Honesty: America’s Business Culture at a Crossroad (New York: Oxford University Press, 2006).


413 Or how people rank different allocations of benefits (pay-offs) or bundles of benefits (for example food, money, time, prestige etc.). See Camerer & Fehr (2004) infra note 432 at 2.

experimental games include the Prisoner’s Dilemma Game, the Public Goods Game, the Ultimatum Game, the Dictator Game, the Trust or Investment Game, the Gift Exchange Game, and the Third Party Punishment Game.\(^{415}\)

The prisoner’s dilemma is the classic example of a social dilemma experimental game. In this experiment, two suspects are arrested by police. They are separated and not allowed to talk to each other. The police have insufficient evidence to convict either prisoner so they offer each prisoner the same deal. If the prisoner agrees to testify against his or her partner (defects) and their partner stays silent (cooperates), the defector goes free and the silent partner gets a ten-year jail sentence. If they both defect, they each get a five-year jail sentence. If they both stay silent, they each get one year in jail for a minor charge. Each player must decide what to do. They are assured that the other suspect will not know their decision until the end of the investigation. The prisoners’ dilemma is represented in Figure 1:

\[\begin{array}{c|cc}
 & \text{Confess} & \text{Keep Quiet} \\
\hline
\text{Confess} & \text{Both go to jail for 5 years} & \text{Prisoner B goes to jail for 10 years, Prisoner A goes free} \\
\text{Keep Quiet} & \text{Prisoner A goes to jail for 10 years, Prisoner B goes free} & \text{Both go to jail for 1 year}
\end{array}\]

\[\text{Figure 1 The Prisoner’s Dilemma}\]

In the prisoner’s dilemma game, economic or rational choice theory predicts that each suspect’s only concern is maximizing their own utility (pay-off) without concern for the other player’s utility. Therefore, it predicts that the equilibrium for this game is that both players defect on each other even though they would both be better off if they remain silent. However, the experimental evidence does not support the theory. In one-shot prisoner’s dilemma games people cooperate about half of the time.416

The other social dilemma experiments, including the Trust Game and the Ultimatum Game, are based on roughly the same type of experimental game structure. They are controlled experiments of simplified scenarios where decision-making can be observed and the variables that might affect decision-making can be varied. Usually they are matched to well-defined mathematical models. A game consists of a set of players, a set of decisions (strategies) available to players, and a set of expected outcomes (pay-offs) for adopting each combination of strategies. Pay-offs are usually provided in financial incentives and players’ decision-making (strategies) is manipulated by changing the pay-offs in the game.

A classic example of a prisoner’s dilemma experiment was run by Robert Axelrod in the 1980s and outlined in his book The Evolution of Co-Operation.417 Axelrod ran a computer tournament of players using the prisoner’s dilemma game to study how cooperation evolved in repeated games. He asked other game theorists to provide strategies for the computer players to use in the tournament. The winning strategy was a simple strategy called “tit-for-tat” where the

416 See Sally (1995) supra note 423. In fact, the mean cooperation rate is about 47%.

417 See Robert Axelrod, The Evolution of Cooperation (New York: Basic Books, 1984). Axelrod realized that this analysis was too simple and so spent a number of years trying to add complexity to his model to determine whether the results would hold in more complex situations. For a summary of his further work see Robert Axelrod, The Complexity of Cooperation: Agent Based Models of Competition and Collaboration (Princeton: Princeton University Press, 1997).
player cooperates on the first move and then subsequently echoes the behaviour of the other player on the previous round. This experiment showed that game theory predictions are also not true in iterated prisoner’s dilemma games.

Axelrod’s experiment had the structure of a classic game theory experiment. There were only two players, the situation was a zero-sum game (if one person gains the other loses the same amount), the players were isolated, and there was no communication allowed (in fact there were no real players). This structure is obviously not realistic because real life is much more complex than that. There are often more than two people, communication is almost always a part of the scenario, there are non-zero-sum games etc. Cognizant of these facts, experimental game experimenters began running more complex experiments to see what happens in more complex scenarios. The results of those experiments are captured in the meta-analyses discussed in the next part.

4.3 Update on Empirical Evidence from Social Dilemma Experiments (to 2010)

When Blair and Stout wrote their article in 2001, they relied on a meta-analysis of social dilemma experiments from 1958-1992 that was written by David Sally in 1995. Since then, there have been two more important meta-analyses of social dilemma experiments published: one by behavioural economist Colin Camerer in 2003 and a recent meta-analysis on the effect of communication in social dilemmas by psychology researcher Daniel Balliet in 2010. The


419 See Camerer (2003) infra note 462 at Ch2 - “Dictator, Ultimatum and Trust Games” (43-117). This chapter summarizes the results of 31 ultimatum games, 11 Dictator games, and a sample of Trust Games.

results of each of these meta-analyses will be presented below, together with an accompanying analysis of its findings for corporate law and regulation.

Meta-analysis is the best way to test the social dilemma literature because there are so many studies and the outcomes vary considerably depending on the way the studies are structured and conducted. The findings of the social dilemma experiments are overwhelming: people cooperate a lot more than the rational choice model predicts and a small set of factors significantly affect cooperation rates including, but not limited to, social context.

4.3.1 The 1995 Sally Meta-Analysis

In 1995, David Sally did a meta-analysis of 25 years of prisoner’s dilemma and social dilemma experiments to determine whether the evidence from the experiments matched the economic theory approach to behaviour.\(^{(421)}\) This is the meta-analysis that was relied upon by Margaret Blair and Lynn Stout in their 2001 article. In this meta-analysis Sally analyzed 37 studies and found that the results were usually inconsistent with a model of pure self-interest. Instead of the prediction of pure self-interest, the mean cooperation rate in the studies was 47.4\%.\(^{(422)}\) In the individual experiments, a number of variables were shown to affect cooperative behaviour: the instructions given, the presence of an authority figure, the normative significance of the language used, repetition, the pay-off matrix, anonymity vs. face-to-face interaction, group identity, and communication. Sally tested all of these variables in a meta-analysis to see which


\(^{(422)}\) Cooperation was defined as the “percentage of total choices made in an experiment that benefit the overall group at the expense of the individual deciding”. The standard deviation was 23.7\%. See Ibid at 62.
were significant when the results of all the studies were taken into account.\footnote{423}{His regression analyses did “not support the view that thousands of subjects in tens of experiments over three decades were motivated solely by self-interest in their own individual pay-offs.”}\footnote{424}{In other words, the variables that rational choice theory would predict as significant were not or were only weakly correlated.}\footnote{425}{The most important variables that affected behaviour were the instructions given to the participants and whether the participants were allowed to communicate with each other.}\footnote{426}{Where participants were instructed to cooperate with each other, cooperation went up by 36\%.}\footnote{427}{Similarly, where participants were allowed to communicate with each other through discussion between rounds, cooperation went up by 40\%.}\footnote{428}{One hypothesis that can be made regarding these results is that language (instructions) and communication may be more important in regulating corporate behaviour than the incentives and punishment predicted by economic theory.}\footnote{429}{Blair and Stout saw this potential in Sally’s results. They argued that the experimental evidence called into question the dominant law and...}

\footnote{423}{The list of possible variables that Sally tested included: subject characteristics, instructions, repetition, payoff matrix, anonymity, group identity, and communication.}

\footnote{424}{Sally (1995) supra note 423 at 75.}

\footnote{425}{The variables that promoted self-interest were that temptation to defect was great, there was no money at stake (pay-off), or the group size was large. See Ibid at 86.}

\footnote{426}{Ibid.}

\footnote{427}{Ibid.}

\footnote{428}{Ibid at 78.}

\footnote{429}{Sally’s results were consistent with the results of other summaries of experimental games published at around the same time. For examples of other summaries see John Ledyard, “Public Goods Experiments” in Kegel & Roth (eds.), Handbook of Experimental Economics (Princeton: Princeton, 1995); Andrew Coleman, Game Theory and Its Applications in the Social and Biological Sciences (Oxford: Butterworth-Heinem, 1995); Douglas Davis & Charles Holt, Experimental Economics (Princeton: Princeton University Press, 1993); and Martin A. Nowak, et al., “Fairness Versus Reason in the Ultimatum Game” (2000) 289 Science 1773.}
economics approach to corporate law and corporate regulation.\textsuperscript{430} That approach to corporate law, which has at its centre the “nexus of contracts” theory of the firm, assumes that each corporate actor wants to maximize their own individual gains and will do so unless legal rules and/or market incentives and punishments keep their behaviour in line. Blair and Stout argued that the results of the social dilemma experiments show that corporate participants often engage in cooperative behaviour in the absence of law, market incentives, or punishment,\textsuperscript{431} and that they do so because of internal incentives.\textsuperscript{432}

Blair and Stout argued that Sally’s findings had five important conclusions for corporate law:

1. Cooperative behaviour is an empirical reality. Individuals in social dilemma experiments do not always act in their own self-interest and exhibit far more cooperative behaviour than can be explained by economic theory.

2. Different individuals vary in their willingness to cooperate (or in their ability to trust and to be trustworthy) in new situations.

3. To some degree these individual differences reflect past experiences, suggesting that trust may be a learned behaviour. This is referred to as a predisposition to cooperate.

\textsuperscript{430} Blair & Stout (2001) supra note 420.

\textsuperscript{431} Ibid at 1745.

\textsuperscript{432} Blair and Stout actually used the language of “internal constraints” to describe the phenomenon of trust and trustworthiness. See Ibid at 1737 where they state: “corporate participants often cooperate with each other not because of external constraints but because of internal ones”. The use of this kind of language to describe trust and trustworthiness exposes a lot about the authors’ assumptions. Their reference to trust and trustworthiness as a “constraint” is interesting and shows that they are still working under the assumption that trust acts as a deterrent to the natural state of self-interested behaviour. This subtle use of language may be damaging in and of itself, see the discussion on performativity later in this Chapter starting on page 138. Similarly, their reference to the constraints as internal is in direct opposition to the economic view of external constraints, which are simply incentives and punishments. From a dialogic point of view trust and trustworthiness are not simply internal phenomena but social phenomena that depend on a lot of external effects like group membership, culture, education, training, reciprocity, dialogue, etc.
4. Trust is a socially contingent behaviour – it depends significantly on individuals’ perceptions of others’ expectations.

5. Economic payoffs are not irrelevant. When the personal costs of cooperation become too high, people stop cooperating.\textsuperscript{433}

This last statement needs to be restated a little because it is not exactly what the experimental evidence showed, nor what Blair and Stout were referring to. What they were referring to was the opposite finding that when the economic incentives of non-cooperative behaviour are increased to a very high level, people are tempted to engage in non-cooperative behaviour.\textsuperscript{434}

The simplest way to summarize the finding is that in complex social situations people tend to engage in cooperative behaviour unless there is a sufficient economic benefit to act in their own self-interest.

The experimental game literature shows that cooperation blossoms when it finds the right social circumstances. What is the role of law in creating those circumstances? Blair and Stout said it well:

Relaxing the assumption that people are always self-interested in favor of the more realistic claim that people have a capacity for socially contingent, other-regarding behavior opens new channels for analyzing a wide variety of relationships in which the law seeks to encourage cooperation and discourage opportunism. These include not only relationships within families and among citizens in the broader community but also business relationships like partnerships, relational contracts, and (our focus here) incorporated firms.\textsuperscript{435}

\textsuperscript{433} This list is provided in two different places in the article. See \textit{Ibid} (2001) at 1742 and 1761.

\textsuperscript{434} They are actually referring to the opposite. See \textit{Ibid} (2001) at 1774 where they state: “as the personal cost associated with cooperating rises \textit{(that is, as players’ expected gains from defection increase)}, cooperation rates begin to decline.” [emphasis added].

\textsuperscript{435} \textit{Ibid} at 1808.
The other really important idea from Blair and Stout’s article is that rewards and punishment only work if the corporate situation is transparent\textsuperscript{436} but trust and trustworthiness (or cooperation) can work even when the situation is opaque.\textsuperscript{437} One of the examples they provide to illustrate this point is when a manager refrains from stealing: is it because they are afraid that they will be caught and fired or jailed (punishment) or because they are trustworthy (learned behaviour)?\textsuperscript{438} In the first situation posited by Blair and Stout, the manager refrains because of the fear of punishment, which requires that their behaviour be transparent so that there is the potential that they will be caught. If it becomes clear that no one is vigilantly watching it is possible that the behaviour will occur. In the second situation, the manager has learned not to steal and does not steal because the manager’s worldview no longer has a place for “stealing”. This creates the opportunity to conceive of a corporate law and regulation approach that is focused on language and communication and has as its goal the learning of regulatory outcomes by corporate participants.

Blair and Stout’s most troubling conclusion was that they felt law was of limited importance in promoting cooperation within firms.\textsuperscript{439} This conclusion was probably the result of them approaching the issue from a law and economics perspective. It is true that the law and economics approach to corporate law is of limited importance in promoting cooperation within a

\begin{quote}
\textsuperscript{436} Ibid at 1740: “But markets and law work best when the situation is transparent and opportunistic behavior can be detected and punished. Trust can work even when the situation is opaque. As a result, business firms that cultivate and support trust can enjoy a competitive advantage over those that do not.”
\end{quote}

\begin{quote}
\textsuperscript{437} This begs the question of the importance of transparency as the key feature of securities and corporate law as we move away from law and economics and towards dialogic regulation.
\end{quote}

\begin{quote}
\textsuperscript{438} Blair & Stout (2001) supra note 420 at 1741.
\end{quote}

\begin{quote}
\textsuperscript{439} See Ibid at 1744, where they state: “Finally, we consider how trust highlights the potentially limited importance of law in promoting cooperation in firms.”
\end{quote}
firm. But, there are other approaches to law that could play a large and prominent role, like the “learning approach” mentioned in Chapter 2. Another example is Lynn Stout’s behavioural approach to corporate law and how it handles the issue of how best to motivate corporate directors to serve the best interests of the corporation. She concluded that the outcomes of the social dilemma experiments had important implications for how we select, educate, regulate, and compensate corporate directors. Her recommendations for dealing with the motivation of directors included creating the right social context for cooperation, choosing directors with a predisposition to cooperate, and removing the incentives that create self-interested behaviour (for example, stock options). All of these suggestions are consistent with a “learning” approach to corporate law and regulation rather than an economic approach.

At this point in the social dilemma literature there was still one experimental finding that was counter-intuitive: in repeated prisoner’s dilemma games cooperation rates declined until they hit almost zero after about ten repetitions of the game. This result made no sense, because if it were true, then how did organizations and human society evolve? In 2001, Fehr and Gachter wrote an article offering a solution. They argued that cooperation does not decline in repeated games when there is an opportunity for punishment. They ran an experiment and found that when participants are allowed to set aside some of their money to punish cheaters cooperation actually starts to increase in repeated games. The idea of punishment as a solution to the declining cooperation is the result of the assumptions built into game theory and its economic models. For example, Hobbes said, “Covenants without the Sword, are but Words, and of no

strength to secure a man at all." This finding was troubling, however. Is it really the case that we only cooperate with each other because of the fear of punishment or is it possible that something else is going on? The answer to that question did not come until 2010.

4.3.2 The 2003 Summary of Social Dilemmas by Colin Camerer

In 2003, behavioural game theorist Colin Camerer provided a summary of a broader range of social dilemma experiments and a broader range of potentially significant variables. His findings mirrored the findings of Sally but he also identified some additional emerging patterns, including the fact that culture and age also affect cooperation rates. He had similar findings to Sally in that he found that people cooperate in one-shot PD games about half the time and contribute about half their endowments in public goods games. These cooperative results in about 50% of the cases were mirrored through the other experiments including Dictator Games, Trust Games, and Ultimatum Games. He also found that pre-play communication was the variable that raised cooperation the most, and non-cooperation could be generated by significantly increasing the pay-offs for non-cooperation.


443 In Dictator Games mean offers range between 15 and 50%. Ibid at 57-58.

444 In Trust games, players risk about half their investment and earn essentially nothing for their investment (they get back what they invested). Ibid at 467.

445 In Ultimatum games, people usually offer 30-50% of their money. The mode and median offers are 40-50 percent and the mean offers are 30-40 percent. There are hardly any offers that are really low (0-10%) or very fair (51-100%). Offers below 20% are rejected about half of the time. See Ibid at 56.

446 Ibid at 46.
He also found results similar to those proposed by Fehr and Gachter in that when games are repeated cooperation and contribution decline until they reach almost zero unless there is a way to police the non-cooperators (in economic game theory language it is called punishment), in which case it rises over time to about 60%. 447

Camerer found three variables that had significant effects on the behaviour in games: culture 448 (significant differences – countries have different sharing norms, e.g. Roth et al. and Henrich), instructions (mild effect), 449 and age (kids under 7 are more self-interested). 450 Camerer explored a number of other variables that ended up having no effect, an inconclusive effect, or very small effect, including repetition, 451 stakes, 452 anonymity, 453 gender, 454 race, 455 and academic major. 456

Camerer’s finding that culture affects cooperation rates is consistent with the findings of earlier studies that argued that social context has the largest effect on cooperation rates. His finding that the instructions given affect cooperation rates is also consistent with previous studies that showed that instructions and language had an effect on cooperation rates. The interesting

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448 Camerer (2003) supra note 462 at 68.

449 Ibid

450 Ibid at 65.

451 Which makes no difference unless the simulation is seeded with computer self-interested players. Ibid at 59.

452 Very large changes in pay-off stakes have a modest effect. See Ibid at 63.

453 Stakes are sometimes lower dictator allocations but not ultimatums. See Ibid at 63.

454 Gender had no effect; it seems to interact with other variables. See Ibid at 64.

455 Race was inconclusive and may interact with other variables e.g. culture, see Ibid at 65.

456 Inconclusive – results go both ways. See Ibid.
finding in Camerer’s results is that of age. The fact that children and adults have significantly
different cooperation rates may be evidence that learning is going on. Camerer found that
children start out self-interested and act that way until about age 7.\textsuperscript{457} By adulthood people in
North America cooperate about half the time and contribute about half in public goods games.\textsuperscript{458} There is some evidence that educational background may make a difference to the way people
act because some studies show that individuals with economics degrees act more in their own
self-interest.\textsuperscript{459} All this evidence points to a learning approach to corporate law and regulation
being possible. People can learn to be trusting, trustworthy, and cooperative.

4.3.3 The 2010 Meta-Analysis by Daniel Balliet

In 2010, Daniel Balliet wrote an important article that might have the potential to solve
the issue of ongoing cooperation in social dilemma experiments. He discovered that cooperation
rates in repeated games with large groups did not decline where communication was allowed,
and punishment did not need to be involved in order for this to happen. This solves the riddle of
why society and organizations evolved cooperative patterns without punishment. So, Fehr and
Gachter may not be correct – simple communication between participants might preserve
cooperation rates.

Balliet’s article was a meta-analysis of 45 studies on communication in social
dilemmas.\textsuperscript{460} As was shown above, it is well known that communication increases cooperation in

\textsuperscript{457} Camerer (2003) supra note 462.

\textsuperscript{458} Ibid.

\textsuperscript{459} See the discussion on page 139 of this Chapter.

\textsuperscript{460} Baillet (2010) supra note 437.
social dilemmas. Balliet took that analysis a step further to look at social dilemma experiments \(^{461}\) and checked the effect of the type of communication (face-to-face, oral, or text), the timing of the communication (before or during the game), and the size of the group. He found a large positive effect between communication and cooperation. The effect is moderated by the type of communication, face-to-face discussion having a stronger effect than e-mail or written messages. \(^{462}\) He hypothesized that face-to-face communication was more effective for three reasons: it is more dynamic and fluid than electronic communication and allows the participants to more accurately address the issues that come up in social dilemmas; it involves the ability to see each other and give and receive social cues; and it allows a space for social norms and promise keeping. \(^{463}\) Baillet found that the positive effect of communication on cooperation was stronger in larger as opposed to smaller groups. \(^{464}\) However, the timing of the communication did not seem to matter. For example, ongoing communication did not matter as long as people had a chance to communicate before the game began. \(^{465}\)

\(^{461}\) Which included PD, public goods, and resource goods.


\(^{463}\) Baillet (2010) supra note 437 at 48.

\(^{464}\) Note: the largest group size in the meta-analysis was nine people. See Ibid at 52 for a reference to this limitation.

The fact that ongoing communication does not significantly increase cooperation is puzzling. One hypothesis is that initial communication creates a norm of reciprocity and that ongoing communication will only increase that if the communication is of the correct type. To use the language of OD theorist Gervase Bushe, if the ongoing communication is not “clear” then it may actually contribute to non-cooperation or the falling apart of the cooperation.\(^{466}\) However, if the communication is “clear” then we should see a significant benefit to cooperation from ongoing communication. There is evidence from the experiments in support of this hypothesis: where there are a greater number of commitments or promises from group members, then the individuals in that group are more likely to cooperate\(^{467}\); and where the communication involves sincere signalling of cooperative intentions that are followed by cooperative behaviour then ongoing communication has a positive effect on preserving cooperation rates.\(^{468}\)

Again, these experimental results point to the fact that the traditional economic approach to corporate law and regulation centred on external incentives like punishment is not supported by the empirical evidence and that a different approach needs to be developed to accommodate these results. That approach could leverage participants’ internal motivators by utilizing language and communication and assisting corporate actors and corporate organizations to engage in learning.

\(^{466}\) Bushe refers to this as “interpersonal mush”. See Bushe (2009) supra note 176 at Chapter 1.


4.4 Update on Empirical Evidence of “Crowding Out” (to 2010)

In response to Sally’s 1995 meta-analysis, Blair and Stout proposed that there were “dangers in the contractarian approach by suggesting that an excessive emphasis on external sanctions . . . may not only be ineffective but counter-productive, serving to undermine trust and trustworthiness in the firm.”\(^{469}\) Trust, they stated, “is not always best promoted by promising rewards and threatening punishments. To the contrary, attempts to employ external incentives can often reduce levels of trust and trustworthiness within the firm by eroding corporate participants’ internal motivations.”\(^{470}\)

There have been five significant sets of experiments that show conclusively that internal incentives do get “crowded out” by the use of external incentives in certain circumstances. First, experimental economist Sam Bowles found in a series of experiments that external incentives can actually “crowd out” internal incentives and prosocial behaviour.\(^{471}\) After reviewing 41 behavioural experiments Bowles concluded that “incentives that appeal to self-interest may fail when they undermine the moral values that lead people to act altruistically or in other public spirited ways.”\(^{472}\) He suggests that economic incentives may be counterproductive when they

\(^{469}\) Blair & Stout (2001) supra note 420 at 1736.

\(^{470}\) Ibid at 1739.


\(^{472}\) Bowles (2009) supra note 491.
signal that selfishness is an appropriate response, thereby constituting a learning environment through which over time people come to adopt more self-interested motivations. To illustrate this situation Bowles used the example of six daycares in Haifa where a fine was imposed on parents who were late picking up their children at the end of the day. Instead of picking up the children on time, parents responded to the fine by doubling the amount of time they were late. When the fine was rescinded 12 weeks later, the enhanced tardiness persisted. The fine seemed to have undermined the parents’ sense of ethical obligation to avoid inconveniencing the teachers and to think of lateness as just another commodity that they could purchase. Bowles refers to this as a “negative synergy” between economic incentives and moral behaviour.

Second, research by neuroscientist Paul Zak determined that there were releases of oxytocin in people who cooperated and that the human mind may actually be wired for cooperation. He calls it the “moral molecule”.

The third set of evidence was discovered by Mark Lubell and John Scholtz who found that punishing non-cooperators might actually reduce cooperation among people who were originally cooperating while increasing cooperation among initial defectors.

Fourth, scientist Samuel Glucksberg conducted experiments centred on “The Candle Problem”, a cognitive performance test invented by Gestalt psychologist Karl Duncker. In this experiment, participants are given a candle, a book of matches, and a box of thumbtacks. They

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are asked to attach the candle to the wall. The solution is to empty the box of tacks, tack the box to the wall, put the candle in it, and light it. However, it takes most people some time to think “outside of the box” and look at the box as something they can use in the experiment instead of just as the container for the tacks. This psychological process is called “functional fixedness”. Scientist Sam Glucksberg has used the Candle Problem to test the effectiveness of external motivators. In his experiment, he assigned the Candle Problem to a group and promised a cash prize incentive if they could solve the problem faster than the average person. The group took three and a half times as long. This effect is called the “overjustification effect” where external motivators decrease a person’s internal motivation to perform a task because people pay more attention to the incentive than to the task itself. However, when the task was made simpler by removing the tacks from the box and eliminating functional fixedness or by simply underlining words in the problem like tack, box, and candle the incentive helped the group complete the task faster.476

Dan Pink has reviewed the literature on the Candle Problem and argued that external motivators are effective when associated with simple tasks477 but counterproductive when

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associated with complex tasks (like creative work, managing a large corporation etc.).

Complex tasks require internal motivation, which Pink summarizes as autonomy, mastery, and purpose. He argues that the traditional idea of the management of corporations is about compliance and making people do simple tasks and that in the modern complex world we need to change that to engagement and inspiring self-directed work. He provides a few examples where this was used successfully including Wikipedia, Fed-Ex days at Adlasian, and 20% time at Google. Similarly, Lyn Sharp Paine, a business ethicist at Harvard University, has argued that not only motivation but also creativity is linked to trust and trustworthiness:

Managers are becoming increasingly aware that many people do their best, most creative work, in an environment of trust, responsibility, and high aspirations. Such an environment can only be built on values such as honesty, reliability, fairness, and respect.

Finally, there is another strand of literature in experimental games related to social value orientation (SVO) that shows that external incentives may only work with individuals who have certain pre-dispositions to distrust others in their interactions. The most widely used SVO survey

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478 Dank Pink’s work is a popularization of the work of Dan Ariely.

479 Pink supra note 497.

480 Wikipedia beat Microsoft in the Encyclopedia game. Microsoft created Encarta with the traditional incentive structure. Wikipedia created a collaborative space that allowed people to create entries based on internal motivation. Wikipedia was more successful.

481 Fed-Ex days are run at Australian software company Adlasian. They close the office down for a day and people are allowed to work on anything with anyone as long as it has nothing to do with the real job. They are called Fed-Ex days because they have to deliver something overnight.

482 Google has a policy called 20% time, which is that every employee can spend 20% of the time working on something not related to their job. It is a massively successful program with most of the new products and services at Google (like gmail) being created during 20% time.

tool groups people into three categories: cooperators, individualists, and competitors.\textsuperscript{484} Cooperators tend to maximize outcomes for themselves and others. Individualists tend to maximize their own outcomes with little regard for the outcome of others. Competitors tend to maximize their own outcomes relative to others’ outcomes. A recent review of SVO studies by Au and Kwong indicates that the breakdown of individuals into the three groups is as follows: cooperators (46\%), individualists (38\%), and competitors (12\%).\textsuperscript{485} Boagaert et al. have argued that incentives only work with the “proself” SVO individuals: the individualists and the competitors (about 50\% of the people). The cooperators are more affected by “signals of trust.”\textsuperscript{486}

All of this empirical evidence shows that not only do we need to adopt a new approach to corporate law and regulation but also that we need to stop the external incentives we are currently using because they may be destroying corporate actors’ internal motivators (like their trust in each other). As Daniel Pink argued, external incentives do not work for complex tasks, and what could be more complex than modern financial markets, banks, or multi-national corporations? We are using an early 20\textsuperscript{th}-century idea to regulate a 21\textsuperscript{st}-century economy.

\textsuperscript{484} The Triple Dominance Measure see note 585.

\textsuperscript{485} See Wing Tung Au and Jessica Wong, “Measurements and Effects of Social-Value Orientation in Social Dilemmas: A Review” in R. Suleiman, D. Fischer, & D.M. Messick (eds.) \textit{Contemporary Research on Social Dilemmas} (New York: Cambridge University Press, 2004) 71-98 at 73-74. In this study the “cooperators” group includes prosocials and altruists. The numbers reported were the mean rates drawn from a data set of 47 SVO studies. The ranges for the three groups were: cooperators (12\%-73\%), individualists (11\%-39\%), and competitors (1\%-49\%).

\textsuperscript{486} \textit{Ibid.}
4.5 The Weakness of Social Dilemma Experiments and the Link to Social Constructionism

Because experimental games were based on game theory most (if not all) of the existing games were designed using economic assumptions and methodology. They are competitive games played by isolated rational individuals that respond to choices about incentives (pay-offs) or deterrents (punishments). The games are usually very simple, with simple sets of rules and concrete descriptions of the problems being investigated. These games are purposefully simple, not because they reflect real life but because the experimenters are trying to isolate the variables that affect decision-making in a laboratory setting. This stark laboratory situation can then be tested against situations where the controlled variables are added back into the experiment, for example by allowing communication. This is the traditional scientific way of determining the significance of each variable.

Unfortunately, people use game theory and the results of these experimental games to make conclusions about whether people are cooperative or self-interested in the real world. Such claims have led to attacks on game theory as unrealistic and not representative of reality. Critics also claim that rational economic man does not exist in the real world. For example, behavioural game theorist Colin Camerer has argued that game theory overestimates people’s capacity for rational analysis and self-interested behaviour and it does too much theorizing about how people might act and not enough observation of how they do act.

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487 For example, Colin Camerer describes game theory in the following way: experimental games are used most often by economists and are “interactions among anonymous agents who play once, for real money, without communicating.” See Camerer & Fehr (2002) supra note 432 at 4.

488 Ibid at 29.

But as game theorist Robert Binmore has argued, game theory did not make those claims and economic man does exist, but only in the constrained circumstances created in the laboratory.\textsuperscript{490} Camerer himself acknowledges that game theorists don’t make claims to universality:

\begin{quote}
[GAME theory is simply an analytical tool – a body of answers to mathematical questions about what players with various degrees of rationality will do. “If people don’t play the way the theory says, their behaviour has not proved the mathematics wrong, any more than finding that cashiers sometimes give the wrong changes disproves arithmetic.” The problem comes in the real world when the theories are used to predict things that they don’t have predictive power for.\textsuperscript{491}
\end{quote}

Binmore has acknowledged that “unmotivated subjects in unfamiliar situations don’t play as game theory predicts.”\textsuperscript{492} He argues that there are “favorable circumstances” or “environments” that game theory can be reasonably expected to work well in. Those circumstances are when:

\begin{itemize}
  \item the game is simple;
  \item the subjects are paid adequately for performing well; and
  \item sufficient time is available for trial-and-error.\textsuperscript{493}
\end{itemize}

He argues that if people want to critique game theory they need to “clean their test tubes” and evaluate game theory only under these circumstances:

\begin{quote}
Just as alchemists can “refute” the predictions of modern chemistry by mixing their reagents in dirty test tubes, so one can “refute” game theory by confusing the subjects with complicated instructions, or by providing them with inadequate incentives, or with too little time to get to grips with the problem that has been set.
\end{quote}

One response to such criticism is that our test tubes need to be dirty, because that’s how it is in real life. Those of us who clean our metaphorical test tubes can


\textsuperscript{491} Camerer (2003) \textit{supra} note 462 at 5.

\textsuperscript{492} Binmore (2007) \textit{supra} note 511 at 1.

\textsuperscript{493} \textit{Ibid.}
then be accused of “fixing” our experiments to get the results we want. But who would apply the same reasoning to chemistry experiments?\textsuperscript{494}

The reality is that both sides of this debate are correct: rational economic man does not usually exist in the messy complexity of the real world but rational economic man can exist in circumstances that resemble the laboratory setting (whether those circumstances occur naturally or are created). When the issue is looked at from a social constructionist perspective, this becomes even clearer. When game theorists like Binmore insist that the circumstances of experimental games be consistent with game theory assumptions – namely that the games be simple, the incentives be high enough, and people play the game long enough to learn those rules – are they not just engaged in a learning exercise where they are teaching people through the environment and incentives to act the way they want them to? For example, Binmore argues that game theory works extremely well in predicting the results of Telecom auctions whose bidding circumstances are constructed to match the assumptions of game theory.\textsuperscript{495} Similarly, when critics construct more complicated experiments and lower the incentives, are they not also engaged in a similar type of learning exercise where they are generating the behaviour that they want? For example, Donald Frank constructed a study where people were allowed to fraternize for 30 minutes before playing a prisoner’s dilemma game and the incentive for defecting was lowered to $1. Not surprisingly, the study found that people cooperated most of the time.\textsuperscript{496}

Each of these arguments is about creating worlds in which theories work. There is an emerging set of literature around this topic in the social theory of markets called

\textsuperscript{494} Ibid. at 5.

