NARRATIVE & VALUE: AUTHORSHIP IN THE STORY OF MONEY

by Michael Schaus

A major research project submitted to OCAD University in partial fulfillment of the requirements for the degree of Masters of Design in Strategic Foresight and Innovation.

Toronto, Ontario, Canada, August 2017



Commons Attribution-NonCommercial-ShareAlike 4.0 International 2.5 Canada license. To see the license go to http://creativecommons.org/licenses/by-nc-sa/4.0/legalcode or write to Creative Commons, 171 Second Street, Suite 300, San Francisco, California 94105, USA.

COPYRIGHT NOTICE

This document is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 2.5 Canada License. http://creativecommons.org/licenses/by-nc-sa/4.0/legalcode

You are free to:

SHARE — copy and redistribute the material in any medium or format.

ADAPT — remix, transform, and build upon the material

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following conditions:

ATTRIBUTION — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

NONCOMMERCIAL — You may not use the material for commercial purposes.

SHAREALIKE — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

With the understanding that:

You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given, he license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.

AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this major research project (MRP). This is a true copy of the MRP, including any required final revisions, as accepted by my examiners. I authorize OCAD University to lend this MRP to other institutions or individuals for the purpose of scholarly research. I understand that my MRP may be made electronically available to the public. I further authorize OCAD University to reproduce MRP by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

ABSTRACT

Money has value because we agree that it does. This study frames that collective agreement as a narrative and through that lens, considers the dynamics by which the agreement of money's value has been authored, and continues to be. Using Sohail Inayatullah's Causal Layered Analysis the project considers what that story is "about" towards an understanding of our collective values inasmuch as they are held by, or noticeably absent from, the most readily used monetary signifier in the world; debt at interest, issued by a central authority, backed by the legal jurisdiction of a nation. With a sense of how the story of money is authored, and what it is about at the level of a foundational myth, the study considers how that story may change with an alternative foundation and explores current signals that resonate with a re-authored story of money. Towards a solution model with an empowered human actor, the study then considers the arena of self-esteem as a framework to consider connections between individual behavior and the entrenched story of money. Finally, the project considers a simple but tangible solution model for how we might consider the financial transaction as a site for experience design. The solution considers the experience of the transactional relationship as the source material in the story of money, and suggests that we might build authentic wealth by consciously considering the attributes of that experience.

ACKNOWLEDGEMENTS

Playing with the narrative of money's value over the length of this project has also been a deep dive into my own values. In the ambiguity of having those values in question, I had a lot of support.

Thanks to *Helen Kerr*, an incredible human, an infinite player, and a true mentor on how we might hold ambiguity at depth over time. I feel such gratitude for the experience of witnessing an example, in action, of how we might play the infinite game.

To all my SFI colleagues who have been through this process. It was an amazing and profound experience I'm proud to share it with such a diverse group of fellow weirdos.

To Cheryl Hsu and Adrienne Pacini for all the work time at the sLab and the equally important follow up meetings at the 5th.

Thanks to Kim Peter for all the help and fun through the collaborative coursework and the pro-tip to start early, finish early, and be there for the endgame.

Thanks to Zeynep Sen who decoded the unruliness and helped design it into something coherent and cool.

To Stephen Davies for the key insights that helped to converge it towards an end. And to Peter Jones for his insight and depth of systems knowledge throughout my SFI experience.

Thanks to my friends and mentors outside the SFI bubble who maintained a platform of integrity on the phone and at various dive bars along Dundas.

Finally, thanks to the Schaus', Sarah, Kristen, Susan and Dave for the ongoing love and support. Specifically, to my parents for the combination of acknowledging that money solves money problems, and providing an example of resolve, determination, sticktoitiveness, and an orientation to the long-game.

TABLE OF CONTENTS

INTRODUCTION	1
CONTEXT & MODEL	6
Money is a Story	8
Two Levels of Reality	9
What is a Story?	9
What is a Premise?	11
Incidents in Relationship	13
Incidents in the Story of Money	15
THE STORY OF CENTRAL BANKING	17
The Story of the Goldsmith	18
Leverage	21
Counterparty Risk	21
Interest	22
Legal Tender	23
The Narrative Entrenching Cycle	24
METHODOLOGY	26
Literature Review	27
Paper Deck	27
Causal Layered Analysis of Financial Language	29
Interviews	30
System Modelling	32
Hybrid CLA	33

ANALYSIS	36
Hybrid CLA Analysis	38
Description of the Hybrid Levels	38
Analysis of Findings at Each Level	40
Debt & Yield CLA Analysis	85
SELF ESTEEM	87
Introduction	88
What is Self Esteem?	88
Outside Validation	91
Money & Outside Validation	91
Human Values versus Corporate Values	94
SOLUTION MODEL	96
The Sou Sou	99
CONCLUSION	104
Revisiting the Research Question	106
Consciousness as Wealth	107
REFERENCES	109

LIST OF FIGURES & ILLUSTRATIONS

Figure 1 - OBJECTIVE & IMAGINED REALITY	13
Figure 2 — INCIDENTS IN RELATIONSHIP	14
Figure 3 — CURRENCY AS PREMISE	16
Figure 4 — STORY OF THE GOLDSMITH 1	18
Figure 5 — STORY OF THE GOLDSMITH 2	19
Figure 6 — STORY OF THE GOLDSMITH 3	20
Figure 7 — THE NARRATIVE ENTRENCHING CYCLE	25
Figure 8 — THE PAPER DECK	28
Figure 9 — PHOTO OF DEBT & YIELD CLA MAPPING	30
Figure 10 — SYSTEM MODELING	32
Figure 11 — HYBRID MODEL CLA	34
Figure 12 - BREAKDOWN OF HYBRID CLA	39
Figure 13 — SCARCITY & VALUE	44
Figure 14 — INTRINSIC & INSTRUMENTAL VALUE	50
Figure 15 — PURCHASING POWER OF US DOLLAR	54

Figure 16 – DISTRIBUTION OF ECONOMIC GROWTH BY INCOME PERCENTILE	55
Figure 17 — IMPACT OF GLASS-STEAGALL	58
Figure 18 — GROWTH OF GLOBAL DERIVATIVE MARKET SINCE 1998	60
Figure 19 — FINITE GAME PERSPECTIVE	72
Figure 20 — INFINITE GAME PERSPECTIVE	76
Figure 21 — DEBT & YIELD CLA ANALYSIS	85
Figure 22 — SHIFTING THE BURDEN ARCHETYPE	92
Figure 23 — ESCALATION OF THE FINITE GAME ARCHETYPE	93
Figure 24 — HOOKED ON HEROICS ARCHETYPE	95
Figure 25 — THE STEPS OF THE SOU SOU	100

LIST OF TABLES

Table 1 - COMPARING COMMODITY EXCHANGE AND GIFT EXCHANGE 51

CHAPTER 1

Introduction

We have chosen debt at interest as our money. There have been other examples of money over time, and there are alternative monetary systems in place today, but at this point in history, this format for money is by far the most widely used. It is so widely used that it is a challenge to consider viable alternatives and tempting to consider the current iteration of money as the form it always has taken and always will take. Douglas Rushkoff provides an articulation of this all-encompassing dynamic in the analogy of a computer operating system; "Imagine if you only ever used Windows, you might not even be aware that the Mac OS even existed." (Rushkoff, 2016).

Money, including the current iteration, is valuable because of a collective agreement that it has value. Bernard Lietaer and Stephen Belgin explain that "there is a widely held belief that societies must have a debt-based central currency upon which interest is charged." (Lietaer and Belgin, 2011) The moneies most often used in the world are national currencies; debt, loaned into the banking system at interest by a central bank under the legal jurisdiction of a particular nation. For the purposes of this study, that kind of money will be referred to as the "common currency". This study will argue a correlation between the degree to which this belief is accepted without consideration in almost any monetized transaction, and the degree to which the power to author our collective story of value is abdicated.

Consider the piece of plastic paper that is a ten-dollar bill, and compare it to another piece of blank paper used in a printer. On an individual level, although they are both plastic paper, there is a considerable difference in an individual's relationship to each one. The relationship to the ten-dollar bill comes with rules and norms that impact, and are sourced from, individual belief structures and therefore individual values and behaviours. The other does not. This difference between the two pieces of

How might we get really rich?

paper, for the purposes of this study, is the collective agreement that the ten-dollar bill is valuable and used as money.

This study will frame that collective agreement as a story or narrative. More specifically, the story of money is an effective story, one that many people believe. (Harari, 2016). With the collective agreement that this most widely used money has value framed as an effective story, the study will first explore what that story is "about", using Sohail Inayatullah's Causal Layered Analysis (Inayatullah, 1998) to delve into what of our collective values we can understand in the current story of money as it plays out in the arena of banking and finance. The CLA is a tool used to analyze a system, (or story), with an aim to find leverage points for change at deeper levels that are not obvious when interacting with the everyday aspects of the system.

With a sense of what that story is about, what it means, and where the power to author it lies, the study goes on to consider how and where that collective agreement might be updated with different values and be "about" something new. Essentially exploring opportunities and providing suggestions for how and where authorship of the story might be reclaimed from where it is currently abdicated using tangible tactics.

The possibility of a re-written story means a revised set of values held by the common currency. The widespread monoculture of money might then be a catalyst for change, as opposed to an entrenching tool for the status quo, as it spreads revised values, authored with intention and attention from more decentralized sources at the transaction level. Simply put, how might we leverage the current financial system's ability to incentivize the circulation of money, a holder of value, to iteratively revise and spread a more preferable set of collective values? How might we get really rich?

RESEARCH QUESTION

How might we get really rich? The question is intentionally provocative and what follows is a breakdown of how each element of the question brings up a dialogue area that the study will explore. Throughout the study, other questions emerged and can be considered as contained within this wider question.

HOW MIGHT — The meaning of "How might" condenses into a dialogue of bringing design not only into finance as we know it, but to bring design into the collective story of our values that *are* reflected by and sourced from, money. Also, to set the intention of working with storytelling as a design method. Although this toolbox is most familiar in an entertainment context, the dialogue expands that lens and considers storytelling as a method to build the fictional structures that influence our beliefs, motivations and behaviours.

"How might" frames the transaction as a site for experience design. Experiences born in the relationship that is the monetized transaction then become the incidents in relationship to each other that

make up the story of money. Changing the story, the collective agreement about what values are held in the holder of value and medium of exchange, by intentionally designing the transaction to yield different experiences. How do the current values held by the common currency impact every transaction within which this kind of currency is used? How does that impact the subsequent story of money?

WE — Everyone. The middle class, the 2 billion unbanked, (Demirguc-Kunt, Klapper, Singer, and Oudheusden, 2015) the ultra-rich, the global poor. The use of "we" in this question is an avenue to consider money, banking and finance as something at a scale that is not currently able to capture something as nuanced as the diversity amongst all human value. In considering the "we" so broadly, the goal of the study ultimately points to fragmentation and diversity-building solutions to remedy what appears to be a monoculture at a scale unknown in human history.

GET — "Get" gestures to a new frame on how to look at money; as a story that has been built in the collective imaginations of all who believe this story, monetized transaction by monetized transaction. The idea of money as a collective story we each have the authority to write fundamentally changes the tactics of "getting rich" or "making money" and orients value around how much of the story an individual can author, instead of how much money they can collect. In this dynamic self-interest is an important tool to promote the health of the very platform where self-interest is to be enjoyed, as opposed to self-interest that extracts from one platform or community to be enjoyed on another with the assumption that they are separate and disconnected.

REALLY — "Really" points to authenticity. Those who are rich within the definition of the prevailing system, are they really rich? Is "rich" an appropriate definition for the 62 people that control 50% of the world's monetized wealth? (White, 2016) The intended outcome of this framing is not to demonize this group, but to use it as an opening to a dialogue about what wealth fundamentally is, towards a system that incentivizes it by design.

RICH — Rich! Plentiful and abundant. Richness in the sense of a rich conversation. Full of nuance, depth, clarity or any combination thereof from the mundane to the esoteric. Not trivial, even if it is mundane. This definition of rich speaks to connectivity and mobility; freedom. Rich, perhaps in the context of a communication channel; as opposed to thin or meagre. A rich story of money comprised of source material with integrity that can be used as a reliable premise for trust and exchange.

DEFINITIONS OF MONEY, BANKING & FINANCE

MONEY — is defined as a medium of exchange, a holder of value, and a unit of account. ("Money", 2017) For the purposes of this study, those attributes of money allow it to be defined as the referent tool to an underlying value, that tool has a function to measure and circulate that value. Money and currency will be used interchangeably.

With respect to the shared agreement of money being a story or narrative, it is the holder of value

feature of money that is of primary concern; not more important, but to be addressed first. That a currency functions as a medium of exchange and a unit of account certainly contributes to the value that it holds. However, this study aims to focus on what values the common currency holds with depth using the CLA for the purposes of considering how to more consciously inform those values. From there, to consider how those values might spread in their exchange.

A BANK — is defined as a financial establishment that invests money deposited by customers, pays it out when required, makes loans at interest, and exchanges currency ("Bank", 2017). The specific activities outlined in this definition refer more specifically to commercial banking in contrast to investment banking. Commercial banking activities are different than those of investment banking, which include underwriting, acting as an intermediary between an issuer of securities and the investing public, facilitating mergers and other corporate reorganizations, and also acting as a broker for institutional clients. ("Commercial bank", 2017)

FINANCE — Finance is the management of large amounts of money, especially by governments or large companies. ("Finance", 2017) This frames finance as an activity; to move assets of lesser value to greater value using monetary capital as a catalyst.

COMMON CURRENCY — As mentioned earlier, the common currency for the purposes of this study will be defined as debt-based currency issued into the system as a loan at interest by a central authority, backed by a legal framework.

CHAPTER BREAKDOWN

Chapter 2 will go over a model that describes how the story of money is authored and chapter 3 will discuss the origin story of the current system's money. Chapter 4 will outline the methodology used to explore the research question and chapter 5 will go over the analysis of the findings. Chapter 6 is an exploration of the concept of self-esteem as it relates to the current and future story of money and Chapter 7 will discuss a simple but tactical approach to the re-authoring of the story of money. Finally, chapter 8 will revisit the research question and provide a condensed statement on the project findings.

...long before money had even been defined to my satisfaction, we had moved on to the profits of stock, as if all study of money were a mere distraction from its pursuit.

- BUCHAN, 2001

CHAPTER 2

Context & Model

Chapters 2 and 3 explore and expand on the idea that the agreement of money's value is a story or narrative. The second chapter includes the descriptive articulation of a model for how the story of money is authored through the myriad monetized transactions that use a version of the common currency. The third chapter is an exploration of the origins of the current story of money.

If we can imagine, we are free.

- SARTRE

Osama Bin Laden didn't believe in North American culture, but he definitely believed in the dollar.

— HARARI, 2014

MONEY IS A STORY

Yuval Noah Harari suggests that "the real secret of success of our species is that we alone can talk about things that don't exist at all. Anywhere. Except in our own imagination, in the stories that we invented." (Harari, 2014)

He goes on to say, ".. the easiest example to give is of course religion, but it's not just religion. It's the same with our legal system, with our political system, with our economic system. Money is also just a story....it is based on a story that only exists in our imagination... if enough people believe that story, then it becomes a very effective story." (Harari, 2014) Money, and its interplay within the arenas of banking and finance is a very effective story.

Most people in the world believe the story of money and those who do not, are still impacted by the widespread belief in this very effective story. That said, those who do not believe in the current story of money, most likely believe in some alternative story about money. Some of those alternative monetary imaginaries, such as the sharing economy of the potlatch or the decentralized issuance of bitcoin, will be explored in the CLA analysis in Chapter 5.

Framed as a story, we can make the leap that the narrative of money is and was on some level, designed, or in the context of narrative, "written", "crafted", "created" or "broken". (Gilligan, 2011). For example, the series of choices that led to the implementation of legal tender laws, could be framed as design choices made to solve a problem within a particular set of constraints. The set of policies that resulted in the current operational structure of the Bank of Canada or the Federal Reserve were choices that were also made to solve a problem within a set of constraints. Those policies could be framed as resonant elements that comprise the overall story of money. In addition to laws or policies, other elements in the story of money include financial products, currencies themselves, marketplaces, religious belief structures and cultural practices.

What is common to these examples is that these elements, whether policy, currency, belief structures, or marketplace, all manifest themselves in relationship, of varying degrees of proximity, to the

financial transaction. A conceptual assumption made in this study is that the monetized transaction is the base from which the story of the common currency is authored, as well as where the manifested value of that story is realized.

TWO LEVELS OF REALITY

Harari describes 2 levels of reality that exist together in relationship:

- 1. the objective reality which includes things like mountains, rivers, trees, oil, bears, and lions. And;
- 2. a fictional reality that operates on top of, and in relationship to, the objective reality. These fictional realities are the stories that we tell, which includes things like human rights, nations, religions, and money. (Harari, 2017)

Part of that fictional reality includes objective facts like the wetness of water, which in the context of the fictional reality serve to embolden and empower the fictional narrative as more believable and more effective; more "real". Often, the fictional reality experiences are less tangible and more abstract than the wetness of water. For example, in the context of religious symbols, the Christian cross or Star of David in the objective reality connect to an abstract meaning of sacredness in the fictional.