\textsuperscript{495} Ibid.

\textsuperscript{496} Ibid. at 6.
“performativity”. French sociologist Michel Callon was the first to write about the performativity of markets in his 1998 book *The Laws of Markets*. He used the performative theory of philosopher J.L. Austin to describe what he found. According to Austin, a performative utterance is a specific kind of statement that establishes its referent simply by being said.\(^{497}\) In other words, the utterance is not simply reporting on a state of affairs – rather the utterance brings about a state of affairs. For example “I apologize” is a performative utterance because the apology happens as you say it. In contrast, “He apologized” is a report on a state of affairs.\(^{498}\) Performatists argue that economics is not a science, the purpose of which is to observe the world. Instead, they argue that economics is producing the world in its own image.\(^{499}\) Callon stated it this way: “Economics . . . performs, shapes and formats the economy, rather than observing how it functions.”\(^{500}\)

To show this aspect of economics, Mackenzie has done several important studies of the performativity of different economic markets. In his book *A Camera, Not an Engine* he highlighted his studies of the creation of the Chicago Board Options Exchange (CBOE).\(^{501}\) Performatists have also studied derivatives,\(^{502}\) hedge funds,\(^{503}\) arbitrage,\(^{504}\) accounting, the


\(^{498}\) *Ibid.*

\(^{499}\) *Ibid* at 2.


\(^{503}\) *Ibid* at 37-63.
emissions markets, the calculation of LIBOR, and the efficient market hypothesis. In each case, they found that economics had an active role in shaping the market in question. As Mackenzie puts it: “economics does things.”

Michel Callon has also argued that economic man does exist and that we need to understand the circumstances under which he is created. That means that not only does the economic approach to behavioural game theory tend to underestimate the amount of altruistic and non-selfish behaviour exhibited by participants, it may actually be creating selfish behaviour by teaching and theorizing that people act in their own self interest. For example, there are a number of experiments that show that participants with an economics education act more in their self-interest than other participants. In the original Prisoner’s Dilemma experiment, the inventors, Flood and Dresher, ran 100 games with two subjects. One chose to cooperate 78 times and the other, an economist, cooperated only 68 times. In 1981, Marwell and Ames put together a panel of 5 economists and 1 sociologist and asked them to make theoretical and public predictions about the outcomes of public goods experiments. The theoretical and public predictions were different. The economists’ theoretical predictions were all around zero. Only the sociologist saw no major gap between theory and reality. Marwell and Ames showed that the

504 Ibid at 85-108.
505 Ibid at 137-176.
506 Ibid at 1-7.
510 Sally (1995) supra note 423 at 60.
5 economists underestimated the amount of altruistic and non-selfish behaviour. In a similar 1992 study, Marwell and Ames found that graduate students of economics cooperated only 20% of the time while others cooperated 40-60% of the time. Robert Frank also found evidence that studying economics inhibited cooperative behaviour.

While these results may be contested, they highlight the danger that occurs when people “learn” about the assumptions we teach them. There is a movement in economics against the simplistic teaching of neoclassical economic assumptions. A petition has been signed by many economics students and professors asking that the introductory economics textbooks contain more realistic descriptions of the assumptions related to human nature, among other things. This movement has been written about by economist Edward Fullbrook who believes that the assumptions that we teach students in economics are “toxic”.

512 Ibid.
514 Other studies have found either no relationship between economic major and behaviour or that economics majors are more cooperative: Camerer (2003) supra note (found no relationship between academic major and behaviour); Carter, J. R., & Irons, M. D. “Are Economists Different, and If So, Why?” (1991) 5(2) The Journal of Economic Perspectives 171 (found in ultimatum experiments that economics majors offered 7 percent less and demanded 7 percent more than other players. But, did not matter between 1st year and seniors – therefore the behaviour was not learned during the course of the program.); Daniel Kahneman, Jack Knetsch, and Richard Thaler, “Fairness as a Constraint on Profit Seeking: Entitlements in the Market” (1986) American Economic Review LXXI 728; Bruno Frey & Iris Bohnet, “Institutions Affect Fairness: Experimental Investigations” (1995) 151(2) Journal of Institutional and Theoretical Economics 286 (economics and business students offered more and behaved as other majors); Catherine Eckel & Philip Grossman, “Altruism in Anonymous Dictator Games” (1996).16 Games and Economic Behavior 181 (economic majors performed same as psychology majors); John Kagel, Kim Chung & Donald Moser. "Fairness in Ultimatum Games with Asymmetric Information and Asymmetric Payoffs," (1996) 13(1) Games and Economic Behavior 100 (economics majors behaved the same as other majors).
In the end, all of this is just evidence in favour of the social constructionist view of reality. We can create any social system that we want. We can create economic markets consistent with game theory, we can create games where people act selfishly all of the time, we can create games where people cooperate all of the time, and we can create markets where people cooperate most of the time. Furthermore, we can create these systems with incentives and punishments or we can create them through education and learning. It is simply a choice about what we want.

There is, however, one big difference between an economic approach and a dialogic or sociological approach. The economics approach is behavioural and does not care what is inside the “black box” – changes in behaviour are brought about by incentives and punishment. A broader sociological or dialogic approach, which focuses not only on the behaviour but also on why the behaviour occurred, emphasizes what happened within the “black box”.

4.6 The Results of Experimental Games and the Implications for Corporate Law and Regulation

Social dilemma experiments have made a huge contribution to our understanding of how people make decisions in situations involving other people. The controlled environments that were created allowed us to discover that cooperation flourishes in the right social contexts and is affected most by:

1) culture and education (age);
2) instructions from authority;
3) communication (a specific type – sincere or meaningful); and
4) internal motivators – or reciprocity of trust.

Social dilemma experiments have also allowed us to discover that the variables that economic theory thought would most affect behaviour do so only in limited circumstances: incentives only work when they are very large and punishment can increase cooperation in repeated games but meaningful communication may also suffice.

In fact, when most of the realities of social life are taken into account (a large number of players, face-to-face communication, presence of authority figures, institutional rules, culture and education, etc.) then it is reasonable to hypothesize that in complex social situations cooperation is the natural state and people need large incentives to act self-interestedly. This hypothesis is in stark contrast to the law and economic approach to corporate law and regulation that assumes that people act in a rational and self-interested way most of the time. If this assumption is not true then it is really important for the fabric of society that we stop talking about it, teaching it, creating laws to support it, and regulating as if every actor were self-interested.

The results of the social dilemma experiments give us a glimpse of the unintended consequences that these theories may be having on our society. Economic man only exists in certain circumstances that we largely have to create. Those circumstances are actually destructive to cooperation. We may, through our law and regulation, be creating exactly what it is that we are trying to eliminate. The current systems, beliefs, practices, institutions, language, narratives, and dialogues of the market and its regulation may be creating corporations and markets full of self-interested actors. The education system and corporate culture creates actors

516 Blair and Stout hinted at this when they stated “Homo Sapiens in a social dilemma – unlike homo economicus – shows a markedly and predictable tendency toward ‘irrationally’ cooperative behaviour in general and toward trust behavior in particular”. See Blair and Stout (2001) supra note 420 at 1761.
that believe the economic assumptions of self-interest, the legal system is built to provide incentives to drive self-interested behaviour, and our corporate regulation is focused on punishing people, which destroys pre-existing trust and cooperation.

An even more damaging thought is, as Blair and Stout stated, the possibility that “just using the language of self-interest can undermine trust and cooperation.”

They were probably right. There is now experimental evidence to suggest that even the words and language we use can affect cooperation rates. In one social dilemma experiment two groups of players were given different labels for the game to be played. The first group was told they would be playing the: “Community Game”. The second group was told they would be playing the “Wall Street Game”. Both groups were presented with identical pay-off structures but the different labels produced dramatically different results. The players playing the Wall Street Game cooperated only one third of the time, whereas those playing the Community Game cooperated more than two thirds of the time.

These concerns are brought to an even higher level when we take into account the experimental finding that a few selfish actors can destroy a cooperative system in just a few rounds. This result has been found in computer experiments of the Prisoner’s dilemma game. When a game is seeded with computer generated self-interested players, cooperation declines rapidly. This implication of this study is that social conditions that encourage cooperation are

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517 Ibid at 1809 where they state: “Indeed, trust can be undermined not only by using external incentives but even by using the language of external incentives.”

518 Ibid at 1768.

harder to generate than they are to destroy.\textsuperscript{520} One defection can start the process of creating a non-cooperative social environment. In fact, this effect is so strong that behavioural game theorists Camerer and Fehr argue that “the existence of these subjects [self-regarding individuals] may cause aggregate outcomes to be close to the predictions of a model that assumes that everyone is rational and self-regarding.”\textsuperscript{521} As Blair and Stout stated back in 2001, this situation raises serious concern for corporate law and regulation with the dominance of the law and economics approach.\textsuperscript{522} It also sounds eerily similar to the Global Financial Crisis where a few self-interested actors almost destroyed the worldwide financial market system – experimental hypotheses have become a stark reality.

But to focus too much on the negative implications of the experimental evidence would be to miss the promising and exciting implications that are presented when the findings are looked at with a social constructionist lens. This social constructionist view of the experimental game evidence is not problematic from a corporate law and regulation perspective. In fact, it is the opposite, it is empowering. Corporate law and regulation is in the business of constructing futures – the future of the corporate world. We want that future to be consistent with the regulatory outcomes of our corporate law and regulation. The empirical evidence shows that people learn the behaviour that is expected of them, provided the right context is created. With regard to complex tasks, that context includes special use of language and communication to assist corporate participants to engage in learning.

\textsuperscript{520} Blair and Stout (2001) supra note 420 at 1776.

\textsuperscript{521} Camerer & Fehr (2004) supra note 432 at 47.

\textsuperscript{522} Blair and Stout (2001) supra note 420 at 1809.
The challenge for corporate law and regulation is how to build a new approach to regulation that is not based on traditional assumptions of rational self-interest to modify behaviour through external incentives and begin to understand how behaviour changes through the use of internal incentives (like trust). Nobel prize-winning economist Elinor Ostrom provided such a challenge in her 1998 Presidential Address to the American Political Science Association when she called for more robust second-generation rational choice models that could accommodate the irrational parts of human behaviour including communication, trust, reciprocity, norms, and rules.\footnote{Elanor Ostrom, “A Behavioral Approach to the Rational Choice Theory of Collective Action: Presidential Address, American Political Science Association, 1997”. (1998) 92(1) The American Political Science Review 1.} Behavioural economist Colin Camerer has also provided a list of the top ten open research questions that experimental game theory needs to answer, including:

1. How do people learn?
2. How exactly are people thinking in games?
3. What games do people think they are playing?\footnote{“A large body of theory on how to design rules to achieve objectives (“mechanism design”) has blossomed in recent years. But many of these mechanisms impose constraints on individual rationality, and presume rational response to rules, which are sometimes cognitively implausible or difficult even for designers to compute. These mechanisms won’t work if people can’t figure out whether to participate, or how to react to these rules. As in other domains of economic design, experiments are an efficient way “test-bed” mechanisms and craft good theory (and hence, practice) of boundedly rational mechanism design” Camerer (2003) supra note 462 at 475.}
4. Can experiments sharpen the design of new institutions?\footnote{The other research questions on the list included: How do people value the pay-offs of others? What happens when people confront new games? How do social preferences vary across people and environments?}
5. How do people behave in very complex games?
6. How do socio-cognitive dimensions influence behaviour in games?
7. How do teams, groups, and firms play games?\footnote{525}

When we start to understand the answers to these kinds of questions, we will be closer to building more robust and comprehensive law and regulation models. So, the way forward is both experimental and theoretical. We need to broaden the behavioural approach of experimental games to include more psychological and sociological approaches – to look inside the “black
box” to build more complex, more realistic games. At the same time, we need to look for new theories or expand existing theories to accommodate internal reasons for why people change or learn new behaviour. Progress has been made on both these fronts in the last 20 years, but there is still a long way to go.

In the experimental game field, recent studies have tried to begin to bridge the gap between an economic experimental approach and an observational sociological approach to study behaviour in more complex social dilemmas.\footnote{For examples see: Roth, Alvin, Vesna Prasnikar, Masahiro Okuno-Fujiwara, and Shmuel Zamir, “Bargaining and Market Behavior in Jerusalem, Ljubljana, Pittsburg and Tokyo: An Experimental Study” 81 American Economic Review 1068; Joseph Henrich, “Does Culture Matter in Economic Behavior? Ultimatum Game Bargaining Among the Machiguenga of the Peruvian Amazon” (2000) 90 American Economic Review 973; Joseph Henrich Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, & Richard McElreath, “In Search of Homo Economicus: Behavioural Experiments in 15 Small-Scale Societies” (2001) 91(2) American Economic Review 73; Henrich Joseph, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, Richard McElreath, Michael Alvard, Abigail Barr, Jean Ensminger, Kim Hill, Francisco Gil-White, Michael Gurven, Frank Marlowe, John Patton, Nathalie Smith, and David Tracer, “Economic Man in Cross-Cultural Perspective: Behavioural Experiments in 15 Small Scale Societies. Working Paper. Online: <http://wesbuer.bus.umich.edu/henrich/gameproject.htm> (accessed May 4, 2014).} One example is a set of intercultural studies done by economists and anthropologists. They designed a cross-cultural behavioural experiment to test the effect of social conditions. They used 12 field researchers in 15 small-scale societies and ran ultimatum, public good, and dictator games in a wide variety of economic and cultural conditions.\footnote{Henrich (2001) supra note 547 at 73. The cultures included three foraging societies, six slash-and-burn horticultural societies, four nomadic herding groups, and three sedentary small-scale agricultural societies. Countries included Peru, Tanzania, Bolivia, Ecuador, Mongolia, PNG, Zimbabwe, Kenya, Paraguay, and Indonesia.} They found that the canonical model of \textit{homo economicus} was not supported in any of the societies studied, there was considerable variability across the cultures, and the variances in individuals’ behaviour were due more to the structure of the economy and the group level differences in organization than individual characteristics. In short, they found that behaviour in the games was consistent with behaviour in the economic patterns of everyday
life in these societies. If everyday economic life were more cooperative, then the games would elicit more cooperative behaviour. Other exciting developments in experimental games that are attempting to bridge the gap between strict economic models and sociological or psychological model include the strategy method and companion modelling approach.

4.7 Development of Hypotheses for Corporate Law and Regulation

While experimental games have taught us a lot about individual behaviour, behavioural change, and the most important variables that affect behaviour change, they have not taught us much about what is going on inside the black box of the participants' minds, whether participants were able to double-loop learn, or the use of dialogic techniques to cause behavioural change.

In order to understand this distinction better, I would like to reintroduce the concepts of Compliance and Adherence that were discussed in Chapter 2. “Compliance” is when people exhibit the desired behaviour but do not necessarily understand why or agree with it. It is simply doing what someone else wants you to do whether you believe it is the right thing to do or not. This is the kind of behaviour that the experimental game literature has been very good

528 Ibid at 77.
531 This can also be thought of as “single-loop learning” See Chapter 3.
532 For example, Webster’s defines compliance as: “1) Act or practice of complying; yielding as to a desire, demand, or proposal, 2) a disposition to yield to others.” See Webster’s New Collegiate Dictionary (New York: Merriam Webster, 1959) at 169.
at measuring and understanding. “Adherence” is when people exhibit the desired behaviour, understand why it is required, and agree with the reason for the requirement.\textsuperscript{533} Adherence means support for a cause or idea or faithful attachment and devotion.\textsuperscript{534} Adherence is double-loop learning a behavioural change. To date, the experimental game has not taught us much about adherence. It also has not taught us much about the use of dialogic processes in behavioural change.

Elinor Ostrom acknowledged these shortcomings of the experimental game research when she posed: How do people learn? And, how exactly are people thinking in games? These questions are a very important dialogic conception of corporate law and regulation because in that conception having the participants double-loop learn or adhere to the desired regulatory outcome is the best result because it may regulate future behaviour. From the perspective of a dialogic approach to corporate law and regulation, the analogous questions are: How do people double-loop learn desired regulatory outcomes? Can dialogic processes assist in double-loop learning desired regulatory outcomes?

Using the literature review provided to this point and the empirical evidence provided in this chapter it becomes possible to conceive of an experimental game that would allow testing of these two questions in a controlled environment. The experimental game could be designed to be a rough proxy for a regulated environment. In the experiment, the participants would be rough proxies for corporate actors, the rules of the game would be a rough proxy for the law, and the

\textsuperscript{533} This can also be thought of as “double-loop learning” See Chapter 3.

\textsuperscript{534} For example, Webster’s defines adherence as: “Quality, act or state of adhering; . . . steady or firm attachment; fidelity as to party or principle.” See \textit{Webster’s New Collegiate Dictionary} (New York: Merriam Webster, 1959) at 11.
authority figure would be a rough proxy for the regulator. During the course of the game the rules (regulations) could be changed using different techniques (including traditional regulatory techniques or dialogic techniques) and the effect on the participants’ levels of compliance and adherence could be measured. This experiment would be important for two reasons: it would allow us to determine if dialogic processes are useful in a regulatory setting to increase Compliance and/or Adherence and we would start to get a look inside the black box of participants’ minds during an experimental game. In designing such a game, there are a number of hypotheses that can be drawn from the literature review in this chapter that are important from a dialogic perspective. The hypotheses are:

**Hypothesis A: We can design a game to generate any desired regulatory outcomes we want.**

Baillet found that social dilemma experiments could be designed to generate any outcome desired from total self-interested behaviour to near complete cooperation. This can be done by emphasizing design characteristics that favour self-interested behaviour like anonymity, competitive language (i.e. “Pay-Off Game”), younger participants (less than 7 years old or students), providing large financial incentives to drive self-interested behaviour, using participant groups that do not have an identity (do not already know each other), not allowing them to communicate during the game at any time, and recruiting only participants with self-interested SVOs. In contrast, it is possible to design a game emphasizing design characteristics that favour cooperative behaviour like allowing communication and face-to-face interaction, using post-identity groups that already know each other, using older participants (adults), providing no or low financial incentives, and recruiting people with only prosocial SVOs.
Hypothesis 1: Participants’ initial behaviour in the game will be related to their SVO measurements.

We know that the initial allocation decisions made by participants in social dilemmas is linked to their SVOs. The amount of money sent and/or returned by participants in the first round will be based on their prior learned behaviour and preconditions and will be closely linked to their measured SVO rates. For example, in a Trust Game, a proself SVO will be more likely to send five or less (out of ten) on the first round than a prosocial, who will be more likely to send an amount greater than five. A similar hypothesis should hold true for return rates with proself SVOs returning less than prosocial SVOs.

Hypothesis 2: Cooperation will deteriorate in an iterated game unless either communication or punishment is allowed.

This hypothesis is based on the findings of Fehr and Gachter (2000) and Baillet (2010). In iterated games cooperation decreases unless players are able to punish or set aside resources for punishing (Fehr & Gachter) or communication is allowed – either at the start of the game or ongoing communication.

Hypothesis 3: Instructions from an authority figure will drive compliance.

This was a finding of the 1995 Sally meta-analysis. If an authority figure provides instructions – for example, you must contribute 50% of your entitlement and you must return 50% of what you receive – the behaviour of most participants will change to follow the

instructions. In the context of regulation, this means that the regulator or “authority figure” has a very significant influence on the behaviour of the participants.

**Hypothesis 4: An audit procedure combined with punishment will maintain compliance to desired regulatory outcomes in iterated games.**

This finding comes from Fehr and Gachter (2001). If the game includes punishment, cooperation should not decrease significantly over the rounds. In fact, evidence shows that the cooperation rates should increase. However, these results will be behavioural only and will not result in double-loop learning in the participant, and if the audit and punishment procedure were to disappear cooperation rates would decline as per the normal expectation (Hypothesis 2).

**Hypothesis 5: Communication and/or dialogue about a desired regulatory outcome will have a significant effect on levels of Compliance.**

Where individuals are allowed face-to-face communication, cooperation rates will increase. In addition, where the face-to-face communication allows time for the participants to discuss the game and to signal to each other and make promises to each other, cooperation will increase even more. This kind of intervention will result not only in behavioural change but also double-loop learning and might actually cause changes in participants’ tendencies to cooperate in future situations (i.e., it may actually change their subsequent SVO measurement).

**Hypothesis 6: Communication and/or dialogue about a desired regulatory outcome will have a significant effect on levels of Adherence.**

This is a new hypothesis that is not supported by any current data. It is an extrapolation of the Dialogic OD mindset to experimental games. In Dialogic OD, people learn by changing their
mindset about the world and their mindset is created through their conversations with people they interact with. So, the hypothesis is that if participants are allowed to dialogue with the other participants of the game about the desired regulatory outcomes, not only will the dialogue and communication drive higher compliance, but it will also result in higher levels of Adherence.

**Hypothesis 7: Participants with different SVOs will respond to differently to interventions.**

We know from previous research that proself SVOs are more likely to respond to external incentives like pay-offs, audit, and punishment while prosocial SVOs are more likely to respond to communication and dialogic interventions. Therefore, I hypothesize that participants with proself SVOs will be more likely to respond to audit and punishment with increased levels of Compliance and Adherence while prosocial SVOs will be more likely to respond to dialogic interventions with higher levels of Compliance and Adherence.

These hypotheses were tested in an experimental game called the “Pay-Off” game, which is described in detail in the next chapter.
Chapter 5: Learning the Rules: An Experimental Game Approach to Corporate Law and Regulation

“I definitely expected that my counterpart would work toward the “Goals” set by the regulator after the intense discussion and was completely surprised by the self-benefit attitude that came in reply.”

A Participant in the Experiment

5.1 Introduction

Recent meta-analyses of social dilemma experiments show that dialogue and communication are far more important to people working together in social dilemma games than any other forms of induced cooperation, including punishment and rule changes. These findings are consistent with recent developments in the field of organizational development where practitioners are finding that the most effective way to meet adaptive challenges requiring transformational change in large organizations is using dialogic practices and not changing rules, policies, and procedures. Both of these findings track closely with advances in regulatory theory that hypothesize that the best way to regulate corporations may be to adopt a learning approach to regulation and to have ongoing dialogues with corporations on how they are meeting the desired regulatory outcomes instead of just passing laws and auditing and punishing corporate actors. To date, however, there is little empirical data showing that dialogic change processes are effective in organizations and there has not yet been a study measuring the

536 These findings from the experimental game literature were summarized in detail in Chapter 4. See specifically, Baillet (2010) supra note 437.


538 These learning approaches to regulation were summarized in detail in Chapter 3.
effectiveness of dialogic processes in a regulatory setting. From a corporate law and regulation perspective the key questions that remain to be answered are: Can dialogic processes increase Compliance and Adherence to desired regulatory outcomes? If yes, how do dialogic processes compare to other traditional regulatory techniques?

5.1.1 Purpose of the Experiment

The primary objective of this experiment was to test, in a controlled environment, whether dialogic techniques could be used to achieve greater Compliance and Adherence to desired regulatory outcomes than other traditional regulatory techniques. The secondary objective was to look inside the “black box” of the participants’ minds after the experimental game by measuring the participants’ level of Adherence.

5.1.2 Summary of Experiment

In this experiment, a modified version of the classic Trust Game was used to test participants’ ability to learn desired regulatory outcomes. Participants were surveyed before the game to determine their pre-disposition towards trust and their social value orientation (SVO). They then played a multiple round Trust Game with an anonymous partner. Halfway through the game the rules of the game were changed using one of the three different regulatory approaches. Participants’ actions during the game were recorded to determine their Compliance and Adherence with the rule change and they were re-surveyed and interviewed after the game to determine whether they had gained any Adherence towards the desired regulatory outcome or other learning from the game.
5.2 Methods

5.2.1 Participants

The participants were recruited from the professional schools and executive programs of the UBC Law School and the SFU Business School. Recruitment was done by way of in-class recruitment scripts, bulletin board postings, and e-mail recruitment from the respective departments. The target was to have between 40 and 80 participants for the study. In the end there were 59 participants.

5.2.2 Design

An experiment was chosen as the appropriate method for initial tests of dialogic processes in a regulatory setting because of the early stage of development of these theories and also because of the inherent risk involved in using dialogic processes. Once a dialogic process is initiated it is difficult to predict what the outcomes will be. A real life regulatory case study was deemed too risky for the participants and also too complicated to be completed within the timeframe of my Ph.D. program. Therefore, for these early investigations a more controlled environment with a simulated regulatory setting was chosen as the appropriate way to test the hypotheses.

The classic Trust Game from the social dilemma literature was chosen as the appropriate experimental game because it is one of the most widely used games, it has a very large set of existing results to compare to, and it could easily be modified to approximate a corporate regulatory environment.\textsuperscript{539} In addition, because of a recent meta-analysis, the probable outcomes

\textsuperscript{539} For a description of the classic Trust Game, see Joyce Berg, John Dickhaur and Kevin McCabe, “Trust, Reciprocity and Social History” (1995) 10 Games and Economic Behavior 122.
of each design choice could be approximated.\textsuperscript{540} The trust game was also chosen because there is a history of utilizing it in conjunction with SVO instruments. This is important because SVO will be used in this experiment as one of the measures for the dependent variable Adherence.

In the classic Trust Game participants are divided into anonymous pairs and each provided with an initial endowment of money (i.e. $10). Player A needs to decide how much of that money to send to Player B (the “Contribution”). On the way, the money is multiplied by a multiplier (e.g. 3x) (the “Multiplier”) and the resulting amount is given to Player B. Player B adds that amount to their initial endowment to determine the total amount they now have. Player B then decides how much of the total to send back to Player A (the “Return Rate”, which is calculated as the percentage of the total amount returned to Player A).

This experimental game was set-up as a rough proxy for a regulated environment: the participants in the experiment were rough proxies for corporate actors, the rules of the game were a rough proxy for the law, and the authority figure was a rough proxy for the regulator. The three different regulatory approaches the game was designed to test were: (1) a simple rule change (the “Rules” condition), (2) a rule changed combined with an audit and punishment procedure (“Audit” condition), and (3) a rule change combined with a dialogic process (the “Dialogic” condition). Groups were randomly assigned into conditions and each condition had approximately one third of the total participants.

\textsuperscript{540} Baillet (2010) supra note 437.
5.2.3 What to Comply With? Unpacking Compliance, Cooperation and Self-Interest, and Contribution and Return Rate

In the classic Trust Game, the participants’ decisions are how much money to contribute and what the Return Rate should be. In unregulated games the normal Contribution Rate is about 50% of the initial endowment and the normal Return Rate is about 50%. Given the structure of the Trust Game, it was decided that the rules that would be imposed during the game would be prescribed and aspirational levels of Contribution and Return Rate. The minimum prescribed rules were set at a level below average Contribution and Return Rates with a Contribution of 40% and a Return Rate of 40%. The aspirational goals were set at a level that would maximize the joint gains of participants in the game, with a Contribution of 100% and a Return Rate of 50%. The outcome of these decisions was that participants would be complying if they were cooperating. This was simply a choice and the game could have been designed to have compliance match with self-interested behaviour. It is important to note that this experimental structure is not about what regulatory outcomes should be – it is simply about which process is the most effective at assisting corporate actors in learning and adjusting their behaviour to the new regulatory outcomes.

The aspirational goal was included in the game structure because it was required for the dialogic process for the Dialogic condition (it was the “imagined future”). To ensure that it had the same effect on all groups it was added to each condition with the minimum rule change.

5.2.4 The Pay-Off Game

The game used in this experiment was called the “Payoff Game”. In the game participants competed to accumulate 100 points in 7 rounds to qualify for a draw where they could win $500. The tension in the game is between the desire to win the $500, which requires
the participants to act in their own self interest and keep enough money to accumulate $100, and
the rules, which were changed during the game to try to compel players to give and return higher
number of points than normal.

The Pay-Off Game is a modified version of the classic Trust Game. There were a number
of modifications to the classic structure to make the game resemble a corporate regulatory
environment and to reduce initial expected cooperation to levels that would allow measurable
impacts to be made when the rule changes were applied. These general modifications
included:

• **Iterated Game:** It was an iterated game with 7 rounds. This mirrored real-life
corporate regulatory environments where interactions occur on an ongoing basis.

• **Financial Pay-Off:** Players did not keep the money they were playing with but
instead competed to accumulate 100 points in order to qualify for a draw to win $500.
The decision to compete for a pay-off was made for two reasons. First, to increase the
likelihood of self-interested behaviour. Research has shown that self-interested
behaviour increases as the financial incentive for it increases. Second, to reduce the
cost of the experiment for the investigators.

• **Non-Zero Sum Game:** The game was structured as a non-zero sum game – every
participant could qualify for the draw provided that there was some cooperation with
the other participant they were playing with. This mirrored real-life markets and
businesses where participant interactions are often non-zero sum interactions and
everyone can gain.

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541 This design was linked to the first hypothesis offered in Chapter 4 - Hypothesis A: We can design any regulatory
environment (or game environment) we like.

542 Previous studies have shown that a single larger prize is not significantly different than allowing participants to
keep the endowments. See Noel Johnson & Sandra Mislin, “Trust Games: A Meta-Analysis” (2011) 32 Journal of
Economic Psychology 865.

543 This was accomplished by making the multiplier 3 times and the goal 100 points. If a player did not cooperate at
all they would score only 70 points. If the pairs sent the maximum and split the difference each player would receive
140.
• **Rule Change:** The rule change was introduced half way through the game between round 3 and round 4. The timing of the rule change allowed observation of behaviour before the rule change and multiple rounds after the rule change.

The remaining design modifications to the game were all made to allow for testing of the remaining hypotheses set out in the last chapter. Each of those hypotheses and the design decisions made to allow for their testing, if any, are outlined below:

**Hypothesis 1: Participants’ Round 1 Contribution and Return Rates will be related to their pre-game SVO.**

Initial allocation decisions made by participants in social dilemmas are linked to their SVOs. The amount of money sent and/or returned by participants in the first round will be based on their prior learned behaviour and preconditions and will be closely linked to their measured SVO rates. For this reason, we decided to implement a pre-game survey to collect each participant’s pre-game SVO and predisposition towards trust.

**Hypothesis 2: Contribution and Return Rates will deteriorate between rounds 1 and 3.**

Cooperation rates decline in iterated Trust Games unless communication or punishment is allowed. The decision was made not to allow any communication or punishment in rounds 1 through 3. Each of these conditions will be added into the experiment as experimental conditions after round 3.

**Hypothesis 3: The Rule Change will cause high levels of Compliance starting in round 4 and increase Contribution and Return Rates.**

Instructions from Authority are one of the most important factors driving behaviour of participants in experimental games. Therefore, we decided to introduce the rule change as an
instruction from Authority between round 3 and round 4. The regulator handed out the rule change after interrupting the game and voicing displeasure with how the game was progressing. It was expected that this form of rule change introduction would cause high levels of Compliance in the round immediately following.

**Hypothesis 4: The audit procedure introduced in the Audit Group after round 4 will maintain Compliance levels through to round 7.**

Fehr and Gachter have shown that cooperation rates maintain themselves and even rise in iterated social dilemma experiments where participants can set aside a portion of their funds to punish cheaters.\(^{544}\) I am expanding this finding to apply to Compliance when Compliance is a function of cooperating in a social dilemma experiment. In the Audit condition an audit procedure will be introduced after round 4 and before round 5 to catch and punish cheaters. I hypothesize that Compliance in the Audit group will remain steady from round 5 through to the end of the game.

**Hypothesis 5: The Dialogue about the desired regulatory outcome will have a significant effect on levels of Compliance through to round 7.**

I hypothesize that when participants are provided with an opportunity to dialogue about rule changes, Compliance to those new rules will increase. In the Dialogic condition the game will be stopped after round 4 and all participants will be brought together in a dialogic intervention about the dialogic regulatory outcomes. I hypothesize that Compliance in the Dialogic Group will rise between round 4 and the end of the game.

\(^{544}\) Fehr and Gachter (2002) *supra* note 432.
Hypothesis 6: The Dialogue about a desired regulatory outcome will have a significantly greater effect on levels of Adherence through to round 7 than the other experimental conditions.

In Dialogic OD, people learn by changing their mindset about the world and that mindset is created through their conversations with people they interact with. So, the hypothesis is that if participants are allowed to dialogue with the other participants of the game about the desired regulatory outcomes, not only will the dialogue and communication drive higher compliance, but it will also result in higher levels of Adherence. I hypothesize that Adherence will increase in the Dialogic group between round 4 and the end of the game.

Hypothesis 7: Participants with different SVOs will respond to differently to the three different regulatory interventions.