In the context of money, these dynamics play out again and again when an objective reality symbol, (whether it be a currency note, a coin, or a digital entry), connects to a fictional reality concept of value. That abstracted concept of value is used in relationships to facilitate the exchange of objective reality goods and services. Margaret Atwood articulates this dynamic by saying, "Scrooge's big sin was to freeze his money; for money, as all students of it recognize, is of use only when it's moving, since it derives its value entirely from whatever it can translate itself into." (Atwood, 2008)

The common currency is continuously "translating itself into" things via the transaction. The more often and widespread a certain kind of money translates itself into things, the more reliable that money becomes as a signifier, or premise, of value. The more reliable the premise as a kind of bridge between the abstract concept of value and the objective representation of value, the more often it is used in transactions, and so on, in a cycle that entrenches the consensus agreement in the value of the currency.

WHAT IS A STORY?

A story is necessarily a complex thing to define. What follows are 3 definitions of story that in their overlap will provide a working definition for this study.

An account of imaginary or real people and events told for entertainment. Oxforddictionaries.com ("Story", 2017)

In this definition, situating the concept of story exclusively in the arena of entertainment perhaps conceals the kind of power Harari affords to stories in their ability to establish and exist as imagined realities. It is in this context that a story can be dismissed as being "just a story". This kind of dismissal may be appropriate at times to divert or re-focus attention away from something banal or even destructive. However, to the extent that stories are considered "made-up for entertainment", and "made-up" is equated to something without credibility, is the extent to which their power, and our unique human capacity of creating, existing and collaborating within shared imaginaries like money, is concealed.

A narrative, either true or fictitious, in prose or verse, designed to interest, amuse, or instruct the hearer or reader; tale. Dictionary.com ("Story", 2017)

This definition moves stories more into the arena of a tool. It mentions that a story is designed with an intent. Included in this definition is the specific intent of instructing the hearer or reader, and opens to the possibility of designing story for other intents.

Framing story as a design tool provides perspective on what that tool is interacting with. Harari, again, suggests that, "story must fulfill two criteria. It must have a role in it for me, and the story must extend my horizons." (Harari, 2016). He goes on to say that when people are asked "what is the meaning of life", the answer they expect to hear is a story. His comments suggest that although stories are indeed powerful tools, that perhaps the meaning of life, and less expansive questions could be, and often are, answered outside of the format of a story. Not everything is a story.

The plot or succession of incidents of a novel, poem, drama, etc. Dictionary.com ("Story", 2017)

It is in the "etc." in this definition that gestures toward story beyond an art or entertainment context. It also describes stories being comprised of "incidents" in some kind of "succession".

In this context, the "etc" could be expanded to include a political movement, a religion, or a money system. Further, the "incidents" in this context could be reconsidered through the lens of ideas from Steve Diller, Nathan Shedroff, and Sean Sauber in their book Blind Spot where they suggest that all value is manifested through experience, and all experience is manifested through relationship. (Diller, Shedroff, and Sauber, 2016) A story is then the succession of resonant "incidents", or experiences of value manifested within relationships. For clarity, the relationships include those with oneself, with another person, with the outside world (companies, causes, organizations, etc.) or with some inside world (internally held belief structures of faith or spirituality).

Finally, the idea of a succession is evocative of a linear time frame. In most story formats, incidents relate to each other chronologically; the most widely held structure of the telling and receiving of a story. The idea of being "in order" is most often associated to being within a time-frame. This idea is being challenged in the interactive media industry, as well as in mainstream media with films like Memento, Inception, and more recently, Arrival (Colin, 2016). Blockchain technology has a unique way to "tell" the story of its economy by incentivizing a decentralized network of transaction-witnesses to put the semi-simultaneous incidents (transactions) of an economic platform into a chronological order. (Gansky and Kedrosky, 2016)

For the purposes of this expanded exploration of what a story is, the incidents may be juxtaposed against one another within frames other than chronological succession. For example, a story could be a networked relationship of "incidents" existing outside a timeframe. In this definition, an economy for example, could be a story comprised of myriad transactions existing with a degree of simultaneity.

That said, even if the incidents of a story do not relate in a chronological order, the definition of story for this study assumes that they must be in some kind of relationship. The study also assumes that the reason or rationale for that ordering, as well as the content itself, is informed by a foundational myth of the system, story, or culture. Quinn Norton beautifully describes this phenomenon of how the foundational myth of money informs and relates to the story of money in this quote: "Money always imposes the politics of its architecture on the useful lives of people. It is always ornamented and carefully covered in that which a culture wants universally remembered." (Norton, 2014)

For the purposes of this study a story will be defined as incidents in relationship to each other. This definition includes the linear stories most familiar in an entertainment context as well as the expansive ideas of a story as a nation, or human rights, or Google, that Yuval Noah Harari describes.

WHAT IS A PREMISE?



Imagine there are two friends at a bar, having a drink. They're in the middle of a conversation, talking about soccer or children or medicine or weddings. One friend is trying to explain what happened at an event, say a wedding that he went to last weekend. He starts to explain in words, and then pauses and picks up 2 pretzels out of the pretzel dish and starts arranging them on the bar. He says "Ok, say this pretzel is the bride and this pretzel is the groom.." He goes on to tell the story of the ceremony, starting with the bride walking down the aisle, only to be interrupted on bended knee by a 3rd pretzel, the bass player in the wedding band. Pretzel 4, the bride's father, gets up and rushes over to take a swing at the 3rd pretzel, until finally,

pretzel 5, the non-denominational officiant steps out of the gazebo and moves down the aisle to break up the tussle. She, pretzel 5, has the bass player escorted out by the bride's brothers, goes on to marry the couple, and then proceeds to play bass in the band at the reception.

The part of the preceding story to focus on is the moment when one friend grabs the pretzel and says "Ok, say this pretzel is...". It is in the moment where "say this is [that]" is spoken that encapsulates some of how we, human beings, use our imaginations as a collaborative tool. The moment of "say this is that" describes the origination of a premise. A premise, in its simplest definition is an assumption that something is true. ("Premise", 2017) A premise is also defined as an assertion or proposition which forms the basis for a work or theory. ("Premise", 2017).

In the story, the premise is that "this" pretzel in the objective reality is "that" person in the imagined reality. The incidents that result from using that premise as a bridge between the objective and imagined — in this case the story of the wedding — exist in the shared imaginations of those two people in the relationship that exists between them, and nowhere else.

This dynamic is explained at length and in detail to describe something that we, homo sapiens, do all the time in every interaction. We use a premise, whether it be language or symbol or utterance, to bridge the objective to the imagined.

The function of a premise, is to bridge the gap between what is objectively observable and what is abstractly imagined, in the context of a relationship. It could be a written word, an utterance, or a symbol like a currency note or ledger entry. The use of the word premise in this study is effectively the same meaning as the word "signifier" within the context of semiotics. It is used instead of signifier because the word premise has a more obvious connection to storytelling, and it is more evocative of the central feature of a premise; that they are negotiated.

PREMISES ARE NEGOTIATED

Like all negotiations, it is a two-way street where "say this is that" starts off the establishing of a premise, and the response might be "yes", "no way", or a negotiated third option. Things that can impact a negotiation are trust, coercion, threat of force, information asymmetries, and a host of other impacts. In the context of the common currency, the premise is so entrenched that its use is rarely negotiated.

The word credit comes from "credo", the latin for "I believe". (Kalas, 2011) To give credit or credence is another way to describe the belief or acceptance of a premise. Someone says, "say this is that..." and the response is to either "extend credit", an acceptance of the premise or rule, or to decline. It is in the play around the premise that an experience emerges. In this context, the premises serve as a kind of scaffolding within a relationship upon which to build the experiences or incidents that are the source material for a story. Said another way, the two at the bar together held an assumption of something being true, for the purposes of having an experience in the context of their relationship.

Noam Chomsky posits that the reason they might have been talking to each other goes beyond

INCIDENTS IN RELATIONSHIP

just communication. Chomsky describes the essential property of humans as distinct from other organisms is a kind of creative capacity that manifested itself most clearly and centrally in language. We all have the capacity to produce new expressions, new in our experience, new in the history of the language. (Chomsky, 2014) The premise, whether it be a word, an utterance, or a symbol like a currency note, is a tool used to facilitate the creation of an experience within a relationship, possibly a new one in the history of the language, or perhaps, the currency.

The premise influences the experience which becomes the source material for the story; accepting a premise in the objective reality includes the acceptance of what it represents in the imagined. It is in the fact that the premise is negotiated that gestures to where the authority to write the story is situated.

INCIDENTS IN RELATIONSHIP

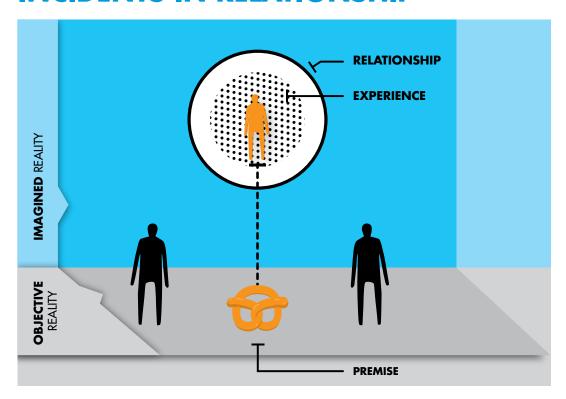


Figure 1 - OBJECTIVE & IMAGINED REALITY - Two friends at a bar negotiate a premise that pretzels are people for the purpose of facilitating an experience within the context of their relationship.

The model on the previous page is based on three ideas (*Figure 1* - Objective & Imagined Reality):

- **1.** There is an objective reality and a fictional reality. (Harari, 2016)
- 2. All value manifests in experience and all experience manifests within a relationship. (Diller, Shedroff, and Sauber, 2016)
- **3.** Homo sapiens negotiate premises as tools to bridge the tangible objective reality with the abstract imagined reality.

Further, it is these experiences that become the source material incidents that when in relationship, are a story. Whether they are the personal stories of these two friends at a bar, or other stories comprised of experiences/incidents from other relationships.

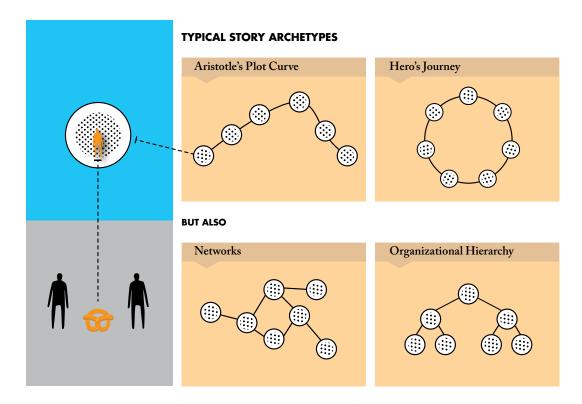


Figure 2 - INCIDENTS IN RELATIONSHIP - Incidents can relate to each other in a variety of relationship shapes including ones that are familiar in the context of entertainment like Aristotle's Plot Curve ("Plot", 2017) or Joseph Campbell's Hero's Journey (Campbell and Cousineau, 2014), or other structures like networks or organizational hierarchies.

INCIDENTS IN THE STORY OF MONEY

If we include things like the European Union and Google into a definition of story as Yuval Noah Harari suggests, (Harari, 2017) it makes sense that we can hold fictional realities between us, in relationship, and then adhere to the rules and norms of that fictional reality. Further, we can do it in the short term and let that story go, or we can build extensive narrative architectures with elaborate rules and norms that influence our behaviour for years, decades, or centuries. From this lens, money is an operating construct formed by, and contributing to, a negotiated consensus reality.

Stories, these fictional realities, are so powerful that it is possible to forget that the norms and rules that we are adhering to are fictional, existing nowhere else but in our imaginations. (Harari, 2016) Central to this study is the idea that the premises, the rule or rules of the game upon which the story is based, are necessarily negotiated and agreed to in a continuous cycle. Based on that, stories like the European Union, or Google, or money, can be re-authored, the authority to do so existing in the power to negotiate the premise of the relationship. In directing attention to the bridge between the objective representation of value and imagined concept of value, the possibility exists to shift the experience and influence the source material incidents that when in relationship, become the story of money, our shared belief in its value.

INCIDENTS IN THE STORY OF MONEY

As mentioned earlier, a conceptual assumption made in this study is that the monetized transaction is the base from which the story of the common currency is authored, as well as where the manifested value of that story is realized. Based on that assumption, some version of the common currency is used as the premise in any monetized transactional relationship, with very few exceptions.

The experiences created within the context of a transactional relationship become the incidents that when considered in relationship to each other, create a story; a fictional reality that exists in the shared imaginations of those that believe it. One level of this story could be called the economy, with the myriad transactions interpreted and ordered into certain kind of story.

Each transaction essentially yields an incident that connects something of objective value with the abstracted concept of value held in the imaginary. It is this dynamic at the level of the transaction where this study will argue that the power to author the story is located, via the choices made by those in relationship. Over time and transactions, a fictional reality architecture is created that is "about" the things that money can turn itself into, and therefore its value. And the cycle continues as that story is the source from which the currency bill or digital entry in my pocket sources its value.

The following chapter will explore the origins of the "this" within the premise of the common currency in our pockets. Yes, it is a piece of plastic paper or a numerical amount in a bank account, but what is the underlying story of "this" and how did it emerge?

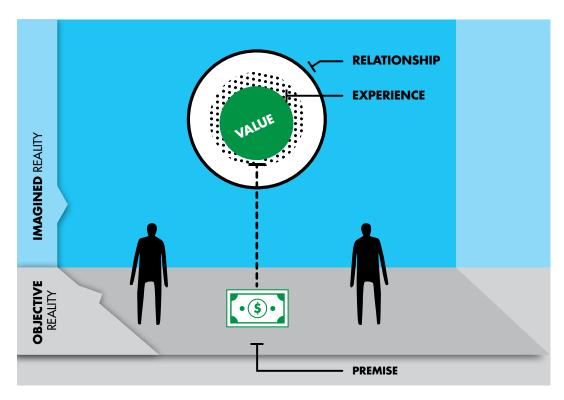


Figure 3 — CURRENCY AS PREMISE — Framing the transaction as a site for experience design, those experiences born in the relationship that is the monetized transaction then become the incidents in relationship to each other that make up the story of money.

"That" is clearer. "That" is everything that money can "turn itself into" (Atwood, 2008). Natasha Dow Schull describes money as "the central signification of our age", and the "that" of this common currency as "the materialization of social relationship and thus the bridge to everyone and everything that is to be had in modernity." (Schull, 2014)

So, what is "this"?

CHAPTER 3

The Story of Central Banking

Lietaer and Belgin's assertion that "there is a widely-held belief that societies must have a debt-based central currency on which interest is charged" (Lietaer and Belgin, 2011) describes the core structural tenant of the current global monetary system and the underlying belief of the common currency. This chapter will explore, through a story, the origins of a central banking system's ability to affect the money supply of a nation.

THE STORY OF THE GOLDSMITH

The function of the story is to better understand the mechanism by which money is issued within a central banking system, these are not factual events. The story of the goldsmith is a common narrative to simplify the foundations of the predominant monetary system of today. (Durden, 2013).

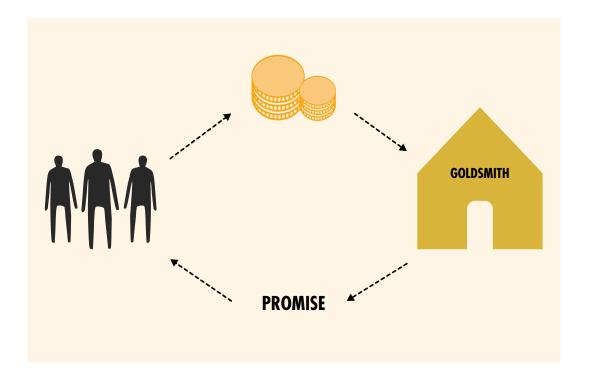


Figure 4 - STORY OF THE GOLDSMITH 1

Imagine a time in the past where gold is being used as money. People hold gold as money; that premise connects to a concept of value in the imaginations of many people and as a result, gold can be exchanged for goods and services in transactions. However, gold is heavy and cumbersome to move, and because it is valuable, it attracts people who want to steal it. As a result, people holding gold look for a place to store it where they will not have to worry about it.

At the same time, gold is also being used for other non-monetary purposes by goldsmiths (smelting it into jewelry, etc). The goldsmith is already set up to hold inventories of gold for the work that he does, so people ask him to hold their gold. He does, probably for a small fee

THE STORY OF THE GOLDSMITH

denominated in the gold that they leave. When they drop it off, he gives them a note for them to present to him when they want it back; an on-demand promise.