Proself SVOs are more likely to respond to external incentives like pay-offs, audit, and punishment while prosocial SVOs are more likely to respond to communication and dialogue interventions. Therefore, I hypothesize that participants with proself SVOs will be more likely to respond to audit and punishment with increased levels of Compliance and Adherence, while prosocial SVOs will be more likely to respond to dialogic interventions with higher levels of Compliance and Adherence.

5.3 Procedures and Materials

Participants arrived at a sign-in room and were asked to sit in silence and not talk to anyone until the game started. Once everyone arrived, they were provided with a brief description of the game processes. This description was always the same and was read from the “Regulator Instructions” (attached as Appendix N-1). The participants were then randomly
assigned into anonymous pairs with players A & B.\textsuperscript{545} Participants’ anonymity was protected by pseudonym. Each participant was asked to put a pseudonym and password in an envelope when they started the experiment and to use their pseudonym throughout the process on all paperwork and during any face-to-face conversations.\textsuperscript{546} Players were then taken into separate rooms for each group A and B. No talking was allowed in the rooms. Participants then filled out the Pre-Game Disposition Survey (attached as Appendix N-2 and described in more detail below). Once all surveys had been completed and collected the game began.

The instructions for the game were written only on the paper in front of the participants (attached as Appendix N-3). The Regulator did not answer any questions about the rules. The game worked like this:

\begin{itemize}
\item **Player A’s Decision:** All players started off with a notional $10 in each round. Player A had $10 and Player B had $10 before any envelope passed.\textsuperscript{547} Player A decided how much of his or her $10 to send to Player B (the “Contribution”) and placed that amount in the “Envelope”. The amount left over was recorded to add to Player A’s bank. The envelope was collected from Player A and a multiplier of 3 times was added to it. This multiplied amount was then delivered to Player B. For example, if Player A contributed $5 to the envelope, Player B would receive $15 and Player A would keep $5 for their bank.
\end{itemize}

\textsuperscript{545} The one drawback to this approach is that only one measure will be provided for each participant depending on which group they are assigned to in the game. They will either be measured for their levels of trust (Group A) or trustworthiness (Group B). However, given that the variable that is generated is continuous and offers more variability, it was considered to be a superior outcome to get continuous data on one of the variables than dichotomous data on both, especially since this game is part of a four part multi-method pre-disposition methodology. Furthermore, the recent meta-analysis found that if the game is repeated with participants switching roles, trust declines significantly and therefore having participants switch roles will not provide comparable data. See Johnson & Mislin (2011) \textit{supra} note at 869.

\textsuperscript{546} Then at end the pseudonyms are drawn for the prize and identity is confirmed with the password. This procedure has been used before, see Friedel Bolle, “High Reward Experiments Without High Expenditure for the Experimenter” (1990) 11 Journal of Economic Psychology 157.

\textsuperscript{547} A recent meta-analysis of Trust Games showed that the amount of money did not make a significant difference therefore the decision was made to use $10. See Johnson & Mislin (2011) \textit{supra} note 563 at 868.
• **Player B’s Decision:** Player B recorded how much he or she received from Player A and added their own $10 to it to determine the total money in their possession. They then decided how much of the total to send back to Player A (the “Return Rate”) and placed this amount in the envelope. The amount that they kept was their total for the round. They recorded this total for the round in their “Bank”. For example, if Player B received $15 from Player A, they would have a total of $25. If they sent back $12, their Return Rate would be 48% and they would bank $13 for the round.

• **Recording the Outcome of the Round:** The envelope was then returned to Player A. No multiplier is added at this point. They recorded the amount they received back from Player B, added the amount that they had kept, and placed the total in their bank for the round. For example, if Player A had sent $5 and received back $12, they would bank $17 dollars for the round (the $5 they did not send plus the $12 they received back.). Each player recorded the amount earned in the round and banked it towards their 100-point goal and the next round would start.

• **Repeated for 7 Rounds:** This process was repeated 7 times for 7 full rounds. Players always played against the same person. Each round they played the Trust Game and banked the money they had left at the end of the round. That money did not enter into the next round. Each round started from scratch with $10 each.

• **Qualifying for the “Pay-Off”:** At the end of the game all players who had more than $100 in their bank had their names put into a draw to win one prize of $500.548

In order to assist with the recording of all of these decisions a set of paperwork was created that the participants were asked to fill out each round. It required them to record all of their decisions and bank totals. The paperwork consisted of a Player A Record Sheet, a Player B Record Sheet, and the Envelope Paper.549 These documents are attached as Appendix N-4.

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548 This type of pay-off award should not have an impact on behaviour during the experiment and has been used in the past, see Bolle (1990) supra note 567.

549 A recent meta-analysis of 143 Investment Games (Trust Games) with over 15,000 participants tested which experimental conditions had a significant effect on the outcomes of the experiments and which did not. As a result of this meta-analysis it was decided for this experiment that the original double-blind mailbox procedure from Berg’s 1995 experiment was not required, which allowed for a significant simplification of the experimental protocol and the development of the “Envelope Paper”. See Johnson & 563 (2011) supra note at 12.
5.3.1 The Rule Change

In the original instructions there was no requirement to Contribute or Return any specific amounts. The Rule Change experimental condition was implemented after round 3 and before round 4. The Rule Change took two forms: 1) it had a prescribed minimum amount for Contribution (40%) and Return Rates (40%), and 2) it had an aspirational goal for Contribution (100%) and Return Rates (50%). The regulator distributed this rule change in each room with the following statement: “We have been watching the game and we are not happy with the way it is being played. So, we are implementing a rule change effective as of this round.” Again, the Regulator was unable to answer any questions about the rule change. The rule change was applied in all the experimental conditions. The paper used to implement the rule change is attached as Appendix N-5.

5.3.2 The Three Experimental Conditions

Each gaming session was randomly assigned one of the three experimental conditions: Rules, Audit, and Dialogic. The structure of the experiment from round 4 until the end of the game was determined by the experimental condition. In the Rules condition no further changes were made. This was the control group.

In the Audit condition, the Regulator implemented an audit and punishment procedure between rounds 4 and 5. The paper used to introduce the audit procedure is attached as Appendix N-6. The procedure worked like this: each round the Regulator would randomly pick a participant in each room and audit to ensure that they were meeting the minimum Contribution and Return Rates. Anyone caught not meeting those rates would lose all money earned in that
round. This audit was applied in rounds 5, 6, and 7. All the other players were aware that an audit had been conducted and who was chosen. They were not notified of the outcome.

In the Dialogic condition, the Rule Change was implemented between round 3 and round 4. The gaming session was stopped between rounds 4 and 5. Participants were then invited into a large room with circular tables that seated between 4 and 6 people. They were randomly invited to take a seat. The Regulator then explained his or her desire to have everyone meet the Aspirational Goals and then ran a World Café with the participants to explore three questions. Each round consisted of participants discussing, at their tables, their answers to a question. For each question, the participants were asked to sit at a minimum of three different tables so that they would most likely have had a chance to talk or dialogue with everyone else in the room on each question. The regulator notified participants when it was time to change tables. Each round lasted approximately 20 minutes. The regulator stopped the discussions and asked each table to report their answers and recorded them on either large flipchart paper or a chalkboard for all participants to see. Then participants were asked to change tables and form different groups and the next question was introduced. The questions, in order, were:

1. What strategies could we adopt to optimize everyone’s return?
2. What would stop people from doing that?
3. What can we do about those issues?

Once the dialogue started, the role of the Regulator was simply to record the outcomes from each table and propose the next questions. The Regulator did not advocate any position or engage in the dialogue. At the conclusion of the World Café, players were asked to return to their rooms and complete the gaming session. The World Café process took approximately 1 hour in each
gaming session in which it was used. There was no other intervention in this experimental condition.

5.3.3 The Pre-Disposition Survey

Every participant comes to an experimental game with a pre-disposition to cooperate or act in their own self-interest. This pre-disposition is based on childhood experience, adult learning and experience, and age.\(^{550}\) In the experimental game literature this is referred to as a social value orientation (SVO) or the magnitude of concern people have for others. SVO is defined as “the weights people assign to their own and others’ outcomes in situations of interdependence.”\(^{551}\) These value orientations often have an effect on people’s behaviour in the games. A recent meta-analysis of SVO studies by Balliet et al. found that SVO explained about 9% of the variance in cooperation in social dilemmas.\(^{552}\) The determination of the pre-disposition of participants is crucial for this experiment for two reasons. First, it will assist in creating a picture of each participant’s mental map of what they think about trust and self-interested and cooperative behaviour. This is required to determine whether learning takes place at the end of the experiment as a result of the regulatory interventions. For this reason, the decision was made to make the pre-disposition survey broader than a traditional SVO to try and capture the participant’s mental maps. Second, it is also important because it is possible that a participant’s  


\(^{551}\) See Balliet (2010) supra note 437 at 533.

\(^{552}\) The result was \((r = .30)\). The effect was larger when participants were not paid \((r = .39)\) than when they were paid \((r = .23)\) and larger in give-some games \((r = .29)\) as opposed to take-some games \((r = .22)\). See Daniel Balliet, Craig Parks & Jeff Joireman, “Social Value Orientation and Cooperation in Social Dilemmas: A Meta-Analysis” (2009) 12(4) Group Processes & Intergroup Relations 533 at 541.
response to a particular regulatory approach may depend on their SVO. For example, the effectiveness of training (or learning) specifically related to the learning of cooperative behaviour during experiments may be mitigated by SVO type. Further, certain SVO types may respond better to incentives while others may respond better to signals of trust.

The Pre-Disposition Survey used in the experiment was a short survey that was a compilation of two pre-existing instruments (together with the collection of some basic demographic data). The decision was made to use existing instruments rather than develop a new instrument that would need to be validated. The two instruments that make up the Pre-Disposition Survey are the World Values Survey questions on trust and the Ryan Murphy et al.’s SVO Sliding Measure that measures how much people actually contribute to others in a series of hypothetical investment questions. These specific instruments allowed for triangulation of the data by collecting data on what people indicate their values are (trust and trustworthiness), data on what people actually do in hypothetical situations (the SVO instrument), and data on what people actually do in real situations (the game outcomes).

5.3.4 The Post-Game Data Collection

After each gaming session players were asked to total up their scores and then fill out the Post-Game Disposition Survey. This survey was identical to the Pre-Game Survey in regards to the questions on trust and SVO. It also added an open-ended question: “What did you learn during the game?” A copy of the post-game survey is attached as Appendix N-7. In addition, in


554 See Bogaert et al. (2008) supra note 582 at 463-466 where the authors argue that prosocials respond better to signals of trust and proselfs respond better to incentives to cooperate.
each gaming session one participant was randomly selected for interview by the Regulator. The regulator simply asked “What did you learn” and then recorded the participant’s answers.

5.4 Data and Analysis

The three independent variables in this experiment were the three different regulatory approaches that comprised the experimental conditions: the Rules conditions, the Audit condition, and the Dialogic condition. The form of those conditions has been described above.

There were two moderating variables in this experiment: pre-disposition to trust and SVO. Since the Trust Game is designed to measure behaviourally a person’s ability to Trust (Player A) and a person’s ability to be trustworthy (Player B) we can expect that pre-dispositions to trust will have an effect on a participant’s initial levels of Contribution or Return Rate, as the case may be. Similarly, we know from previous research that a person’s SVO explains about 9% of the variance in social dilemma experiments. Note that it is only the pre-existing measurements of these variables before the game that constitute the moderating variables. The experiment is designed to cause changes to these variables during the course of the experiment and it is expected that different experimental conditions will affect them in different ways. The changes in these variables during the experiment will be used as measures of the dependent variables. This relationship with these concepts, as both a moderating and dependent variable, mirrors real-life double-loop learning processes in a regulatory environment, the learning process in a feedback loop where a participant comes to any regulatory situation with a specific pre-disposition to Comply and/or Adhere. During the course of their interactions with other participants in the situation and the regulator that predisposition will be affected by what they learn and experience. That learning and experience will then change the way they approach that
regulated situation in their next encounter, and the feedback loop repeats itself. This feedback loop in the regulatory setting was one of the feedback loops in regulatory scholar Christine Parker’s Triple Learning Loops.555

There were two dependent variables in this experiment: Compliance and Adherence. Compliance was measured behaviourally by recording the amount players either Contributed or Returned. This was measured only after the implementation of the Rule Change. Compliance was considered to be any amount above the desired threshold (e.g. 40% for Contribution and 40% for Return Rate).

Adherence was measured three ways: behaviourally, by a learning measure, and subjectively. The behavioural measure was similar to the Compliance measure except that Adherence was any amount equal to or greater than the Aspirational Goal of the Regulator (e.g. 100% for Contribution and 50% for Return Rate). The learning measurement was the delta between the players’ pre- and post-game scores on the Disposition Survey’s trust and trustworthiness instrument and SVO instrument. The subjective measure was coded from the player’s answer to the open-ended question on the survey and the coding of the post-game interviews.

Each of the variables is outlined below with descriptions of how the data was collected and analyzed.

5.4.1 Compliance Behavioural Measures

Compliance was measured as the percentage of participants who Contributed or Returned at least the minimum amount prescribed by the Rule Change. These data were collected from the

game Record Sheets and double-checked using the Envelope Papers. The data were then analyzed by generating the percentage of participants in any given group and/or round who met the minimum amounts of Contribution and/or Return Rates in the Rule Change. Since the Rule Change was introduced after round 3, Compliance rates were calculated from round 4 through round 7.

5.4.2 Adherence Behavioural Measures

Adherence was measured in the behavioural data as the percentage of participants who sent at least the Aspirational Goals of the Regulator (10 and 50%). Again, these data were collected from the game Record Sheets and double-checked using the Envelope Papers. The data were then analyzed by generating the percentage of participants in any given group and/or round who met the aspirational amounts of Contribution and/or Return Rates in the Rule Change. Since the Rule Change was introduced after round 3, Adherence rates were calculated from rounds 4 through 7.

5.4.3 Trust Questions

It is important to test for trust separately because it has been found that trust and SVO are two distinct concepts.556 Trust may be a meta-concept that underlies SVO. In this experiment, trust was tested using questions from the World Values Survey. The World Values Survey is a longitudinal survey of values from countries around the world. It has been completed every five years since 1990. The surveys usually consist of over 200 questions and the 2005 survey had

over 92,000 respondents.\textsuperscript{557} The findings of the surveys are available online.\textsuperscript{558} There are two questions from the 2005 World Values survey that deal specifically with whether people trust other people.\textsuperscript{559} They are questions V.23 and V.47:

V.23 Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people? (Turned into scale of 1 to 10).

V.47 Do you think most people would try to take advantage of you if they got the chance, or would they try to be fair? (Scale of 1 to 10).

The trust questions were coded into a 10-point linear scale with the left side of the question being assigned 1 and the right side 10. Changes in measures of trust and trustworthiness were measured as the difference between the pre- and post-game results. If there was a change the participant was coded as “Change” otherwise they were assigned the “No Change” categorization. The magnitude of the changes was calculated as the difference between the pre- and post-game results. For Question 1, a negative change was an indication of an erosion of and a positive change was an indication of an increase in trust. For question 2, a negative change was in indication of an increase in trustworthiness and a positive change was an indication of a decrease in trustworthiness. These data were then analyzed overall for all participants and by each experimental condition and differences were tested for significance.


\textsuperscript{558} For the findings for each of the World Values Surveys, see online: <http://www.worldvaluessurvey.org/index_surveys> (accessed May 4, 2014).

\textsuperscript{559} The other trust questions on the survey will not be used for this experiment because they relate to trust in specific social institutions like family, neighbours, government, or trust in general groupings of people like people of another religion or nationality. For example, see V.116-V.121 and V.125-V.130.
5.4.4 SVO Slider Measure

SVOs are designed to test the individual differences in participants in terms of the weight they attach to their own and others’ outcomes in situations of interdependence. This is done by presenting participants with a set of hypothetical scenarios in a decomposed game where they are to assign values to themselves and other people. For this experiment the decision was made to use the newly developed SVO Slider Measure. It has a total of 15 items, each of which has the same general form. Each item is a “resource allocation choice over a well-defined continuum of joint payoffs.” A copy of the version of the SVO Slider Measure used in the experiment is attached as Appendix N-8.

The SVO Slider Measure was chosen because it was better suited for this experiment than the other two traditional SVO instruments: the Triple Dominance Measure and the Ring Measure, in two ways: it offers a continuous variable and it has superior re-testing correlation. In this experiment, an attempt will be made to measure double-loop learning on non-zero sum

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561 Balliet (2009) supra note 574 at 535.

562 Ibid at 772.

563 For a description of this instrument, see Ryan Murphy, Kurt Ackerman & Michel Handgraaf, “Measuring Social Value Orientation” (2011) 6(8) Judgement and Decision Making 771.

regulatory outcomes (Adherence). Because the duration of the experiment is so short, the learning that occurs, if any, may be subtle. Therefore, a continuous SVO variable will be better to show any changes. The SVO Slider Measure is also better than traditional measure on test/re-test correlation. For this experiment because participants will be re-tested within a few hours and the variance in their re-test is a primary dependent variable of the study, it was imperative to have the best test/re-test SVO measure available. The SVO Slider Measure has shown itself to have test/re-test scores of 89% as compared to test/re-test scores of 69% for other instruments.\(^{565}\)

The SVO Slider measure data was analyzed using the MATLAB software package and the SVO Slider Measure MATLAB script written by the instrument’s authors.\(^{566}\) This script transforms the participants’ answers on the Slider Measure into one of two SVO categories (individualistic and prosocial) and an SVO angle between 12.04 and \(\pm57.15\) for each participant. The value of the angle corresponds to different SVO types. For the purposes of this experiment, only two SVO types were identified: individualistic (-12.04 to 22.45) and prosocial (22.45 to 57.15).

The script was used to analyze the pre-game Slider Measure results to determine each participant’s SVO category and SVO angle score pre-game. It was also used on the post-game Slider Measure results to determine each participant’s SVO category and SVO angle post-game. The data for each individual participant were then analyzed to determine whether there were any changes to either the SVO category or the SVO angle post-game. If there was a change in SVO

\(^{565}\) See Bogaert et al. (2008) \textit{supra} note 582.

\(^{566}\) The full details on the MATLAB SVO Slider Measure script can be found online: <http://vlab.ethz.ch/svo/SVO_Slider/SVO_Slider_scoring_files/SVO_Slider_Tutorial_V3.pdf> (accessed April 9, 2014).
category the participant was coded as “Change”, otherwise they were coded as “No Change”. Changes in SVO category were then subjected to frequency counts overall and by each experimental condition (Rules, Audit, and Dialogic). In this experiment, changes in SVO category from an individualistic SVO to a prosocial SVO were considered as evidence in support of Adherence.

Changes in SVO angle were measured by comparing the pre-game SVO angle to the post-game SVO angle for each participant. If there was a change in SVO angle the participant was coded as “Change”, otherwise they were coded as “No Change”. Changes in SVO angle were then subjected to frequency counts overall and by each experimental condition (Rules, Audit, and Dialogic). The magnitude of the SVO angle changes was then calculated as the difference between the pre-game SVO angle and the post-game SVO. Negative numbers indicate an SVO change towards a more individualistic value orientation and positive numbers indicate a move towards prosocial value orientation. These data were then analyzed to determine pre- and post-game changes in the mean, standard deviation, and range of the SVO angles for all participants and by each experimental condition, and differences were tested for significance. The mean change shows the general magnitude of the change for a group as a whole. The standard deviation is a more accurate measure that will allow the elimination of outliers, which is especially important for such a small sample. The range is important as a measure of the unpredictability of the changes. The experiment is designed to have SVOs move towards prosocial outcomes, which should decrease the range. If the range of the SVO changes is large it is an indication of the unpredictability of the outcomes (i.e. within the same group different people were reacting in opposite ways). In this experiment, negative changes in SVO angle towards a prosocial value orientation were considered as evidence of Adherence. In order to
calculate these results, all the SVO results were first tested for transitivity (internal consistency). The results were found to be intransitive if they were not internally consistent and could have been the result of the participant randomly answering the SVO questions. If either the pre-game or post-game SVO was found to be intransitive, the participant’s results were excluded from this SVO Adherence analysis. Nine participants were excluded using this technique.

Finally, the reliability of the pre- and post-game samples was tested against the test/re-test reliability of the SVO Slide Measure. If the correlation was found to be similar to past test/re-test correlation of the instrument then any within-group correlation variances could be deemed to be valid. The hurdle for this test was $r => .89$

5.4.5 Open-Ended Survey Question

The question on the post-game survey was “What did you learn during this game?” Not all participants answered this question. In total, there were 54 responses to the survey question. Because this type of data had not been collected before there was no pre-determined method to analyze it. The qualitative data were content analyzed post-hoc to build categories of responses to understand the themes of what people learned during the experiment. The categories were then grouped into whether they showed evidence of the either of the dependent variables (Adherence or Compliance) or were unrelated. The final data were analyzed on the frequency count of number of participants mentioning that category in their response.

5.4.6 Post-Game Interviews

At the end of each gaming session one participant was randomly selected to conduct a five-minute interview with one of the researchers. Participants were allowed to decline the interview. In total, 9 interviews were conducted. The interview was an unstructured interview
that asked only one question: “What did you learn during the game?” The interview was able to get more in depth into the participant’s experience than the survey question because the interviewer was allowed to ask follow-on questions (e.g. “Can you tell me more about that?”). The interviewer was not allowed to ask directed questions. Again, the data were analyzed post-hoc to determine categories of relevance and then subjected to frequency count of the number of participants who mentioned that category in their interview.

5.4.6.1 Level of Significance and Significance Testing

For all of the data collected and analyzed, results were determined to be significant if they met a significance level of 0.05. The behavioural measures for Contribution and Return Rate were tested using a one-way ANOVA to see if there was any significant difference between the three groups. For the SVO data, the correlation of all samples was calculated using chi square. For each of the dependent variables, the pre-game and post-game data (game outcomes, trust questions, and SVO data) was tested using two sample T-tests to determine if there were significant differences between the pre-game and post-game results.

5.5 Results

5.5.1 Participants

In total, 59 people participated in the experiment in 8 different gaming sessions in groups numbering between 4 and 12 people. The sample was roughly half women (31) and half men (28). Roughly one third of the participants were assigned into each of the experimental conditions: Rules condition (17), Compliance condition (19), and Dialogic condition (22). The sample was an abnormal sample in a number of respects. Surprisingly, only 21% of the
participants were individualistic (12); the rest were prosocial (46). Normal distributions of SVO would have roughly 50% of the participants in each category.\textsuperscript{567}

In addition, the age of the sample was much higher than is normal for these kinds of experiments. The average age was 36 years old. Similarly, the educational background and occupation of the participants was much higher than normal: 83% of the participants held a bachelor’s degree or above and there were only 8 participants who listed their occupation as “student”; 34% of the participants were professionals, self-employed, or had supervisor level jobs or above. This makes the sample unsuitable for comparison to data from previous Trust Games, which are largely populated by university students between the ages of 19 and 25.\textsuperscript{568} It does, however, make the sample more analogous to a sample of corporate managers who would be operating in a corporate regulatory environment.

The total scores, Contribution Rates, and Return Rates for all the participants and for each of the experimental conditions are summarized in Table 1. The average total score in the game was 121 and there was not a significant difference between the different experimental conditions (p=.74).

\textsuperscript{567} See Au and Wong (2004) supra note 582. In this study the “cooperators” group includes prosocials and altruists. The numbers reported were the mean rates drawn from a data set of 47 SVO studies. The ranges for the three groups were: cooperators (12%-73%), individualists (11%-39%), and competitors (1-49%).

\textsuperscript{568} Baillet (2010) supra note 437.
Table 1 Behavioural Measures

BEHAVIOURAL MEASURES

TOTAL SCORE:

<table>
<thead>
<tr>
<th></th>
<th>All Groups</th>
<th>Rules Group</th>
<th>Audit Group</th>
<th>Dialogic Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>121</td>
<td>125</td>
<td>120</td>
<td>119</td>
</tr>
</tbody>
</table>

All groups tested for significance using one-way ANOVA. Differences not significant (p=.75)

CONTRIBUTION AND RETURN RATES:

<table>
<thead>
<tr>
<th></th>
<th>Group A Sends (Contribution)</th>
<th>Group B Sends Back (Return Rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Groups</td>
<td>Rules</td>
</tr>
<tr>
<td>Round 1</td>
<td>6.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Round 2</td>
<td>6.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Round 3</td>
<td>6.1</td>
<td>6.8</td>
</tr>
<tr>
<td>Round 4</td>
<td>8.5</td>
<td>8.1</td>
</tr>
<tr>
<td>Round 5</td>
<td>8.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Round 6</td>
<td>8.0</td>
<td>8.6</td>
</tr>
<tr>
<td>Round 7</td>
<td>7.7</td>
<td>9.3</td>
</tr>
</tbody>
</table>

All groups tested for significance using one-way ANOVA for whole game and for each round. No significant relationships found.

*Audit and Dialogic compared to Rules for whole game and each round using two sample T-test. Only round 7 Dialogic was statistically significant (p=.03).

Hypothesis 1: Participants’ round 1 Contribution and Return Rates will be related to their pre-game SVO.

Contribution and Return Rates for all participants are summarized in Table 1. The overall Contribution and Return Rates were much larger than expected, both overall and in each individual round. The “Pay-Off” game was designed to start with less than 5 Contribution and less than 50% Return Rates. Actual Contribution for all players started in round 1 at 6.6 and the Return Rate started at 50.9%. It is not clear from the data why these rates were higher than expected.
The Contribution and Return Rates for each SVO type are outlined in Table 10. Participants’ initial Contribution and Return Rates in round 1 were correlated to their pre-game SVO but in the opposite way than expected. On average individualistic SVOs Contributed 7.8 and Returned 60.1% and prosocials Contributed 6.5 and Returned 50.8%. However, these results were not significant (p=.39). Contribution and Return Rates by SVO type for rounds 2 to round 4 were very similar and there was no significant difference between the results for the Individualists and the prosocials. These results may be due to the small sample of Individualists. There were only 11 individualistic participants in total: five in Group A and six in Group B.

The significant difference in results between the SVO types occurred in rounds 5 through 7. For Group A, in round 5, Individualists Contributed 4.6, far less than prosocials’ 9.1 and the result was statistically significant (p=.001). This pattern continued in round 6 where Individualists Contributed 4.4 and prosocials Contributed 8.7 and the result was significant (p=.001). In round 7, Individualists Contributed 5.8 and prosocials 8.1, but the result was not statistically significant (p=.14). Therefore, this hypothesis was not supported for rounds 1-4 and supported for rounds 5-7. In this experiment, pre-game SVO type only affected how participants responded to the interventions. This will be explored in more detail in the section on Hypothesis 7.

**Hypothesis 2: Contribution and Return Rates will deteriorate between rounds 1 and 3.**

This hypothesis was supported. Contribution rates deteriorated from 6.6 to 6.1 and Return Rates deteriorated from 50.9% to 45.3% between rounds 1 and 3 for all groups. There were similar deteriorations in each of the experimental conditions, as can be seen in Table 1.
Hypothesis 3: Rule Change will cause high levels of Compliance starting in round 4 and will increase Contribution and Return Rates.

This hypothesis was supported. In round 4 all players in all conditions showed 100% compliance. The Compliance Rates for all players are summarized in Table 2. In total there were only 17 instances of Non-compliance: 8 in Group A and 9 in Group B. There were no instances of nNn-compliance in the Rules condition, only 5 instances in the Audit condition, and 12 instances in the Dialogic Condition. Individualists were responsible for 11 of the 17 instances of Non-compliance and they engaged in Non-compliance at an earlier stage than the prosocials. Individualists started Non-compliance in round 5 while prosocials started in round 6. The summary of instances of Non-compliance by condition, group, and SVO are also included in Table 2.

In round 5 there was a drop of about 10% of those complying in the Group A Audit (90%) and Dialogic condition (91%), which stabilized after round 5 except in the Dialogic condition which deteriorated further in round 7 to 71%. It was not possible to test these results for significance because of the way Compliance was calculated. A similar pattern was observed for Group B players. In round 4, all players complied. In round 5 there was a drop of about 10% in the Rules (88%) and Dialogic (93%) conditions which held through the rest of the rounds, except for the Dialogic condition where compliance rates dropped to 73% in both round 6 and round 7.

All but one of the instances of Non-compliance occurred in a round where the player engaging in the Non-compliance passed through the 100-point threshold. In effect, the player broke the rules to ensure that they made 100 points to qualify for the “Pay-Off”. Both individualistic and prosocial players engaged in this type of behaviour.
**Hypothesis 4:** The audit procedure introduced in the Audit Group after round 4 will maintain Compliance levels through to round 7.

This hypothesis was supported. All Audit condition participants complied in round 4. In Group A, Compliance dropped to 90% in round 5 and it stayed at 90% through to round 7. In Group B, participants in the Audit grouped stayed at 100% in round 5 and then dropped to 89% in rounds 6 and 7.

**Hypothesis 5:** The Dialogue about the desired regulatory outcome will have a significant effect on levels of Compliance through to round 7.

This hypothesis was not supported. In fact, Compliance rates in the Dialogic group dropped after the dialogic intervention. Group A and Group B players dropped 100% compliance to 91% Compliance after the dialogic intervention in round 5. In Group B, Compliance dropped to 73% in rounds 6 and 7 and in Group A, Compliance dropped to 71% in round 7. These Compliance levels were much lower than the other two conditions but it was not possible to test for statistical significance. However, the Group A Dialogic round 7 results were the only statistically significant differences in the Contribution rates – so it can be argued that something was going on in the Dialogic Group in round 7. To understand this result, the actual contribution and return rates, along with the SVO categories of each subject in the Dialogic Group for each round, are shown in Table 2.
Table 2 Compliance and Non-Compliance Measures

| INSTANCES OF NON-COMPLIANCE |

<table>
<thead>
<tr>
<th>Group A – Instances of Non-Compliance</th>
<th>Group B – Instances of Non-Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>All Rules Dialogic Individualist Prosocial</td>
<td>All Rules Dialogic Individualist Prosocial</td>
</tr>
<tr>
<td>Round 4</td>
<td>0</td>
</tr>
<tr>
<td>Round 5</td>
<td>2</td>
</tr>
<tr>
<td>Round 6</td>
<td>2</td>
</tr>
<tr>
<td>Round 7</td>
<td>4</td>
</tr>
</tbody>
</table>

Hypothesis 6: The Dialogue about a desired regulatory outcome will have a significantly greater effect on levels of Adherence through to round 7 than the other experimental conditions.

Adherence was measured in this experiment using four different measures: the behavioural measure, the trust measure, the SVO measure, and the qualitative measure from the
open-ended survey question and the post-game interviews. Each set of data will be discussed separately below.

### 5.5.2 Behavioural Measure

This hypothesis was not supported using the behavioural data. The results from the behavioural measure of Adherence were the opposite of what was hypothesized due to a significant deterioration of Adherence in the Dialogic condition in the last two rounds. A summary of the Adherence data is provided in Table 3. Adherence in the Dialogic condition for Group A started at 55% in round 4 and deteriorated to 45% by round 7. Similarly, Adherence in the Dialogic condition for Group B started at 64% in round 4, deteriorated to 45% by round 6, and stayed at 45% in round 7. In contrast, the Rules condition showed increase of Adherence in Groups A and B from round 4 (56% and 50%) to round 7 (78% and 63%). The one anomaly was the unusually low levels of Adherence in the Rules condition in both Group A (33%) and Group B (25%) in round 5. The Audit condition showed relatively stable levels of Adherence in Groups A and B from round 4 (60% and 78%) to round 7 (60% and 67%).

**Table 3 Adherence Measure**

<table>
<thead>
<tr>
<th>Round</th>
<th>All Groups</th>
<th>Rules</th>
<th>Audit</th>
<th>Dialogic</th>
<th>All Groups</th>
<th>Rules</th>
<th>Audit</th>
<th>Dialogic</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>57%</td>
<td>56%</td>
<td>60%</td>
<td>55%</td>
<td>64%</td>
<td>50%</td>
<td>78%</td>
<td>64%</td>
</tr>
<tr>
<td>5</td>
<td>59%</td>
<td>33%*</td>
<td>70%</td>
<td>73%</td>
<td>49%</td>
<td>25%*</td>
<td>67%</td>
<td>55%</td>
</tr>
<tr>
<td>6</td>
<td>60%</td>
<td>56%</td>
<td>70%</td>
<td>55%</td>
<td>62%</td>
<td>75%</td>
<td>67%</td>
<td>45%*</td>
</tr>
<tr>
<td>7</td>
<td>61%</td>
<td>78%</td>
<td>60%</td>
<td>45%*</td>
<td>58%</td>
<td>63%</td>
<td>67%</td>
<td>45%*</td>
</tr>
</tbody>
</table>

*Given the way compliance was measured it was not possible to test this result for significance.

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5.5.3 Trust Questions

The hypothesis also was not supported using the data from the trust questions which show no statistically significant difference between any of the conditions. The number of changes in each group and the magnitude of the changes to the trust question answers pre-game and post-game are shown in Table 6. None of the results were statistically significant.

Table 4 Trust Questions Pre- and Post-Game

NUMBER OF PARTICIPANTS WHERE TRUST QUESTIONS CHANGED

<table>
<thead>
<tr>
<th></th>
<th>Change</th>
<th>No Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>22</td>
<td>37</td>
<td>37%</td>
</tr>
<tr>
<td>Dialogic</td>
<td>8</td>
<td>15</td>
<td>35%</td>
</tr>
<tr>
<td>Audit</td>
<td>5</td>
<td>14</td>
<td>26%</td>
</tr>
<tr>
<td>Rules</td>
<td>9</td>
<td>8</td>
<td>53%</td>
</tr>
</tbody>
</table>

MAGNITUDE AND SIGNIFICANCE OF CHANGES

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Delta</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 (Trust)</td>
<td>4.17</td>
<td>3.81</td>
<td>0.36</td>
<td>0.40</td>
</tr>
<tr>
<td>Q2 (Trustworthiness)</td>
<td>5.73</td>
<td>5.98</td>
<td>-0.25</td>
<td>0.58</td>
</tr>
<tr>
<td>Dialogic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 (Trust)</td>
<td>3.91</td>
<td>3.78</td>
<td>0.13</td>
<td>0.83</td>
</tr>
<tr>
<td>Q2 (Trustworthiness)</td>
<td>5.70</td>
<td>5.22</td>
<td>0.48</td>
<td>0.50</td>
</tr>
<tr>
<td>Audit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 (Trust)</td>
<td>4.16</td>
<td>3.84</td>
<td>0.32</td>
<td>0.71</td>
</tr>
<tr>
<td>Q2 (Trustworthiness)</td>
<td>5.79</td>
<td>6.32</td>
<td>-0.53</td>
<td>0.57</td>
</tr>
<tr>
<td>Rules</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 (Trust)</td>
<td>4.53</td>
<td>3.82</td>
<td>0.71</td>
<td>0.40</td>
</tr>
<tr>
<td>Q2 (Trustworthiness)</td>
<td>5.71</td>
<td>6.65</td>
<td>-0.94</td>
<td>0.24</td>
</tr>
</tbody>
</table>
5.5.4 SVO Changes

The hypothesis was supported by the SVO data. First, the SVO changes that occurred in the experiment were valid. In this sample, the r correlation coefficient was .89 for all groups, indicating a similar reliability to the expected test/re-test score for the instrument and meeting the validity hurdle that was chosen before the experiment (r=>.89). The correlation coefficient in the Audit condition was .98 indicating that the instrument was extremely reliable for test/re-test for this group. However, it was not as reliable for the other two groups where the correlation was less than .857. It is within these two groups (Dialogic and Rules) that Adherence and learning may have occurred.

The pre- and post-game comparison of the SVO scores showed exactly what was expected: the Dialogic condition had by far the most changes in SVO and also the greatest magnitude of changes. In the entire experiment, only 6 participants changed their SVO category. Five of them were in the Dialogic condition and one was in the Rules condition. There were no changes in SVO in the Compliance condition. The pre-game and post-game SVO category for each participant is shown in Table 5. A chart summarizing all the experimental data of the six participants whose SVO category changed is included as Table 11 at the end of this section.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-Game SVO</th>
<th>Post-Game SVO</th>
<th>Transitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogic 1</td>
<td>Individualistic</td>
<td>Individualistic</td>
<td></td>
</tr>
<tr>
<td>Dialogic 2</td>
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<td>Individualistic</td>
<td></td>
</tr>
<tr>
<td>Dialogic 3</td>
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<td></td>
</tr>
<tr>
<td>Dialogic 4</td>
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<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Dialogic 5</td>
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<td></td>
</tr>
<tr>
<td>Dialogic 6</td>
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<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Dialogic 7</td>
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<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Dialogic 8</td>
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<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Dialogic 9</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Dialogic 10</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td>Intransitive</td>
</tr>
<tr>
<td>Dialogic 11</td>
<td>Individualistic</td>
<td>Individualistic</td>
<td></td>
</tr>
<tr>
<td>Dialogic 12</td>
<td>Prosocial</td>
<td>Individualistic</td>
<td></td>
</tr>
<tr>
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<td>Individualistic</td>
<td></td>
</tr>
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<td>Dialogic 19</td>
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</tr>
<tr>
<td>Compliance 1</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
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<td>Compliance 5</td>
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</tr>
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<td>Compliance 6</td>
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<td>Individualistic</td>
<td></td>
</tr>
<tr>
<td>Compliance 7</td>
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<td>Individualistic</td>
<td>Intransitive</td>
</tr>
<tr>
<td>Compliance 8</td>
<td>Prosocial</td>
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<td>Intransitive</td>
</tr>
<tr>
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<td>Intransitive</td>
</tr>
<tr>
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</tr>
<tr>
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<td>Intransitive</td>
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<td>Compliance 15</td>
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<td>Compliance 16</td>
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<td></td>
</tr>
<tr>
<td>Participant</td>
<td>Pre-Game SVO</td>
<td>Post-Game SVO</td>
<td>Transitivity</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Compliance 18</td>
<td>Individualistic</td>
<td>Individualistic</td>
<td></td>
</tr>
<tr>
<td>Compliance 19</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 1</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td>Intransitive</td>
</tr>
<tr>
<td>Rules 2</td>
<td>Individualistic</td>
<td>Prosocial</td>
<td>Intransitive</td>
</tr>
<tr>
<td>Rules 3</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 4</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 5</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 6</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td>Intransitive</td>
</tr>
<tr>
<td>Rules 7</td>
<td>Prosocial</td>
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</tr>
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<td>Rules 8</td>
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</tr>
<tr>
<td>Rules 10</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
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<td>Rules 11</td>
<td>Individualistic</td>
<td>Prosocial</td>
<td>Intransitive</td>
</tr>
<tr>
<td>Rules 12</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 13</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
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<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 15</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 16</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td></td>
</tr>
<tr>
<td>Rules 17</td>
<td>Prosocial</td>
<td>Prosocial</td>
<td>Intransitive</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Categorization of SVOs</th>
<th>Pre-Game</th>
<th>Post-Game</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL GROUPS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Prosocial</td>
<td>46</td>
<td>47</td>
</tr>
<tr>
<td><strong>DIALOGIC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Prosocial</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td><strong>RULES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Prosocial</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>AUDIT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Prosocial</td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>

The same result holds true when the changes in SVO are looked at in terms of the change in magnitude of the raw SVO scores. The changes in the SVO scores by experimental condition are shown in Table 6. The Dialogic condition had by far the largest changes with the range of
changes (27.7) and standard deviation of changes (5.8) being significantly higher than the other two groups. The Audit condition had predictably the smallest changes with very low range (6.7) and standard deviation (1.8). The Rules condition had a range of 12.7 and a SD of 4.2. However, these results should be look at with caution because all of these results were tested using two sample T-tests and none of the results were found to be significant. This was probably due to the small sample size. Participants in the Audit condition showed the least amount of change in SVO post-game even though they showed the highest Compliance rates in the behavioural data. This may indicate that even though they were complying, compliance was only behaviourally based and they did not actually learn or adhere to the rules. The surprise in the SVO data was the number and magnitude of the changes in the Rules Group with a range of 12.7 and a standard deviation of 4.24. The other big surprise was that more than half of the SVO changes in the Dialogic Group were participants’ SVOs changing from prosocial to individualistic. This was an unintended result. Regardless of what the participants learned, the SVO data shows that there was more Adherence and possibly more learning going on in the Dialogic Group than the other two groups.
### Table 6 SVO Slider Measure – Post-Game Magnitude of Changes

**SVO SLIDER MEASURE – POST-GAME MAGNITUDE OF CHANGES**

<table>
<thead>
<tr>
<th></th>
<th>SCORE SAME</th>
<th>DIFFERENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL GROUPS</strong></td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>15.115</td>
<td>-12.6237</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SCORE SAME</th>
<th>DIFFERENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIALOGIC</strong></td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>15.115</td>
<td>-12.6237</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SCORE SAME</th>
<th>DIFFERENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUDIT</strong></td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>3.022</td>
<td>-3.68</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SCORE SAME</th>
<th>DIFFERENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RULES</strong></td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

#### 5.5.5 Qualitative Data

The qualitative data from the surveys supports Hypothesis 6 by showing that there was more Adherence in the Dialogic condition. On the survey, the Dialogic group had more mentions.
of Adherence supporting categories than either of the two other groups combined. Adherence supporting comments were considered to be comments relating to the rules of the game or the aspirational goals of the regulator. The most frequent post-game comments of the Dialogic Group were mentions of the Rules while the other two barely mentioned the rules. Of the 13 mentions of the rules 11 came from the Dialogic Group. In the other two groups the comments tended to focus on whether the other player was fair or trusting, greedy or self-interested, or general game strategies the player used to win. The frequency coding of the qualitative data from the post-game survey is summarized in Table 7.

The post-game interviews did not show any significant results with respect to Adherence with the only comment relating to the Rules coming from a participant in the Dialogic. The Frequency Coding of the Interviews is summarized in Table 8.
### Table 7 Frequency of Comments on Post-Game Survey

**FREQUENCY OF COMMENTS ON POST-GAME SURVEY**

<table>
<thead>
<tr>
<th></th>
<th>Mentioned rules or aspirational goals</th>
<th>Mentioned general knowledge or understanding of game</th>
<th>Mentioned trust, fairness, or cooperation</th>
<th>Mentioned greed, self-interest or competitiveness</th>
<th>Mentioned general game strategies</th>
<th>Mentioned wanting to know other player</th>
<th>Mentioned punishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall (n=54)</td>
<td>13</td>
<td>3</td>
<td>38</td>
<td>13</td>
<td>16</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Dialogic (n=20)</td>
<td>11</td>
<td>3</td>
<td>12</td>
<td>8</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Audit (n=19)</td>
<td>1</td>
<td>0</td>
<td>14</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Normal (n=15)</td>
<td>1</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Table 8 Frequency of Comments in Post-Game Interviews

**FREQUENCY OF COMMENTS IN POST-GAME INTERVIEWS**

<table>
<thead>
<tr>
<th></th>
<th>Mentioned rules or aspirational goals</th>
<th>Mentioned general knowledge or understanding of game</th>
<th>Mentioned trust, fairness, or cooperation</th>
<th>Mentioned greed, self-interest or competitiveness</th>
<th>Mentioned general game strategies</th>
<th>Mentioned wanting to know other player</th>
<th>Mentioned punishment</th>
<th>Mentioned was just a game</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall n=9</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Dialogic n=3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Audit n=5</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Normal n=1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
5.5.6 Summary of Adherence Data

As a whole, the SVO data and some of the qualitative data provide some support for the hypothesis that the dialogic condition created more Adherence. The dialogic condition had the largest number of participants whose SVO category changed and it had the largest number of participants whose SVO scores changed, together with the largest range of SVO score changes and the largest standard deviation of changes. In addition, when the qualitative survey data was analyzed the Dialogic Group had the most Adherence supporting comments and as a group they were acutely aware of the rules and how other participants were supposed to be playing the game. However, the behavioural evidence does not support the conclusion that there was more Adherence in the Dialogic group. This evidence actually shows the Dialogic condition as having the lowest levels of Adherence. This finding will be discussed in more detail in the Discussion section. Similarly, the Trust data and the Interview data do not show any findings in support of more Adherence in the Dialogic condition.

Hypothesis 7: Participants with different SVOs will respond to differently to the three different regulatory interventions.

There were not enough participants in the study to make any definitive findings with respect to this hypothesis. Nonetheless, the findings still show some very interesting patterns that should be explored more to determine whether they hold up in larger sample sizes. In the rounds before the interventions (rounds 1-4) there was no statistically significant difference between the Contribution and Return rates of the individualists vs. prosocials. However, starting in round 5 after the Audit and Dialogic interventions significant differences occurred in the Contribution rates of the Players in Group A. In this Group, individualists responded to both the Audit
condition and the Dialogic condition by Contributing far less than prosocials. Table 9 summarizes the behavioural results of Group A by SVO for all conditions. For Group A, Contribution rates for the individualists were significantly lower in rounds 5 through 7 than for prosocials for all conditions. Individualists Contributed 4.6 in round 5, 4.4 in round 6, and 5.8 in round 7. In contrast, prosocials Contributed 9.1 in round 5, 8.7 in round 6, and 8.1 in round 7. The differences in Contribution rates in rounds 5 and 6 were statistically significant (p=<.001). From a statistical point of view this was the most significant finding of the experiment. When the experimental conditions are explored the most striking differences are in the Dialogic Group followed by the Audit group. There were no statistically different results in the Rules group. In addition, there were no statistically different results in Group B. Table 10 summarizes the behavioural results of Group A by SVO for all conditions.

It appears that the prosocials responded better to each of the dialogic interventions than the individualists. It is interesting to note that in 6 of the 7 games where a participant experienced a change in SVO category, an individualist was involved in the game as one of the two participants. This can be seen in Table 11.
Table 9 Behavioural Results By SVO Type – Group A

<table>
<thead>
<tr>
<th></th>
<th>ALL</th>
<th>DIALOGIC</th>
<th>AUDIT</th>
<th>RULES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individualists</td>
<td>Prosocials</td>
<td>Individualists</td>
<td>Prosocials</td>
</tr>
<tr>
<td></td>
<td>(n=5)</td>
<td>(n=26)</td>
<td>(n=2)</td>
<td>(n=10)</td>
</tr>
<tr>
<td>Round 1</td>
<td>7.8</td>
<td>6.5</td>
<td>10</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>(p=.06)</td>
<td>(p=.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Round 2</td>
<td>6.6</td>
<td>6.5</td>
<td>6.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Round 3</td>
<td>5.6</td>
<td>6.2</td>
<td>5</td>
<td>6.7</td>
</tr>
<tr>
<td>Round 4</td>
<td>8.0</td>
<td>8.6</td>
<td>7.5</td>
<td>9</td>
</tr>
<tr>
<td>Round 5</td>
<td>4.6*</td>
<td>9.1*</td>
<td>4*</td>
<td>9.4*</td>
</tr>
<tr>
<td></td>
<td>(p=.0003)</td>
<td>(p=.0003)</td>
<td>(p=.013)</td>
<td>(p=.013)</td>
</tr>
<tr>
<td>Round 6</td>
<td>4.4*</td>
<td>8.7*</td>
<td>2.5*</td>
<td>8.4*</td>
</tr>
<tr>
<td></td>
<td>(p=.001)</td>
<td>(p=.001)</td>
<td>(p=.012)</td>
<td>(p=.012)</td>
</tr>
<tr>
<td>Round 7</td>
<td>5.8</td>
<td>8.1</td>
<td>8</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>(p=.14)</td>
<td>(p=.14)</td>
<td>(p=.5)</td>
<td>(p=.5)</td>
</tr>
</tbody>
</table>

*All results in this table were compared using Two-sample T-tests: Individualists vs. Prosocials for all game results and by round. Those results with a * were found to be significant (p<.05). Where the results are different but were not significant, the p-score has been included in the table.

Note: It was not possible to conduct significance testing on the Rules Group because the n of the Individualistic sub-group was 1.
Table 10 Behavioural Results By SVO Type – Group B

<table>
<thead>
<tr>
<th>Round</th>
<th>ALL Individualists (n=6)</th>
<th>ALL Prosocials (n=26)</th>
<th>DIALOGIC Individualists (n=3)</th>
<th>DIALOGIC Prosocials (n=8)</th>
<th>AUDIT Individualists (n=2)</th>
<th>AUDIT Prosocials (n=8)</th>
<th>RULES Individualists (n=1)</th>
<th>RULES Prosocials (n=9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>60.1%</td>
<td>50.8%</td>
<td>67.5%</td>
<td>39.1%</td>
<td>59.1%</td>
<td>62.5%</td>
<td>40.0%</td>
<td>52.1%</td>
</tr>
<tr>
<td>Round 2</td>
<td>40.9%</td>
<td>47.1%</td>
<td>38.3%</td>
<td>51.7%</td>
<td>43.8%</td>
<td>49.0%</td>
<td>42.9%</td>
<td>41.5%</td>
</tr>
<tr>
<td>Round 3</td>
<td>43.3%</td>
<td>40.7%</td>
<td>37.5%</td>
<td>37.2%</td>
<td>50.0%</td>
<td>54.1%</td>
<td>47.1%</td>
<td>33.4%</td>
</tr>
<tr>
<td>Round 4</td>
<td>51.8%</td>
<td>50.6%</td>
<td>53.5%</td>
<td>54.0%</td>
<td>55.0%</td>
<td>50.3%</td>
<td>40.0%</td>
<td>47.9%</td>
</tr>
<tr>
<td>Round 5</td>
<td>49.3%</td>
<td>47.1%</td>
<td>49.3%</td>
<td>47.3%</td>
<td>55.0%</td>
<td>48.4%</td>
<td>37.8%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Round 6</td>
<td>37.2%</td>
<td>49.7%</td>
<td>31.3%</td>
<td>49.2%</td>
<td>45.0%</td>
<td>43.6%</td>
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<td>54.8%</td>
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<tr>
<td>Round 7</td>
<td>37.9%</td>
<td>47.1%</td>
<td>42.5%</td>
<td>42.8%</td>
<td>25.0%</td>
<td>51.6%</td>
<td>50.0%</td>
<td>47.3%</td>
</tr>
</tbody>
</table>

*All results in this table were compared using Two-sample T-tests: Individualists vs. Prosocials for all game results and by round. None of the results were statistically significant to the p=.05 level.

Note: It was not possible to conduct significance testing on the Rules Group because the n of the Individualistic sub-group was 1.
Table 11 Participants Whose SVOs Changed

<table>
<thead>
<tr>
<th>Participant</th>
<th>Condition</th>
<th>Group</th>
<th>SVO Pre</th>
<th>SVO Post</th>
<th>Game Summary</th>
<th>What Did You Learn? (Survey and Interview Answers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogic 5</td>
<td>Dialogic</td>
<td>A</td>
<td>Prosocial (22.6)</td>
<td>Individ. (14.6)</td>
<td>Played against an individualistic opponent. This player started the first round by sending 3. Not consistent with a prosocial SVO. Player B sent back 100% (19) on the first round. This player responds by sending 2 and 1 in the next two rounds. Player B sends almost nothing back. For the remaining rounds they sent the minimum required by the rules – 5 each round. Player B responds with the minimum payback ~50%. This player scored 110 and the opponent was one of the few people not to make 100: 82.</td>
<td>Survey: You have to make sure both gain but not at your expense. If you don’t know what the other person is doing &amp; trust has not been established, you can signal in the middle and move high/low from there. You also need to understand the rules of the game. Interview: To be consistent whatever strategy you use – stick with it. Don’t know the other person and have not established trust . . . Initially got back more than expected because I am not a very trusting person therefore, I thought about changing strategy. But I did not. Personal experience showed that I have been taken advantage of in the past and I was not going to be fooled again. It was a good idea to have people meet in the group face to face . . . but I stuck with the same strategy post group intervention. I was going to pass [accumulate the 100 points] therefore stuck with it.</td>
</tr>
</tbody>
</table>

Trust Pre (8 / 3) | Trust Post (8 / 3) No Change | | | | | |
<table>
<thead>
<tr>
<th>Participant</th>
<th>Condition</th>
<th>Group</th>
<th>SVO Pre</th>
<th>SVO Post</th>
<th>Game Summary</th>
<th>What Did You Learn? (Survey and Interview Answers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogic 6</td>
<td>Dialogic</td>
<td>B</td>
<td>Individ. (17.8)</td>
<td>Prosocial (36.5)</td>
<td>Played against an Individualistic opponent. Received 10 in each of the first four rounds and reciprocated by sending back 25. Then in round 4 and 5 A sent nothing and this player reciprocated by sending 0 and 5. In the last round received 10 again and sent back 15. He kept enough to just make 100. The opponent scored 140.</td>
<td>Regulators did not follow the rules which in fact changed the game. It was clear what the rules were. I learned rules could be broken which cause an ethical quandary. People can be trusted &amp; be fair if rules are left as noted.</td>
</tr>
<tr>
<td>Dialogic 7</td>
<td>Dialogic</td>
<td>A</td>
<td>Prosocial (31.4)</td>
<td>Individ. (21.8)</td>
<td>Played against an Individualistic opponent. Sent 2 on the first round and received back 3. Second and third rounds were similar sending 5 and 1. On fourth round sent 8 and on 5th round 10. Each time did not receive back more than 50% except in round 6. Average return rate from opponent was 26%. Failed to make 100 scoring 73 while opponent scored 123. Interestingly, the other player moved 8 points towards prosocial.</td>
<td>I definitely expected that my counterpart would work toward the &quot;Goals&quot; Set by the regulator after the intense discussion and was completely surprised by the self-benefit attitude that came in reply. I've learned that maybe my mother is right when she says to be more wary of other intentions. I am just too nice :)</td>
</tr>
<tr>
<td>Participant</td>
<td>Condition</td>
<td>Group</td>
<td>SVO Pre</td>
<td>SVO Post</td>
<td>Game Summary</td>
<td>What Did You Learn? (Survey and Interview Answers)</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------</td>
<td>-------</td>
<td>---------</td>
<td>----------</td>
<td>--------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Dialogic 20</td>
<td>Dialogic</td>
<td>B</td>
<td>Individ. (19.4)</td>
<td>Prosocial (24.2)</td>
<td>Played against Individualistic opponent: Dialogic 21. See above for game description.</td>
<td>That I felt guilty when I had the chance to make more from my partner and that the group discussion increased my guilt by meeting the person that I may be partnered with even if I was unsure of who they were in the other group. In the end, when being greedy had no impact on my outcome, due to the rule change which required both my partner and I to cross $100 threshold I was more egalitarian.</td>
</tr>
<tr>
<td>Rules 2</td>
<td>Rules</td>
<td>B</td>
<td>Individ. (20.6)</td>
<td>Prosocial (26.7)</td>
<td>Played against a prosocial opponent. Nothing really interesting in this game. A sends between 5 and 10 – slowly increasing. Augustine sends back around 40%. Cannot explain this one.</td>
<td>That we would all do better with more immediate trust That having an attainable target helps to facilitate trust That having rules transparency of who gets what and the conditions of negotiation ease the process</td>
</tr>
</tbody>
</table>
5.6 Discussion

The experiment proceeded mostly as was hypothesized with a few surprising outcomes that need to be discussed, including the large amount of Adherence in the Rules condition and the bi-directional nature of the SVO changes in the Dialogic condition. Each of these will be discussed in more detail below.

5.6.1 SVO Changes in Rules Group

After careful review of the games and data, one possible explanation for the amount of Adherence that was shown in the Rules condition is that learning occurred even in the absence of the dialogic intervention. The reason is that there was an unusually high number of games in the Rules Group where Player A sent the maximum (10) every round and Player B reciprocated by sending back 50% or more of the total. This experience in the game matched the experiences that the Audit condition and the Dialogic condition were intended to create and allowed the participants to learn. The conclusion is that given the right circumstances and experience learning can occur in the absence of an intervention by the regulator.

5.6.2 Dialogic Group Changing SVOs in the Wrong Direction

The Dialogic condition showed surprisingly low levels of Compliance and surprising bi-directional changes to SVO scores post-game. Most of the instances of Non-compliance happened later in the game and occurred in games where the participant was “cheated” by the other player after the dialogic intervention. After reviewing the circumstances of each game in which this happened it appears that it occurred in games where a Player returned to the game after the dialogic intervention and then failed to meet even the minimum Contribution or Return Rate (i.e. less than 4 or 40%). The other player then responded by punishing that Player by
reciprocating and the Players were unable to recover through the final rounds of the game. This had the effect of producing Non-compliance by both players in multiple rounds following the first instance of Non-compliance. It is interesting to note that in almost all of these cases it was the individualistic SVO participants who triggered the pattern of Non-compliance. It is also interesting to note that this phenomenon was limited to the Dialogic condition. There were three other similar instances of Non-compliance in the Audit condition. Two were not met with retaliation from the other participant. In the other case, the Group A player engaged in two rounds of Non-compliance before receiving retaliation. Therefore, there was something special about the Dialogic condition that may have increased the “ante” or expectations for compliance that caused more retaliatory behaviour when the rules were broken. This is evidenced in the post-game comments of the participants in the Dialogic condition who were very focussed on the “rules”.

However, there is not enough in the data to explain exactly what happened in the Dialogic condition. So, it is useful to explore in a little more detail what happened in each of the Dialogic Groups. There were two Dialogic groups with ten to twelve people in them each. They each explored the same three questions in a World Café. At the end of the world café each group had a report out of their collective answers to the three questions. There were four important similarities between the report outs of the two dialogic groups. First, both groups decided that the strategy they wanted to adopt to optimize everyone’s return was to have Player A give 100% every round and Player B to send back 50% every round. In one of the groups this decision was unanimous. In the other – there were still a couple of dissenting voices at the report out stage who wanted to trust until the end of the game and then cheat the other player to ensure that they would not reach 100 points. Surprisingly, this difference seemed to have no impact on the results.
of the game – both groups had similar Contribution and Return Rates and levels of Compliance and Adherence.

Second, both groups suggested that one way to solve issues of optimizing returns was to have the Aspirational Goals adopted as the only rule of the game (i.e. do away with the Minimum Rule Change and only have the Aspirational Goal). This was not in the construct of the game and so it was not possible but both groups asked the regulator if it could have been done. This is a very interesting finding and it should be allowed as a possibility in future experiments to see if it would work. This is an extremely interesting finding for Dialogic Regulation, where after being allowed an opportunity to have a dialogue about the rules the participants voluntarily request that the Aspirational Goal be made into the only set of rules.

Third, both groups agreed that it was appropriate to punish participants not following the aspirational goals by sending back less or signalling to those players that they were not following the group’s expectations. The groups expressed this as a secondary option because it was the only way they could communicate. Both groups would have preferred the regulator to change the rules to the Aspirational Goal.

Finally, both groups expressed a lack of trust in the regulator and were worried that there would be further rules changes during the course of the experiment. This is an interesting finding and it may have been because there was no dialogue about the rule change. In the experiment, the regulator was purposefully restricted from having any conversations with participants about the rules. This is an experimental game design decision to ensure that all participants receive the same information (only what is on the paper). But, the lack of communication had an effect on the participants.
What appears to have happened in the Dialogic Group is that the dialogue created space for change and learning. But what exactly was learned was determined not by the content of the dialogue but rather by the actions in the game after the dialogue. In this experiment, there were 5 games out of 12 in the Dialogic Group where the last 2 rounds of Compliance and Adherence were affected by 1 player sending significantly less than the Aspirational amount which was followed by punishment from the other player. In 4 of those 5 games, the Player who initiated the sequence was an individualistic Player. For example, in one game Player A starts round 5 (the round immediately after the dialogic intervention) by sending 0. In another game, Player B, after having received the maximum Contribution from Player A (30), sends back only 25%. This shows that the dialogic intervention was not enough to constrain the behaviour of the individualistic players on its own. In fact, all but one of the individualistic players engaged in this kind of activity in at least one of the last 4 rounds of the gaming session after the dialogue. This caused them not only to not learn about cooperative behaviour but also to learn the exact opposite. When this finding is placed in the context of previous social dilemma experiments, it is not so surprising. It is consistent with the findings of Mark Lubell et al. in previous social dilemma experiments where it is not just the communication that is important but also the sincerity of the communication (i.e., is it followed up by real action after the fact).569 Where the sincerity of the dialogue is found lacking the progress can result in the opposite effects. This finding is also consistent with previous findings in social dilemma experiments that when

569 See Lubell et al. (2008) supra note 488.
prosocials are treated unfairly they can become the most self-interested actors in the game in seeking to exact punishment.\textsuperscript{570}

5.6.3 Conclusion: Dialogic plus Audit may Amplify Results

Because of its limited sample size, it is very difficult to generalize anything from the results of this experiment. However, if taken on face value, the results imply that if the regulatory goal is just to have people follow the rules Compliance Based Regulation may be the best method to accomplish it. However, those participants did not seem to learn much or change their views – they were simply doing what they were told.

If the regulatory goal is to have the participants “learn” the rules, then the Dialogic Group showed the most potential. It had the highest Adherence ratings in the SVO Slider Measure and in the qualitative data from the post-game surveys and interviews. The caution to that finding is that while the Dialogic approach creates a “space” for learning, it cannot control what is actually learned – that is determined by the participants’ experience after the dialogic intervention. If a regulator wants participants to learn a specific outcome, more work will have to be done to influence control the participants’ behaviour after the dialogue to ensure they are learning what the regulator intended. There was something going on about the dialogic condition which upped the ante, created expectations, and when people acted contrary to expectations, left others feeling violated.

A lesson can maybe be pulled here from the results of the Audit condition. The Audit based approach proved to be very good at controlling behaviour. It is possible that a dialogic approach followed by a compliance based approach in the last few rounds of the game would

\textsuperscript{570} See Camerer (2003) supra note 462.
increase learning and adherence of all participants. This is an interesting idea to explore in the future. It is clear, though, that a dialogic intervention on its own is not enough to drive wholesale learning towards a regulatory goal and that further steps are required to impact those participants whose world views are not consistent with the desired regulatory outcome.

Another lesson to be learned is that even after a dialogic intervention there are some actors who will not comply. In this experiment, it was the Individualists who did not comply. This is where Dialogic Regulation would recommend the use of the strategic regulation pyramid and look to intervene with those actors with a more aggressive dialogic process after their Non-compliance is determined. The non-compliant actor could be pulled aside by the regulator and engaged in a learning conversation about their behaviour. If this does not work further escalations could occur until finally reaching punishment or expulsion from the game. If the experiment were to be run again this would definitely be a game construct to explore.

There is nothing in this experiment to be generalized out to the corporate regulatory setting – the results of the experiment do not warrant that. The only finding is that the Dialogic approach shows promise but more work must be done to explore and refine the techniques before it is implemented into a real-life regulatory scenario.

5.6.4 Limitations of the Experiment

This experiment is severely limited by the unusual SVO characteristics of the participants. Because there were so few individualists in the sample, the study, in effect, is a study of how prosocials respond to different types of regulatory interventions. But prosocials make up only half of the normal population. So, it is difficult to make any conclusions or
generalizations from this sample other than the fact that, at least for the prosocials, there appears to be a difference in the reactions to the dialogic techniques.

This experiment is also limited by the small sample size and therefore it is not possible to make any generalizations from the experiment.

5.6.5 Avenues for Future Research

There is a lot more work to be done with this current experimental format to refine it before it can be modified to accommodate other research questions. First, more participants need to be recruited into the existing experiment to determine whether some of the results are anomalous because of the small sample size. In particular, efforts should be made to recruit enough participants until there is a normal distribution of pre-game SVO categories with about a 50/50 split between individualists and prosocials. In addition, it would be interesting to see if the Rules Based group continues to show as much SVO angle change as the group gets larger or whether something special was going on with this group in this small sample.

Once the results from the current experiment are confirmed, a future area of interest would be to revise the game structure to add two more experimental conditions. The first condition would be a no rule change condition where participants play the 7-round iterated game without any rule changes or other interventions. This condition is required because the expected deterioration of cooperation in the game in the later rounds did not materialize as much as would be expected from the results of Fehr and Gachter (2001). This condition would test whether there is something in the game design itself that is maintaining co-operation without either punishment or communication or whether cooperation deteriorates at the expected rate.
The second condition that would be of interest is a dialogic intervention combined with an audit process after the dialogic intervention to amplify the dialogic intervention in the desired direction. The hypothesis is that if participants leave the dialogic intervention and return to their games and experience only the expected behaviour then the unpredictability of the Adherence and Compliance results would be reduced and would be concentrated towards the prosocial direction.