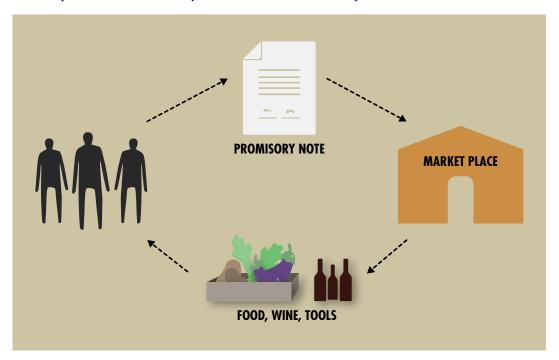


Figure 5 - STORY OF THE GOLDSMITH 2

An interesting thing happens; as more people ask the goldsmith to hold their gold, people start to use the notes issued by the goldsmith, (the claim-checks that represent the goldsmith's promise to give them back their gold) within the marketplace to exchange for goods and services; food, wine, tools and other things of value. As the promissory notes begin to be exchanged within the marketplace, a new premise is being negotiated on a transaction-by-transaction basis. Through the myriad transactions where "this" promissory note is "that" cow/wine/plough, a story begins to emerge that is made up of experiences born of relationships, (transactions), that use a promissory note (redeemable for gold) as the bridge between abstract value, and objective goods and services. The new story is "about" many things, at least one of them is that promissory notes are money.

At the same time, the goldsmith notices a couple of things; 1-that people rarely come to him to claim their gold; and 2- not everyone comes in at the same time to claim their gold.

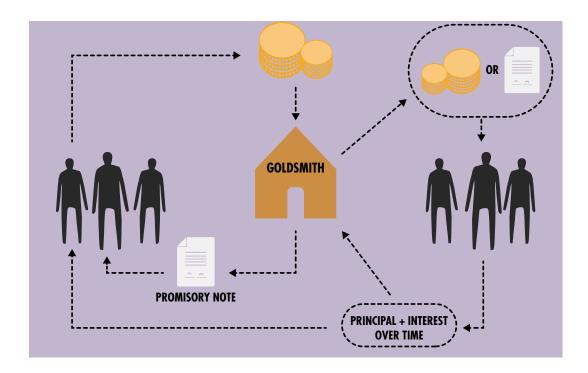


Figure 6 — STORY OF THE GOLDSMITH 3

Then, something else starts to happen. Other goldsmiths who used to borrow gold from the goldsmith, a service he charged a fee for, were now willing to accept gold OR the promissory notes. The goldsmith starts to loan out gold and/or promissory notes from gold in his inventory at a fee over time; interest. As those transactions are made, the word spreads that this is happening and the goldsmith starts to share the interest he earns with the owners of the gold storing it in his shop.

The goldsmith starts to think, "There's a demand for promissory notes that I can charge interest on. A lot of my inventory just sits here, there's more than enough to make good on the promises I've made because it is rare that people claim their gold, and they've never all come in at once. I could probably write some extra promissory notes for gold I don't even have in my inventory. I can charge fees on the extra notes and I'll still be able to make good on any particular promise I've made from gold in my inventory."

This choice, to create something from nothing, is very alluring for any individual human. As a supporting question to "How might we get really rich?", the chapter 5 analysis explores "How might we support each other, and the system, with the allure of the at-times-productive and at-times-damaging choice to leverage?"

LEVERAGE

The purpose of this story is to draw a parallel between the mechanism by which that goldsmith creates those extra promissory notes at interest, and the way that money is created in the global financial system. This is leverage. Leverage is defined as the use of a small initial investment, credit, or borrowed funds to gain a very high return in relation to one's investment. ("Leverage", 2017)

It is important to note that this story is meant to personify the moment where a person, the goldsmith, chooses to write more promissory notes based on his gold reserves. Essentially, he is creating something from nothing, the money he creates is backed up, or leveraged, by a fraction of real reserves. In the current system, money is created by both central banks and the affiliate banks (called charter banks in Canada) with a similar mechanism. This study acknowledges that although the current system is informed and influenced by this mechanism, this narrative tool is not effective in explaining all the nuances of monetary system that exists today.

COUNTERPARTY RISK

The difference between gold and promissory notes is that a promissory note carries the risk of default, in current terms, called counterparty risk. ("Counterparty Risk", 2015) In some ways, all money holds the risk of default if the story, the collective agreement that it is valuable, collapses. In the story of the goldsmith, the gold "was simply a monetary asset. It entered circulation in that it was physically produced and

then spent, not loaned. Rather than being an IOU in itself, it just facilitated payments, that is, the final settlement of an IOU in transactions." (Huber, 2017) As this study looks deeper into the financial system, it becomes evident the degree to which the system is organized around this risk, the risk of default inherent to a promissory note or IOU.

An IOU as the premise that facilitates a financial transaction, (the bridge between the abstract concept of value and the objective reality representation of value), has the effect of creating "incidents" that are unsettled. Part of the content of the experience/incident that is the result of a transaction that uses an IOU as its premise, is that the final settlement of the IOU is not contained within the transaction. Said another way, if someone has gold held by a goldsmith and he uses that promissory note in an exchange for a cow, the person who sold the cow is holding the promise of gold which is one transaction away from being settled for value. The seller of the cow may never redeem the promissory note for gold, but the value of the note is still connected to that transaction, even if it remains notional.

This is not inherently problematic, it is highlighted to illustrate

- 1. the potential complexity that comes with leverage since transactions become related to other, sometimes notional, transactions, and
- **2.** that the incidents that result from transactions that use a promissory note versus gold would necessarily be different incidents. And, it follows that different incidents in relationship would necessarily create a different story.

The money that money earns, earns money

- BEN FRANKLIN

The most powerful force in the universe is compound interest

— ALBERT EINSTEIN

INTEREST

It is common for most people to have heard a description of the power of interest. For the purposes of a revisit and/or reconsidered view on the power of interest, what follows is a consideration of two quotes in the context of the fictional moment where this goldsmith makes this choice to create promissory notes out of thin air and circulate them at interest.

Breaking down the Franklin quote in the context of the goldsmith story:

THE MONEY

in this case the claim that a person has on their gold,

THAT MONEY EARNS,

the interest changed by the goldsmith, which is money denominated in the same way; as a claim that a person has on their gold

EARNS MONEY.

the new money, the interest, is also denominated in the same form, a claims-check for gold held in storage.

From the perspective of the goldsmith's human choice, it makes good sense for the goldsmith to increase his impact and income with leverage, if it is possible to remain true to the underlying promises. That said, the more promises that are circulating against a true ability to fulfill them, the more the dynamic is focused on the "when", "how much", and "who" variables of the potential redemption; in other words, counterparty risk.

As IOU's first started to enter the system, the goldsmith noticed that people rarely redeemed their gold and that even more rare was an event when everyone came in at once. With more IOU's entering the system, the counterparty risk in the system increases and holders of the notes redeem more frequently, called a flight to quality. (Flight-to..,2017) If everyone comes at once, or word spreads that the goldsmith cannot redeem, the entire structure crashes, the story is no longer believed.

Further, since the interest on the issuance of new promises is denominated in promises, the delta between the promises and the ability to redeem them can grow at a logarithmic rate. As a result, attention is naturally focused on speculating around the measurable specifics of redemption. Stephen Green provides a present-day perspective that looks back at the foundational tenets of the system brought up in the story of the goldsmith; "I take a step back from the amazing array of mathematical energy, institutional resources, and technological weaponry currently deployed to manage risk and ask the question of how and why risk itself is constructed as the central coordinating social mechanism for financial actors." (Green, 2000)

The story of the promissory note being money is hinged upon its ability to be redeemed. Interest on the promise has the effect of adding risk to that notional redemption. If it can no longer be redeemed then the story is no longer effective in that people stop believing it. This is evidenced in currency crashes in the German Papiermark after the first World War, the Zimbabwean dollar in 1980, and the Argentine Peso in 1982. (Michael, 2010) This focus, on the measurable dynamics of the payback, is reflected in our current financial system and is not detrimental in and of itself, but perhaps conceals other potential focuses and aims of what the activity of finance could be about.

In chapter 6, this dynamic will be considered through the lens of personal value as an internal evaluation a person makes. The degree to which people are aware of, can fulfill, or can reconcile not fulfilling their own "promises" in our myriad relationships, contributes to personal belief structures around self-esteem. When those evaluations are low, they can be raised authentically or attempted to be fulfilled in the short term by making more promises. (Branden, 2013)

LEGAL TENDER

In the story of the goldsmith the value of the promissory notes was derived from 2 sources:

- **1.** the underlying gold was valuable and;
- **2.** that the holder of the note could trust getting their gold when they brought the note to the goldsmith. That their gold was available to them "on demand".

In the current system, there is no longer any gold in the equation. As a result, the currency's value is derived from the trust people have in its value to be realized on demand. Without the gold, what is left is the enforceable recourse related to its value. Said another way:

"Early private banknotes in Europe from the 1660s to the 19th century were promissory notes. The issuing bank promised the bearer to convert the note into silver coin anytime on demand. The banknote was a surrogate for the 'real thing' which was precious metal coin or gold bullion" (Huber, 2017)

With that in mind, it makes sense to consider the dynamics by which the "on demand" nature of promissory notes is enforced within the current system; through legal tender laws.

Legal tender is "..a medium of payment recognized by a legal system to be valid for meeting a financial obligation." ("Legal Tender", 2017). In the context of the goldsmith, legal tender would apply if the promissory notes he was writing were mandated by law to be accepted by merchants in the marketplace.

When a currency is legal tender, the legitimacy of the money is backed up by law. Ultimately, the acceptance of the laws of the land includes the acceptance of the currency (or currencies) that are denoted as legal tender. In the context of a transaction it means that the "this" side of the premise is backed by the force of law. Legal tender currencies obligate the creditor to accept the currency in question toward repayment of a debt. ("Legal Tender, 2013) While legal tender laws do not make illegal the use of other currencies in the jurisdiction, in the US there is a de facto prohibition on any gold or silver-based currency that poses a significant challenge to the dominance of the floating flat Federal Reserve "dollar." This could be through regulatory burdens, taxes, and many other forms of harassment. (Lewis, 2017)

The intent of legal tender laws is for the state to provide a system of currency that is fungible; useable in the widest range of transactions. Legal tender laws ensure that the dollar spent in Toronto can also be spent in Vancouver and St. John's. When the use of money is backed by the force of law, the value of a particular currency is widespread wherever the laws of the land are enforced. Legal tender laws also contribute to the reality that there remains a monopoly on the national currency issued by a nation. As well, a single government issued currency facilitates the collection of taxes and the tracking of criminal, and other, behaviour through individuals making transactions.

In part, it is the upholding and enforcement of legal tender laws that have essentially replaced gold as that which backs up the value of the currency. Legal tender currencies have value because they are obligated by law to be accepted. The objective reality representation of value is controlled to be consistent.

THE NARRATIVE ENTRENCHING CYCLE

Central to this study is the idea that the collective agreement that the ten-dollar bill is valuable is a story. That story is made up of the experiences that happen in the relationship that is the transaction. There is then a cyclical dynamic where using money, the common currency, as the premise entrenches the story that is the very source of the currency's value, and so on (See Figure 7).

Within this cyclical dynamic, monetized transactions become rituals by which the premise creates a new experience that entrenches the story.

The idea that there is a foundational myth that is influencing this narrative gesture to the fourth phase of the cycle where the story is ordered. What follows in chapters 4 and 5 is an explanation of the methods and outcomes of the of what underlies this narrative of money.

Chapter 4 describes the specific methods and steps taken in the study to answer the research question. Chapter 5 is an explanation of the outcomes of that analysis, specifically, two different journeys through the Causal Layered Analysis that attempt to unearth an articulation of the current foundation myth of the global financial system.

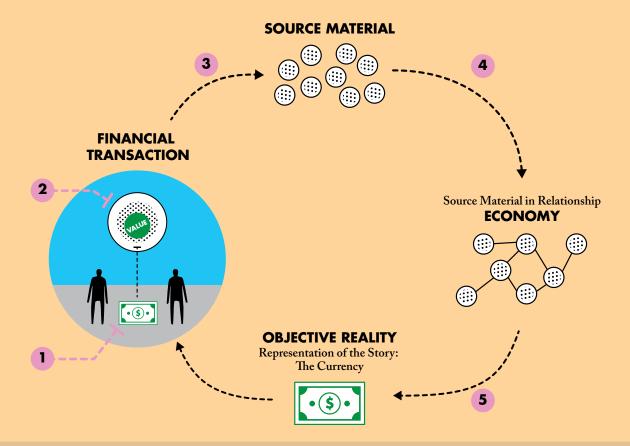


Figure 7 — THE NARRATIVE ENTRENCHING CYCLE

- The story of money, the articulation of the shared agreement that it has value, make it the default premise in transactions.
- The premise, neutral before its use and always negotiable, has an impact on the experience when used in relationship.
- Experiences all using the same premise give an element of uniformity to the source material incidents that when in relationship to each other, make up the story of money.
- **4** The incidents are ordered into a narrative.
- The currency or numbers in an account become the objective reality representation of the story; the premise

CHAPTER 4

Methodology

The research question framed money as a narrative and the methods used were in search of the source material of that story and the underlying foundational myth that was informing it. The methods themselves also fit into the study's definition of a story; incidents in relationship to each other. The methods chosen provided a to and fro between an emphasis on the incidents themselves (literature review, interviews, system modelling) and the degree to which there was an established structure for how to order those incidents into relationship (paper deck, CLA).

LITERATURE REVIEW

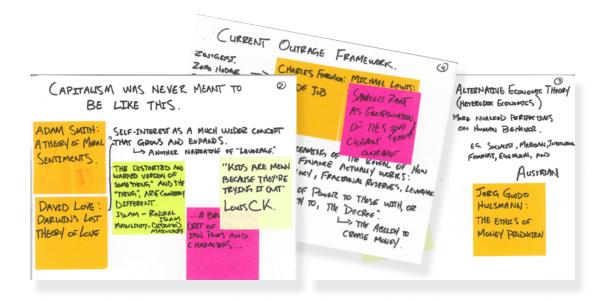
The literature review included a variety of diverse material from inside and outside the financial industry. As different concepts came up through the review, it was possible to see similar concepts coming up in completely different areas.

PAPER DECK

A "paper deck" was created with slides that brought together in an analog format, the interesting and resonant points of the initial literature review.

The paper deck used the first wave of the literature review as source material. What started to emerge were the beginnings of a narrative — resonant points juxtaposed against each other in relationship.

There was something productive about slowing down the process of creating a deck digitally that resonated with the material. Printing the words, cutting them out, arranging them on a page, pasting them into place brought a degree of deliberateness to the process. Then, the process of walking advisors through the deck page by page and laying them all out on a desk at the same time was an effective way to communicate an early iteration of the study.



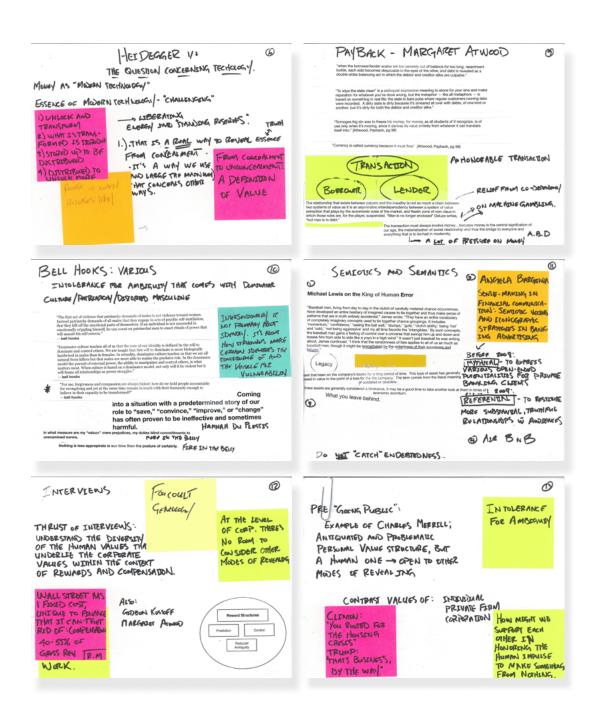


Figure 8 - THE PAPER DECK

CAUSAL LAYERED ANALYSIS OF FINANCIAL LANGUAGE

Causal Layered Analysis, or CLA for short, identifies the driving forces and worldviews underpinning diverse perspectives about the future ("Causal..", 2017). To go deeply into the underlying belief structures and foundational myths of finance and money, the CLA provided a structured route. The CLA provided a framework to reveal a route from what the system was manifesting in plain view, to what was perhaps concealed in the underlying belief structures and myths of that very system.

THE LITANY LEVEL — The litany level is described as the official unquestioned view of reality. (Inayatullah, 1990) It is observational, and includes events, trends, opinions, behaviours, media spin and public buzz.