5.6.6 Contribution to the Fields of Regulation, Dialogic OD, and Experimental Games

The experiment is significant to corporate law and regulation because it shows that there is definitely some promise in using dialogic processes to increase Adherence in regulatory settings. However, that promise comes with the serious caveat that dialogic processes are powerful and, to a certain extent, uncontrollable, and if they are not followed up with sincere behaviour the results may be the opposite of what was expected. A lot more work needs to be completed to understand how best to create sincere behaviour following a dialogic intervention before a real life scenario can be recommended. The experiment may also have provided a glimpse into the answer to that question by showing the audit and punishment is effective at driving behavioural outcomes. It is possible that if audit and punishment procedures are instituted after a dialogic intervention it will allow more learning, more Compliance, and more Adherence.

This study is significant to game theory because it moves past behavioural analysis and attempts to get a look inside the “black box” of why people make the decisions they make. The novel use of the SVO Slider measure as a tool to gauge learning shows promise and the results warrant further exploration in this area. In addition, the use of post-game surveys and interviews
to ask qualitative questions about what participants’ learned during the game also shows promise as a technique to be used in future game experiments.

Finally, this study is also significant to the field of Dialogic OD because it provides empirical evidence that dialogic processes do have a different impact than more traditional forms of change intervention like rule changes and external incentives.

5.7 Conclusion

The primary objective of this experiment was to test, in a controlled environment, whether dialogic techniques could be used to achieve greater Compliance and Adherence to desired regulatory outcomes. The results of the experiment show that there is significant potential in using dialogic techniques to accomplish this goal but that more work needs to be done to understand how to narrow the possible outcomes towards the desired results. The experiment showed the two most important characteristics of dialogic processes: their incredible power to cause change (in comparison to other techniques) and the uncontrollable nature of the outcomes. There was enough potential shown, however, to be able to begin to conceive of a framework for a theory of corporate law and regulation that leverages and utilizes dialogic processes. In the next chapter, I will leverage the results of this experiment and combine them with the insights from the literature review to offer the building blocks of a theory of dialogic regulation.
Chapter 6: Dialogic Law and Regulation: A Bridge to an Imagined Future

Law may be viewed as a system of tension or a bridge linking a concept of reality to an imagined alternative. Robert Cover

The corporations of our future will be whatever we can collectively imagine and work together to make a reality. Dialogic law and regulation is a generative tool that can build the bridge between the present and an imagined future. Regulators keep people on the bridge by identifying the kinds of dialogues we want corporate actors to have and by encouraging, coaching, and sometimes assisting them to have those dialogues. This approach works because small changes in the way corporate actors talk to, and interact with, each other can have dramatic effects on the emergent corporate culture.

The dialogic approach to law and regulation is built on insights from a large number of disciplines. However, all of those insights are related to the influence of two central ideas: complexity and social constructionism. As was shown in Chapter 3, complexity emerged from systems theory and argued that human social systems are complex and interdependent. Complexity has had a tremendous impact on a number of disciplines including, for the purposes of this thesis, sociology, chaos theory (the study of non-linear systems), network theory, and organizational development. The idea of the importance of language came from the post-modern thinkers, including Foucault, Derrida, and Wittgenstein. It rejects ideas of objective truth

571 Including law, regulatory theory, corporate theory, systems theory, complexity theory, chaos theory, organizational theory, organizational development, psychology, and social psychology.


573 Complexity has also had a large effect on biology, mathematics, and geometry.
and global or meta-narratives. It is beginning to have a significant effect on many disciplines including sociology, architecture, literary criticism, law, and organizational development.

Dialogic regulation is a transdisciplinary approach based on how post-modern dialogic and narrative approaches to the social construction of reality can be combined with insights on complex non-linear and interdependent human social systems to design better regulatory systems. The purpose of this chapter is to leverage the findings of the experiment presented in the last chapter and combine them with the insights from the literature review provided earlier in this thesis, to provide a basic framework of a theory of dialogic regulation.

This chapter will proceed in three stages. First, it will use the insights from these disciplines and the experiment to propose a theory of dialogic law and regulation. Second, it will discuss the limitations of this theory and the limited circumstances in which it can be used successfully. Third, it will use the case study of Suncor’s Firebag Facility creative sentencing project to illustrate what dialogic regulation might look like in real life.

Now it’s time to draw all of the insights from complexity theory, chaos theory post-modernism, and the dialogic corporation together to develop a dialogic model for regulating corporations in a complex world. The model is called “dialogic regulation” because it focuses on changing the conversations that people have to assist in promoting double-loop learning of desired regulatory outcomes. This theory was developed as a mix of theory, experimental

\[574\] The use of the word “outcome” here is its general sense. For the purposes of this thesis, dialogic law and regulation is about the process of law and regulation – it does not advocate any particular normative outcomes to regulation.
results, and personal experiences in trying to change the behaviour and culture within corporations.  

Dialogic regulation conceives of corporate regulation as a complex human system and approaches it with a learning approach where all regulatory participants (regulators, corporate actors, stakeholders, etc.) try to move corporations towards the desired regulatory outcomes and move our collective understanding of corporations forward. It acknowledges the difficulties of steering complex systems towards desired ends without unintended consequences and it leverages the emergent qualities of human social systems. Dialogic regulation assumes that the corporation is a socially constructed reality that consists of the patterns of interactions and conversations between the organization members. Corporate culture is emergent and is the shared beliefs and assumptions created, maintained, and changed through conversations that lead to patterned interactions among the individuals within the corporation. For example, we do not bring up contentious issues in a meeting, we always defer to the boss’s ideas, we value profit over service, etc. It assumes that changes in the corporation and changes in corporate culture can be created by changing the conversations between corporate actors. The basic ideas of dialogic regulation are:

- The corporations of our future can be whatever we can collectively imagine and work together to make a reality.  
- Dialogic law and regulation is a generative tool that can build the bridge between the present and that imagined future.  

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575 The author has experience in this area as a consultant, corporate executive tasked with changing the culture of a large number of people, and an in-house counsel.  
576 This is based on the Anticipatory Principle from AI. See Cooperrider & Whitney (2001) supra note 256 at 16.  
577 This is Robert Cover’s idea of law as a bridge to an imagined future. See Cover (1983) infra note 610.
• Regulators keep people on the bridge by identifying the kinds of dialogues we want corporate actors to have and by encouraging, coaching, and sometimes assisting them to have those dialogues. 578
• Small changes in the way corporate actors talk to and interact with each other can have dramatic effects on the emergent corporate culture. 579

Dialogic regulation assumes that when we regulate a corporation we are trying to either attain or maintain a desired way of acting or being. It also assumes that a change in behaviour that is learned (the individual adopts the reasoning for why the behaviour is desirable within their world view) is better than a change of behaviour that is coerced (through deterrents) or compelled (through incentives). 580 It is better because it has a longer-lasting effect, increases future compliance, and reduces regulatory costs, among other things. 581

The regulation of corporations can have a number of different effects ranging on a continuum from not effective to extremely effective. At one end of the continuum is not effective. In this worst-case scenario, the regulation attempt has no effect on the corporation. At the other end of the continuum is extremely effective, where the corporate participants have engaged in double-loop learning related to the regulatory effort and have not only learned new behaviour but have learned to incorporate the regulatory outcome into their thinking and possibly, in a best case scenario, are attaining outcomes beyond which the regulator thought possible and raising the bar for all regulatory participants. Somewhere between these extremes is

578 See the section on “Dialogic OD” in Chapter 3.
579 This is the idea of the corporation as an emergent system. It is based on the insights from chaos theory discussed in the section – “Chaos Theory and the Corporation” in Chapter 3.
580 Single- and double-loop learning were summarized in Chapter 3.
581 The list provided in the text focuses on the regulatory components of “better”. There are also a wide range of other components of better here that are beyond the scope of the regulatory system, for example more democratic, more participative, community building, etc.
a range of less effective regulation outcomes, two of which should be highlighted. The first is a “de-coupled” regulatory response. David Hess identified this in his work on Corporate Social Responsibility reporting.\(^{582}\) In this response, the corporation fulfils the technical requirements of the regulation by building an apparatus (people, resources, etc.) to do so, but that apparatus is separate from the corporation itself. Hess argues that, in this response, the focus of the corporation on the “process” to meet the regulation does not allow for changes in actual corporate behaviour.\(^{583}\) For example, if a department is created for corporate social responsibility reporting and generates annual documents about the corporation’s corporate social responsibility but has very little interaction with the actual business, managers may actually not be aware of the claims being made by the new department.\(^{584}\) In a decoupled response, the regulatory outcome has not been incorporated into the theory-in-use or day-to-day management of the business. Hess argues that when the “social reporting process is decoupled from actual operations” and “serves only a ‘symbolic’ or ‘cosmetic’ role” then it is “little more than a superficial public relations strategy”.\(^{585}\)

The second type of less effective regulation is simple behavioural modification. While this accomplishes the regulatory task in the short term by creating situations for single-loop

\(^{582}\) See David Hess (2008) supra note 75. The discussion of de-coupling can be found starting on page 490.

\(^{583}\) Ibid at 452.

\(^{584}\) Hess refers to a study that found this. Hess describes the study in the following way: They “studied four large firms that experts considered social reporting leaders and found that the reporting process was conducted in a manner that had no real connection to the actual operations of the firm. For all four firms, the researchers found that the content of the social report and the performance indicators included within it were developed not through the internal management system, but by a self-contained unit separated from the organization’s accountants and operational managers. Accordingly, they found that managers did not view the social report as in any way affecting their decision making.” Hess (2008) Ibid at 42.

\(^{585}\) Ibid at 487.
learning, it has not changed the way the actors think, so behaviour can either revert, if vigilance, incentives, punishment, etc. change, or the participants may use their old mindset to innovate around the regulation to accomplish the same non-desired outcomes by engaging in a different behaviour. It is only where double-loop learning occurs that regulatory outcomes become a part of the worldview or belief structure of the regulated individuals and eliminate the need for vigilance and punishment or continued incentives. Therefore, the best regulatory outcome is double-loop learning by corporate participants about a desired regulatory outcome. Double-loop learning is a social process that involves dialogue. Therefore, dialogic law and regulation hypothesizes that the best way to regulate corporations is to have laws that are generative statements about the way we want corporations to be (the “law”) and the role of corporate regulators is to have ongoing dialogues with corporate participants about how they are working towards those goals (“regulation”).

Dialogic regulation postulates two kinds of change in organizations: small incremental change with foreseeable outcomes, and spontaneous transformational change that occurs at the edge of chaos. Within a corporation social reality is being constructed or reconstructed every moment of every day based on the conversations and interactions that the corporate actors are having with each other. Corporate culture is constantly changing, although in many cases it is changing very slowly unless there is an event that triggers an adaptive challenge or throws the corporation to the edge of chaos. Small incremental changes in corporate culture can emerge when people learn to change the patterns of their interactions, even if the changes are small. Those small changes then get replicated through numerous interactions within the corporation.

and the new systemic level corporate culture emerges naturally from those interactions. It is very
difficult to tell ahead of time exactly what that culture will be, but it should occur within a range
of possible outcomes (at least in the short term). The learning approach of dialogic regulation
anticipates unintended consequences and allows all participants to collectively learn from the
outcomes and collaboratively re-engage in a continued change effort toward desired regulatory
outcomes.

In dialogic regulation the law has two components: the written law, which is the formal
laws and regulations – these are generally aimed at the systemic level (“written law”) and the
regulatory function – and the “informal” interactions between the regulator and the regulatee –
these are usually aimed at specific companies or groups within companies and take the form of
dialogue, persuasion, investigation, audit etc. (“regulation”). In practice, this looks like a
generative corporate law that talks about the future that we want, and a dialogic learning loop
regulatory approach with corporations. Dialogic regulation focuses on individuals (and the way
they interact with each other) instead of system level interventions as the primary unit of change
in corporations. If this approach is taken the two components of law both still have a role to play
– the written law can be used as the initial set of rules of interaction between the organization
and the regulatory function becomes the conversations that assist in changing the interactions to
be more consistent with the law when they are not meeting the expected standards. Each of these
components of the law is described in more detail below.

6.1 Dialogic Law and Regulation

In dialogic law and regulation the law acts as a generative image that allows people to
think about new possibilities and work together in new ways. It is based on the dialogic
principles of AI, but this metaphor was first eloquently offered in the law in the 1980s by legal scholar Robert Cover when he wrote about the law as a “bridge” to imagined futures.\textsuperscript{587} Cover wrote that: “[I]aw may be viewed as a system of tension or a bridge linking a concept of reality to an imagined alternative.”\textsuperscript{588} For Cover, law was not simply a means of social control but also, in its ideal form, could assist in the creation of a nomos or imagined future.\textsuperscript{589} There are a lot of parallels between Cover’s work and the work of the new Dialogic OD practitioners discussed in Chapter 3, including a focus on narrative, stories, and an appreciation for the self-organizing properties of human social systems.\textsuperscript{590}

   Cover believed that we all inhabit a nomos or a normative universe and we constantly “create and maintain a world of right and wrong, of lawful and unlawful, of valid and void.”\textsuperscript{591} This idea is similar to social constructionism and the mental maps concept from OD, and it is one of the central concepts of Dialogic OD. Cover also believed that we create and maintain our world through narrative or the stories that we create and repeat to each other. This is similar to the idea of theories-in-use from OD. For Cover, the law situates itself within this narrative. He stated that no law or set of legal institutions “exist apart from the narratives that locate it and give


\textsuperscript{588} Ibid at 9.

\textsuperscript{589} Ibid at 10. Cover’s exact words were: “I first contrast an ideal form for the creation of a nomos – of a legal world conceived purely as legal meaning – with the more familiar notion of law as social control”.

\textsuperscript{590} Cover was coming at the law from a background of religious narrative interpretation. OD practitioners are coming at it from a background of learning through experience what actually causes real change within corporations. It is very curious to note that as complexity and chaos theory advances as a science they are started to uncover scientific truths about the practices of the world’s major religions, which is drawing religion and science back together. An exploration of this phenomenon is beyond the scope of this paper but it is interesting to note.

\textsuperscript{591} Ibid at 4. Cover defines a nomos as a “present world constituted by a system of tension between vision and reality”. Ibid at 9.
it meaning” and “[for] every constitution there is an epic, for each dialogue a scripture.” 592 Once law is situated in the context of the social narratives that give it meaning then the law becomes “not merely a system of rules to be observed, but a world in which we live.” 593 For example, in the United States the right to bear arms is part of the revolutionary story of the formation of the country. For Cover, a civilization’s laws are a part of its epic stories and the great legal civilizations are marked by the richness of the nomos or narratives in which the law is located. 594

In Cover’s view, the law is a part of the structure by which each of us communicates with each other 595 and every legal tradition is a part and parcel of constructing our normative world. 596 This view is consistent with social constructionism, the new regulatory theories, and dialogic regulation. Cover’s view of law is consistent with social constructionism because he believed that meaning was constantly created and maintained by the stories (or conversations) that people tell each other to create the nomos. It is consistent with the new regulatory theories because he did not believe that the state was the sole source of law. In fact, he felt that law was a “creative process” that was “collective or social”. 597 He coined the term “jurisgenesis” to refer to creation of multiple narratives of the nomos by different social groups in society, which is always a danger for both society and the law because “it is the problem of the multiplicity of meaning – the fact that never one but always many worlds are created by the too fertile forces of

592 Ibid at 4.
593 Ibid at 5.
594 Ibid at 6.
595 Ibid at 8.
596 Ibid at 9.
597 Ibid at 11.
He argued that the process of jurisgenesis, if left to its own devices within social groups, would lead to a society in a chaotic state because the worlds created by the different social groups would be “unstable and sectarian in their social organization, disassociative and incoherent in their discourse, wry and violent in their interactions.” This is similar to the idea of an organization in a chaotic state that is unable to self-organize.

In this situation, the imperial nature of the law steps in to exert world maintenance. Every society or community uses its constitution to define and maintain legal norms. In this sense, the law is “jurispathic” because it destroys all alternate narratives. However, a single legal text always creates a multiplicity of meaning because the meaning of a national text or universal law is always contested. Cover thought of the courts as the main agents of jurispathic activity because once the courts hand down a decision on a particular interpretation they preclude the legitimacy in the society of any competing interpretations of the law. Legal scholars Blair and Stout also felt that the courts had an important role in deciding the narratives and stories that corporate actors will internalize to guide future behaviour.

Robert Cover warned against the jurispathic power of the law and for the recognition of a multiplicity of normative meanings. For Cover, the power of the law should be leveraged to

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598 Ibid at 16.
599 Ibid at 16.
600 Ibid at 25.
601 Ibid at 19.
602 Ibid at 17.
603 Ibid at 40-44.
invite jurisgenesis or the creation of new worlds as opposed to being used solely for jurispathic activities and the destruction of normative possibilities. This is very similar to Gervase Bushe’s idea that the key to AI is to be generative, not just positive.605 Cover’s conclusion about the potential of his conception of the law is echoed in the final sentence to his famous article: “We ought to stop circumscribing the nomos; we ought to invite new worlds.”606

When Cover’s generative metaphor is applied to corporate law and regulation it results in the basic ideas of dialogic regulation of the law as a bridge to an imagined future and that the future can be anything we can collectively imagine and bring into existence.607 It could be argued that Dialogic OD practices and dialogic systems theory provide the theoretical framework within which it becomes possible to make Cover’s dream of the law as a bridge to an imagined future into a reality. In fact, dialogic regulation can be seen as a practical application of Cover’s dream: the use of law to “invite new worlds”.

Cover’s analysis should be heeded, though, to the extent that he offered a warning about the jurispathic and imperial tendencies of the law. The law is destructive to naturally emerging self-organizing processes because it picks one interpretation, one narrative, one story, and one dialogue over all others. So, the warning is that we need to be very, very careful about what we choose to put in the law because it closes out all other possibilities. For example, if we ever decided to put in our corporate law that corporations should be run for the sole benefit of shareholders, we would close down the possibility of conversations that corporations could be

605 See Bushe (2007) supra note 353
606 Cover (1983) supra note 610 at 68.
607 Cover himself applies his thoughts to corporate law. He portrayed corporate law as an “insulated nomic reserve” which had a nomos all its own that ended up being protected by universal laws. Ibid at 30.
run for a broader range of stakeholders. This realization argues even more forcefully against regulations in the corporate law about minor or non-principled normative decisions, for example the number and timing of meetings, etc. When the law states that corporations need to have a board of directors, or need to have a shareholders’ meeting once a year, it precludes the option of people who might want a board of employees or to have shareholders’ meetings 12 times a year. Does the law need to be jurispathic to that extent? If used incorrectly, the law is a real danger to the ability of social systems to innovate, learn, and move forward. Healthy and innovative social systems are able to surf the edge of chaos. The key question is: How do you draft laws to achieve desired regulatory outcomes while at the same time allowing for healthy innovative and sustainable business organizations?

This question has been looked at from a number of different perspectives in law and regulatory theory. The most common debates are about rules-based vs. principles-based laws, process-oriented laws vs. outcome-oriented laws, and about the different assumptions on how to change human behaviour – whether through internal or external motivation, rules, coercion, inducement, persuasion, or, as is argued in this thesis, learning through dialogic processes. Each of these legal and regulatory debates is canvassed briefly below and then a conceptual tool is offered to show how all of these debates are of relevance in deciding what the law should be in a dialogic regulatory system. From a dialogic perspective the key is for the law to be generative while at the same time achieving regulatory outcomes.

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608 It is interesting to note that Anglo-American corporate law never says that corporations should be run in the best interests of shareholders. Those words do not appear in any corporation’s legislation. That meaning has been ascribed by the normative world and the narratives of Anglo-American countries, which is evidence supporting Cover’s assertion that no law can be separated from the normative context that gives it meaning. It also means that to change that aspect of corporate law it is not enough to change the law. The nomos and dominant narratives must also be changed.
The most prominent debate in current corporate regulatory scholarship is about rules-based regulation and principles-based regulation.\(^{609}\) This is often presented as an either/or choice for a regulatory system. In reality, any complex regulatory system will contain both principles-based components and rules-based components and so should be thought of more of a continuum between the two approaches.\(^{610}\)

Rules-based regulation is a regulatory approach that tries to make “most or nearly all legal judgments in advance of actual cases.”\(^{611}\) Rules have the advantage of being more precise and certain but are often considered to be rigid, reactive, and incapable of accommodating specific contexts. They usually provide a clear standard of behaviour and are easier to apply consistently. The downside is that they can lead to gaps and inconsistencies, and they are prone to creative compliance behaviour and can drive a race to the minimum regulated standard.\(^{612}\) This phenomenon was witnessed in corporate law in the U.S. with the race to the bottom for corporate charters, which was eventually won by Delaware.\(^{613}\)


\(^{613}\) For a discussion of the phenomenon of “Race to the Bottom” see Lucian Bebchuk, “Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law” 105(7) Harvard Law Review 1443.
Rules can be precise or complex. Precise rules set out a single criterion which has to be satisfied for the rule to apply, for example you must hold an annual general meeting of the corporation within 140 days of the last financial year end. It is easy to apply but it can fail to achieve its purpose because there may be circumstances where corporate stakeholders would be better served by meetings held in a different timeframe. Similarly, the rule may not be a good way to ensure that management and shareholders are in regular communication. Complex rules have a more complex set of prerequisites before they apply and this complex formulation may leave out some circumstances where it should apply and may create more opportunities for creative compliance behaviour.

Rules-based regulation is the dominant regulatory approach in the world in relation to corporations. Legal scholar William Bratton has summarized this situation by stating that:

[B]usiness law as a whole . . . has been evolving away from broad standards and towards precise rules. . . . The drafters no longer leave it to the case law to fill in the details. Instead they pursue the impossible dream of creating complete sets of instructions. . . .

Bratton has argued that business law has moved to rules because auditors, lawyers, and clients alike demand clear instructions. They put the burden of clarity on the lawmaker so as to relieve themselves of the burden of making judgments in uncertain circumstances. The proliferation of corporate laws and regulations has been studied in Australia and Canada and the volume of regulations being generated is astounding. A modern multinational corporation may need to comply with thousands of pieces of legislation. While it is unclear under which circumstances

614 Black et al. (2007) infra note 641 refer to this distinction as between “bright line rules” and “complex/detailed rules”.

rules best regulate behaviour, regulatory scholar John Braithwaite has argued that precise rules more consistently regulate simple phenomena than principles and as phenomena become more complex principles are better.\textsuperscript{616}

Principles-based regulation focuses on the substantive outcomes of rules. It means “moving away from reliance on detailed, prescriptive rules and relying more on high-level, broadly stated rules or [p]rinciples to set the standards by which regulated forms must conduct business.”\textsuperscript{617} The key is for these rules to be drafted at a high level of generality as overarching requirements “that can be applied flexibly to a rapidly changing industry.”\textsuperscript{618} The example often used to illustrate the difference between principles-based regulation and rules-based regulation is the speed limit. A rules-based approach to the speed limit would be to set a specific limit like 100km an hour. This is a precise limit that leaves little discretion to front-line regulators. A principles-based approach would be something like drive reasonably in the circumstances.

Principles-based regulation is based on the idea that corporations and management are better suited than regulators to determine what actions need to take place within their businesses to achieve a given regulatory outcome. As such, it places increased emphasis and reliance on the internal systems within corporations, which sometimes leads to it being called “management-based” regulation.\textsuperscript{619} But corporations do not decide on their own and the articulation of


\textsuperscript{618} Ibid at 192.

\textsuperscript{619} Ibid at 193.
processes and details of the regulation should be worked out by front-line regulators in collaboration with industry.\textsuperscript{620}

The key to principles-based regulation functioning is the creation of an interpretive community of stakeholders that includes the regulated corporation, the regulator, and other parties, who determine the content of the regulatory principles.\textsuperscript{621} Principles-based regulation is flexible, able to accommodate specific contexts and situations, can be tailored to apply in specific situations, and can involve the regulatee and other stakeholders actively in the regulatory process. This ability to engage the relevant stakeholders in a dialogue is the most important quality of principles-based regulation from a dialogic perspective. Principles-based regulation can provide a “basis for open dialogue between regulator and regulated firm.”\textsuperscript{622} In this way, principles create the possibility for regulatory actors to dream about achieving future standards or outcomes. The downside to principles is that they can be seen as uncertain, unpredictable, and difficult and costly to implement, and they may provide too much power to front-line regulators.\textsuperscript{623} There is some evidence that principles-based regulation increases compliance, but only for internally motivated actors or values-driven actors to whom this kind of approach

\textsuperscript{620} Ford (2010) supra note 633 at 10. In this regard, principles-based regulation is very similar to the meta-regulation/self-regulation regulatory model proposed by Christine Parker. See Chapter 2 – “Self-Regulation and Meta Regulation”

\textsuperscript{621} Ibid.

\textsuperscript{622} Black et al. (2007) supra note 641 at 195.

appeals. Conversely, principles-based regulation does not work with individuals who have no principles.

In principle-based regulation there is the assumption of the firm as a responsible self-observing organization and regulatory conversations take centre stage as the meaning and application of principles are elaborated by iterated communications between the regulator and the corporation. Regulatory scholar Julia Black has argued that to an extent this conception of the regulatory system is a “rhetorical invocation of a Utopian world” that was used in the competition for business between the regulators in New York and London and that principles-based regulation had a positive and powerful rhetoric that created a vision that was appealing to government, firms and regulators alike. The end result, it has been argued, was light-touch regulation. Black describes that rhetoric the following way:

Regulators and regulatees move from a directing relationship of telling and doing, to a relationship of responsibility, mutuality, and trust in which regulators communicate their goals and expectations clearly in principles and apply those principles predictably, regulatees adopt a self-reflective approach to the development and processes and practices to ensure that these goals are substantively met, and critically, both trust each other to fulfill their side of the new regulatory bargain.

That statement is not just rhetoric. It can be the future. But, that future requires a lot more work to implement than was attempted prior to the global financial crisis. As Black et al. have

626 Ibid at 11.
628 Ibid at 12.
acknowledged, principles-based regulation requires a revolution in the relationship between the regulator and the regulatee, including a change in the mindset and skills of the regulator, a more sophisticated dialogue between the firms and the regulator, a change in the skills, judgment and mindset of firms, and the engagement of senior management with regulatory issues at the highest level.\textsuperscript{629} In addition, the parties should anticipate that it would fail at some point and have a Plan B ready and available for when it does. Implemented correctly, this new type of regulatory system would be anything but light touch—it would be intense, full of real, open, and clear dialogues that are harsh and existentially challenging. That is why participants in the system will need to be trained and the correct structures will need to be set up to facilitate those dialogues. In this changing roles “developing the appropriate dialogues and relationships of trust in this context will be particularly challenging.”\textsuperscript{630} Black et al. state it this way in relation to the FSA:

Principles-based regulation will only work if there is on-going dialogue between the FSA and regulated firms, which develop, shared understandings of what conduct is required by the [p]rinciples. It is only through extensive regulatory conversations as to the objectives of the regulatory regime, to the respective roles and responsibilities of regulators and regulated firms in achieving those objectives, and to the interpretation and application of the regulatory requirements that any regulatory regime can operate.\textsuperscript{631}

The current problem with principles-based regulation is that while people realize that a lot of work, preparation, and training is required to make it work, there has not yet been satisfactory guidance on how to train people, what to train them on, and what these dialogues are supposed to look like. Dialogic OD holds the key to solving these problems. Black does

\textsuperscript{629} Ibid at 200.
\textsuperscript{630} Ibid at 202.
\textsuperscript{631} Ibid at 203-204.
acknowledge that principles-based regulation can live up to the expectations of its supporters, depending on how it is implemented and on the institutional context that surrounds it. She believes that to be successful it requires at minimum “a close engagement between the regulator and regulatee based on mutual trust, firms need to be concerned to go beyond minimal compliance with regulatory requirements, outcomes and goals have to be clearly communicated by the regulator, the enforcement regime has to be predictable, and, most relevant for the US, the culture of litigation needs to be restrained.”

The movement towards adopting principles-based laws for corporate law and regulation instead of detailed process-oriented laws has been underway for some time. Before the Global Financial Crisis in 2009 it seemed that principles-based regulation was actually making some headway, with inroads being made with the U.K. Financial Services Authority, a proposed British Columbia Securities Act, and potentially with the new national securities regulator in Canada. However, with the occurrence of the Global Financial Crisis the reputation of principles-based regulation “took a severe battering” because it was seen as a form of light


636 This act was never brought into force but the B.C Securities Commission has adopted a more principle-based approach in the administration of their current act.


touch regulation “that placed too much reliance on firms themselves to behave responsibly”. In a recent article, Christie Ford has argued that principles-based regulation failed during the Global Financial Crisis not because the idea was faulty but because it was not reinforced by an effective regulatory presence. Ford is correct in not giving up on principles-based regulation and asserting that it can work if certain factors are present, including sufficient regulatory capacity in terms of resources, access to information, and expertise, and regulation grapples with the complexity of its task. These initial failures of the new regulatory system are just part of the natural learning loop cycle.

However, a dialogic approach to law and regulation would argue that focusing on only the difference between rules and principles-based regulation is too simplistic because there are many other ways to draft laws that can be used, based on the type of principle to be applied and the assumption of behavioural change that is adopted. For example, there is the distinction between process-based and outcome-based regulation. Process-based regulation focuses on how to achieve results. A regulated entity complies with the law by following the right process. A process-based approach assumes that the regulator knows the best way to solve the problem and they just need the regulated entities to follow the process they have prescribed. In the example of the speed limit, the law in this case would prescribe mandatory driving lessons for all drivers. In

Black argues that four types of regulation took a hit to their reputation after the Global Financial Crisis: principles-based regulation, risk-based regulation, reliance on internal management and controls, and market-based regulation.

639 Ibid at 3.


641 See Ibid at 1. Ford also argued that to be effective principles-based regulation also requires increased diversity among regulators and greater independence from industry to avoid “conflicts of interest, over-reliance on market discipline and ‘groupthink’.” I do not necessarily agree with this conclusion. The whole idea of conflict of interest and regulatory capture is called into question in a dialogic law and regulation approach. How does a regulator stay differentiated from a regulatee when they are actively engaged in collaborative learning loops?
contrast, outcome-based regulation has the defined outcomes written into the regulation. An outcome-based approach for the speed limit could be to “reduce deaths or accidents by X%”. The outcome-based approach acknowledges that the regulator does not know the only way to solve the problem and regulated entities are free to meet the outcomes in the way that they determine is best. The dominant paradigm in current business regulation is process-based and not outcome-based.

Another way to conceive of the drafting of laws is by looking at the assumption of behavioural change behind the law. In Chapter 4, the difference between internal motivation and external motivation was described in the work of Samuel Bowles. There it was shown that behavioural change is more powerful when it relies on internal motivation for change and that attempts to control complex behaviour with external incentives can often backfire by crowding out internal motivations. In the context of the speed limit the argument would be that by setting a pre-determined speed limit of 100 km an hour, the regulator has now absolved drivers of determining on their own what is reasonable in the circumstances, and so drivers who would normally have only driven 80 km an hour may now drive 100 km an hour. In addition, by setting pre-determined fines for speeding, the regulator has transformed speeding into a commodity that can be purchased and so drivers will speed knowing that they can just pay the fine. In both of these situations, the internal motivation not to harm other drivers or injure themselves or their passengers has been “crowded out” of the decision about whether to speed or not to speed. The caveat to this comes from the SVO research that shows that different types of people respond to different types of regulatory approaches. Individualistic individuals seem to respond better to external incentives while prosocial individuals seem to respond better to internal incentives.
One more dichotomy in the drafting of laws should be pointed out: the difference between maintaining minimum behaviour now and setting new goals on ceilings for future behaviour. In Chapter 3, the anticipatory principle was introduced. It provided that human systems move towards what it is that we talk about and ask questions about. That means that we are unlikely to make progress towards environmental sustainability or corporate responsibility unless we are talking about these concepts. If we focus on prescribing that environmental discharges should only be 40L/month then the best we will ever accomplish is probably environmental discharges of 40L/month. In contrast, if we aim and talk about corporations that have no impact on the environment, we might actually get there. The anticipatory principle states that we are not likely to find a new world unless we are looking for it.

Regulatory systems are complex. None of the debates outlined above are about polar opposite positions. No regulatory system is based solely on rules or solely on principles. Similarly, different people respond to different techniques for behavioural change. Some people respond better to appeals to values and principles but some people find coercion to be the best way to change. It depends on the person, the situation, and the behaviour in question. There are ways to change behaviour using external motivations (coercion, inducements, persuasion, etc.) and using internal motivations (principles, values, learning, dreaming, etc.). The quote that principles-based regulation does not work on people with no principles should really be changed to: “principles-based regulation will not work with someone who does not think that the thing you are talking about relates to principles”, or “principles-based regulation only works with the people who share your principles.”