"The litany level is the most visible and obvious, requiring few analytic capabilities. It is believed, rarely questioned." (Inayatullah, 1990)

THE SYSTEM LEVEL — Includes the scientific and social system analysis of what informs reality, this level excels at technical explanations as well as academic analysis. From the article, Causal Layered Analysis: Deepening the Future, Sohail Inayatullah the creator of the CLA model speaks to the system level of the CLA in these terms;

"While the data is often questioned, the language of questioning does not contest the paradigm in which the issue is framed. It remains obedient to it." (Inayatullah, 1990)

THE WORLDVIEW LAYER — Described as being concerned with structure and the discourse/worldview that supports and legitimates it. Again from Inayatullah's Causal Layered Analysis: Deepening the Future;

"At this stage, one can explore how different discourses (the economic, the religious, the cultural, for example) do more than cause or mediate the issue but constitute it: how the discourse we use to understand is complicit in our framing of the issue. (Inayatullah, 2005)

THE MYTH LEVEL — Described as the deep stories, the collective archetypes, the unconscious, often emotive, dimensions of the problem or paradox.

"This level provides a gut/emotional level experience to the worldview under inquiry." (Inayatullah, 2005)

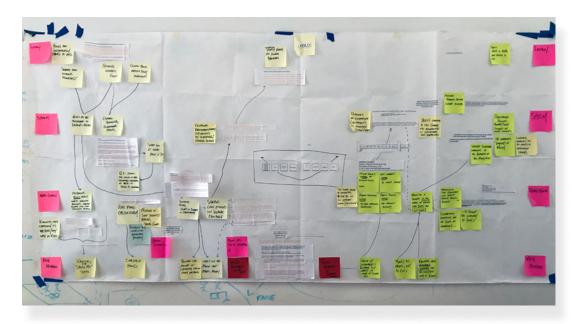


Figure 9 - PHOTO OF DEBT & YIELD CLA MAPPING

The depth of the integration of the story of money into everyday life made it difficult to get a perspective on money as a narrative with an underlying myth or belief structure; such is an outcome of very effective story (Harari, 2016). It is for that reason that words that are common within the financial industry, "yield" and "debt", were used to bring a degree of focus to the early phases. Considering how the words yield and debt were being used in the 4 different contexts of the CLA was a way to bring forward elements of the current story of money.

INTERVIEWS

I interviewed 4 subject matter experts about their jobs and in the context of the story of money:

- **1.** A lawyer at an Islamic Bank-Anonymous
- **2.** A Silicon Valley venture capitalist-Owen Ward
- **3.** A Harvard economics professor and venture capitalist-Anonymous
- The CEO of a Canadian Fintech startup-Michael Katchen

The findings were captured and integrated into the notes of the literature review as quotes or concepts, tagged by the established nomenclature.

How are societies created? There are dreams, those dreams become songs, those songs become myths, those myths are written and then they become laws. And so, society is based on myths.

ALEJANDRO JORODOSKY

SYSTEM MODELLING

The process of refining the narrative of the study included extensive system modelling, or storyboarding, that brought together ideas and insights to explore their coherence (or discord) when in relationship. These diagrams are included for a sense of this step of the process and are not necessarily meant to be read at this size.

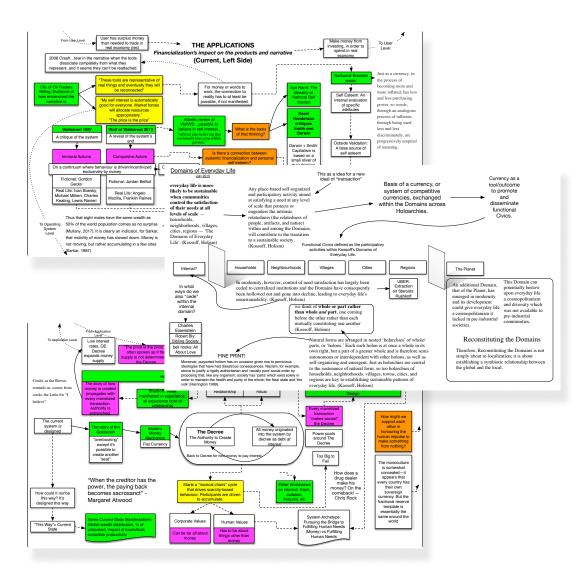


Figure 10 - SYSTEM MODELING

HYBRID CLA

In the literature review a reading of Douglas Rushkoff's "Throwing Rocks at the Google Bus" introduced the metaphor of the common currency system as an operating system within a computer. (Rushkoff, 2016) Rushkoff uses this premise to articulate aspects of the current financial system with a focus on the impact of a debt-based currency. He uses this model of the computer operating system to convey a monetary system running in the background of all other systems.

According to Rushkoff, the OS was "conceived during the period of colonialism, is extractive, and is in need of an upgrade". (Rushkoff, 2016) Without a "reboot" to shift and change the underlying operating system, the future would continue to manifest in the same form, (or even more pernicious forms) regardless of what new tools and technologies continue to arrive in the digital age.

He goes further and considers the expectations in the early years of the internet in contrast to the manifestation of those expectations. (Rushkoff, 2016) He uses Twitter as one example; a company whose product provides the ability to share 140 character messages with a connected community was an "abject failure" through the lens of the venture capitalist startup economy. Rushkoff writes:

"...only in the twisted logic of the startup economy could a company with around \$500 million of revenue per quarter—and more, most recently—be called a failure. That's half a billion dollars for a tiny application that simply lets people send out 140 characters to each other. The economic activity it has generated is nothing short of miraculous....But that's not enough for investors who expect to recoup 100 or even 1,000 times their original investment in the company...But becoming such a winner—even playing the startup game to begin with—condemns the founders of a company to chase growth above all else. That's the core command of the highly accelerated digital economy...For Twitter, this command means finding a way to grow a business that may already be full-grown." (Rushkoff, 2016)

Rushkoff makes a connection between the "core command" of "growth above all else" to what he refers to as the economic operating system, the "framework that still guides most of economic activity today." (Rushkoff, 2016)

Another angle on the pervasiveness of the core command is evidenced in how other issues are readily explained in the context of the prevailing story of money using market-friendly terms. Nancy Fraser describes this dynamic in the context of feminism:

"we see feminist ideas simplified, truncated, and reinterpreted in market-friendly terms, as for example, when we come to think of women's subordination in terms of discrimination that prevents talented women from rising to the top. Such thinking validates the entire hierarchical corporate imaginary. It legitimates a worldview that is fundamentally hostile to the interests of the majority of women, indeed of all people throughout the world. And this version of feminism provides an emancipatory veneer for neoliberal predation." (Fraser, 2016)

These examples, and others, provided a rationale to connect Rushkoff's OS with the CLA at the worldview level. Considering the current worldview of the system as an operating system allowed these features to be leveraged from Rushkoff's metaphor:

- It is running in the background, impacting everything.
- It is written or coded, and so can be re-written or re-coded.
- **3.** Its widespread use perhaps conceals other operating systems, or even the possibility of other operating systems.

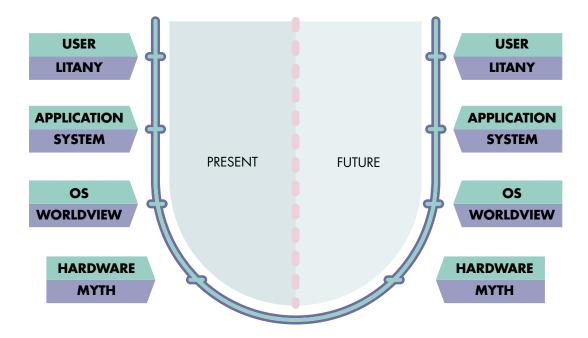


Figure 11 — HYBRID MODEL CLA — Combining CLA and Computer OS.

On the surface, the two models appeared to have conceptual connections. They were both 4 levels and those levels were built on top each other making the placement of the layer important, while at the same time not necessarily prioritizing the content of any given level or layer as more important than another. All levels have a role, and their placement is important since lower levels are foundational. Moving up and down layers is emphasized in the CLA to integrate analysis and synthesis (Inayatullah, 2005). The outcome of exploring both models was that the CLA was an effective tool in getting to the belief structure of the finance system and the OS model was effective in carrying forward Rushkoff's concept of global finance as OS; but also, that the models were not the same. The

HYBRID CLA

CLA model drives the analysis and pursuit of the underlying narrative, the OS model helps describe key features of running in the background, the possibility of re-authorship, and the concealment of other options in the widespread use.

Connecting the worldview level in the CLA to the OS level in a computer operating system allowed, from the CLA perspective, a way to frame a worldview as a kind of technology or tool; a software or algorithm. From the computer operating system perspective, the combination allowed for a framing of the OS as a practiced ideology, or a set of incidents designed in relationship to each other; a story.

Rushkoff's description describes the voracious extractive quality of a current system that does indeed seem to operate on a level seemingly outside of our collective control, embedded in our collective imaginations and as a result, concealed in plain sight as "the way of the world".

Stepping back, this view does provide a kind of explanation for the reality that 62 people in the world control 50% of the common currency. (White, 2016) It is the thrust and essence of the CLA model to attempt to reveal just such a worldview, with an eye on firstly understanding that it is just that; a worldview created by humans through the mechanisms that all fictional realities are built. From there, to understand the deeper myth level, the "hardware" that informs that worldview, and to also see how the system, the "applications", relate to that worldview, and finally the visible ways that it impacts the "user" on the litany level.

CHAPTER 5

Analysis

The analysis will be broken into two sections, both use the Causal Layered Analysis structure to understand how the various levels support, influence, and interact with each other and the foundational myth of the common currency.

The Hybrid CLA, a more elaborate analytical endeavor, will be described in the first section to give the reader a sense of the how the CLA was structured and used to organize data from the literary review, interviews, and system mapping towards insights. With a sense of how the model is and was used, the second section will describe the key insights of the Debt and Yield CLA analysis.

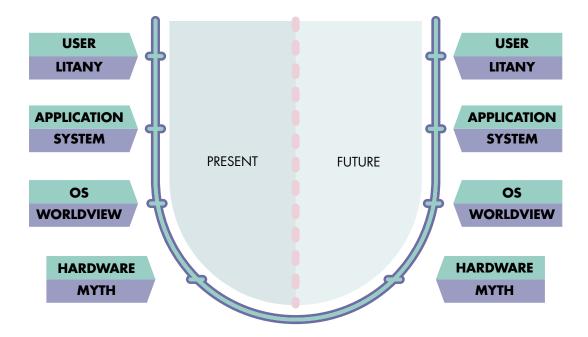
The issue is less what is the truth but how truth functions in particular policy settings, how truth is evoked, who evokes it, how it circulates, and who gains and loses by particular nominations of what is true, real and significant.

- INAYATULLAH, 2005

HYBRID CLA ANALYSIS

The chapter 4 description of the hybrid model provided a rationale for the combination of the CLA with the computer OS. This discussion of the hybrid CLA in this chapter is structured to provide:

- 1. a description of the specifics of the resultant meaning of each level in combination, and;
- an analysis of the findings at each level. The findings are structured to provide an observation or multiple observations, and then insights into the meanings of what was observed.



DESCRIPTION OF THE HYBRID LEVELS

Figure 12 is structured is to name the level in the hybrid model in terms of the computer operating system. So, each level in the hybrid model is labeled user, applications, operating system, and hardware. Then, each of those levels are described in terms of what activities, behaviours, participants, products, interactions, structures etc. would be included on this level as it applies to money, banking and finance. Finally, the corresponding CLA level is connected; user/litany, application/system, os/ worldview, and myth/hardware.

DESCRIPTION OF THE HYBRID LEVELS

APPLICATIONS SYSTEM

THE APPLICATIONS LEVEL

Describes the financial services within the global financial system. This level includes financial products and services, including currencies, mortgages and other loans, stocks, bonds, insurance, as well as each and any of these products as the roots of more exotic derivative products. The creation and exchange of these derivative products also occurs, in large part, at this level. This level also includes the institutions that are delivering these products and services, including banks, brokers, asset managers, markets, payment networks, insurers, and credit card companies (Kedrosky, 2015).

• This level associates to the **SYSTEM** or **SOCIAL CAUSATION LEVEL** of the CLA.

HARDWARE MYTH

THE HARDWARE LEVEL

Describes the foundational myth by which value and its pursuit is framed. It is at this level that the myth that precedes the story of money exists. The hardware level describes hard limits of the system in a similar way that the technological resources a desktop computer are hard limits to what an operating system can allocate to application for the purposes of providing functionality to the user.

• This level also associates to the MYTH LEVEL of the CLA.

Figure 12 - BREAKDOWN OF HYBRID CLA

USER LITANY

THE USER LEVEL

Describes the real economy level where people and institutions interact with real goods and services in exchange for financial products including currencies, mortgages, and loans.

• This level associates to the LITANY LEVEL of the CLA

OS

WORLDVIEW

THE OPERATING SYSTEM LEVEL

Describes the interconnected network of national banks, licensed or chartered banks connected to the central bank, national governments, corporations, and high wealth individuals that control and influence the issuance of currency and the management of large sums of money through monetary policy and financial regulation. The operating system describes the constellation of entities that are in relative degrees of proximity to the authority to issue currency. It is this level that contains the real-world dynamics of the essence communicated in the now-evolved story of the goldsmith, as well as other worldviews on money and monetary systems.

This level associates to the **WORLDVIEW LEVEL** of the CLA

It is at this level that the meaning from Rushkoff's metaphor becomes a worldview in the CLA

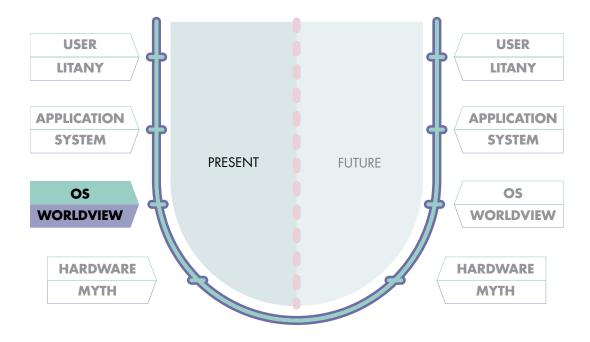
ANALYSIS OF FINDINGS AT EACH LEVEL

This analysis will begin at the os/worldview level on the left side of the model. The reason to start it at this 3rd level on the left side of the "U" is because this is where Ruskoff's metaphor exists in the model, as well as the dynamics outlined the opening conversation about the goldsmith.

After situating and expanding an analysis of that worldview within the model, the analysis will move up to the applications/system level to discuss the system's impact on financial services, and then to the user/litany level to consider some visible implications in the real economy. Then, an analysis at the myth level on this left side to consider what is perhaps underlying this predominant worldview in the current financial system.

LEFT SIDE | OPERATING SYSTEM LEVEL

This level describes the current, real world manifestation of what was gestured to in the story of the goldsmith. The operating system loans money into the system by decree, as debt at interest, backed by the code of laws of a nation.



LEFT SIDE | OPERATING SYSTEM LEVEL

This level also includes findings of three alternative value exchange systems that have existed and/or are emerging. The 3 examples show the establishing of a trust network through exchange where the dynamics around self-interest, reciprocity, and systemic integrity are approached in different ways than in a centrally controlled, debt-based currency system. These three examples existed and exist partially or wholly outside of a legal jurisdiction and have a story of what is valuable that does not necessarily condense into one specific premise or objective holder of value.



FINDING ONE

Money, in any fractional reserve banking system, is debt, loaned into the system at interest.

OBSERVATIONS

Fractional-reserve banking is the practice whereby a bank accepts deposits, makes loans or investments, and holds reserves equal to a fraction of its deposit liabilities. ("Fractionalreserve..", 2017) This is the central concept that is articulated when the goldsmith makes the decision to issue additional notes (loans) based on the gold (reserves) that he holds.

There are two types of money in a fractional-reserve banking system operating with a central bank:

CENTRAL BANK MONEY — Money created or adopted by the central bank regardless of its form - precious metals, commodity certificates, banknotes, coins, electronic money loaned to commercial banks, or anything else the central bank chooses as its form of money.

COMMERCIAL BANK MONEY — Demand deposits in the commercial banking system; also referred to as "chequebook money", "sight deposits" or simply "credit". (Huber, 2017)

Central bank money, or reserve currency, enters the system via the mechanism of issuance, the open market transaction. The open market transaction is essentially a central bank purchasing (or much less often, selling) government securities for the purposes of bringing new central bank money into the system. (Huber, 2017) This is the modern-day equivalent, although not exactly the same, as the goldsmith writing promissory notes.

Commercial bank money is created based on how much reserve currency a bank within a network of licensed (in Canada called, "chartered") banks, has. These banks have the authority to make loans of new commercial bank money while holding a fraction of reserve currency. It is a similar mechanism to the goldsmith except in a commercial bank, the central bank money essentially functions as gold would have. Included within the origination transaction of commercial bank money is the expectation of receiving interest on that "loan" that was created from nothing, based on a fractional amount of central bank money the commercial bank has. The interest is not included in the loan itself and must therefore be created by the same mechanism, which also expects interest for the loan, which again must be created by the same issuance mechanism. New money, whether central bank money or commercial bank money, at origination, owes money.

Former Deputy Governor of the Bank of Canada William White said; "Some decades ago, the academic literature would have emphasized the importance of the reserves supplied by the central bank to the banking system, and the implications (via the money multiplier) for the growth of money and credit. Today, it is more broadly understood that no industrial country conducts policy in this way under normal circumstances." ("Fractional-reserve..", 2017)

William White is gesturing to a shift not so much in the way currency is issued, but where in the system the mechanism exists with the most impact. Instead of the power largely collecting in the central bank and their ability to create new reserve currency which can be leveraged up and into commercial bank money by chartered banks within the system, the power now largely sits with the banking network. The banking network is not really constrained by a lack of central bank money reserves in their creation of commercial bank money. In fact, since the mid 90's, Canada has not had a reserve requirement that dictates to commercial banks how much central bank money they need to have. (Thomson & Neufeld, 2008)

The commercial bank is instead regulated more by capital requirements, also called "stress tests", which govern the ratio of equity to debt, recorded on the liabilities and equity side of a bank's balance sheet. Reserve requirements, less emphasized, govern the assets side of a bank's balance sheet-in particular, the proportion of its assets it must hold in cash or highly-liquid assets, otherwise known as central bank currency. ("Capital requirement", 2017)

Connecting this to the goldsmith, it simply means that the regulations around how much money he can create and loan out is impacted less by the amount of gold he holds, (reserve requirements) and more by how risky the loans he is making with his promissory notes (capital requirements).

Essentially, how much commercial banks can loan is governed by the measurable risk they are exposed to on the loans they have made, those loans denominated in the commercial bank money created as a fractional proportion of how much central bank money they have.

INSIGHTS

Whether the emphasis is on a central bank or a network of chartered banks, the mechanism of issuance remains the same and the central narrative, that money is debt at interest, is embedded within the origination transaction of effectively every national currency.

This dynamic means that the system is always short the interest, and therefore always beholden to the mechanism by which money is created. Centralized banking and legal tender laws ensure the issuance of currency, call it the origination narrative, is controlled by a relatively small number of people. With more power in the

LEFT SIDE | OPERATING SYSTEM LEVEL

network of affiliate banks than in the central banks, that number increases with a slight decentralization of the power to issue money, but it is still relatively small.

The outcome of this dynamic has made this currency the most widely used premise in almost any financial transaction that uses a national currency, the real-life manifestation of cycle of narrative entrenchment discussed earlier.

It is in these dynamics that quotes from those critical of the central banking system, some particularly sharp and damming (and old), start to resonate:

"I believe that banking institutions are more dangerous to our liberties than standing armies. If the American people ever allow private banks to control the issue of their currency, first by inflation, then by deflation, the banks and the corporations that will grow up around [the banks] will deprive the people of all property until their children wake-up homeless on the continent their fathers conquered. The issuing power should be taken from the banks and restored to the people, to whom it properly belongs."-THOMAS JEFFERSON

"I am a most unhappy man. I have unwittingly ruined my country. A great industrial nation is now controlled by its system of credit. We are no longer a government by free opinion, no longer a government by conviction and the vote of the majority, but a government by the opinion and duress of a small group of dominant men."-WOODROW WILSON

"The inability of the Colonialists to get power to issue their own money permanently out of the hands of George III and the international bankers was the prime reason for the revolutionary war." -BENJAMIN FRANKLIN

"Let me issue and control a nation's money, and I care not who writes the laws." - MAYER AMSCHEL ROTHSCHILD

"It is no coincidence that the century of total war coincided with the century of central banking."-RON PAUL

It makes sense that currency originating in that way, immediately owing, has become the primary way we measure value in the modern world; "the central signification of our age, the materialization of social relationship and thus the bridge to everyone and everything that is to be had in modernity." (Schull, 2015) If lack is the value at origin (although not the only value) held by the currency, how does that impact every transaction within which this kind of currency is included?

Scarcity and lack are ritualized into the system at the origination of the currency.

Considering the model that assumes that value manifests in a relationship, if the relationship is facilitated by a premise that holds lack as valuable, then it follows that the experiential outcomes in those transactional relationships, have a propensity to be influenced by that value, although not determinedly so. The proposition is, that when you use an IOU at interest, issued by a central authority, backed by a legal framework, as the premise in a transaction, you get an objective reality signifier that gives an abstracted concept of value in the imaginary that is married to an abstracted concept of scarcity.

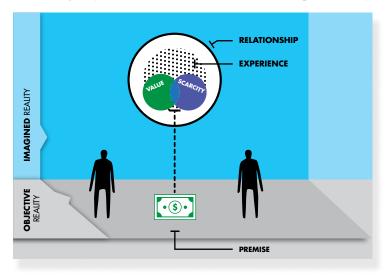
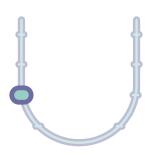


Figure 13 - SCARCITY & VALUE - An IOU at interest, issued exclusively by a central authority backed by a legal framework used as the premise in a transaction, results in an objective reality signifier that gives an abstracted concept of value in the imaginary that is married to an abstracted concept of scarcity.

It follows that there is a connection to the widespread belief in scarcity as a fact of life and the idea that the issuance of currency includes this very message as valuable at its inception. On the route to answering, "How might we get really rich?" is the question, "Is scarcity such a predominant component in economic dialogue because it has been designed to be valuable?"

To be clear, the idea that the myriad transactions using this (or any) kind of money is a ritual that makes more real the narrative of the current system, is not to dissuade or admonish the spending of money or the power of market forces. On the contrary, the degree to which the widespread belief in scarcity is so often held as a fact of life is a strong endorsement to the ability of market forces to spread the values held by money. It is to highlight the "wicked problem" of ongoing and expanding inequality and proposing a rationale to why that dynamic is entrenched to the point of being normalized at the level of a caricature. The idea of transaction as ritual also helps to consider a point of leverage to bring more consciousness to the abstracted concept of value that connects to the common currency towards the iterative shifting of the narrative one incident at a time.



FINDING TWO

The fractional reserve banking system is largely the same structure for the sovereign currency of any nation.

OBSERVATIONS

A central bank that is associated with the government of a nation issues money into the system as debt at interest is the template by which the common monetary system works around the world. There are variations from nation to nation with respect to the independence of the central bank to the policy structures of a nation, but in large part central banks are "institutionally designed to be independent from political interference." ("Central bank", 2017)

For example, in Canada, "The bank was chartered by and under the Bank of Canada Act on July 3, 1934, as a privately owned corporation. In 1938, the bank was legally designated a federal Crown corporation. The Minister of Finance holds the entire share capital issued by the bank. "The capital shall be divided into one hundred thousand shares of the par value of fifty dollars each, which shall be issued to the Minister to be held by the Minister on behalf of Her Majesty in right of Canada." ("Bank of Canada", 2017)

In the US, the central bank is the Federal Reserve. Although an instrument of the U.S. Government, the Federal Reserve System considers itself "an independent central bank because its monetary policy decisions do not have to be approved by the President or anyone else in the executive or legislative branches of government, it does not receive funding appropriated by the Congress, and the terms of the members of the Board of Governors span multiple presidential and congressional terms." ("Federal reserve..", 2017)

INSIGHTS

Any national currency, although varied through some policy differences nation to nation,

The homogeneity among human beings that is an effect of money is assumed by economics to be a cause.

— EISENSTEIN, 2011

is largely homogeneous in the way it is issued, and therefore, in its underlying premise. The fractional reserve system has a central bank that issues legal tender currency and requires a network of commercial banks throughout the country to hold those reserves in proportion to the amount of commercial bank money they issue into the real economy for non-bank entities. (Huber, 2017)

Charles Eisenstein describes the impact of money on transactions:

"Just as money homogenizes the things it touches, so also does it homogenize and depersonalize its users. It facilitates the kind of commercial exchange that is disembodied from all other relations. In other words, people become mere parties to a transaction. In contrast to the diverse motivations that characterize the giving and receiving of gifts, in a pure financial transaction we are all identical: we want the best deal. This homogeneity among human beings that is an effect of money is assumed by economics to be a cause. Where there is no standard of value, different humans want different things. When money is exchangeable for anything, then all people want the same thing: money." (Eisenstein, 2011)

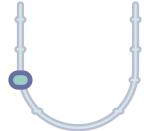
Eisenstein is critical of largely homogeneous currency but the striving for standardization obviously has a huge upside. In the case of money, the reliable acceptance of it across a nation, and its interchangeability in an international context is extremely valuable. That a person can access their money and that it is kept relatively safe is also a considerable value in the current system. Standardization can and does allow for accessibility and "ensures that the end-product has consistent quality and that any conclusions made are comparable with all other equivalent items in the same class." (Standardization, 2015)

What has interestingly emerged from the standardization of money from "the wide belief that societies must have a debt-based central currency on with interest is charged" (Lietaer and Belgin, 2011) is a striking and ongoing focus on comparison based on amounts of money. The comparison occurs at all levels of the model, from user to hardware, and as will be discussed at the myth level, is based on the narrative that scarcity is an objective reality fact and that each participant's gain or loss [of utility] is exactly balanced by the losses or gains [of the utility] of the other participants ("Zero-sum game", 2017)

LEFT SIDE | OPERATING SYSTEM LEVEL

These dynamics within the system are reflective of our individual values also. When our own personal evaluation of worth is based on this underlying scarcity myth, there is evidence and frameworks within psychology that explain how adhering to it results in depression and low self-esteem. (Branden, 2004)

We likely would not accept one kind of food in the world, although, on paper at the idea stage, it might seem to be very convenient. Similarly, we probably would not accept one language, although it would also seem to be convenient. In the context of the definition of story being "incidents in relationship" a diversity in both language and food would seem to allow access to different experiences, within different relationships and as a result, new values.



Examples of things that have immense value but that are not held that way in their non-monetized existence are numerous and range from things like the raising of children, to the value of an untouched forest, to less obvious things like navigating an amicable divorce. Although there are a lot of things that are valuable that are measured by money, there would seem to be a gap between what is of value and what is measured as valuable by the common currency system. It is in this gap that the future of finance is extremely exciting to consider.

FINDING THREE

There have been, and are, alternative systems of exchange that contrast with the current system.

OBSERVATIONS | BARTER

Barter is a system of exchange where goods or services are directly exchanged for other goods or services without using a medium of exchange, such as money (Barter, 2017).

In the barter transaction, the intrinsic value of that which is being traded is also the medium by which the value of the traded items is flowing. For example, when a cow is traded for a pig, the cow and pig are what is of value as well as what represents the value. Value is not abstracted and as a result, the transaction contains no intermediaries, is self-contained, and does not need to be recorded. There really is no separate and negotiated monetary premise required within the shared imaginations of the two parties involved in the exchange, although other signifiers like words and gestures are a part of the transaction.

The issue with barter is that it does not scale well, each transaction requiring fulfillment of the "dual coincidence of wants"; a scenario where one party needs to find another party who

wants what they have and has what they want. ("Coincidence of wants", 2017)

OBSERVATIONS | POTLATCH

A potlatch is a gift-giving feast practiced by indigenous peoples of the Pacific Northwest Coast of Canada and the United States, among whom it is traditionally the primary economic system. ("Potlatch", 2017)

The potlatch, from the Chinook word Patshatl, functioned to confer status and rank upon individuals, kin groups and clans, and to establish claims to names, powers and rights to hunting and fishing territories. Wealth in the form of utilitarian goods such as firearms, blankets, clothing, carved cedar boxes, canoes, food and prestige items such as slaves and coppers were accumulated by high-ranking individuals over time, sometimes years. These goods were later bestowed on invited guests as gifts by the host or even destroyed with great ceremony as a show of superior generosity, status and prestige over rivals. A great potlatch might last for several days and would involve feasting, spirit dances, singing and theatrical demonstrations. (Gadacz, 2017)

In addition to its economic redistributive and kinship functions, the potlatch maintained community solidarity and hierarchical relations within, and between, individual bands and nations. The federal banned the potlatch from 1884 to 1951 in an amendment to the Indian Act, ostensibly because of the treatment —seen as wasteful, reckless and anti-Christian — of personal property. (Gadacz, 2017)

OBSERVATIONS | SOU SOU

A sou sou is a savings arrangement where a group of people each pool an equal amount of money for a period (a month, two weeks, etc) and after that time is up, one person in the group gets all that money, also known as "the hand". The group keeps doing this until everyone in the group gets their turn and receives that full lump sum at least once.

Typically, the group determines a treasurer who collects the contributions and determines the payout schedule. The payout schedule is either arbitrary, or potentially negotiated by members in the group so members can request when they receive the hand during the cycle.

Sou sou originated in West Africa, and is practiced in many African and Caribbean countries. Somalis call the same basic system of rotating credit hagbad or ayuuto, in Jamaica, it is known as "partner" in Guyana, a "box hand", and Haitians refer to it as a "min". (Sou sou, 2017)

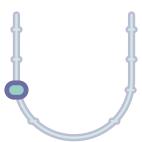
These and other similar peer to peer banking technologies are referred to as a rotating savings and credit association (ROSCA). ("Rotating..", 2017)

A sou sou is kind of forced savings based more on the shared trust of each member of the group contributing their share, and less on the enforcement of recourse in the case of default from other members. That said, there is an informal rule that the organizer is responsible for making up a participant's missed share.

A sou sou also operates outside of the prevailing financial system and is a way to bank money without interaction with a financial institution. One of the features of a ROSCA is that there is not much, if any, documentation. It originated in communities where having the money around would lead to it being spent, making it difficult to pool money for larger purchases.

INSIGHTS | BARTER

In the context of the dual coincidence of wants, money is an amazingly powerful technology that standardizes one side of every transaction enabling exchange much more easily and often. The cost of this convenience and the ability to scale and spread transactions that would not have otherwise been able to happen, is that any individual transaction is less "settled"; dependent upon the premise of the monetary intermediary. A barter transaction is wholly contained within the transaction itself in that the abstracted concept of value is represented in the actual objective reality goods that are being exchanged. When there is no monetary intermediary, the transaction is not related to any other transaction, notional or otherwise.



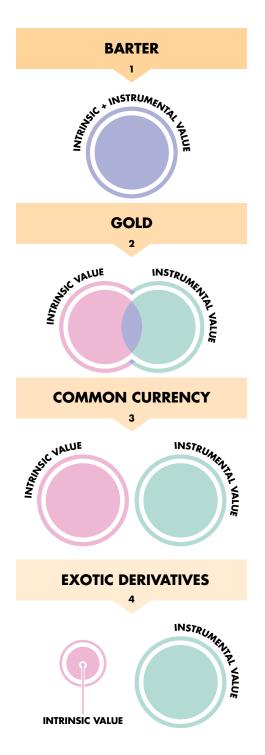
If, as mentioned earlier, the trajectory from gold to promissory notes brings an increased risk of default to the transaction, (counterparty risk) the notional movement of barter to gold also brings a similar increase in default risk—in exchange for the incredible scalability that comes with money. The barter transaction helps to articulate the incredible power of money to scale, as well as its risk of default. Barter brings up a comparison between language and money:

"Prior to the invention of language, if two proto-humans wished to communicate about an object then the physical presence of that object would have been required since no language existed to allow its discussion in the abstract. Analogously, prior to the invention of money, if two traders wished to make a transaction, then the physical presence of the goods was required. With the invention of language then the two participants could simply exchange abstract signs regardless of the presence, or otherwise, of the object under discussion. Similarly, with the invention of money, it became possible for traders simply, to exchange value rather than actual goods. Money, in essence, allows us to treat of wealth in the abstract." (Waller, 2012)

Figure 14 on page 50 depicts this trajectory. With language or money, objects or value can be referred to in the abstract. Chris Waller elegantly articulates the risk: "Money, while it offers us freedoms analogous to those of the spoken word, also permits us the financial equivalent of lying." (Waller, 2012) The more detached the instrumental value is from the transaction, the greater the distance back to a settled transaction.

INSIGHTS | POTLATCH

Charles Eisenstein uses the idea of a gift economy and compares with the current debt economy. He suggests that in a gift economy, there is an obligation to pay back, but describes the nature of the payback in a gift economy in this way: "I give to you freely and trust that I will receive what is appropriate from you or another in our gift circle" (Eisenstein, 2011).



This describes an expectation of reciprocity in the transaction or relationship, but it is a less specific obligation than one within the debt economy, bound by when, how much, and who.

Chris Gregory in his book "Gifts and Commodities" argued that "gift economies" and "market economies" operate as polar opposites, thereby implying that non-market exchange was always altruistic. (Gregory, 1982)

Other anthropologists, however, refused to see these different "exchange spheres" — a heuristic tool for analyzing trading restrictions within societies that are communally governed and where resources are communally available — as such polar opposites. In the Gender of the Gift, Marilyn Strathern, writing on a similar area in Papua New Guinea that Gregory researched, dismissed the utility of the opposition. (Strathern, 2010)

Minus the implication that non-market exchange was always altruistic, and that therefore one side is better or worse than the other, the continuum Gregory presents is still useful to understand commodity exchange and gift exchange as two distinct systems of exchange:

"Commodity exchange is an exchange of alienable objects between people who are in a state of reciprocal independence that establishes a quantitative relationship between the objects exchanged.