But, while some of these theories are more appealing than others – for instance I intuitively like the theory that external motivation and rules work best for simple tasks and
situations and as tasks and situations get more complex internal motivators and principles will work better.\textsuperscript{642} The truth is that we really do not know which approach works best. For all the explosion of laws, rules, and regulatory approaches there is stunningly little empirical evidence that helps us understand which types of laws and regulatory approaches work well and where.\textsuperscript{643} A growing number of studies are being done to explore this, but the results from a regulatory perspective are not yet conclusive or generalizable. That being said, an astonishing amount of evidence in social psychology supports the theory that rules and external motivators work well for simple tasks and that principles and internal motivators work better for complex tasks.\textsuperscript{644} Most regulatory situations that involve corporations are complex to the extent that internal motivation will work better, but there clearly are places where rules and external motivators can be useful.

Continuums are not really the way to conceive of law in a dialogic regulation approach. The more accurate conception is one of nesting.\textsuperscript{645} Each principle or value can have a number of more specific guidance examples, or rules attached to it. A few of those are a good idea and can help explain and communicate the value or principle. Too many gives rise to the dangers of over-ruling. Cover’s imagined future and the imagined future suggested here can be seen as a nest for principles. To complicate things each imagined future, principle or rule can be framed as a

\textsuperscript{642} See Pink (2007) \textit{supra} note 497.

\textsuperscript{643} For a list of the handful of studies that have attempted to do this, see Black (2010) \textit{supra} note 662 at footnote 4.

\textsuperscript{644} See Chapter 4.

\textsuperscript{645} See Black (2010) \textit{supra} note 662 at 24 where she states, “In practice, characterising a regulatory regime as rules based or principles based does not take us very far, descriptively or normatively. It is hard to classify any one regulatory regime as being either entirely rules based or entirely principles based; the better question is what is, and should be, the relative roles of each.”
process or an outcome. In a way what I am suggesting here is simply the legal structure that has evolved naturally as different stakeholders grapple with coming to agreements on regulation at different levels. At the international level, where the tasks are very complex and involve large number of stakeholders, entities have been moving towards an AI approach. At the national level governments and regulatory bodies have been moving towards PBR. And at the regional or local level there have been experiments with PBR but by and large this is still the area for rules. I am not going to argue with this, as it might be the correct way for this to occur. But, I will argue that the complexity of the tasks at the local level is not significantly less complex than the international level – we just choose to characterize them as simpler. So, all levels would benefit from more imagined futures and principles approaches.

In order to illustrate a dialogic approach to law, let’s look at the example of the speed limit. When we are conceiving of the law we need to ask: what is its real purpose? In relation to the speed limit example given earlier, what is the goal or imagined future that a speed limit is intended to accomplish or direct us to? While this can be debated, for the purposes of this analysis let us assume that it is to allow people to get where they are going as quickly as possible while ensuring the safety of all.

Once the law is conceived of as outcome oriented it becomes possible to build a nesting of the law in the real world that is a combination of principles and rules as the situation dictates. For example, there is a very dangerous stretch of highway on the 401 between Toronto and London that has more than its fair share of accidents and deaths. This is a heavily travelled section of the road. If the imagined future is safe roads, why would it not be appropriate to just impose a rule over this section that the speed limit will be 60 km an hour and people need to be 3 Chevrons apart? On country back roads the limit could be “reasonably prudent in the
circumstances.” In a complex system, some cases require more specificity while others don’t. I have included below a chart that outlines what the speed limit law would look like using each of the approaches to law we outlined above. As you move down the chart the regulatory system becomes more complex and the regulatory approach to match that complexity changes to ensure that it remains effective.

<table>
<thead>
<tr>
<th>Regulation Approach</th>
<th>Speed Limit Example</th>
<th>Assumption of Behavioural Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules</td>
<td>100 km an hour.</td>
<td>External Motivation.</td>
</tr>
<tr>
<td>Principles (Values)</td>
<td>Speed reasonably suitable in the circumstances.</td>
<td>Internal Motivation.</td>
</tr>
<tr>
<td>Process</td>
<td>Mandatory driving lessons for all drivers.</td>
<td>Control process that causes accidents (i.e., poor or uneducated drivers).</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Reduce accidents and deaths per district to X or by x% or accident-free roads. Can allow specific approaches in specific areas.</td>
<td>Complexity – more than one way to change the same behaviour.</td>
</tr>
<tr>
<td>Imagined Future</td>
<td>Roads where people arrive at their destination as quickly as possible while assuring the safety of all.</td>
<td>Dialogic – human system move towards what we talk about.</td>
</tr>
</tbody>
</table>

*Figure 2 Examples of Regulation Approaches*
In the dialogic regulation approach, corporate law would be simply a collectively arrived at vision of what society wanted corporations to become. This is consistent with the aim of many dialogic OD practices, including AI. Consider this quote about AI practitioners Cooperrider and Whitney and how it would apply to corporate law and regulation: “How can we better inquire into organization existence in ways that are economically, humanly and ecologically significant, that is, in ways that increasingly help people discover, dream, design and transform for the greater good?”646 This view is exactly the same conceptualization as Robert Cover has for the law. There are numerous examples of this kind of use of AI that hold hints of the potential of using law in this way. Four examples are highlighted below.

The most important example is the United Nation’s Global Compact. The Global Compact is a set of 10 principles in the areas of human rights, labour, the environment, and anti-corruption that corporations are asked to embrace, support, and enact.647 The principles resulted from an AI summit held with world business leaders and hosted by the United Nations. The Ten Principles of the Global Compact are:

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.
Principle 2: Businesses should make sure that they are not complicit in human rights abuses.
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
Principle 4: The elimination of all forms of forced and compulsory labour.
Principle 5: The effective abolition of child labour.
Principle 6: The elimination of discrimination in respect of employment and occupation.
Principle 7: Businesses should support a precautionary approach to environmental challenges.

Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility.

Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Another example is Business as an Agent of World Benefit. Following the Global Compact, Case Weatherhead held a forum using the generative image of “Business As An Agent of World Benefit: Management Knowledge Leading Positive Change.” The generative image was created to make people think about new ideas and new ways of engaging corporate enterprise and corporate innovations for world benefit. The forum involved many stakeholder groups, including corporate participants. There were 400 delegates and over 1000 virtual participants.

A third example is the Principles of Responsible Investment. The Principles for Responsible Investment Initiative (PRI) is a United Nations sponsored international network of investors working together to put the six Principles for Responsible Investment into practice. Its goal is to understand the implications of sustainability for investors and support signatories to incorporate these issues into their investment decision-making and ownership practices. The six principles for responsible investment are:

Principle 1: We will incorporate Environmental, Social, and Corporate Governance (ESG) issues into investment analysis and decision-making processes.

Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.


649 To find out more about the principles of responsible investment visit the website: <http://www.unpri.org/> (accessed May 4, 2014).
Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.
Principle 5: We will work together to enhance our effectiveness in implementing the Principles.
Principle 6: We will each report on our activities and progress towards implementing the Principles.\(^{650}\)

A final example is the Social Labs Revolution. The Revolution was started by Zaid Hassan and is a new approach to solving our most complex challenges like poverty, hunger, ethnic conflict, and climate change. Social labs bring together a diverse group of stakeholders to develop a portfolio of prototype solutions for these problems, test those solutions in the real world, use the data to further refine the solutions, and test them again.\(^{651}\)

It has been stated previously that the model of a dialogic regulation offered here does not deal with what the normative content of the law should be or how that should be generated because it is beyond the scope of this thesis. But, as can be seen from the structure and the examples given here, the dialogic approach would argue that the law should be whatever the legitimate stakeholders agree it should be, after they have engaged in dialogic processes to determine it. What if the corporate law of each country was the Global Compact? And regulators in each country worked to make it a reality? There would still be rules, laws, regulations, conversations, and all of the normal aspects of a regulatory system – but people would know in what direction it was moving.


The most important outcome of a well-crafted dialogic law is that it is generative. This generativity will then invite dialogue. OD Professor Gervase Bushe has shown that generativity is a very important component of a successful dialogic transformational change.\textsuperscript{652} The goal of generativity is to set a clear vision of the future and to leave the details on how to get there to the actors. In the experiment in Chapter 6, the dialogic form of the “rules” was the aspirational goal of the regulator: Contribute 100% and Return 50%. Some participants in all of the conditions met this aspirational goal even though they did not have to. There is a special skill set required to draft laws that are generative. Bushe has done extensive work on generative images and has outlined four characteristics that are required for a topic to be generative:

Capture the core issue those sponsoring the inquiry are interested in.

1. Match the identity state of the group in which it is being used.
2. Frame the focus of the inquiry in a way few people have considered before.
3. Capture the interest and energy of those people who will need to be engaged in the inquiry for it to be successful.\textsuperscript{653}

It is this last characteristic where most of our current corporate law and regulation fails. That is because most of it is based on the “nexus of contracts” theory of the firm from economics that assumes that corporate actors always act in their own self-interest and the purpose of the corporate law is to contain their self-interest. It is not surprising then that our current corporate laws have not captured the interest and energy of the people who will need to be engaged for them to be successful (business leaders and corporate actors). It is also the reason that the

\textsuperscript{652} Bushe (2013) \textit{supra} note.

\textsuperscript{653} Bushe (2013).
metaphor of “Business as an Agent of World Benefit” was created to engage business leaders in the direction that we would like to go.

There are some other components of generative questions that are relevant to drafting laws. Bushe has also provided that generative questions:

1. are surprising because they have not been thought of or discussed before;
2. touch people’s hearts and spirits;
3. talk about and listen to the stories that will build relationships; and
4. force us to look at reality a little differently.

A generative law is the opposite of detailed rules and certainty. Detailed rules and certainty can shut down dialogue and the interactions meaning, language, innovations, and progress come from. In a dialogic system, shutting down dialogue is not good because healthy systems need to be self-organizing in order to be able to deal with complex tasks that hit them and survive. An organized or ordered system – one where all the rules and laws are clear – is only able to deal with prior complex problems that the system has encountered. This is probably why the legal rational rules-based capitalism we have created works great but is prone to catastrophic collapse every 3-10 years when it encounters new complex problems, products, and services, for example in mergers & acquisitions accounting (Enron and Arthur Anderson), asset-backed securities, and derivative financial instruments (global financial crisis).

One example of how clear and numerous rules and certainty can shut down innovation in a system and put it at risk is the example of the stock exchange. People always traded goods, money, and shares of businesses. In the past, traders who interacted with each other in dialogic markets handled the stock exchanges. The first stock exchanges were coffee shops. As corporations became more numerous and shares were more available we created stock exchanges where specialists met to trade shares. The early stock exchanges were extremely dialogic systems
with human beings interacting and were open to waves of innovation. There were failures, and catastrophic ones at that, but the system survived and innovated. But then, in the 1980s, the dialogic components of stock exchanges were eliminated permanently with computerized trading and the standardization of the trading of shares for that particular type of trading. This system was massively efficient for trading at the time, but it has proven unable to deal with innovations of complex new tasks that are presented to it. For example, short sells. The 1987 stock market crash was caused because the system could not stop triggering stop loss sell orders. If people had been trading it is very likely they all would have slowed down and stopped that process long before the system went out of control.

Another example is that stock exchanges require you to sell blocks of shares, usually 100. But, as a result of all the mergers and acquisition activity and the exchange ratios of shares, it is not unlikely for an investor to end up with a number of shares less than a board lot, for example 72 shares, or even less than 1 share, for example .73 of a share. How does the system deal with that? It can’t – so brokers will tell investors that they will do them favours and sell less than board lots once or twice a year. I have held 0.73 of a share for over 10 years because no one has figured out how to get rid of it.

If the system is unable to change to deal with these kinds of simple problems, how will it deal with complex problems like hedge funds shorting billions of dollars worth of stock they don’t own, or the fact that times the amount of gold that has ever existed in the world is trading in the market every day? These new standardized and computerized markets were lauded because they created liquidity and eliminated the need for people to know who the counterparties were. The opposite way to look at it is that they created anonymity and closed down the opportunity for dialogue or a relationship with the person you were doing business with. Imagine
an unknown trader walks into the pit at the old NY stock exchange and offers to sell to the other traders billions of dollars worth of gold – more gold than all the companies in the world have ever mined from the ground – with delivery dates on futures contracts within 6 to 18 months. When asked, “Where are you getting this gold? And who is your client?” The trader says, “I am sorry but I cannot tell you.” The other traders are not likely to buy these contracts. Furthermore, if you were to say “My client is a financier who lives in a tax haven who has no mines, no ability to get any gold, and is just going to re-sell these contracts before their expiry to someone else for a profit” what response would he get from the traders? The argument here is that standardization of systems and organization of system through laws and rules is beneficial up to a point. That point is focused on the emergent qualities of the system and that is a direct function of the ability of interdependent agents to engage in dialogue to provide new answers to complex problems. If a system becomes organized to the point that all dialogic processes are removed from it just became likely candidate for a future failure.

Dialogic regulation proposes that the law should be a minimal and clear set of expectations or hopes about the future we are imagining. For example the corporate law could be the principles of the global compact. Law in this conception has only two purposes: 1) to make a clear statement about the future that we desire, and 2) to promote dialogue among the correct stakeholders about how to achieve that future. How those dialogues occur, what happens after those dialogues, and what happens if the dialogues do not occur, are all tasks discussed in the regulation section below. The regulators in this model are the keepers of the dialogue. The government’s role and expertise in this system is to create the laws where the future vision is enshrined and then to create the regulator that will promote and enforce the dialogues about that future.
To close this section on law it is important also to talk about one other debate in the legal and regulatory literature: form vs. substance.\textsuperscript{654} This debate focuses on the fact that a regulatory system need not be defined by the form of its laws and the practice of the system adopted by the regulator can have a much different character than the character of the written law. For example, the BC Securities Commission has an act that is rules-based but they have adopted a principles-based approach to regulation. Similarly, an act that is punitive can have all the teeth taken out of it if the regulator chooses not to enforce it. This is possible because often the regulator is not the author of the laws that it applies.\textsuperscript{655} Legal scholar Dan-Cohen refers to this as the “acoustic separation of law” or the gap between the written word and the interpretation a regulator gives it.\textsuperscript{656}

This debate shows that while the text of laws is important, it is perhaps not as important as some think. Where behaviour changes, where learning takes place, where the rubber hits the road, is in the regulatory process. Which raises an interesting question: why, if this is the case, are we spending increasing amounts of time and resources to create ever more numerous and complicated laws with little evidence to show that they work while at the same time cutting budgets to regulatory agencies where the work actually occurs?

In the end, the actual form of the law is really not that important because from a dialogic and social constructionist perspective the uncertainty of laws, norms, or principles has little to do

\textsuperscript{654} For a discussion of this concept see Black (2010) \textit{supra} note 662 at 5-9.

\textsuperscript{655} \textit{Ibid} at 5.

with the way they are expressed; it has everything to do with how they are understood and interpreted.\textsuperscript{657} As Aristotle said, the goal in rules is not to be precise but to be clear.\textsuperscript{658}

\subsection*{6.2 Dialogic Corporate Regulation}

Regulation is the part of the regulatory system that focuses on the process of how behaviour is changed. For the purposes of this thesis, I adopt Julia Black’s definition of regulation: “a process involving the sustained and focused attempt to alter the behaviour of others according to identified purposes with the intention of producing a broadly defined outcome or outcomes.”\textsuperscript{659}

A recent article in a local Vancouver newspaper highlights the currently held views in the government on the relative importance of regulation in supporting the law.\textsuperscript{660} The article dealt with the new law in British Columbia that permits business lobbyists, provided that they become registered.\textsuperscript{661} This is an important Act, the application of which could have significant outcomes on society because businesses have a lot of resources with which to lobby. The law was given its due process in the legislature, but now it has been released into the world the regulatory agency tasked with administering it is woefully under-resourced. One year after it was created the agency had 643 active lobbyists registered and 1.5 full time employees whose job it is to educate

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\textsuperscript{657} Black (2002) supra note at 180.

\textsuperscript{658} Aristotle, Nicomachean Ethics, Bk 1, at 10946, 13-14 (W Ross trans. 1940) as quoted in John Braithwaite (2002) at 48: “Since Aristotle it has been understood that precision in this pursuit can be self-defeating; our discussion will be adequate if it has as much clearness as the subject matter admits of, for precision is not to be sought for alike in all circumstances.”

\textsuperscript{659} Julia Black, “Regulatory Conversations” (Mar 2002) 29(1) Journal of Law and Society 163 at 170.


\textsuperscript{661} The law is referred to as the Lobbyist Registration Amendment Act.
\end{flushleft}

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everyone on the new Act and enforce contraventions of the Act. One of the quotes in the newspaper article was provided to shock people with a comparison: “The average nightclub on Robson Street probably has more bouncers than the Registrar of Lobbyists has compliance officers.” It should not be a surprise, then, to find out that the regulator believes that there are still a large number of unregistered lobbyists in the Province and that they have not yet closed a successful investigation or fine for contravention of the Act. Unfortunately, this story is all too familiar. We currently value laws over regulation and we often under-resource regulators to engage even in simple investigation and enforcement – let alone dialogue. This needs to change because in a dialogic view of the law the regulation aspect of the system is far more important than the law creation aspect.

In the principles-based law literature and the literature around new governance regulatory theories there are a lot of references to “interpretive communities” that will have conversations about principles-based laws to determine what to do with them. These discussions often identify who they think should be involved (the stakeholders or dialogue participants) and they sometimes talk about ground rules for the conversation or what each side should keep in mind. They never talk about how that dialogue should occur. How do civil society, the government, and business get together to talk about these things? These are groups of people with very different mental maps, theories-in-use, and ideas about the way things should be. They probably all speak different languages. The items on the agenda are important and deal with power, emotions, and other contentious content. Chances are people will get triggered into

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662 Executives in corporations do much the same thing around strategic planning. Lots of energy, time, and resources go into the plan and less into the execution and change. The vast majority of the effort goes into deciding what the change should be and then everyone just moves on.
defensive behaviours and real dialogue will not happen. We have seen it too many times. If these conversations are handled incorrectly, these are most likely going to be discussions. They are not likely to be dialogues.

Regulatory scholar Julia Black has written about these regulatory conversations and has argued that regulation is in large part a “communicative process” and that understanding regulatory conversations is central to understanding the “inner life of that process”.663 She defines regulatory conversations as communications that occur between regulators, the regulated, and others involved in the regulatory process concerning the operation of that regulatory system.664 She argues that “discourse forms the basis of regulation” in that it “builds understandings and definitions of problems and acceptable and appropriate solutions”.665 For Black, in order to understand the regulatory process it is important to understand the points at which regulatory conversations occur – when they occur, who has them, and what they talk about.666 Black argues for a conversational approach to regulation where institutional processes are structured so as to require and facilitate deliberation and conversation.667 However, Black focuses on discourse analysis to explain and describe the role that regulatory conversations and interpretive communities have in regulation. This has the benefit of being strong from a theoretical perspective in stating the case for regulatory conversation but lacking in the practice

665 Ibid at 165.
666 Ibid at 171.
667 Ibid at 172.
elements of exactly how you construct an interpretive community and how a regulatory dialogue should take place.

In this chapter, I am going to add to Julia Black’s theory of regulatory conversations by using insights from Dialogic OD to propose dialogic processes and structures for how these regulatory conversations can and should take place. Two types of processes and structures will be covered: Continuous Dialogic Regulation and Episodic Dialogic Regulation.

6.3 Continuous Dialogic Regulation – Dialogic Learning Loops

The process of continuous Dialogic Regulation will be referred to as “Dialogic Learning Loops”. Dialogic is in the title because the idea is to get different stakeholders with divergent views to work together so that the outcome of the group is more than the individual inputs. The term learning is included because I want to promote the double-loop learning of all the participants, including not only the regulated but also the regulator. In any regulatory situation corporations can learn from regulators, but regulators can also learn from corporations and civil society. Even different regulators can learn from other regulators. Any open dialogue creates the opportunity for everyone to have their views, maps, and theories challenged and for them to learn something new that changes their view.

The term loops is inserted for two different reasons, each dealing with a different conception of loops. The first is that in order for this process to be successful in a regulatory system it needs to be inculcated at multiple levels in the system. That is because learning starts

with individuals, then moves into groups, and then between groups. An interpretive community in a principle-based regulatory system is an inter-organizational learning group. So, the argument is that in order for that to work each individual within that organization has to be capable of double-loop learning. These are the loops of the first conception. I am not calling them levels because I do not want to anthropomorphize the levels. The only entities learning in the system are the individuals. They are just doing it in different loops: the individual learning loop, the individual in the organizational learning loop, and the individual in the inter-organizational learning loop. The individual is the only one learning; they are just learning at higher levels of complexity. Think about it as the same individual wearing multiple hats. Organizations do not learn and inter-organizational interpretive communities do not learn – the people involved in them do.

The other concept of the word “loop” implied in my use of the term is that the dialogic learning loop once created will feed back on itself in future learnings and dialogues, which hopefully will lead towards a continuous improvement cycle where people are working together toward their goals. Learning loops exist between the individuals in the social system because this perspective conceives of an organization as the content of the interactions between the participants: the conversations, dialogues, etc. There are no separate hierarchical system levels in this approach that are anthropomorphized separate from the participants in the system. There are conceptual hierarchical system levels that emerge out of the patterns and content of the participants’ interactions but those only exist to the extent that they have been taken up into each individual’s mental maps, world view or theory-in-use. Therefore, a corporation is not an objective fact that is true in a single discernable form for everyone. It is a subjective fact that has a different meaning, existence, etc. for every participant in the social system.
The loop in the dialogic approach is in the repeating form and content of the interactions between the individuals in the system. If certain conversations about the corporation repeat themselves and become more prominent, a learning loop is created. Where a conversation or dialogue causes an individual to “learn” to the point that it changes the way that they then choose to communicate with others in the system, then learning has occurred. For the loop to be dialogic the participants must learn by challenging the premises behind their actions. As an example, if the corporate culture had a belief that the environment was not an important factor in business decisions and it resulted in an injunction that provided “we do not talk about environmental concerns in making business decisions in this organization,” even if that injunction might sometimes be discussed between individuals “off-stage”, if it was never directly discussed in meetings it would be a part of the corporate culture. If, however, one person (usually a newcomer who does not know any better) brought up environmental concerns during a business decision discussion, they would be challenging the premises behind the cultural belief that the environment was not important to business decisions. Depending on how that situation resolved itself – either positively or negatively – and how that story was told and repeated throughout the organization, the potential exists for either the reinforcement of the current corporate culture or a dialogic re-examination of the premises underlying the culture. If conversations within the corporation challenging the premises repeat themselves enough times a tipping point could be reached and where a new standard cultural norm could emerge (even without official acknowledgement by management) that “the environment is important to our business decisions”. This dialogic loop learning process could be assisted by a dialogic intervention that could create a conversation where people’s beliefs about this norm were made visible and people could discuss what norm they would like to have. This version of dialogic learning loops can be
depicted visually, as in the set of diagrams in Appendix O. The outcomes of this approach can be seen by documenting the changes in the “content” of the interactions between the system participants – their narratives, stories, and conversations.

This approach is dialogic because it assumes that reality is co-created by system participants on an ongoing basis and the way to change that reality is to change the way that reality is being created. In the diagrams in Appendix O1, the conversations about the corporation are depicted by symbols representing content of conversations between participants. One symbol represents the non-environmental conversation. The other symbol represents that environmental conversation. The placing of the individuals on the diagram represents the density of their social interactions. The closely placed individuals near the centre have more interactions with each other than the more sparsely placed individuals near the periphery. Note that the dense and patterned interactions near the centre all contain the accepted “no-environmental” content conversation. The “pro-environmental” conversation only exists on the periphery of this system. In the time series that follows the “non-environmental” conversation starts to be repeated as a positive amplifying loop pushing the system in a new direction. Over time, more of the participants take up this conversation until finally some of the inner circle individuals take up the conversation, which creates a tipping point, and the dominant system state becomes “pro-environmental”.

It should be noted that at this time there will probably be the creation of the “no-environmental” conversation on the periphery, either because the “no-environmental” individuals (the ones who could not learn the new system state) are moved to the periphery or individuals react to the “pro-environmental” dominant conversation. It is also possible that there are other amplifying conversations related to the environment existing in the system at this state. It is
extremely unlikely that this process will occur in a short period of time. Left to its own natural processes this kind of dialogic learning loop (or social construction of reality) can take years and years. One way to speed up the process and cause transformational change to the conversations and reality in a short period of time is to use one of the Dialogic OD practices to make room for the conversations from the periphery at the dense centre of the network where they can be heard by all and to assist people in listening to that conversation and using it to challenge their underlying beliefs.

This same conception of a dialogic learning loop can be applied to learning between organizations, for example learning between a regulator and a corporation or a regulator, a corporation, and a non-governmental organization. In this conception, a corporate department, an activist group, or regulator exists only in the dialogic learning loop diagrams to the extent that they exist in the conversations between the individuals and in their conceptions of the world (i.e., there is a set of conversations between individuals that replicate the corporate culture and practices in a dampening loop to keep the system in order). Organizations do not really interact with other organizations, it is just people talking to people. However, people usually like interacting with people who belong to the same groups that they do, so interactions are more likely to be intra-organizational than inter-organizational and organizational boundaries can be discovered by following the density of conversations. This is where Dialogic OD practices can assist by helping to create inter-organizational conversations.

The inter-organizational dialogic learning loop can be depicted in a dialogic regulatory diagram as in Appendix O2. In this diagram there are two separate groups of individuals, one with a set of conversations and dialogues that replicate “regulator”. These individuals are densely grouped to the left of the diagram. The other set of individuals have a set of conversations and
dialogues that replicate “corporation” and are densely grouped to the right of the diagram. Notice there are no or few conversations between the parties and if there are they are about trying to replicate their conversations within the other group. The regulator tries to replicate its “regulator” conversations with the corporate participants and the corporate participants try to replicate their “corporation” conversations with the “regulator” participants. It is possible that, over time, amplification replication may occur inside one or the other organization, but it is not likely because the conversations are so different and the two groups are not having real dialogues with each other that lead to learning. They are just “talking at each other”.

In order for this inter-organizational group to double-loop learn a specific kind of dialogue is needed that will promote these two separate social systems to become one social system. This can happen where a dialogue occurs between the parties, they have listen to each other’s underlying beliefs, they use the other party’s beliefs to challenge their own assumptions, and they engage in a real dialogue to form a shared set of beliefs. Dialogic OD practitioner Gervase Bushe describes this as the process of moving a group from a pre-identity state to a post-identity state.669

Diagrammatically what happens here is that learning occurs and each conversation starts to be adopted by the other organizations but what emerges is a new conversation out of the groups’ shared understanding. That conversation is the one that replicates the most and it creates a new system state where the two social systems are now one and the dominant conversation holding the system together is a new conversation. This time series is depicted in Appendix O3. Notice that the other conversations probably never go away – the individuals having those

conversations just get pushed to the periphery. These kinds of dialogic processes and structures can benefit any regulatory system whether it is dialogic, rules-based, principles-based, or otherwise – because, as Black has stated, all regulatory systems are based on conversations.

That is the theoretical basis of Dialogic Regulation. But, what does it look like in real life? Regulatory scholar John Braithwaite has been working on the form of these everyday regulatory conversations since the early 1970s with his work on responsive regulation. His idea is that in most regulatory scenarios the regulator should engage in light-handed regular conversations with regulated entities that are rewarding them for meeting regulatory goals and challenging them to reach for new ceilings. Braithwaite’s work on responsive regulation talks about capacity building at the bottom of the pyramid instead of enforcing.670 This is a positive as opposed to a negative approach. In this approach, regulators celebrate innovations and progress, publicize them, and support this kind of work with research grants and other creative ideas.671 John Mikler recently did a study of Japanese environmental regulation of the fuel economy of cars. He found that Japanese regulation has been more effective than European and American regulation in reducing the environmental damage that cars cause, despite the fact that Japan’s environmental enforcement is weak. The key to success has been encouraging competition in engineering excellence to take fuel economy to new ceilings and then using breakthroughs as opportunities to let other companies know that they need to meet the new standards or buy the technology of the new leader.672

671 Ibid at 481.
672 Ibid at 481.
Braithwaite’s conception of these regulatory conversations has recently become dialogic. At a recent talk at the University of British Columbia he offered an updated version of responsive regulation that was meant to encapsulate all the learning that had happened in the last 20 years around responsive regulation. In the talk he leveraged practices from motivational interviewing in psychology to explain his current understanding of regulatory conversations. He explained that regulatory conversations are not all about the positive and that there is a real requirement for the regulator to listen to the regulatee’s story of non-compliance. He argued this because he believed that the listening would lead to an agreement on desired change outcomes and an agreement on self-monitoring or external monitoring toward achieving them. He highlighted the motivational interviewing process from psychology that helps clients resolve ambivalence and move ahead with change.

Here is a quote from Braithwaite where he leverages a motivational interviewing quote and replaces “clinician” with “regulator” and “client” with “regulatee”:

- Regulation should be collaborative, where the regulator assumes the regulatee has what it needs to achieve change, and the regulator draws on the regulatee’s values, motivations, abilities, and resources to help the regulatee bring about the desired change.
- The regulator seeks to evoke and explore the ambivalence of the regulatee to change in order to help the regulatee resolve its ambivalence and move in the direction of positive change.
- The regulator should focus on the statements of the regulatee and emphasize the “change talk” in those statements to strengthen the regulatee’s motivation to bring about change. The regulatee, rather than the regulator, should voice the arguments for change.

673 Ibid at 495.
674 Ibid at 496.
• The regulator’s role is to elicit and strengthen the change talk.
• The regulator is to roll with the resistance that emerges from the regulatee and to focus on the change talk.
• Developing a plan for a change is the role of the regulatee, who decides what is needed, and when and how to proceed. The regulator offers advice cautiously when asked by the regulatee.
• Commitment for change must come from the regulatee. The role of the regulator is to listen for whether the regulatee is ready to commit to the change plan based on the “communication language” of the regulatee.
• To effect this change in approach, the regulator should listen with empathy, minimize resistance, and nurture hope and optimism.676

Over 200 clinical trials of motivational interviewing have been published, with positive change results for a number of different individual disorders.677 This kind of understanding of the regulatory conversation as a dialogic conversation is a huge step forward. It also very nicely links individual psychology with corporate regulation and highlights that dialogic regulation is just the “Talking Cure” for corporations.

To take Braithwaite’s idea one step further, Dialogic OD provides that listening to the regulatee’s story is important for another reason: in order for the regulator to challenge his or her belief about the regulation. So, the listening is not only beneficial to the regulatee but also to the regulator. This kind of listening and dialogue is exactly the kind of process that Dialogic OD practices can assist with. In the everyday dialogic learning loop processes of the regulatory system Dialogic OD has a role to play as another set of tools in the toolbox of the regulator. Dialogic OD processes and procedures can assist with identifying areas of need, opening up opportunities for double-loop learning, speeding up the normal incremental process of change

676 Braithwaite (2011) supra note 698 at 496-497.
within a corporation, and, finally, creating the possibility for transformational change. Transformational change is covered in the next section.

6.4 Episodic Dialogic Regulation

It is in the area of transformational corporate change that Dialogic Regulation and Dialogic OD show the most potential. They would both be very useful in situations where a corporation has encountered a law-related adaptive challenge that it is unable to solve on its own and that sent it to the edge of chaos. An example might be a regulatory breach that highlighted a culture of regulatory non-compliance in the corporation. The solution to this problem is not simple – it is complex – and it is a situation that begs for the use of dialogic techniques. To place this hypothetical situation in the context of traditional regulatory theories, in the middle range of the strategic regulatory pyramid, the corporation has offended but it is cooperating and so it has not yet hit the most interventionist levels of the pyramid that involve criminal sanctions or revocation of license. But not all complex situations or situations in the middle of the strategic regulatory pyramid are appropriate for the use of dialogic techniques.