Gift exchange is an exchange of inalienable

Figure 14 — INTRINSIC & INSTRUMENTAL **VALUE** — When the instrumental value is separated out and represented by a monetary premise, there is an increase in the availability of transactions and a corresponding decrease in the degree to which any individual transaction is settled in and of itself. (Peter and Schaus, 2015)

objects between people who are in a state of reciprocal dependence that establishes a qualitative relationship between the transactors" ("Moka exchange", 2016)

Gregory contrasts gift and commodity exchange according to five criteria:

COMMODITY EXCHANGE	GIFT EXCHANGE
IMMEDIATE EXCHANGE	DELAYED EXCHANGE
ALIENABLE GOODS	INALIENABLE GOODS
ACTORS INDEPENDENT	ACTORS DEPENDENT
QUANTITATIVE RELATIONSHIP	QUALITATIVE RELATIONSHIP
BETWEEN OBJECTS	BETWEEN PEOPLE

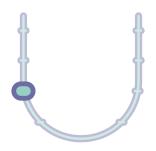


Table 1 — Comparing commodity exchange and gift exchange. (Gregory, 1982)

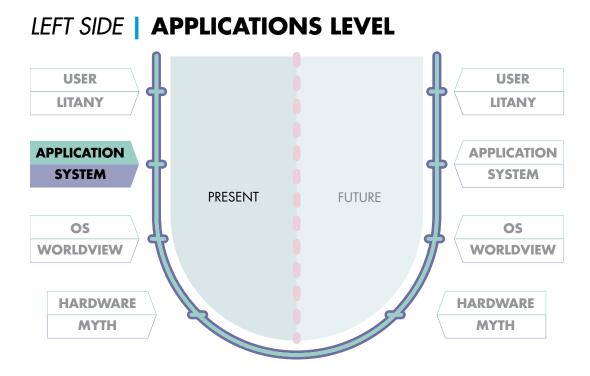
It is a feature of a debt-based money system that recourse for not being paid is the central focus. As a result, risk, is the central organizing concept of the current financial system. A debt contract essentially outlines what will happen if you do not get paid. As a result, a debt based system is naturally focused on the nuanced scenarios of not being paid back to manage and control against these eventualities. The greater the risk of not being paid back, the greater the return to be expected if, in fact, the payment happens.

Debt based currencies are a way to turn promises into commodities, which might be ideal in the markets for some, or even many, goods. When they are the predominant money, it follows that value itself is commoditized.

INSIGHTS | SOU SOU

As a sou sou runs its course what can emerge is a social network connected by the trust built by each member contributing consistently. Another feature that may be emergent is a community's shared knowledge of what each member is spending their "hand" on.

Through the lens of money as a story, the sou sou is an interesting structure. Something that informally happens in a sou sou, the exchange of the individual stories of what individuals purchased with their share, gestures to a powerful lever in the authorship of the story of money. The experience of spending the hand becomes a shared experience of the group and in this dynamic, the group has a specific set of cases of what money is actually "translating itself into". (Atwood, 2008).



On the application level of the model, the "this" and the "that" are increasingly abstract representations of money. Increasingly on this level, what money can "turn itself into" is more money. It is at this level where financial products are used for the purposes of transporting accumulated value from a position of lesser value to a position of greater value. If the OS level is roughly about central banking and the user level is about commercial banking, then the applications level is about investment banking. There is considerable overlap in this framing, but it serves as an overview.

What is compelling in the research is the exponential trajectory of growth, in terms of money, within the financial industry over the last 100 years, and most acutely in the last 20.

Over this time frame, there is increasingly a prioritized relationship between the applications level and the OS, and an increasingly deprioritized relationship between the applications level and the user/litany/real economy level. As the following analysis will illustrate, the representatives of the application level rationalize their activities with stories about free markets, price discovery, and the profit motive. The thrust of these narratives is that in the pursuit of individual self-interest within a market dynamic, real information is surfaced and rational actors can make decisions based on the best

information. The analysis reveals a discord when these stories are considered in relationship to the story of how money originates at the OS level. That said, the power of market dynamics are also revealed to be immensely powerful tools.



FINDING ONE

There has been increased financialization over the last 100 years.

OBSERVATIONS

What is financialization? According to Wikipedia, "Financialization describes an economic process by which exchange is facilitated through the intermediation of financial instruments. Financialization may permit real goods, services, and risks to be readily exchangeable for currency and thus make it easier for people to rationalize their assets and income flows." ("Financialization", 2017)

Greta Krippner of the University of Michigan writes that financialization refers to a "pattern of accumulation in which profit- making occurs increasingly through financial channels rather than through trade and commodity production." (Krippner, 2005)

John Evans and Pierre Habbard define it as, "The increasing dominance of the finance industry in the sum total of economic activity, of financial controllers in the management of corporations, of financial assets among total assets, of marketised securities and particularly equities among financial assets, of the stock market as a market for corporate control in determining corporate strategies, and of fluctuations in the stock market as a determinant of business cycles" (Evans and Habbard, 2008)

All of these definitions point to a measurable increase in the amount of total GDP that the financial services industry accounts for. In 1950, financial services in the US accounted for 2.8% of the total GDP, in 1980 it was 4.9% and in 2006 it was 8.3%. (Greenwood and Sharfstein, 2012)

While the size of the financial industry has increased, as measured in dollars, over a similar timeline, the purchasing power of the US dollar has lost nearly 96% of its purchasing power. (Durden, 2013)

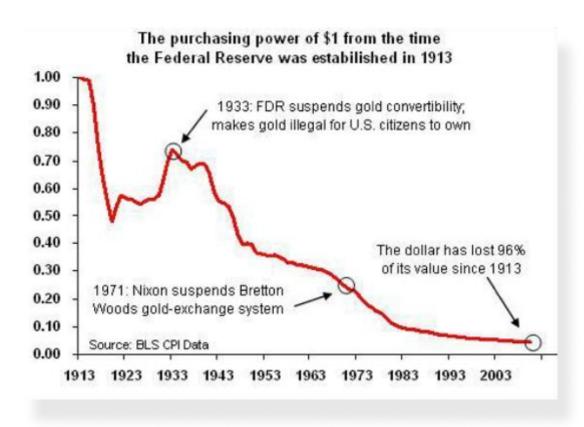


Figure 15 - PURCHASING POWER OF US DOLLAR SINCE 1913 - The purchasing power of \$1 from the time the Federal Reserve was established in 1913. (Durden, 2013)

INSIGHTS

With an increase in financialization, more money has flowed into this sector and there has been a corresponding increase in the degree to which money is controlled by a decreasing number of interlocking people and entities. It is clearly an indicator, for Sarkar, that mobility of money has slowed down. Money is not moving, but rather accumulating in a few sites (Sarkar, 1987) Thus that eight males have the same wealth as 50% of the world population comes as no surprise (Mullany, 2017).

At the same time, the US dollar has lost most of its purchasing power. The power to issue currency, as it has become more and more centralized, has issued currency with fewer and fewer natural constraints.

It also means money flows in huge swathes into ideas, businesses, and technologies that have huge growth potential; there have been incredible innovations over this timeframe. Exponential growth within the venture capital paradigm is more and more the expectation. The upside is that ideas with potential are capitalized and manifest more quickly.

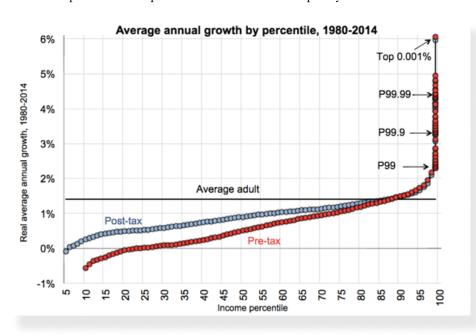




Figure 16 - DISTRIBUTION OF ECONOMIC GROWTH BY INCOME PERCENTILE This chart describes the degree to which the economic growth has been taken by those who already have the most money. (Piketty, Saez and Zucman, 2016)

FINDING TWO

Glass-Steagall regulation of 1933 (separation of commercial and investment banks) ends with Clinton in 1999. There is a subsequent expansion of financial derivatives.

OBSERVATIONS

Glass-Steagall describes 4 provisions of the US banking act of 1933 separating commercial and investment banking. The separation of commercial and investment banking prevented securities firms and investment banks from taking deposits, and commercial Federal Reserve member banks from:

- dealing in non-governmental securities for customers
- investing in non-investment grade securities for themselves
- underwriting or distributing non-governmental securities
- affiliating (or sharing employees) with companies involved in such activities ("Glass-Steagall.", 2017)

Glass-Steagall was effectively repealed through the process of merging Citibank, a commercial bank, and Solomon Smith Barney, an investment bank in 1998-1999, and was "the culmination of a \$300 million lobbying effort by the banking and financial-services industries, spearheaded in Congress by Senator Phil Gramm." (Stiglitz, 2015)

The separation of commercial banks from investment banks that Glass-Steagall regulation provided, meant that clientele for investment banks would necessarily be people with savings. After the repeal, the clients of investment banks could be the commercial banks themselves. What is revealed is a very alluring, arguably impossible to resist, opportunity for commercial banks to invest their holdings in riskier investment bank instruments to generate greater returns. On the investment bank side, what is revealed is a trend for the development of more and more risky and derivative financial instruments.

OBSERVATIONS | **DERIVATIVE PRODUCTS**

Through one lens any currency or financial product is a derivative; it derives its value from a shared agreement that it has value. The difference with a financial derivative is that it derives its value from another financial product. The definition is a contract between two or more parties whose value is based on an agreed-upon underlying financial asset, index, or security. ("Derivative", 2017)

The arguments made for the expansion of more and more derivative or "exotic" financial instruments largely land with the sentiment that they are effective tools, but like all tools, it depends on who is using them and the reason why. ("The Great Untangling", 2008) The function of the derivative financial instrument is to enable capital to flow (or retreat) with greater degrees of refinement, into (or from) any place that the capital owner is willing to assume the risk of not getting it back; again, counterparty risk. The argument of a derivative product (or really, any financial instrument) as a neutral tool is well encapsulated in the following quote:

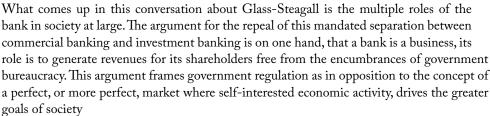
"Derivatives are simply another financial and managerial tool which financiers and managers need to use properly. True, some of those instruments are too powerful for inexperienced or unsupervised hands. Their innards can sometimes be complicated. But then the same could be said for the motor car, and few people would advance that as an argument for more traffic lights." (Tickell, 2000)

In the context of the goldsmith story, the "complicated innards" of a financial instrument like a derivative mean an expansion of the dynamic described above, where settlement is not wholly contained within a transaction. A promissory note is one transaction away from the underlying gold and brings counterparty risk to the transaction using it as money, in contrast to using the gold itself. Using a derivative product in a transaction can mean the underlying value can be multiple transactions away which can increase the

LEFT SIDE | APPLICATIONS LEVEL

counterparty risk, the risk that all related transactions will be honoured. This is the cost of the "power" outlined in the above quote; the power of leverage is costed in an increased counterparty risk.

INSIGHTS

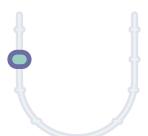


On the other hand, this conversation also brings the function of a bank into the realm of government. Financial lobbyists frame the repeal as a policy that attempts to enable capital to more easily flow into the projects and outcomes that society expresses its desire for through market forces. The point is that the banking industry is not well-defined as either a private sector business function or a public sector government function and in that lack of clarity, the industry understandably assumes the role of either to further an agenda of growth in terms of money. What happened in tangible terms in the eroding and eventual repeal of a policy that separates commercial and investment banking, is a corresponding doubling in financial services as a percentage of total GDP over the same period. (Greenwood and Scharfstein, 2012) The issue is that GDP measures growth in terms of money and not in terms of value. In the context of the chapter 2 model, it prioritizes the objective level of the transaction and deprioritizes the imagined level of the transaction where the abstracted concept of value exists.

INSIGHTS | GLASS-STEAGALL IN PRACTICE

What resulted on the user level used in the 50's and 60's after the 1933 legislation was imposed, roughly, was people would save money they earned in a commercial bank. They might save enough to get a mortgage, traditionally the exclusive realm of the commercial (or community) bank. If the customer had additional savings after they paid their monthly mortgage, they might consider investing into the stock or commercial bond market in search of greater return. This choice to invest, after the passing of Glass-Steagall, meant that it was a different and unrelated entity, an investment bank, that would invest the client's money into instruments like stocks, bonds, mutual funds, etc. Among other factors, the legislation meant that the commercial bank was not connected to the riskier investments, and more importantly, that investment banks were not tied into the fractional reserve central banking system. The counterparty risk stayed in the realm of investment banking.

Within central banking, one of the functions of the central bank is to serve as the "lender



of last resort". ("Lender of..", 2015) The function is to serve as a backstop against the systemic failure of banks in the event that too many people came into to claim their money at once; "a run on the bank" or "contagion". The central bank had the authority to flow new money into the system, (via the same mechanism outlined in the story of the goldsmith), to avoid the failure of a local bank and to stop the cascading spread of bank failures that could wreak havoc on the banking network and the functions they provided.

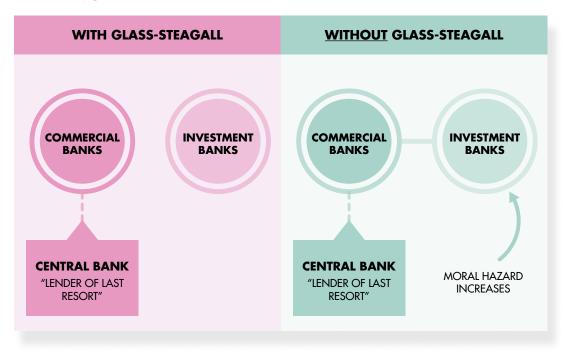


Figure 17 - IMPACT OF GLASS-STEAGALL - Commercial banks are connected to the central bank and the "lender of last resort" benefit of being bailed out in the face of a potential collapse. When commercial banks merge with investment banks, the combined entity is backed up by the lender of last resort, increasing the investment bank's tolerance for risk.

Without Glass-Steagall, (or some other agreement or cultural norm that separates these 2 kinds of banking) the "lender of last resort" backs up the merged entity that contains all banking functions, both commercial and investment. When the investment bank functions are backed up against failure by the central bank, there is necessarily a different framing around risk-taking by these entities. There is a correlation between the expansion of more and more exotic derivative products, like Collateralized Debt Obligations, and the end of Glass-Steagall in 1999. In fact the US derivatives market in 2011 was worth over 10 times the US GDP. ("Is the Dollar..", 2016)

This phenomenon, of the "lender of last resort" security afforded to the combined entities in the banking system by the central bank, was evidenced in the 2008 crash where the "too big to fail" banks

LEFT SIDE | APPLICATIONS LEVEL

were bailed out. There is a relative consensus that not bailing out the banks at that time would have caused a systemic failure of the banking system. The degree to which this is true is not necessarily because of their size per se, but instead because these "too big to fail" entities contained within them the essential functions of a commercial banking system along with so many other investment banking functions that are perhaps not as central to society. If the entire entity failed, then indeed, it would have impacted the commercial banking infrastructure that many people depend upon in their everyday lives.



The paradox is that the investment banking functions and products are based upon the commercial banking functions. When the two are combined, there is very strong evidence in Figure 18 showing the expansion of derivative products, as well as the exponential growth in financial services in general, that shows that the focus of the entire industry shifts very quickly to prioritizing money with a diminishing regard for outcomes.

INSIGHTS | DERIVATIVE EXPANSION IN TERMS OF A STORY

Investment banks connected to the "lender of last resort" benefits increase the moral hazard; "when one party in a transaction has the opportunity to assume additional risks that negatively affect the other party" ("Moral Hazard", 2017). As a result, financial products have become more and more "exotic" ("Exotic Derivatives", 2017) which, in the context a story, means that premise upon which the product is based (this house is that mortgage), becomes more and more detached from the investment instrument. As that distance increases, two things happen;

- 1. An alternative story expands. The "rogue" story is less and less beholden to the base premise and expands by using experiences/incidents born of transactions in the unhinged story as new premises in a speculative cycle. And;
- 2. In that expansion, the emerging story becomes at once more and more dependent upon the base premise, and more and more a completely different story with different values, driving different motivations and behaviours; a different reality. The first story is about people owning houses today in exchange for a promise to pay it off in installments, while the emerging story is mostly about leveraging the abstracted value of the house to make more money. When the expanded alternative fictional story snaps back to the objective reality; there is a crash that impacts all subsequent transactions using the common currency as a premise, to varying degrees.

The insight from this dynamic is that an alternative story can emerge through the experience, relationship, premise dynamics of the model outlined in chapter 2. In this case, it was an undesirable story that emerged, but perhaps with intention these dynamics could also be Like gods of old, we will live with clean hands in the realm of pure abstractions.

- KEEN, 1992

a route to develop a more desirable abstract concept of value that associates to the objective reality signifier.

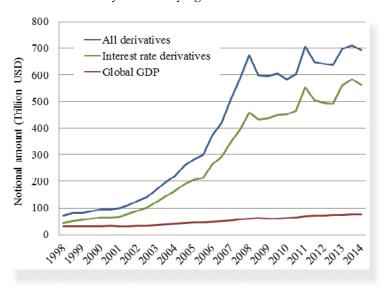


Figure 18 - GROWTH OF GLOBAL DERIVATIVE MARKET **SINCE 1998** — Globally, the notional value of all derivatives is over 7 times the value the world's economic output, as measured by GDP. (Vuillemey, 2015)

INSIGHTS | EFFICIENT MARKETS THEORY

The case for commercial and investment bank mergers, and it continues with fervor today (Dayen, 2017), is based on the efficient markets theory or other similar theories about free markets. The theory states "that an asset's prices fully reflect all available information", and that "it is impossible to "beat the market" because market-efficiency causes existing prices to always incorporate and reflect all relevant information ("Efficient-market", 2017). Although this definition is about the stock market, this worldview is pervasive and assumes that price, measured in money, holds all available information about the asset in question (stocks, houses, businesses, wages etc), and further, that all people act rationally based on the perfect information that price provides. ("Rational choice theory", 2017)

First, it is worth stating that is the view of this study that markets are incredibly powerful and useful engines for leveraging collective resources to efficiently accomplish defined tasks. That said, the story that is the EMT is based on a shaky foundation. Financial assets, including currencies, are according to the EMT, the vessels or registers that carry the perfect information upon which the entire theory is based. However, as has been illustrated from the beginning of this paper, the market for money in the current system is an overtly controlled market. The price of money, the interest, is fixed by a central authority, its value much more determined by the decree of the central bank and the creation of money by a network of banks, and much less by being "discovered" by the wants and needs of the market.



Essentially, the efficient markets theory states that the market will surface the true value of something through unencumbered market forces, and that true value articulated in its price. ("Price discovery", 2017) At the same time, the market for money is completely encumbered, its price determined by the opposite of market economy; a planned economic model or a monopoly. The Efficient Markets Theory is largely incoherent in the context of how the price of money itself is derived.

And so, the argument for commercial and investment banks to merge together is essentially one about removing the government barriers that stop the efficient operation of the market towards the discovery of the true value as everyone pursues their self-interest in the context of price only. What is not communicated is that these kinds of mergers increase even further the degree to which the market for money is increasingly centralized and planned.

The reason the theory is compelling and is widely believed--an effective story--is because markets, in their myriad transactional relationships do, in fact, reveal what is valuable within the context of that specific market. What is problematic is that the story of market efficiency is based on a deeply entrenched premise that this most widely used money, and the process by which it is issued, is a holder of perfect information. In fact, the very process by which money is created appears to be in direct opposition to the idea of a free market

FINDING THREE

Wall Street to The Wolf of Wall Street—the culture of greed in the financial industry, and the media representation of it, are shifting.

OBSERVATIONS

There is a shift in the way the system is critiqued over the time frame of these two films, Wall Street in 1987 and The Wolf of Wall Street in 2013.

A way to concretize the delta between these two points in the history of the financial industry is in looking at the reviews of these films. Roger Ebert writes these words in his review of the movie, dated December 11, 1987:

"Although Gekko's law-breaking would of course be opposed by most people on Wall Street, his larger value system would be applauded. The trick is to make his kind of money without breaking the law. Financiers who can do that, such as Donald Trump, are mentioned as possible presidential candidates, and in his autobiography Trump states, quite simply, that money no longer interests him very much. He is more motivated by the challenge of a deal and by the desire to win. His frankness is refreshing, but the key to reading that statement is to see that it considers only money, on the one hand, and winning, on the other. No mention is made about creating goods and services, to manufacturing things, to investing in a physical plant, to contributing to the infrastructure." (Ebert, 1987)

In contrast, consider this excerpt of the 2014 review in The Atlantic on The Wolf of Wall Street:

"One can accept the guiding conceit of neoclassical economics-that people pursuing their private interests generally provide for greater development than a centrally planned economy — without also believing that we benefit from any selfish pursuit. Indeed, it is hard to imagine a belief more convenient or morally corrosive, for it not only justifies any bad behaviour, however ugly, duplicitous, or cruel, it suggests the victims should be grateful for the harm done them. (Rollert, 2014)

INSIGHTS

The difference between these two films shows an increasing intensity to the adherence to the "core command"; growth, measured in money, as the priority, the way to win the game (Rushkoff, 2016). While Gordon Gekko made a speech in Wall Street that "greed is good", the point is that it was plausible that he had to convince people that it was true. The decision for that character to speak those words is framed in the film as risky to have said aloud, even if many people considered it true.

In The Wolf of Wall Street, there is no questioning of the core command for the main characters within the narrative itself. The main characters, till the end and beyond into real life, continue to play the game that is framed by the core command. There is a direct connection, within the characters, between the narrative of individual self-interest at any cost to the community or platform, and the narrative of freedom. These characters are not questioning the rules at all, just playing the game and dealing with any internal friction with a variety of numbing behaviours. The ideas that the Gordon Gekko character espoused in Wall Street have been ingested as the truth and operationalized in The Wolf of Wall Street.

In the first review, the prioritization of money, profits, and most interestingly, the adrenaline that

LEFT SIDE | APPLICATIONS LEVEL

comes with the win, seems to be manifesting as the template for a Donald Trump presidency. The Ebert review is critical of the system, but really focuses on individuals, in this case, Donald Trump as a comparative example. The critique of the system exists in the interaction between the characters and what they each believe; the critique is contained within the film.



The second review, while it includes a similar kind of critique to the current system, strikes at a more fundamental and foundational level, focusing on the system itself versus emphasizing any actor within it. In doing so, the review suggests the film has an effect of implicating the audience in the truths that the characters hold. As an audience member, what started as safely enjoying a story that contained a distanced critique, shifted as it became clear these characters were not on the typical Hollywood narrative of self-discovery and redemption. They struck me, the audience, more as junkies trapped in an enabled addictive loop and less as greedy immoral actors who knew the truth but were cleverly avoiding it as part of the game.

The film and the review call into question the underlying "core command" of the system and while neither excuses the behaviour of those following "the rules", the criticism is more focused on a specific core principle of the system itself; that self-interest is always and necessarily connected to the greater good. The profit motive will, eventually, lead to the correct allocation of resources to the right places, evening out inequality in the long run, says the core command. The characters in the Wolf of Wall Street are no longer making the impassioned speech that Gordon Gekko did in 1987 when he said, "greed is good"; they have ingested the premise, made it belief, and are living it without question as the way of the world.

Whereas Wall Street's Gordon Gekko is a scoundrel, Wolf of Wall Street's Jordan Belfort is an addict. With that shift, the approach for change would also be different, perhaps like considering drug abuse as a public health issue instead of a criminal justice issue.

INSIGHTS | ADDICTIVE FINANCIAL BEHAVIOUR IN REAL LIFE

Consider this exchange from Franklin Raines, the former chairman and chief executive officer of the Federal National Mortgage Association and according to Time Magazine, one of the 25 people to blame for the 2008 financial crisis ("25 People to Blame".., 2009):

"[Raines:] Investment banking is a business that's so denominated in dollars that the temptations are great, so you have to have very strong rules. My experience is where there is a oneto-one relation between if I do X, money will hit my pocket, you tend to see people doing X a lot. You've got to be very careful about that. Don't just say: "If you hit this revenue number, your bonus is going to be this." It sets up an incentive that's overwhelming. You wave enough money in front of people, and good people will do bad things."

The moral achievement of The Wolf of Wall Street is not that it shows Belfort to be wrong-it doesn't-rather that it asks the audience: What does it say about us if he's right?

- ROLLERT, 2014

Unfortunately, Raines' insights stemmed from his implementation of just such a system.

Raines knew that the unit that should have been most resistant to this "overwhelming" financial incentive, Fannie Mae's Internal Audit department, had succumbed to it. Mr. Rajappa, its head, instructed his internal auditors in a formal address in 2000 (and provided the text to Raines, who praised it):

"By now every one of you must have 6.46 [the earnings per share target] branded in your brains. You must be able to say it in your sleep, you must be able to recite it forwards and backwards, you must have a raging fire in your belly that burns away all doubts, you must live, breath and dream 6.46, you must be obsessed on 6.46.... After all, thanks to Frank [Raines], we all have a lot of money riding on it.... We must do this with a fiery determination, not on some days, not on most days but day in and day out, give it your best, not 50%, not 75%, not 100%, but 150%. Remember, Frank has given us an opportunity to earn not just our salaries, benefits, raises, ESPP, but substantially over and above if we make 6.46. So it is our moral obligation to give well above our 100% and if we do this, we would have made tangible contributions to Frank's goals [emphasis in original]." (Black, 2008)

How might we deal with examples like this one, and the myriad others like it, in the pursuit of answering how we might get really rich? When the hypocrisy is as overt as it is in this example, it is a relatively straightforward task to call it out and suggest admonishment, even if nothing much is done. It also highlights the alternative prioritization of empathy when considering next steps towards a solution model. What does it mean to really bring empathy to these issues, without excusing the bad behaviour? This quote from bell hooks comes to mind:

"For me, forgiveness and compassion are always linked: how do we hold people accountable for wrongdoing and yet at the same time remain in touch with their humanity enough to believe in their capacity to be transformed?" (hooks, 2005)

And from Houssam Hamade, another way to express this sentiment:

"I don't find the concept of the 99 per cent satisfactory. Not all rich people are evil nor are all poor people good. And the problem lies not only in the personal misbehavior of the elites but in the structure of the capitalist system. (Fraser and Hamade, 2017)"

And, finally, from Charles Eisenstein a wider example that includes the financial arena:

"The acute trauma endured by the incarcerated, the abused, the raped, the trafficked, the starved, the murdered, and the dispossessed does not exempt the perpetrators. They feel it in mirror image, adding damage to their souls atop the damage that compels them to violence. Thus it is that suicide is the leading cause of death in the U.S. military. Thus it is that addiction is rampant among the police. Thus it is that depression is epidemic in the upper middle class. We are all in this together." (Eisenstein, 2016)

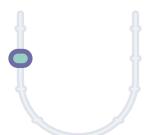
It is in the framing of these kinds of outcomes as opportunities for empathy with boundaries that inform the chapter 6 exploration of self-esteem.



Framing the issue of malfeasance at the application level in the context of addiction as opposed to moral failure, reframes the system-wide solution model from a perspective of criminal justice to one of public health. That reframing suggests a route to a financial services layer informed by diverse human values as opposed to narrow corporate values. The contrast between the two is on an individual level, no matter how much a person has prioritized money and the pursuit of it as important, as a human with objective reality needs like food, shelter, and connection, there necessarily must be something else layered into the individual narrative of "what's valuable to me". From the perspective of a corporation, it can be only money that is valued. It is not the position of this paper that corporations holding profit as a primarily value is inherently problematic. The point is that there must be a delineation between human values and corporate values in the context of the story of money.

Human values are necessarily different because humans exist in objective reality, and corporations exist nowhere except in the imaginations of people. (Harari, 2014) While money is a bridge to provide for human values, there is a point where the pursuit of the bridge can crowd out the pursuit of the actual needs. In the context of self-esteem, there is a similar dynamic where humans that consistently pursue outside validation, through money or other means, reach a point where their self-esteem, their evaluation of their fitness to exist, is so low that they switch to real sources and raise that evaluation, or they risk ceasing to exist. (Branden, 2013)

These dynamics of addiction will continue in the chapter 6 discussion of self-esteem and outside validation, and will provide a platform for a proposed solution model within the financial transaction.



LEFT SIDE | USER LEVEL **USER USER** LITANY LITANY **APPLICATION APPLICATION SYSTEM SYSTEM PRESENT FUTURE** OS OS WORLDVIEW **WORLDVIEW HARDWARE HARDWARE MYTH MYTH**

This level tells the story of how people use financial technologies, including currency, to trade for the real goods and services they need and prefer in their lives. It could also be referred to as the real economy level. This level is composed of people, as customers or end users, and the transactional relationships they make to fulfill their needs. At this litany level of finance, money is not really questioned in terms of why it is valuable, it is commonly accepted that it is and the unquestioning has value in and of itself.

This level is the final leg where the value, once abstracted into financial instrumentation, is exchanged for real goods like food, shelter, movies, blenders, conveyor belts, cars, etc. It is also the level where the underlying value of financial products are ultimately sourced. Again, Margaret Atwood encapsulates this point in her quote about money's value being derived from what it can turn itself into; this is the level where that happens. (Atwood, 2008)

This level is where the abstract value of money is made concrete, but it is also the site of the concrete value that will be abstracted into money and other financial products. It is at this level where the "religion finding moment" occurs (Santelli, 2008). Where the value, once abstracted, is concretized and the promises made are realized and fulfilled. For example, an oil futures contract is an abstraction of the actual barrel of oil that is promised to be delivered at this, the user/litany level.

With respect to the story of the goldsmith, the "religion finding moment" for a promissory note is when it is brought to the goldsmith and the gold it represents is claimed. As was illustrated in that story, over time, those notes got "new religion" per se, since what they were exchanged for in transaction was increasingly not gold, but other things of value.

In terms of Harari's point of view on fictional and objective realities, the user level is where it is possible to see how these realities connect. The story of "this" (objective reality) being "that" (fictional reality), reconciles back to "this" being "this" at the litany level of the model.



At this level, everyone participates in the dominant system or is impacted by participating in an alternative system. The objective reality is the only territory where a certain set of essential human needs can be fulfilled. It is within this level of the model where the fictional story of money interacts with the objective reality that contains physical human needs. Regardless of how much or little money any one individual has in this system, or whether any individual exists outside of this system, a set of objective needs like food, shelter, water, must be fulfilled for people to live. Although obvious, it is worth stating that it is not possible to eat or drink a dollar bill, and it is at this level of the model where currency derives its value from the myriad monetized transactions for goods, each one containing an implicit or overt negotiation of the premise.

FINDING ONE

Consumer Debt is increasing in US, Canada and the world, and there's a consistency to the way that story is told.

OBSERVATIONS

Consumer debt is defined as "debts that are owed as a result of purchasing goods that are consumable and/or do not appreciate." ("Consumer debt", 2008) In economics, it is described as a debt that is used to fund consumption rather than investment. ("Consumer debt", 2017)

Statistics Canada said the amount of household credit market debt rose to 167.3 per cent of adjusted household disposable income in the fourth quarter [of 2016], up from 166.8 per cent in the third quarter. That means there was \$1.67 in credit market debt for every dollar of adjusted household disposable income. (Wong, 2017)

In Germany, the amount is 82.78% and the European area average is 96.57%. Although those numbers are considerably lower than Canada and the US, it still means that on average, there is 83 cents in credit for every dollar of adjusted household disposable income. The Netherlands and Denmark have debt to income ratios of 214.45% and 265.11% respectively. (Martin, 2016)

When the borrower and lender scales are too severely out of balance for too long, resentment builds, each side becomes despicable in the eyes of the other, and debt is revealed as a double-sides balancing act in which the debtor and creditor alike are culpable.

— ATWOOD, 2008

What is more interesting than the levels themselves is the way the conversation is framed on this headline level. In nearly every place where these statistics can be found, either on the internet, in a magazine or book, a high ratio of debt to household income is framed up as very worrisome and problematic. In contexts where multiple credit to income levels are being compared, those with the highest levels are seen to be in the most precarious position, while those with the lowest amount of consumer debt are widely framed as being better off, more secure in the face of what seems to be an inevitable confrontation.

An article in MacLean's from April 2017 states that "These levels are up 23% from a decade ago, and on par with what the US saw at the peak of its housing bubble." (Terrio, 2017) The article also mentions ".. But for all the attention the subject has received, it's a safe bet that most people still cling to very clichéd notions that only so-called "deadbeats" ever hit the debt wall. Nothing could be further from the truth. The reality is Canadians would be shocked if they could peer into the private financial lives of many of their closest neighbors and friends."

INSIGHTS

Having higher debt to income levels means that the borrower is more susceptible to unfavorable changes in the terms related to the credit they hold. If those terms change, for example the interest rates on the borrowed amounts increase, then the greater the amount borrowed means the greater the impact of these changes. With a lot of consumer debt, more of one's personal income must be used to service the debt, taking away from their ability to invest in truly productive endeavours, assuming they maintain their income level. The reason why consumer debt is specifically singled out as worrisome is related to the fact that the debt is assumed on a consumable, in contrast to borrowing to purchase an asset that would help to generate income to help pay off the debt they took to buy the asset in the first place.

The more personal debt one holds at high interest rates, the greater the cost to service that debt. The greater the degree that someone uses credit to purchase things that do not generate incomes, the greater the propensity the borrower has for reaching a point where the servicing of their debt, the paying of the interest, will crowd out

LEFT SIDE | USER LEVEL

any other expenditure able to be made within their income. Further, if an entire economy, or a section thereof, adheres to these principles for too long, it will inevitably collapse as greater and greater proportions of wealth, as measured by money, are directed to the servicing of debt through interest payments.

While these factors are true, what is interesting is that the dialogue at this user/litany level is largely framed as a failing, or potential failing, of the borrower. That this kind of debt, beyond the most modest amounts held only for the convenience it provides, is articulated, to varying degrees of overtness, in terms of a dangerous shameful moral failing of the borrower.