6.5 When to Use Dialogic Regulation

Bushe has argued that there are specific situations that dialogic processes are more appropriate for: high complexity issues where the leadership’s readiness for change is high.678 In order to determine the complexity of the issue Bushe & Marshal recommend using the Cynefin Model (attached as Appendix P).679 This model categorizes the correct decision-making process

678 Bushe (2013) infra note 737.
to use, depending on how well cause and effect relationships are understood in the specific situation. The model has five characteristics matched to decision-making processes. Bushe and Marshall argue that Dialogic OD practices are best used for Complex and Chaotic decision processes (the left side of the model). The same would be true for Dialogic Regulation, which is appropriate for complex and chaotic situations. It should be noted that complexity theorist Ralph Stacey has argued that all change issues in organizations are so complex that they would qualify for the complexity quadrant of the Cynefin Model. 680

The concept of combining leadership readiness for change with the Cynefin Model came from Gilpin-Jackson. 681 Gilpin-Jackson argued that dialogic practices are best used when the leadership shows a high readiness for change which would be a “fully committed leadership willing to actively participate in a more emergent process of discovery.” 682 In the context of regulation, this readiness needs to be genuine. It cannot be forced by circumstances or coerced by the regulator or prosecutor. Already it can be seen that the circumstances in which episodic Dialogic Regulation can be used are narrowing down. Those circumstances become even narrower when the factors that most affect the success of a dialogic intervention are taken into account.

6.6 Factors that Increase the Chance of a Successful Dialogic Intervention

OD practitioner Gervase Bushe has done a lot of work identifying the characteristics of successful Dialogic OD change initiatives. These characteristics would also be required to make


Ibid.
Dialogic Regulation interventions successful. First, they need to have an internal sponsor within the corporation. This person needs to have some “ownership” over the organization and the power and willingness to make the necessary resources (time, money, and people) available for the successful completion of the change project. This person also has to agree with the intended outcomes of the change effort.

Second, they need to have a “how” expert. The sponsor, however, is not able to run the change process on their own – they need a Dialogic OD consultant to assist. These consultants need to be experts in the “how” of how to create and sustain dialogic change processes. They are not “What” experts like the corporate monitors of the DOJ that were experts on Codes of Conduct or Ethics – instead they are experts on the “how” of hosting dialogic events. They need to be objective third parties to do this, so that they can focus on fostering dialogue as opposed to being caught up in the subject matter.

Third, they should involve as many diverse voices as possible. In order for a dialogic process to be successful the right people need to be at the table. At a minimum, this list includes the people who will be required to make the change happen. It is also beneficial to have as diverse a group of participants as possible. In a dialogic change process, the most change often comes from the discourses or narratives that are suppressed or on the perimeter. This requires a look outside of the normal definitions of who should be included in a corporate change effort or a regulatory process. In the realm of corporate regulation this is similar to the concept of

683 For a more detailed discussion of the requirements of the sponsor of a dialogic intervention see Marshak et al. (2013) supra note 266. The characteristics include: ability to make dominant discourse (i) formal power, (ii) critical resources, (iii) network links, (iv) legitimacy of discourse. (p. 18). So, it is best to identify the most powerful actors and get them into the change narrative.
stakeholders and the question of who is or is not a corporate stakeholder. A dialogic view of who is appropriate to invite to an event is much broader than any of the traditional corporate stakeholder conceptions. Bushe offers the example of inviting the protesters from outside the building into the conversation. Weisbord and Janoff use the acronym “ARE IN” to define who ought to be at an event: “those with authority, resources, expertise, information, and need”. Axelrod adds those opposed and those who volunteer themselves – anyone who wants to come in. Obviously, this is a very expansive list to include in an official regulatory process and it will take some time to make people comfortable that the list can be that expansive and the process will not become bogged down or derailed. The main point to take from this is that the list of participants will be broader than normally thought of in a corporate regulatory setting and the broader the list can be the better.

Fourth, participants must come voluntarily. However, it is not just about inviting people to come, the events must be designed in a way to attract the right people to come. People cannot be forced to participate. This is a real problem in the legal realm. At first, it is easy to think that corporations could be forced through dialogic transformational processes. But dialogic change processes do not work that way. Dialogic processes leverage internal motivations in people and change can only result when they volunteer themselves for the process. In the regulation literature there is a concept called “dialogue in the shadow of the law” that refers to the ability to

684 In the context of Dialogic Regulation this definition could adopt a number of different forms from R. Edward Freeman’s classic corporate stakeholder definition to Peter Drahos’ network partners from Nodal governance.


force people to engage in dialogue with the threat of legal sanctions if they do not.\footnote{687} For an OD practitioner that statement seems naïve because those circumstances will not result in a genuine dialogue. Regulatory scholar John Braithwaite has a lot of experience in dealing with this dilemma in his responsive regulation approach. He believes that the more severe the punishment the regulator is able to bring to bear at the top of the strategic regulatory pyramid (i.e., force, punish, incarcerate), the more cooperation regulated entities will exhibit at the bottom of the pyramid.\footnote{688} He provides that “[t]he paradox of the pyramid is that by being able to escalate to really tough responses at the peak of the pyramid, more of the regulatory action can be driven down to the deliberative base of the pyramid.”\footnote{689} The key for Braithwaite is not how to eliminate coercion in the regulatory setting – which is not possible – but how to “minimize the escalation of coercion and how to avoid threats.”\footnote{690} The spectre of the law is always in the background but never threatened in the foreground.\footnote{691} Braithwaite also argues that there is growing empirical evidence that the spectre of punishment combined with non-punitive restorative justice processes at the base of the pyramid is the best regulatory design for increasing detection of most covert forms of law-breaking.\footnote{692} He has argued that the “benign big gun” actually leads to more


\footnote{688} Braithwaite (2011) supra note 698 at 477-478.

\footnote{689} Ibid at 505.

\footnote{690} Ibid at 489.

\footnote{691} Ibid at 489.

regulatory cooperation provided that the regulator never actually uses it or threatens it until it is required.\footnote{\textit{Ibid}.} If the people are forced to participate the power of the change process could be severely compromised. The problem is that in a legal or regulatory setting it will never be possible to know whether participation on the part of a regulated entity is voluntary. The spectre of the law is always there. The only way to mitigate this is to use only dialogic processes where the corporation and the sponsor have both volunteered.

Fifth, participants must have, or be given, the capacity to engage in the dialogic conversations. This is a really important step. Just inviting a group of people into a room and asking them to talk with one another is not enough. A dialogue has a much different structure than a conversation. In order for the dialogue to be productive all of the participants need to be provided with the capacity to engage in it. Bushe argues that at the very least it requires that they be acclimatized as a member of this new group.\footnote{Bushe refers to this as the difference between a pre-identity group, where people do not identify with the group, and a post-identity group, where people do identify with the group. See Bushe (2013) \textit{supra} note 349 at 39-63.} In the language of Dialogic OD this is referred to as increasing the richness of the network.\footnote{Bushe (2013) \textit{supra} note 356.} At the more extreme end of the spectrum is ensuring that every person has the mature dialogic skills to engage in difficult open existentially threatening conversations and continue to listen without triggering their defensive behaviours, for example forcing every participant to take Gervase Bushe’s \textit{Clear Leadership} course before participating in the dialogic process. Obviously, this is a best-case scenario and not possible in the vast majority of circumstances.
Sixth, the dialogic process needs to be generative. The process that is decided upon needs to adopt a generative approach and not a problem-solving approach. For example, the question needs to be “How do we become an organization that is in compliance with all our regulatory requirements?” and not “How do we solve our regulatory compliance problems?”

Seventh, a “container” must be created to host an event. This is a meeting space that helps suspend all normal everyday interactions and makes it possible to generate new possible futures. It can be as simple as a management retreat or a World Café. What the container will look like for any given dialogic intervention will depend on the circumstances. This is also the place where the Dialogic OD consultant picks the appropriate Dialogic OD practice to match the type of change that needs to occur and the type of organization involved.

Eighth, changes must be resourced adequately to amplify change. At some point the OD process shifts from conversations to harvesting ideas for action. When the dialogic event ends, the process needs to continue to push to make sure that those ideas get adequately resourced and tracked. The changes that will result from a good dialogic process cannot be determined ahead of time. So the sponsor needs to be ready to recognize emergent changes and resource them correctly. Best change practice in these circumstances is to allow a variety of self-organizing changes to be determined by collective action. The changes that people care about and decide to join are the ones that are the most worthwhile. The goal then is to resource those changes, and, over time, focus more and more on those changes that are the most successful. The changes that never finish are probably the changes that never should have finished. Resourcing is the biggest

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696 Ibid at 18.
697 Ibid at 18.
hurdle in this part of the process. Too many times management teams, group, and communities spend the time to generate great dialogue and possibilities and everyone leaves full of promise, only to have nothing happen because there was no way to resource the great ideas. The biggest changes will result from the different way that people think and talk and not from completing any specific “project”. The resourcing question may also require the sponsor to make changes to the organizational structure and/or policies to support the ongoing changes.

Ninth, change is a continuous process. The kinds of changes that a Dialogic Regulation intervention would require are complex and involve a large number of people. That means that the change process could go on for a long time. It is not enough to hold a two-day AI Summit and then check off the box. The resourcing of the change needs to be an ongoing activity and it could take years before it has run its course.

6.7 Limitations on the Use of Dialogic Regulation

As can be seen, there are a lot of characteristics that make up a successful dialogic regulation intervention. It requires a certain type of organization, a certain type of problem, and a change in the mindset of regulators and prosecutors to be successful. The type of organization required is an organization that is willing and ready to engage in this type of project to attempt a transformational change. The organization needs to volunteer, have a management team that is willing to change, have an appropriate sponsor, and set aside the budget and resources to amplify the results. The type of problem that is required is a high complexity or chaotic problem from the Cynefin framework. While Dialogic techniques can be effective in assisting with the solutions of

608 Marshak et al. (2013) supra note 266.
less complex problems (i.e. complicated or simple problems), this kind of intervention would not require the planning of an episodic Dialogic Regulation intervention.

The most important limitation to a successful Dialogic Regulation intervention is a change in the mindset of the regulators and prosecutors. Most regulatory processes are run by the regulators. In a dialogic regulation intervention they will need to abdicate the direction of the process to a Dialogic OD Consultant who has the appropriate mindset and skills to run the intervention. It is very difficult, maybe impossible, to have a successful dialogic process where the host has a mindset of uncovering the facts (diagnostic) and then punishing the wrongdoer. It is not that this mindset is wrong; it is appropriate in the circumstances of prosecution. It is, however, destructive in a dialogic process. It is destructive because it is a diagnostic process which is the opposite of a dialogic process.699

Given all of these criteria and the differences in the assumptions of those criteria vs. the prevailing corporate regulatory system, it is not possible at this time to envision wide-scale use of dialogic techniques in the regulatory system. There are, however, small areas within the corporate regulation environment that present the right conditions to make dialogic regulation work and it is in these areas that we should start to experiment with dialogic processes to being to assess their potential. The two that immediately come to mind are the corporate monitorships mentioned in Chapter 2 (the U.S. DOJ, etc.) and the creative sentencing projects in environmental regulation. In order to demonstrate how dialogic regulation might work in a regulatory setting, I next look at the novel case of Suncor’s Firebag facility creative sentencing project. This was a project that I was lucky enough to be involved in and it is one of the first

699 For a description of the difference between Dialogic and Diagnostic see Chapter 3.
publicly available creative sentencing projects – so we are able to get a look inside what is normally a closed process.

6.8 **Suncor’s Firebag Creative Sentencing Project**

6.8.1 **Summary**

In April of 2009, Alberta’s Provincial Court fined Suncor Energy Inc.—a Canadian energy company and one of Canada’s largest corporations—for two environmental infractions at their Firebag in-situ facility. In an unusual move, the Defence and Crown Counsel made a joint submission to the Court for a creative sentencing project to fund a social science research project on the cultural antecedents of regulatory compliance. The fine of $675,000 was the largest creative sentencing project ever undertaken in the Province of Alberta and it was unique in two important respects. First, prior projects generally involved funding scholarships or donating funds to not-for-profit organizations to support their efforts, whereas this sentence sought to examine the cultural underpinnings of the infraction and to share the lessons learned broadly to improve compliance across the industry. Second, the sentence included an additional provision to examine best practices with regard to creative sentencing.

6.8.2 **Creative Sentencing**

The notion of creative sentencing was developed in the 1980s arising from the realization that traditional deterrence, compliance, and criminal approaches to offences often did not work with organizations because the people who “learned” the lesson ended up leaving the organization. Creative sentencing is an innovative approach to sentencing where, among other


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things, funds from the sentence can be dedicated to non-traditional projects, including remediation, education, support of existing community environmental projects, or improvements in industry standards or research. In the United States, creative sentences are also called supplemental orders, which are the preferred method of settlement for the Environmental Protection Agency in the United States. As part of a supplemental order, an alleged violator may voluntarily agree to undertake an environmentally beneficial project related to the violation in exchange for mitigation of the penalty to be paid.

Creative sentencing can only be used where it is provided for in the governing statute. In Canada, the use of creative sentencing is on the rise. While most of the creative sentences and their outcomes are not in the public domain – they are sealed away in court records – there are a number of public organizations that have been set up to administer them (e.g. The BC Habitat Trust) that publish data demonstrating that in recent years the funds available from creative sentencing are increasing at a steady rate. The creative sentencing case presented here represents a unique research opportunity precisely because the publication of the creative sentence process and results were actually a part of the court order and because a study of the creative sentencing process was included within the scope of the research outlined in the judgment. Therefore, this case affords a rare opportunity to get a look inside a creative sentencing process.

702 Ibid.
703 Creative sentences can only occur where the statute under which the offence occurs allows for it, see G. Campbell, “Fostering a Compliance Culture through Creative Sentencing for Environmental Offences” (2004) 9(1) Canadian Criminal Law Review 1. In Canada, environmental legislation and prosecution led the way within the creative sentencing movement see Hughes & Reynolds (2009) supra note 729. And, many environmental statutes now allow for it see C. Strickland & S. Miller, “Creative Sentencing, Restorative Justice, and Environmental Law: Responding to the Terra Nova FPSO Oil Spill” (2007) 30(2) Dalhousie Law Journal 547. In Alberta, creative sentencing is allowed under section 234(1) of the Environmental Protection and Enhancement Act.
In the Province of Alberta (the jurisdiction in which this case occurred), creative sentencing has been available for environmental offences since 1993. Alberta uses its Creative Sentencing Guidelines to determine creative sentences. The guidelines call for the formation of a team with the lead prosecutor and lead investigator as the core of the team. The team starts by determining the root cause of the offence and builds the creative sentencing projects around that cause. A project is then created based on a number of guidelines as outlined in Appendix Q. At this time, creative sentencing projects in Alberta are primarily proposed by the creative sentencing team, by the prosecutor, or by the offending organization. There is no process for third parties to propose projects, although some have argued that this could be beneficial. Technical expertise is then sought and a special investigator is assigned to ensure that the organization is not receiving a secret benefit, engaged in a conflict, or duplicating work it might have done in any event. A creative sentence can only be applied after a finding of guilt and the judge in the case is the ultimate decision maker with regard to the sentence. Once a judge has agreed to a creative sentence, the amount of money available is determined using a two-step process: first, the total amount of the fine is determined based on the circumstances of the case, and second, the percentage allowed for the creative sentence is determined. In Alberta, that percentage is usually 50% but in some federal jurisdictions the percent can be up to 90%. To date, most creative sentences have been used to restore the environment, in technical projects, or


706 Clean-up costs are not included in the calculation.

to provide scholarships. We were told that this is the first time a creative sentence was used to assess and make recommendations on the internal compliance culture of an organization.

6.8.3 The Creative Sentencing Process

The creative sentencing project had two distinct stages: investigation and output. In the investigation stage the research team worked with Suncor to uncover the root causes of the incident. They did an extensive literature review of the cultural antecedents of compliance, they reviewed thousands of pages of documents from Suncor and the regulators, and they interviewed over 70 individuals from Suncor, the regulators, and the prosecutors. They produced a final report that concluded that there were technical, systemic, and cultural issues that contributed to the incident.

After the investigation was done the team was required to generate a number of outputs with their findings in order to complete the court-mandated process. Those outputs were:

1. A final research report and executive summary of their findings.
2. A teaching case to be used in business schools and in the industry.
3. A Two-Day Knowledge Forum for the public presenting their findings and allowing discussion.
4. A list of publicly available research papers or Ph.D. theses reporting on different dimensions of the case.

All of these outputs were successfully completed. For the purposes of this thesis, the most important output was the Two-Day Knowledge Forum. This Forum was held in Calgary at the Chamber of Commerce. Day 1 was open to the public and was attended by over 100 people including representatives from Suncor, the oil industry, law firms, environmental consultants, universities, regulators, and prosecutors. The morning consisted of presentations reporting the findings of the team and the afternoon was a roundtable discussion with Suncor and the regulators where members of the public could ask questions. Day 2 was a closed-door session.
with only Suncor, other senior industry participants, the regulators, and the prosecutors. The purpose of Day 2 was to have frank and open discussions on the implications of the incident for the industry and regulation of the industry.

6.8.4 Discussion of the Dialogic Implications of the Project

It is important to note that this creative sentencing process was not designed as a dialogic regulation intervention. The process just developed as it proceeded and since it was a novel process there were no real guidelines for it to follow. I was asked to become involved a few weeks before the knowledge forum and so was able to provide some small amount of input into the structure of the forum – especially the closed-door session on Day 2. Therefore, it is clearly not fair to assess the effectiveness of the project through a dialogic lens because it was never designed to be a dialogic process. Nonetheless, it is fruitful for our purposes to look at what components of this project were useful and dialogic and could be leveraged for future dialogic regulation interventions, and which components would need to be improved upon.

To assess the project through a dialogic lens, I will use Bushe’s three main stages of a Dialogic OD practice: getting ready, holding a dialogic event, and incorporating changes. For each stage, I will discuss which activities from the creative sentencing project fit into that stage and assess whether they were effective or could be improved upon. For the purposes of this analysis, I will focus on the Two-Day Knowledge Forum as the dialogic event.

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6.8.4.1 Getting Ready

There are six main components of this stage that I would like to discuss: Suncor’s voluntary decision to participate, the existence of a sponsor, the question the intervention was focused on, the interviews and data collection that was conducted, the identification of the stakeholders and participants for the dialogic intervention, and the preparation of those participants for the dialogue.

In this case, Suncor was an active participant in proposing and designing the creative sentencing project. The idea for the project was the result of an ongoing discussion among Suncor, the regulators, and the prosecutors. While Suncor was under investigation for possible criminal charges and so the “spectre of the law” was there, that spectre was mitigated by the fact that they assisted in conceiving of, volunteered for, and ensured that the project had the right leadership and resources.

The project also had a strong internal sponsor at Suncor at the Vice President level. The project also had a significant of $300,000 from the funds paid into court.

The problem or question that the team was researching was to identify the root causes of the environmental infractions. This is a problem-solving approach. The formulation of the research problem in this way limited all the outputs from the project and potentially limited its potential to create transformational change.

The first example of the effect of the formulation of the inquiry as a problem-solving inquiry is in the way the interviews were conducted and the data were collected. The team spent a lot of time inside the Suncor organization and with the regulators interviewing people and collecting their stories of the event, the culture of compliance inside Suncor, and the regulatory environment in general. In total they conducted over 70 interviews. From a dialogic perspective
this is a very important process that should be repeated in future projects. The scope of the team’s interviewing process is impressive. It was similar to the interview process recommended in preparing for an AI event, with two main exceptions. First, in this case the researchers conducted the interviews, whereas in AI it is recommended that the participants conduct the interviews. Second, the researchers were focused on identifying the “root causes” of the problem. In AI the interviewers focus on discussing the positive aspects of the organization. For example, instead of asking, “What went wrong in this case?” they would ask “Provide me of an example when Suncor was at its best in its compliance?”

The team did an excellent job of identifying the stakeholders and created a broad invitation list for the dialogic event that included Suncor employees and management, other industry participants including representatives from most of the major integrated oil companies, members of many different regulatory agencies, the prosecutors, academics from other universities not directly engaged in the project, and members of NGOs and other environmental organizations that might be interested in the project. For a corporate regulatory process this is an impressive list and the team should be commended for creating such an inclusive list. It should be noted that this list only applied to the first day of the forum. The list for the second day was limited to industry participants, regulators, and prosecutors. The only issue that arose with the participant list was that very few, if any, of the invited NGO members chose to participate. It is difficult to know why without asking them but two thoughts immediately come to mind. First, the event was clearly not designed in a way that appealed to them and made them want to attend. Second, they were not invited into the early stages of the project and discussions. They were only invited to the Two-Day Knowledge Forum. In future projects, it would be useful to invite NGOs
into the process from the beginning. Their voices from the perimeter of this corporate regulatory system may have been able to have the most effect in causing a transformational change.

Finally, the team did not prepare the participants for the dialogue, other than invite them and provide them with copies of their findings. This was apparent in the early morning sessions of the closed-door event on Day 2 as we separated the industry players from the regulators to begin discussions. Those discussions started with a lot of “Those people” and “They do not understand”. This group was clearly not a post-identity group and the richness of the network had not yet been increased. It turned out not to be relevant because the team worked on this as the day progressed, and by the end the group did identify with each other and the dialogue between the regulators and the industry participants opened up to high levels of dialogic interaction.

6.8.4.2 Holding the Dialogic Event

Day 1 of the Knowledge Forum had an incredible number of participants and a great diversity of attendees – with the conspicuous absence of the NGOs as was mentioned earlier. Day 1 was designed by the team as a way to present their findings and it was not designed to be interactive or dialogic. In that regard, it was an outstanding success. The morning consisted of PowerPoint presentations of the findings and the afternoon session had a roundtable discussion with Suncor and the regulators and the opportunity for people from the public to ask questions. The feedback on the session was very positive with a number of people commenting on the willingness of Suncor to engage in open dialogue about their transgressions and the frankness with which they answered questions.
However, if subjected to a dialogic lens, Day 1 was a lost opportunity. If Day 1 could have been drawn into the dialogic process, a larger group of stakeholders’ voices might have been heard. There were a lot of people in the room with experience, knowledge, and diverse viewpoints and many were never given an opportunity to participate. This was seen in the feedback comments where some people mentioned that they were disappointed by the limited range of viewpoints that were given time during the session. Nonetheless, as a precedent for creative sentencing projects, Day 1 of the Knowledge Forum was a huge success and should be incorporated into future creative sentencing projects.

Day 2 of the Knowledge Forum was more productive from a dialogic point of view. The participants included senior members of most of the major integrated oil companies in Canada, the primary environmental regulators in Alberta, and the most senior environmental prosecutors in the Province. The closed-door session was structured roughly as a World Café and three questions were asked related to cultures of compliance within corporations. The questions were:

1. How do you determine whether a company has the capability to comply?
2. How can you support companies that need to develop these capabilities?
3. How do you keep companies focused on compliance?

After the initial period where the group needed to increase its connections, the discussion became very frank, relationships began to be built, and the ideas offered were very generative. The ideas included creating an industry/regulator group of senior people that would meet to discuss regulatory issues, committing to make senior people available for that group, and committing to meet on a regular basis. In addition, many relationships were built during the session with some participants commenting “why don’t we do this more often” and “why don’t we have lunch together”. Unfortunately, while the event was a success in generating ideas, it was
not a success in harvesting those ideas and resourcing them for action. There was no sponsor, no budget, and no resourcing or tracking process. Therefore, we do not know how many, if any, of the ideas ever made it to fruition.

6.8.4.3 Incorporating the Changes

The official goal of the project was to identify the causes of the incident and create industry awareness and learning with respect to environmental compliance. What was curiously absent from the creative sentencing project was the outcome of generating internal change in Suncor with regards to its culture of compliance. The project was a major success in educating the industry. Not surprisingly, it was not very successful in causing internal change within Suncor.

With respect to the industry changes, the creative sentencing process required that a number of “outputs” be completed before the sentence would be deemed completed. Those outputs included: completion of the report by the research team, completion of the teaching case for use in business schools, completion of the Two-Day Knowledge Forum, completion of the IRIS industry presentations, and a listing of the publicly available research papers or Ph.D. theses related to the project. All of these outputs were completed and the creative sentencing project was successfully closed. What is curiously absent from this list is evidence that the offender (Suncor) demonstrated that it had changed its culture of compliance in a way that would reduce the chances of future offences.

With respect to the changes within Suncor, while not part of the official creative sentencing project a number of changes were initiated within Suncor to deal with the issues identified in the creative sentencing project. Suncor put in a very large effort in this regard. The
change plan that the company developed was extensive and traditional in the sense that it involved a number of projects designed to fix problems, including: a large cultural effort to make a cultural shift toward operational excellence, the development of an Operational Excellence management system (OEMS), the creation of a registry of all regulatory requirements that the company was responsible to comply with; the integration of those regulatory requirements into the OEMS, and introducing new training at the Firebag facility using the case study from the project. All of these projects were completed successfully. Note that it was not a condition of the court-mandated process that they were completed. The creative sentencing process only required the completion of the “outputs” listed above. Suncor undertook these changes on its own.

It is important to note that all of these projects are traditional “rational systems” or “command and control” type projects that are based on the change assumption that if you change the rules or processes behaviour will change. They are not dialogic change processes that ensured that the changes were double-loop learned by the people who needed to learn them. For example, the legal registry exists in the corporation only to the extent that it is taken up into the minds of the people who are working in the corporation every day. The act of creating the registry in and of itself does not constitute a change.

It is difficult to determine whether the changes had their desired effect but within a few months, there was another serious environmental infraction at another Suncor facility. While this is, to a certain extent, a sad story, it is an important story for two reasons: it highlights how complex and difficult change exercises are in corporations and it illustrates how long these kinds of change processes can take (over five years and still not complete). It is all the more illustrative

709 In 2010 there was a large loss containment issue at their main oils sands production facility.
in this case because this was a willing corporate participant that wanted to change, that had resources and budgeted appropriate amounts to change, that had the incentive to change from a threatened criminal process, and that had assistance from external research experts. In spite of all of this, there were future infractions after the change effort. From a dialogic point of view these kinds of failures should be expected and the regulators should be there throughout the process assisting and supporting and allowing a redirection after future infractions. Change is a continuous process that takes a long time and is unpredictable. To Suncor’s credit, I understand that they are still very active in continuing to dedicate resources, time, and money to improve their culture of excellence and regulatory compliance.

My argument would be that Suncor’s internal change efforts were not successful because the type of change that was required in this case was not an incremental change. This was a highly complex change involving a management team with a willingness to change. Based on the criteria discussed above that would make this a prime candidate for a dialogic intervention. While the creative sentencing project and Suncor’s internal change initiatives had a number of novel characteristics that were steps in the right direction, it was not, as a whole, a dialogic process, and so it is not surprising that transformational change did not occur. The project did, however, show amazing potential because with a few small changes it could have been a dialogic project with the potential to cause transformational change. In the next section, I will offer a re-design of this creative sentencing project to show what it could have looked like as a dialogic regulation project. This can then be used as a template for future creative sentencing projects that need to cause transformational change.
6.9 Template Dialogic Regulation Creative Sentencing Project

For this template, let us assume that there is a corporation that has either committed an environmental offence or has issues with environmental compliance. The corporation is no longer at the base of the strategic regulatory pyramid, but has been escalated up to more interventionist methods of regulation. They are either involved with prosecutors for the offence or enforcement staff at the regulator. As a result of initial investigations by both the corporation and the regulator/prosecutor, both parties agree that there is either a systemic or cultural issue in the corporation that contributed to the offending behaviour and that this issue needs to be resolved. In order to proceed with a Dialogic Regulation intervention there are two questions that need to be answered:

1. Is this an appropriate case for a Dialogic intervention?
2. How would the intervention be structured?

6.9.1 Selection Criteria for Dialogic Intervention

The case will only be appropriate for a Dialogic Intervention if two criteria are met: it is a high complexity problem and management has a high willingness to change. All systemic or cultural issues within a corporation can be considered a “high complexity” problem, so in this case the first criterion is easily met. For the second criterion, it is important that management is not only willing to change but also volunteers for the creative sentencing project, an appropriate sponsor from within the organization volunteers to lead the project, the organization commits to provide the appropriate resources (time, money, people) to complete the project, and the organization agrees to pay into court the funds that are required to complete the project (whether or not these exceed the potential fines they would pay).
There are two additional hurdles that need to be added here in the context of a creative sentence in order to make the case appropriate for a dialogic intervention: the selection of a qualified Dialogic OD practitioner to host the event, and an agreement by all parties on the scope of the project (i.e. the generative image that will be used). The most important step is for all the parties (corporation, regulator, court) to agree upon and hire an appropriately skilled Dialogic OD practitioner. The skills that are required to plan and hold a successful Dialogic event are very particular and the quality of the host is a major determinant on the success of the event. The parties also need to agree on the division of responsibility and decision-making. The best-case scenario is that once the process starts the regulators and prosecutors can take a back seat and participate in the process as stakeholders but not as drivers of the process. The host and the corporation will make most of the decisions and they will submit them to the court for approval.

With respect to the scope of the project, all parties (corporation, the regulators, OD practitioner, and the court) need to agree on the scope of the project. Note that this will be very different to creating a measurable diagnostic project such as “You will create a training program or new operating procedure.” Instead, it will be to complete a change process built around an agreed generative image. For example, “How can we become an organization that is always in compliance with environmental regulation?” The OD practitioner will be the resource that is the most useful in this process because they are used to working with generative images. The outcomes of this type of project are not identifiable or measureable at this point because they cannot be decided until the dialogic process has identified them. They can, however, be harvested from the dialogic event and agreed upon by the parties later in the process.
6.9.2 Structure of the Dialogic Intervention

For this portion of the hypothetical I will again use Bushe’s three generic stages of a Dialogic OD intervention: getting ready, holding the event, and incorporating changes. The description provided below will be necessarily generic and any component of it could be modified or changed based on the particular circumstances of the organization in question or the type of change that is required.

6.9.2.1 Getting Ready

The primary purpose of the Getting Ready stage is not to identify what went wrong. Instead, it is to prepare the participants for the dialogic event. So, to the extent that there are interviews conducted they should focus on the generative image, they should be conducted by the participants, and they should play a role in the upcoming dialogic event.

The first step of this stage is to set the list of participants. This list needs to be a broad as possible and include employees, regulators, employees from other companies in the industry, NGOs, and anyone else who wants to be there. The factors mitigating the risk of inviting so many diverse participants are the experience of the Dialogic OD consultant, the preparation stage to prepare everyone for the event, and the structure of the event itself. Nonetheless, this is a broad list of participants and it may not be possible in the first few creative sentencing projects to invite such a broad list of participants into a process that is normally closed. It may take some time for corporate and regulatory stakeholders to become comfortable with this approach. The more diverse the participant list, the better.

The second stage is to prepare them for the dialogue by making them all feel like part of the same group. This could take the form of a series of events before the dialogue to increase the
richness of the network or it could involve a cascading interview process where participants collect each other’s stories of the generative image. It may also involve training some of the key participants in dialogic techniques to ensure that they can engage in the dialogue. The Dialogic OD consultant will be able to identify any of the key participants who might need this training. The budget for the project should anticipate that these events or training might be required.

The final step is to re-assess the generative image to ensure that it is still appropriate for the participant list and the project and then to select the appropriate dialogic events to create the desired dialogue.

6.9.2.2 Holding the Event

In our hypothetical case, let’s assume that the purposes of the events are the same as in the Suncor case but with the addition of causing internal change in the corporation as well to reduce the likelihood of re-offense. So the purposes of the intervention are: to cause internal cultural change in the corporation towards compliance and to assist the industry in learning from the incident/issue. In the case of the corporation, the event could be structure as an AI Summit including the participation of the company employees and a broad range of other participants including employees from other industry companies, the regulators, and representatives from NGOs.

In the case of industry learning, the dialogic event could be structured much like the Day 2 World Café from the Suncor Knowledge Forum with a few notable exceptions: the invitation list would be much larger and more diverse, the session would be open to the public, and there would be a process to harvest the ideas and resource them from the budget of the creative sentencing project.
Finally, all of these events will need to be created in a “container”, a place away from the everyday hustle and bustle of the real world. This was something that was done extremely well in the Suncor case – especially the Day 2 session. Even though there were a number of very senior people at that session, everyone attended, everyone stayed to the end of the day even though it went late, everyone was fully engaged the whole time, and there were no interruptions to answer cell phone calls or check on things. Exactly what an appropriate container will look like depends on the events chosen and the participants invited, but the Dialogic OD practitioner will be a real asset in making this decision.

6.9.2.3 Incorporating Changes

The changes that will be required during the project will not be decided until after the dialogic events have taken place. During the events the Dialogic consultant and the corporation will harvest the ideas together. They will then make a recommendation to the court of the ideas that should be resourced from the funds of the project. Some resources and funds should be held back to be utilized at a later stage to amplify those projects that are proving to be the most successful. The court then acts as the arbiter of reasonableness and approves, modifies, or disapproves of the plan. There would then be periodic updates with the court where the plan could be modified and additional resources deployed to amplify changes. The outputs from this process should be real change and not just the creation of documents or procedures. All participants should take a long-term view of this process and acknowledge that it will take months and years instead of days and weeks to complete. It is at this stage of the process where the sponsor becomes very important because they are the one who can resource the ideas appropriately.
6.9.3 Summary

The Suncor Firebag creative sentencing project was a huge step forward in corporate regulation. Like the development of many of the Dialogic OD practices, the form of the project was not based on any grand theory, it was simply created by the parties as they went along because they wanted to change and they felt it was the best way to cause that change. However, now that this novel case has opened the possibility of dialogic regulation, we can look to Dialogic OD and leverage its body of knowledge to make these kinds of projects more successful in the future.

6.10 Conclusion

In this chapter the building blocks of a dialogic theory of regulation for corporations were outlined. The structure of the written law in a dialogic legal system was described and some guidelines were offered of what the content of the law should be in a dialogic legal system. The regulatory function in a dialogic legal system was also described. Both the everyday continuous regulatory function and the episodic regulatory function to assist corporations that have run into trouble were described along with the characteristics of successful dialogic interventions. The limitations of the use of dialogic techniques in the current regulatory system were outlined and a conclusion was offered that, given the large number of limitations, it is unlikely that dialogic regulation will have widespread use in the current regulatory system. Two areas were identified where it could make an impact: corporate monitorships and creative sentencing projects. The novel case of Suncor’s Firebag creative sentencing project was used as an example of a situation where dialogic regulation could have been used. The case was then subjected to a critique from a dialogic lens to determine ways that it could be improved upon for future creative sentencing
projects. Finally, guidelines for future dialogic creative sentencing projects were offered using a hypothetical situation. This chapter provided the theoretical basis for dialogic regulation, an example of how it can be used, and a prescription for how to make its next use better. Hopefully, there will be a corporation out there that wants to encourage transformational change and is willing and ready to volunteer and sponsor another creative sentencing project. In the meantime, as mentioned in the last chapter, there is a lot of experimental work to be done to better understand how dialogic techniques function in a regulatory setting.
Chapter 7: Conclusion: Building a Longer Bridge

“If you want to build a ship, don’t drum up people to collect wood and don’t assign them tasks and work, but rather teach them to long for the endless immensity of the sea.”

- Antoine de Saint-Exupery

Dialogic regulation is not an incremental change in regulatory theory. It is a completely different way of thinking about corporations, corporate actors, and corporate regulators. Corporate law and regulation has for a long time been based on a rational systems approach to corporations and corporate actors, the “nexus of contracts” theory of the firm being its main theoretical device. Small inroads were made with natural systems approaches but none proved strong enough to replace the rational systems perspective. Now corporate law and regulation has the potential to make a dramatic move forward to an even newer paradigm – the dialogic paradigm. Under normal circumstances, this might be a difficult task, but the promising part of the corporate regulation story is that it is now clear to everyone that the rational systems approach to corporate law and regulation is not working. The time is right for a new approach to take its place. Much of the work towards a dialogic approach to corporate law and regulation has already begun with the movement towards learning approaches to regulation, principles-based corporate and securities laws, and the growing popularity of Dialogic OD practices within corporations.

This thesis offered the beginning foundations of a theory of Dialogic Law and Regulation for corporations. It is an exciting theory because it has the potential to cause real transformational change in the realm of corporate behaviour. It is full of positive messages and imagined futures. It supports the belief that the corporations of our future can be whatever we
can collectively imagine and work together to make a reality. Dialogic regulation is a generative tool that can build the bridge between the present and an imagined future. Regulators keep people on the bridge by identifying the kinds of dialogues we want corporate actors to have and by encouraging, coaching, and sometimes assisting them to have those dialogues. This approach works because small changes in the way corporate actors talk to and interact with each other can have dramatic effects on the emergent corporate culture.

This thesis outlined what a dialogic approach to writing laws looks like and how dialogic practices could be useful in the realm of corporate regulation. It also conducted a controlled experiment to test whether dialogic practices are effective in assisting participants in double-loop learning regulatory outcomes. The results were promising and show that dialogic practices can be effective. This thesis also looked at the novel case of Suncor’s creative sentencing project to show an example of what dialogic regulation might look like in a real regulatory setting. The Suncor case again showed the promise of the dialogic approach.

The dialogic processes that Dialogic Regulation is built upon are powerful processes that can bring about amazing human transformation. But, with its power also come severe warnings. These processes are powerful because they leverage the self-organizing processes of complex human social systems. It is not possible, nor is it even advisable, to try to control them. More often than not, they end up creating unexpected results. This was exactly what happened in the experiment in Chapter 5. The experiment showed that the Dialogic intervention had potential to create increased amounts of double-loop learning of the desired regulatory outcomes, but it also showed that the process was not predictable, even in the controlled environment of the experiment. Freud’s warning “You think they know that we are on our way bringing them the
plague?” presented at the beginning of this thesis is still echoing meaningfully in the back of my mind.

When I began the research for this thesis, my hope was that my work and the experiment would prove unequivocally that we should start implementing dialogic processes into corporate regulation. Now that the research is complete and the experiment has been conducted and I have seen both the power of the processes and the unexpected outcomes, I am much more cautious. These are powerful processes and they do hold the potential in the future to cause dramatic change in corporate regulation. But, we have to study these processes more in controlled environments to see exactly how they can be used in the law without causing unexpected negative consequences. It does not mean that the imagined future is not possible – it just means that the bridge needs to be a little longer than I originally thought. I still look forward to, in the immortal words of Robert Cover, “inviting new worlds.”
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Appendices

Appendix A  Theories of Regulation

APPENDIX A: THEORIES OF REGULATION

1970's
- Direct Regulation (pre-1970s)
- Market Based Regulation (1970s)

1980's
- Responsive Regulation (1992)
  Ayres and Braithwaite
- Smart Regulation (1998)
  Cunningham, Grabowsky, St. Clair
- Democratic Experimentalism (1998)
  Dorf & Sabel

1990's
- Restorative Justice (2002)
  Braithwaite
- Nodal Governance (2005)
  Drahos, Shearing, Berris
- "New Governance" (2004)
  Kerkvinken, Hess and Ford
- Regulatory Capitalism (2008)
  Braithwaite

2000's
- Self-Regulation (2002)
  Christine Parker
  Christine Parker
Appendix B Organizational Analysis

Definition of Organization Within Rational, Natural and Open Theoretical Perspectives

| DEFinition OF ORGANIZATION WHITHIN RATIONAL, NATURAL AND OPEN THEORETICAL PERSPECTIVES |
|----------------------------------|----------------------------------|----------------------------------|
| **Rational Systems**             | **Natural Systems**               | **Open Systems**                 |
| Definition of Organization       | “Organizations are collectivities oriented to the pursuit of relatively specific goals and exhibiting relatively highly formalized social structures.” | “Organizations are collectivities whose participants are pursuing multiple interests, both disparate and common, but who recognize the value of perpetuating the organization as an important resource. The informal structure of relations that develops among participants is more influential in guiding the behavior of participants than is the formal structure.” |
| Characteristics of Organizations | **Primary**                       | **Primary**                       | **Primary**                       |
|                                 | • Goal specificity               | • Survival and maintenance       | • “Open” to its environment       |
|                                 | • Formalization                  | • Goal complexity                 | • Boundary maintenance           |
| Other                           | • Rationality                    | • Informal structures             | • Loosely coupled parts           |
|                                 | • Overriding principles (universal application) | • Social collective of people     | • High variability and complexity of subparts |
|                                 | • Scientific Analysis           | • Adaptable (half-open, half-closed) | • Hierarchy of systems            |
|                                 | • Technical expertise            | • Hard to replicate               | • Adaptable                       |
|                                 | • Structure more important than people | • No universal principles        | • Interdependency within and between organizations |
|                                 | • People are interchangeable     | • Behaviour rather than structure | • Information flows               |
| Metaphor                        | Dry, cold mechanical Clock      | Living Organisation Human Body    | Family                           |
|                                 | Blue Print                       |                                   | Social group                      |
| Example Organization(s)         | Government                       | Japanese Kiyoizuka (circa 1980’s) | Joint Ventures                    |
|                                 | Army                             | Family                           | Strategic Alliances               |
|                                 | Abstract corporation             | Social Clubs                      | Relational Contracting           |

Authors: Julian Dierkes, Maclean Brodie, Takeshi Hamamura, Sooeyun Jung, Rachael Qi Zhang, Estrella Reyes, Alexandra Ho and Michael Cody. This chart was a group effort during a workshop. Reproduced with permission.
Appendix C  The Stages in the Development of our Understanding of Organizations, Corporations, Corporate Law, and Corporate Regulations

The Stages in the Development of our Understanding of Organizations, Corporations, Corporate Law, and Corporate Regulations

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Organization Theory Time Period</th>
<th>Corporate Theory Time Period</th>
<th>Regulation Theory Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rational closed systems models</td>
<td>Turn of century to late 1930’s</td>
<td>1880’s – 1970’s (Contractual Theory, Managerialism)</td>
<td>Pre – 1960’s (Direct Regulation, Command and Control)</td>
</tr>
<tr>
<td>2.</td>
<td>Natural closed systems models</td>
<td>Late 1930’s – 1960’s</td>
<td>1880’s – 1930’s (Entity Theory)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Natural open system models</td>
<td>Late 1970’s to present</td>
<td><strong>Not yet accepted</strong> (Power Coalition Theory (1985), Social Theory (2010))</td>
<td>1990’s – present (Responsive Reg, Self-Reg/Meta-Reg, Democratic Experimentalism, New Governance and Nodal Governance)</td>
</tr>
</tbody>
</table>

### Appendix D  Boulding’s System Types

<table>
<thead>
<tr>
<th>Level of System</th>
<th>Type of System</th>
<th>Title</th>
<th>Description</th>
<th>Example(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Physical</td>
<td>Frameworks</td>
<td>Systems comprising static structures</td>
<td>Arrangement of atoms in a crystal of the anatomy of an animal</td>
</tr>
<tr>
<td>2</td>
<td>Physical</td>
<td>Clockworks</td>
<td>Simple dynamic systems with predetermined motions</td>
<td>Clock</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The solar system</td>
</tr>
<tr>
<td>3</td>
<td>Physical</td>
<td>Cybernetic Systems</td>
<td>Systems capable of self-regulation based on a throughput of resources from their environment</td>
<td>Thermostat</td>
</tr>
<tr>
<td>4</td>
<td>Organic</td>
<td>Open Systems</td>
<td>Systems capable of self-maintenance based on a throughput of resources from their environment</td>
<td>Living Cell</td>
</tr>
<tr>
<td>5</td>
<td>Organic</td>
<td>Blue-Printed Growth Systems</td>
<td>Systems that reproduce not by duplication but by the production of seeds or eggs containing pre-programmed instructions for development</td>
<td>Acorn-oak system</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Egg-chicken system</td>
</tr>
<tr>
<td>6</td>
<td>Organic</td>
<td>Internal-Image Systems</td>
<td>Systems capable of a detailed awareness of the environment in which information is received and organized into an image or knowledge structure of the environment as a whole</td>
<td>Animals</td>
</tr>
<tr>
<td>7</td>
<td>Human and Social</td>
<td>Symbol-Processing Systems</td>
<td>Systems that possess self-consciousness and so are capable of using language</td>
<td>Human beings</td>
</tr>
<tr>
<td>8</td>
<td>Human and Social</td>
<td>Social Systems</td>
<td>Multicephalus systems comprising actors functioning at level 7 who share a common social order and culture</td>
<td>Social organizations</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Transcendental Systems</td>
<td>Systems composed of the absolutes and inescapable unknowables</td>
<td>We have not identified them yet.</td>
</tr>
</tbody>
</table>

Appendix E  Argyris and Schon’s Double-Loop Learning
Appendix F  Theory-in-Use Characteristics

F.1  Model I

The governing Values of Model I are:
Achieve the purpose as the actor defines it
Win, do not lose
Suppress negative feelings
Emphasize rationality

Primary Strategies are:
Control environment and task unilaterally
Protect self and others unilaterally

Usually operationalized by:
Unillustrated attributions and evaluations e.g. “You seem unmotivated”
Advocating courses of action which discourage inquiry e.g. “Let’s not talk about the past, that’s over.”
Treating one’s own views as obviously correct
Making covert attributions and evaluations
Face-saving moves such as leaving potentially embarrassing facts unstated

Consequences include:
Defensive relationships
Low freedom of choice
Reduced production of valid information
Little public testing of ideas

Taken from Argyris, Putnam & McLain Smith (1985, p. 89)
The governing values of Model II include:
Valid information
Free and informed choice
Internal commitment

Strategies include:
Sharing control
Participation in design and implementation of action

Operationalized by:
Attribution and evaluation illustrated with relatively directly observable data
Surfacing conflicting view
Encouraging public testing of evaluations

Consequences should include:
Minimally defensive relationships
High freedom of choice
Increased likelihood of double-loop learning

Taken from Anderson 1997

Taken from Argyris, Putnam & McLain Smith (1985, p. 89)
### Appendix G  Diagnostic Vs. Dialogic OD

**Table 1**

Contrasting Diagnostic and Dialogic Organization Development (OD)

<table>
<thead>
<tr>
<th>Influenced by</th>
<th>Diagnostic OD</th>
<th>Dialogic OD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical science, positivism, and modernist philosophy</td>
<td>Interpretive approaches, social constructionism, critical and postmodern philosophy</td>
<td></td>
</tr>
<tr>
<td>Dominant organizational construct</td>
<td>Organizations are like living systems</td>
<td>Organizations are meaning-making systems</td>
</tr>
<tr>
<td>Ontology and epistemology</td>
<td>Reality is an objective fact</td>
<td>Reality is socially constructed</td>
</tr>
<tr>
<td>• There is a single reality</td>
<td>• There are multiple realities</td>
<td>• Truth is immanent and emerges from the situation</td>
</tr>
<tr>
<td>• Truth is transcendent and discoverable</td>
<td>• Reality is negotiated and may involve power and political processes</td>
<td></td>
</tr>
<tr>
<td>• Reality can be discovered using rational and analytic processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructs of change</td>
<td>Usually teleological</td>
<td>Often dialogical or dialectical</td>
</tr>
<tr>
<td>• Collecting and applying valid data using objective problem-solving methods leads to change</td>
<td>• Creating containers and processes to produce generative ideas leads to change</td>
<td></td>
</tr>
<tr>
<td>• Change can be created, planned, and managed</td>
<td>• Change can be encouraged but is mainly self-organizing</td>
<td></td>
</tr>
<tr>
<td>• Change is episodic, linear, and goal oriented</td>
<td>• Change may be continuous and/or cyclical</td>
<td></td>
</tr>
<tr>
<td>Focus of change</td>
<td>Emphasis on changing behavior and what people do</td>
<td>Emphasis on changing mindsets and what people think</td>
</tr>
</tbody>
</table>

Appendix H  Problem Solving Vs. Appreciative Inquiry

**Problem Solving**

- “Felt Need”
- Identification of Problem
- Analysis of Causes
- Analysis and Possible Solutions
- Action Planning (Treatment)
- *Basic Assumption: An Organization is a Problem to be Solved*

**Appreciative Inquiry**

- Appreciating and Valuing
- The Best of “What Is”
- Envisioning “What Might Be”
- Dialoguing “What Should Be”
- *Basic Assumption: An Organization is a Mystery to be Embraced*
The 4-D Model of Appreciative Inquiry

**Discovery**
“What gives life?”
*(the best of what is)*
*Appreciating*

**Destiny**
“How to empower, learn and adjust/improvise?”
*Sustaining*

**Design**
“What should be—the ideal?”
*Co-constructing*

**Dream**
“What might be?”
*(What is the world calling for?)*
*Envisioning Results*

**AFFIRMATIVE TOPIC CHOICE**

*Appreciative Inquiry “4-D” Cycle*
Appendix I  Organization Theory

## DEFINITION OF ORGANIZATION WITHIN DIFFERENT THEORETICAL PERSPECTIVES

<table>
<thead>
<tr>
<th></th>
<th>Rational Systems</th>
<th>Natural Systems</th>
<th>Open Systems</th>
<th>Dialogic Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition of Organization</strong></td>
<td>“Organizations are collectives oriented to the pursuit of relatively specific goals and exhibiting relatively highly formalized social structures.”</td>
<td>“Organizations are collectives whose participants are pursuing multiple interests, both disparate and common, but who recognize the value of perpetuating the organization as an important resource. The informal structure of relations that develops among participants is more influential in guiding the behavior of participants than is the formal structure.”</td>
<td>“Organizations are collectives of interdependent flows and activities linking shifting conditions of participants embedded in wider material-resource and institutional environments.”</td>
<td>“Organizations are dialogic systems. They are the patterns in the interaction between the participants – how they talk to each other, what they say, and what they think.”</td>
</tr>
<tr>
<td><strong>Characteristics of Organizations</strong></td>
<td>Primary • Goal specificity • Formalization</td>
<td>Primary • Survival and maintenance • Goal complexity • Informal structures</td>
<td>Primary • “Open” to its environment • Boundary maintenance • Loosely coupled parts • High variability and complexity of sub-parts • Hierarchy of systems</td>
<td>Primary • Adaptation • Innovation • Resilience</td>
</tr>
<tr>
<td></td>
<td>Other • Rationality • Overriding principles (universal application) • Scientific Analysis • Technical expertise • Structure more important than people • People are interchangeable</td>
<td>Other • Social collective of people • Adaptable (half-open, half-closed) • Hard to replicate • No universal principles • Behaviour rather than structure</td>
<td>Other • Adaptable • Interdependency within and between organizations • Information flows • Focus on process and not on structure</td>
<td>Other • Conversations • Continuously emerging • On the edge of chaos • Paradox, no polarities • Beb/and</td>
</tr>
<tr>
<td><strong>Metaphor</strong></td>
<td>Dry, cold mechanical Clock, Blue Print</td>
<td>Living Organism Human Body</td>
<td>Orchestra</td>
<td>Jazz Band</td>
</tr>
</tbody>
</table>

Adapted from Cody (2009) and Bushe and Marshak (2010).
Appendix J  Chaos Theory Systems Classification

Surfing the Edge of

Organize  Self-Organizing  Chaotic
### Appendix K  Behavioural Approach vs. Dialogic Approach

<table>
<thead>
<tr>
<th>Behavioural Approach</th>
<th>Dialogic Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-loop learning</td>
<td>Double-loop learning</td>
</tr>
<tr>
<td>Not inside “Black Box”</td>
<td>Inside “Black Box”</td>
</tr>
<tr>
<td>External Motivators (e.g. incentives and punishments)</td>
<td>Internal Motivators (e.g. trust) (e.g. autonomy, mastery, and purpose)</td>
</tr>
<tr>
<td>Autonomous (no contact required)</td>
<td>Dialogic (based on meaningful or sincere conversations)</td>
</tr>
</tbody>
</table>
Appendix L  Cooperation Rates With and Without Punishment

Figure 1b: Average contributions over time in the Stranger-treatment (Session 3)

Appendix M  Learning the Rules: Experimental Appendices

M.1  Regulator Instructions

THE “PAY-OFF” GAME
REGULATOR INSTRUCTIONS

1. Welcome Everyone – 2 hours
2. Consent Forms – Make sure have signed consent form from everyone before start
3. Play a Game Tonight Called “Pay-Off” Game.
   • Will go to 2 separate rooms upstairs: Room A and Room B.
   • Randomly take a seat in Room you are assigned to.
   • All instructions will be at your seat.
   • When get there – fill out your Code Name on all the sheets.
   • Questionaire First. Then 7 Round Game. Then another questionnaire. 2 people will be randomly selected to do a post-game interview of 5 minutes.
   • After game will meet in this room 2 minutes to close up and interviews will happen here.
   • Should take no more than 2 hours. Some downtime. Use it to think of what your strategies will be to reduce thinking time.
   • Please do not talk with anyone once you are in the rooms until you leave the rooms.
4. Tell participants which room they are in:
   • Group A: Room 4405
   • Group B: Room 4805
   • Can immediately start filling out the short survey at seats when enter.
   • I will be going to Room A first then Room B to give instructions.
5. Go to Rooms.
6. Room A:
   • Name on all papers: Questionaire, Record Sheet. Not on Envelope. Numbered to match people in other room.
   • Fill Out Questionaire.
   • When done will hand out rules to the game.
   • Going to Room B will be back in 5 minutes.
7. Room B:
   • Name on all papers: Questionaire, Record Sheet. Not on Envelope. Numbered to match people in other room.
   • Fill Out Questionaire.
   • When done will hand out rules to the game.
   • Going to Room B will be back in 5 minutes.
8. Round 4: Hand out Rule Change to All Players
9. Round 5: Take Everyone to Room 2800 for World Café
   • Use Questions.
10. Take everyone back upstairs – for rounds 5-7
11. Post-Game Survey
12. Select for Interviews
13. Meet downstairs and say thank-you.
THE “PAY-OFF” GAME
PRE-GAME SURVEY

1. Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people? Please code your answer on the scale below, where 1 means you agree with that position slightly and 5 means you agree with the position completely (circle one number only):

<table>
<thead>
<tr>
<th>Most people can be trusted</th>
<th>Need to be very careful</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

2. Do you think most people would try to take advantage of you if they got the chance, or would they try to be fair? Please code your answer on the scale below, where 1 means you agree with that position slightly and 5 means you agree with the position completely (circle one number only):

<table>
<thead>
<tr>
<th>People would try to take advantage</th>
<th>People would try to be fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

3. How old are you? ________

4. What is your highest level of education? (e.g. Highschool, BA, Masters, MBA, Ph.D. etc.)

_________________________________________

5. If applicable, What was your Major (e.g. Economics, Law, Commerce):

_________________________________________

6. Gender (circle one): Male Female

7. Occupation and Job Title/Description:

________________________________________

Version: November 23, 2012
**Game Instructions**

**THE "PAY-OFF" GAME**

**INSTRUCTIONS**

In this experiment, you will be playing a game called the “Pay-Off" Game. The goal of the game is to accumulate $100 by the end of the game. Participants who accumulate $100 will have their name put into a draw to win the $500 “Pay-Off”.

You will be playing the game against a randomly selected participant in the other gaming room. You will not be told who you are paired with either during or after the game. There are other people in the room called ‘Regulators’ who will be pointed out to you at the start of the game. The Regulators are in charge of the ‘envelopes’ (as explained below) and will assist you to make sure all the forms are filled out correctly.

The remainder of these instructions explain exactly how the game is played.

The game has 7 rounds. You will be playing against the same person for all 7 rounds. Every round is exactly the same and it occurs as follows.

The group with the ‘envelopes’ in front of them is Group A. The other group is Group B. Your choices in the game depend on which Group you are in.

**Group A starts.** Each person in Group A has been given $10 (notional) in their ‘envelope’ for showing up for this experiment. The envelope is represented in this game by the “envelope paper”. Persons in Group A will have the opportunity to send, in the envelope, some, all, or none of their $10 show up fee to the person they are paired with in Group B. Each dollar sent to Group B will be tripled. For example, if you send an envelope with $2, the envelope will contain $6 when it reaches Group B. If you send an envelope, which contains $9, the envelope will contain $27 when it reaches Group B. When you make your choice – please write it on the envelope paper in the appropriate box for the round we are playing and then triple the number and place it in the next box in the paper. At the same time, please record your choice on the “record sheet” taped to your desk by subtracting the amount you sent from your $10 show up fee. Once you have completed these steps – please raise your hand and the Regulator will collect the envelope. The Regulator will assist you in making sure your choice has been correctly recorded on both sheets in the first round. The amount you send to Group B is called the “Contribution Amount”.

**Group B goes next.** Each person in Group B has also been given a $10 (notional) show up fee. Each person in Group B will receive an envelope from the Regulator with a ‘tripled’ amount in it. Please record this amount on the “record sheet” taped to your desk and then add your $10 to it and place this total amount in the next box on the record sheet. Now, you need to decide how much of your total to send back to the person in Group A and how much of it to keep for yourself. You can send all, some, or none of the amount. Make your choice and record it on the envelope sheet. Also, record your choice on your record sheet and then indicate also how much you kept for yourself. The amount you keep for yourself is your total for the round. Once you have made your choice and recorded it, raise your hand and the Regulator will collect the envelope. The Regulator will assist you in making sure your choice has been correctly recorded on both sheets in the first round. The amount you send back is called the “Payback Amount”.

**End of the Round:** Once Group B has made their choices – the envelopes are returned to Group A. Group A will record what amount they received back on their record sheets, and add the amount to what they kept to determine their total on the round. They will record this on their “record sheet”. These totals are “banked” for Group A and Group B and counted toward your end of game total.

This process will be repeated for each of the seven rounds. Each round resets with all participant again receiving $10 to start the round.

This experiment is structured so that none of the participants will know the personal decision of people in either Group A or Group B. Since your decision is private we ask that you do not tell anyone your decision either during or after the experiment.
Record Sheets and Envelope Paper

"ENVELOPE PAPER"

<table>
<thead>
<tr>
<th>ROUND 1</th>
<th>Send to Group B (1-10)</th>
<th>Group B Receives (x3)</th>
<th>Group B Sends Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROUND 2</td>
<td>Send to Group B (1-10)</td>
<td>Group B Receives (x3)</td>
<td>Group B Sends Back</td>
</tr>
<tr>
<td>ROUND 3</td>
<td>Send to Group B (1-10)</td>
<td>Group B Receives (x3)</td>
<td>Group B Sends Back</td>
</tr>
<tr>
<td>ROUND 4</td>
<td>Send to Group B (1-10)</td>
<td>Group B Receives (x3)</td>
<td>Group B Sends Back</td>
</tr>
<tr>
<td>ROUND 5</td>
<td>Send to Group B (1-10)</td>
<td>Group B Receives (x3)</td>
<td>Group B Sends Back</td>
</tr>
<tr>
<td>ROUND 6</td>
<td>Send to Group B (1-10)</td>
<td>Group B Receives (x3)</td>
<td>Group B Sends Back</td>
</tr>
<tr>
<td>ROUND 7</td>
<td>Send to Group B (1-10)</td>
<td>Group B Receives (x3)</td>
<td>Group B Sends Back</td>
</tr>
<tr>
<td>ROUND 1</td>
<td>Group A Show-up Fee</td>
<td>Send to Group B (1-10)</td>
<td>Amount Left (Box1 - Box2)</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------</td>
<td>------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROUND 2</td>
<td>Group A Show-up Fee</td>
<td>Send to Group B (1-10)</td>
<td>Amount Left (Box1 - Box2)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROUND 3</td>
<td>Group A Show-up Fee</td>
<td>Send to Group B (1-10)</td>
<td>Amount Left (Box1 - Box2)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROUND 4</td>
<td>Group A Show-up Fee</td>
<td>Send to Group B (1-10)</td>
<td>Amount Left (Box1 - Box2)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROUND 5</td>
<td>Group A Show-up Fee</td>
<td>Send to Group B (1-10)</td>
<td>Amount Left (Box1 - Box2)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROUND 6</td>
<td>Group A Show-up Fee</td>
<td>Send to Group B (1-10)</td>
<td>Amount Left (Box1 - Box2)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROUND 7</td>
<td>Group A Show-up Fee</td>
<td>Send to Group B (1-10)</td>
<td>Amount Left (Box1 - Box2)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

END OF GAME

Game Total
GROUP B - RECORD SHEET

CODE NAME: ________________________________

<table>
<thead>
<tr>
<th>ROUND</th>
<th>Group B Show-up Fee</th>
<th>Received From Group A</th>
<th>Total Amount (Box1+ Box2)</th>
<th>Send Back to Group A</th>
<th>Round Total (Box 3-Box4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>END OF GAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Game Total</td>
</tr>
</tbody>
</table>
THE “PAY-OFF” GAME
ROUND 4

RULE CHANGE

As of now the following rules apply to every round left in the game.

New Rule: Minimum Contributions and Pay-Backs:

• **Group A**: The minimum Contribution Amount is 50% of the $10 Show-up Fee: i.e. $5

• **Group B**: The minimum Pay-Back Amount is 40% of Group B’s Total: i.e. if your total is 20 you need to pay-back 8.

**Aspirational Goals**: These are not rules – these are simply the aspirational goals that the Regulators would like you to meet.

• **Group A**: The aspirational Contribution Amount is 100% of the $10 Show-up Fee: i.e. $10

• **Group B**: The aspirational Pay-Back Amount is 50% of Group B’s Total: i.e. if your total is 20 you need to pay-back 10.

**Please note**: There are no consequences for not meeting the aspirational goals.
M.3 Audit Procedure

THE “PAY-OFF” GAME
ROUND 5

RULE CHANGE – AUDITING PROCEDURE

As of now the following rules apply to every round left in the game.

- We will now be instituting random auditing of the Minimum Contributions and Pay-Back Rule.

- Each Round one person will be randomly chosen for the audit.

- If you are found not to have contributed or paid back the minimum amount required by the rule – you will lose all gains for that round.

- Audits are random only – there is no ability to respond to whistle-blowers – so please do not talk out during the experiment.

As a reminder: The Minimum Contribution and Pay-Back Rules are:

- **Group A**: The minimum Contribution Amount is 50% of the $10 Show-up Fee: i.e. $5

- **Group B**: The minimum Pay-Back Amount is 40% of Group B’s Total: i.e. if your total is 20 you need to pay-back 8.

**PLEASE NOTE**: We will not be auditing for compliance with the aspirational goal. Only the minimum contributions and pay-back.
THE “PAY-OFF” GAME
POST-GAME SURVEY

CODE NAME: ________________________________

1. Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people? Please code your answer on the scale below, where 1 means you agree with that position slightly and 5 means you agree with the position completely (circle one number only):

<table>
<thead>
<tr>
<th>Most people can be trusted</th>
<th>Need to be very careful</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

2. Do you think most people would try to take advantage of you if they got the chance, or would they try to be fair? Please code your answer on the scale below, where 1 means you agree with that position slightly and 5 means you agree with the position completely (circle one number only):

<table>
<thead>
<tr>
<th>People would try to take advantage</th>
<th>People would try to be fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

3. What did you learn from playing the “Pay-Off” Game?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

Version: November 23, 2012
Instructions

In this task you have been randomly paired with another person, whom we will refer to as the other. This other person is someone you do not know and will remain mutually anonymous. All of your choices are completely confidential. You will be making a series of decisions about allocating resources between you and this other person. For each of the following questions, please indicate the distribution you prefer most by marking the respective position along the midline. You can only make one mark for each question.

Your decisions will yield money for both yourself and the other person. In the example below, a person has chosen to distribute money so that he/she receives 50 dollars, while the anonymous other person receives 40 dollars. There are no right or wrong answers, this is all about personal preferences. After you have made your decision, write the resulting distribution of money on the spaces on the right. As you can see, your choices will influence both the amount of money you receive as well as the amount of money the other receives.

<table>
<thead>
<tr>
<th>You receive</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
<th>65</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other receives</td>
<td>80</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

Example:

<table>
<thead>
<tr>
<th>You receive</th>
<th>85</th>
<th>85</th>
<th>85</th>
<th>85</th>
<th>85</th>
<th>85</th>
<th>85</th>
<th>85</th>
<th>85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other receives</td>
<td>85</td>
<td>76</td>
<td>68</td>
<td>59</td>
<td>50</td>
<td>41</td>
<td>33</td>
<td>24</td>
<td>15</td>
</tr>
</tbody>
</table>

You receive:

| 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |

Other receives:

| 85 | 76 | 68 | 59 | 50 | 41 | 33 | 24 | 15 |

You: ____________________________

Other: ____________________________
Appendix N  Learning Loops

N.1  Organizational Loops
N.2 Inter-organizational Loops 1
N.3 Inter-organizational Loops 2

REGULATOR CONVERSATION
CORPORATE CONVERSATION
BROKEN LINE OF COMMUNICATION
T+ DIALOGIC INTERVENTION.
Appendix O  Cynefin Model

Appendix P  Alberta Creative Sentencing Guidelines

- There must be a nexus of connection between the offence and the project.
- The order must still be punitive in nature.
- Deterrence should be the primary objective and the yardstick by which the success of such projects is measured.
- The project must either improve the environment or reduce the level of risk to the public.
- The main beneficiary of the project must be the public.
- The public must be the citizens of Alberta.
- The project must result in a concrete, tangible, and measureable result in the short term and the long term.
- There must be a value added to the environment.
- The project must exceed current industry standards.
- The project must be as local as possible to the area where the offence occurred.

Source: Alberta Provincial Court [on file with author].