In the research for facts around increasing consumer debt words like "deadbeat" were found to be peppered through these conversations. It is perhaps indicative of an imbalance in the analysis of the problem. Margaret Atwood speaks at length about this phenomenon and suggests that when the creditor has the power, then the paying back becomes sacrosanct. (Atwood, 2008). Atwood goes on to suggest that as the power has shifted from creditor to borrower and back throughout history, the perspective on the paying back of debt has also shifted at this level of the dialogue. She says, "...both the borrower and the lender were to blame if their arrangement didn't work out: the former for engendering his security by borrowing, the latter for seeking to make a profit — assumed to be an excessive profit from the desperation or the excessive risk-taking of the borrower." (Atwood, 2008)

INSIGHTS | BAD DEBT

Bad debt is defined as "debt that is not collectible and therefore worthless to the creditor. Bad debt is usually a product of the debtor going into bankruptcy but may also occur when the creditor's cost of pursuing the debt collection activities is more than the amount of debt." ("Bad Debt", 2015) Although consumer debt is not necessarily considered bad debt, it is on the road towards it and the anxiety of it one day becoming bad debt, a debt that will not be paid back, seems to be evident in the framing of the conversation on this level.

This kind of language continues and intensifies as debt moves in the direction of becoming bad debt. This excerpt from an article in the Economist, although probably better situated on the applications/ There is a deep and abiding moral power to debt.

- GRAEBER, 2017

system level of the model, describes this kind of bad debt in terms related to the bubonic plague:

"..But during a crisis, when volatility rises, pre-existing links between economies suddenly have huge effects. This finding was striking: a dormant interdependence of economies was spreading disease like a shipful of flea-covered rats. This suggests that economies are far more linked in bad times than their ties in good times suggest." ("Economic epidemiology", 2012)

The issuance mechanics of the current system reveal that, in fact, all money is debt. The current system is designed so that if all debts were paid back, there would be no money. Financial institutions do not make money from people that pay back on the loan.

Debt precedes the history of money and it is a promise that is held in a different way than say, promises made in a political context. Says Graeber; "Promises made to voters are made to be broken, to bond holders, they are sacred." (Graeber, 2017)

LEFT SIDE | HARDWARE LEVEL **USER USER** LITANY LITANY **APPLICATION APPLICATION SYSTEM SYSTEM PRESENT FUTURE** OS OS WORLDVIEW **WORLDVIEW HARDWARE HARDWARE MYTH MYTH**

The exploration from worldview/OS, to system/application, to litany/user are all informed by an underlying myth or belief structure, the hardware, upon which the other layers are built. The myth level contains the deep stories of the financial system and "provides a gut/emotional level experience to the worldview under inquiry." (Inayatullah, 2005)

THE MYTH OF THE CURRENT SYSTEM

The current system is a finite game, a game played for the purpose of winning.

OBSERVATIONS AND INSIGHTS

James P. Carse's book, Finite and Infinite Games: A Vision of Life as Play and Possibility, brings forth the idea that **there are (at least) two kinds of games**. (Carse, 1986)

One could be called finite, the other, infinite.

- A finite game is played for the purpose of winning.
- An infinite game is played for the purpose of continuing the play.

The current system is a finite game, played repeatedly with a central rule that says, to win, the player must have more money than other players having less.

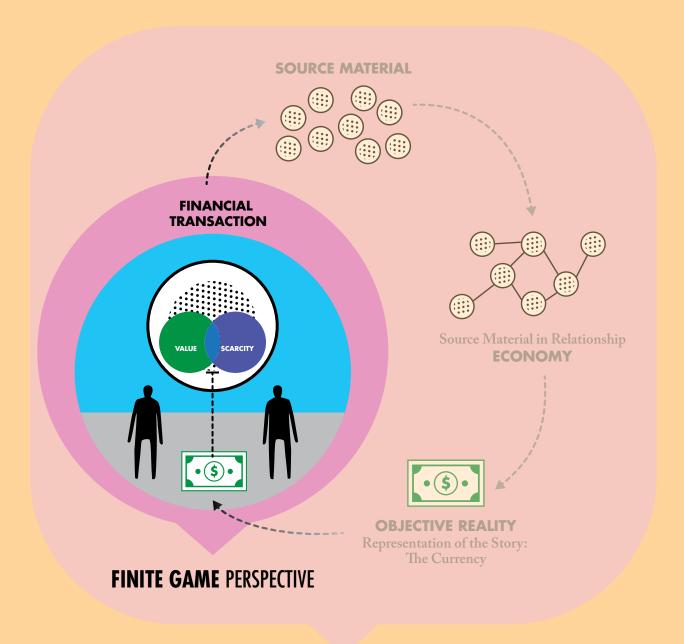
Carse writes, "A point of great consequence to all finite play follows from this: The agreement of the players to the applicable rules constitutes the ultimate validation of those rules. Rules are not valid because the Senate passed them, or because heroes once played by them, or because God pronounced them through Moses or Muhammad. They are valid only if and when players freely play by them." (Carse, 1986)

These rules and this game is appropriate in scenarios where scarcity is the truth, and so the demonstrable adherence to these rules gestures to the foundational myth of the system: **that** things of value are always scarce.

Scarcity, whether experienced in the objective reality or believed the imagined reality, results in predicable behavioral patterns. If we believe that things are scarce we accumulate to varying degrees of intensity, and more specifically, we accumulate more than the next person, because there is only so much.

We see these rules observed and the results of the ongoing finite games are articulated in terms of GDP (national level) quarterly results, stock prices, the compensation that comes with titles (corporate level), and consumer goods and services acquired (personal level).

Framed in terms of a story, the finite game perspective focusses at the objective level of the transaction. The more finite the perspective of the player, the more the player prioritizes the accumulation of the objective reality representation of value, and the less that player

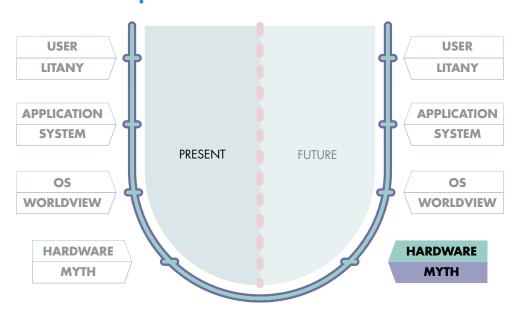


INFINITE GAME PERSPECTIVE

Figure 19 - FINITE GAME PERSPECTIVE - The finite player is playing to win by accumulating more money than other players having less. This game plays out within the transaction and conceals the impact of the finite play on the narrative of money to the finite player.

considers the content of the abstracted concept of value the premise represents. Said another way, the finite game prioritizes the premise and deprioritizes the experience of the relationship. The paradox is that the incident that is the result of the transaction becomes the source material that when ordered, is the shared agreement that the premise he or she is "playing for", has value.

RIGHT SIDE | HARDWARE LEVEL



THE MYTH OF THE ALTERNATIVE SYSTEM

The future system is an infinite game, a game played for the purpose of continuing the play.

OBSERVATIONS & INSIGHTS

The future system might be an infinite game, the purpose of which is to continue the play and include more players, the rules changing when the players "agree that play is imperiled by a finite outcome". (Carse, 1986)

The key distinction between a finite game and an infinite game lies within how the rules

are observed. In a finite game, "it is evident that the rules may not change in the course of play—else a different game is being played", in an infinite game, the rules must change over the course of play". (Carse, 1986)

The foundational myth of an alternative system is that things of value are in abundance. The source of that abundance is not just in the fact that the word "abundant" is the opposite of the word "scarcity".

Rather, the abundance is in our unique ability "to talk about things that don't exist anywhere" (Harari, 2014); to create fictional realties, worlds, in the shared imaginaries of our relationships. In the context of the model, there is always the possibility (although exercising it is sometimes at great cost) to define the abstract concept of value in any terms agreed to within the relationship. Or as Chomsky puts it, we all have the capacity to produce new expressions, new in our experience, new in the history of the language. (Chomsky, 2014) It is this demonstrable ability that is unique to homo sapiens that can be the cornerstone of a foundational myth about abundance. Scarcity and abundance are opposites in the meaning that those words carry, and, they are also separate concepts outside of a polarized continuum; they do not have to be attached. An infinite game of abundance, played for the sake of continuing the play, is possible because we have the unique technology to author our own reality into existence, albeit in relationship to an objective reality.

Inasmuch as it has been possible to create a story about scarcity through the design of currency to hold that value, it is possible tell an alternative story about the abstract representation of value that connects to the objective reality premise. In our collective authority and our individual authorship at the level of the transactional relationship, a new story of value can be written, incident by incident. There are abundant possibilities in the increasingly conscious acknowledgment and operationalization of this unique ability.

Another question on the road to how we might get really rich; What would we have our holder of value hold if not scarcity? What else could it be?

OBSERVATIONS & INSIGHTS | THE RELATIONSHIP BETWEEN FINITE & **INFINITE GAMES**

In one respect, but only one, an infinite game is identical to a finite game. Of infinite players we can also say that if they play, they play freely; if they must play, they cannot play. Otherwise, infinite and finite play stand in the sharpest possible contrast."

The key distinction is that the former is contained within the latter; the infinite game contains within it finite games.

Economist Paul Summerville puts it this way:

RIGHT SIDE | HARDWARE LEVEL

"A strong market economy will create unequal outcomes and they are to be celebrated. Unequal outcomes are a wonderful thing for a society; they create great wealth, they are a reflection of people's intelligence, discipline, hard work, and luck. The point is, how do you use the wealth created from unequal outcomes to invest in a long-term social democracy." ("Paul Summerville", 2014)



Or put another way:

"We think of whole or part rather than whole and part, one coming before the other rather than each mutually constituting one another" (Harding, 2011)

How might we get really rich by using the power of inequality within a finite game to serve the evolving and emerging purpose of the infinite game, which is to ensure that the play is ongoing, and to include more players within it?

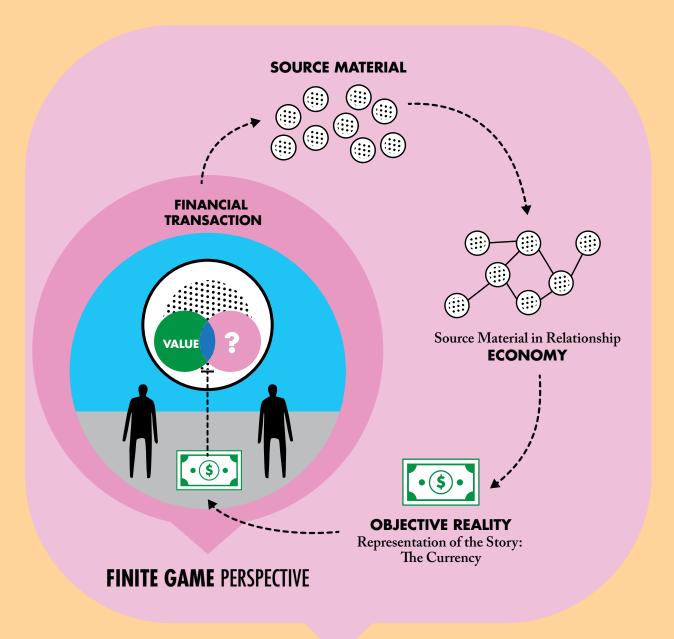
It is in this context that the market forces described in the economic models of capitalism can be powerful tools for the infinite player and the infinite game. This highlights the key issue within the system today and the essence of this study; not that the finite game of pursuing profit within timeframes in order to win in terms of money is wrong or bad or flawed, but that when the finite game is seen as the only kind of game, anything outside of it is first devalued, and then dismissed and/or demolished; the power to author the story of money is concealed within the perspective of a finite game.

The infinite game perspective includes conscious attention to the entire cycle by which the narrative is authored and re-authored. This wider perspective allows us to consider how we might get really rich in terms of what we would like to more readily experience in the transaction, in contrast to how much we can accumulate within the transaction.

OBSERVATIONS & INSIGHTS | SHIFTING TO A FOUNDATIONAL MYTH OF ABUNDANCE

The myth of a finite game is particularly apt for finance because of this system's focus on measurability and quantification, two very powerful tools in the process of creating the rules of a finite game, the very basis upon which a win is determined. Further, since the win is rewarded with more money, it provides advantage to the finite player in any new game played by the same rule; to accumulate more money than other players who necessarily have less.

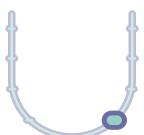
Playing an infinite game necessarily requires a tolerance of ambiguity from those playing as the rules are necessarily changing, the game itself being consistently reoriented around new finite rules as the outcomes of old rules compromise the continuation of play.



INFINITE GAME PERSPECTIVE

Figure 20 — INFINITE GAME PERSPECTIVE — The infinite game perspective of the story of money includes a conscious acknowledgment of how the experience of the transaction influences the story of money, the agreement of the collective values of those playing.

This left-right myth level may be used to describe other industries, perhaps medicine, where the finite game is about "beating disease". The infinite game in this context may be framed as "generating health", and within that infinite game, there necessarily would be finite games to "win" against disease, but the degree to which the entire system is only about winning against disease, the system remains in a finite cycle, searching for more disease to win against.



What emerges within the context of the infinite game is a revised version of competition. Moving from a win framed by the defined rules of a finite game, to more of an agreement between competitors to bring out the best in each other through the play, trusting (and eventually "knowing" in a new way, without certainty) that others in competition are signed on for the same deal. In this paradigm, the gains and losses of the finite game are played for honestly and with fervor. Carse is clear that infinite play is not about showing up to the finite game not ready to play. Instead, the relative importance of the output to be won, although important and still included, is re-placed in priority with the continuation of play. And, if the outcome of the finite game, the victory of some players and the defeat of others, is deemed to imperil the continuation of the play, the infinite players agree to change the rules. (Carse, 1986)

Charles Eisenstein frames this shift from a finite game to an infinite game as a shift in what he refers to as the "Story of the People" moving from a story about "separation" to one of "interbeing". As an aside, Eisenstein also suggests that stories in general and our narratives, our collective stories, have a kind of immune system that keeps them intact for as long as possible. (Eisenstein, 2013) This is evidenced in the resistance in the financial industry, among other industries, when a new narrative is proposed and/or starts to emerge. This is brought up as an acknowledgement of the potential magnitude that comes with the changing or ending of such a widely-held narrative.

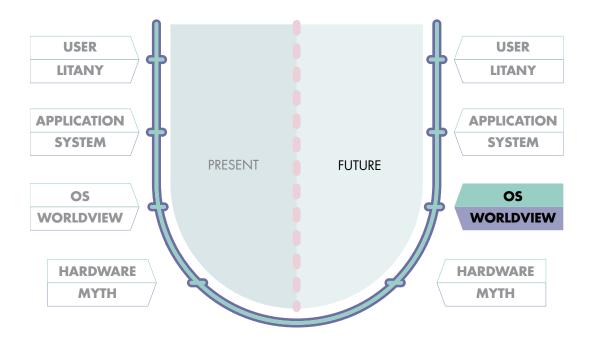
RIGHT SIDE | OPERATING SYSTEM LEVEL

FINDING ONE

Blockchain technology provides a genuinely new model for how currency can be issued.

OBSERVATIONS

The blockchain technology, when applied to currency, changes the dynamics around the



issuance of currency into the system. In contrast to the current system where the issuance mechanism brings money into the system as debt created by decree (fiat) at interest, bitcoins, and (some) other blockchain-based currencies bring money into the system through the process of "mining". Briefly, the mining process involves a decentralized network of "witnesses" that observe and make public the transactions made within the network. The miner/witness network organizes the transactions into the pages of a public ledger, "blocks", and then individual miners use cryptography and computer processing power to "race" to be the first to solve a math problem that will place the "block" on the "chain", ordering the semi-simultaneous transactions into a linear relationship. The miner that wins the "race" unlocks an amount of bitcoin into existence from a finite number available, 21 million. ("Bitcoin", 2017)

What is fundamentally different in this origination of currency is a much tighter (although not perfect) alignment between self-interest (economic incentives), and the integrity, security, and sustainability of the platform where that self-interest might be realized. The miners are the decentralized network of witnesses that are incentivized to validate the transactions through consensus; the witnessing network is the infrastructure where value circulates. They are incentivized with the potential reward, denominated in the medium of exchange used on the same platform. The self-interested miner is more directly connected to the health of the platform than, for example, an employee at a bank who works to provide the infrastructure for a centralized "witness", a bank, in exchange for his or her salary. In a fully decentralized monetary system, there is no central authority that regulates the monetary base. Instead, currency is programmed to be issued when protocol conditions are met by the nodes of a peer-to-peer network. ("Controlled supply", 2017)

RIGHT SIDE | OPERATING SYSTEM LEVEL

Bitcoin is also interesting because the currency units enter the system free of interest. It is not debt loaned into the system and as a result, the transactions where it is used would necessarily be more settled. It does not mean it is not possible to potentially charge interest on bitcoins in an agreement between two parties, but that exchange is not embedded into the system at the kernal or origination level. As has been highlighted throughout this study, one feature of the system today is that in the origination of money into the system, the mechanism itself projects lack and scarcity upon the neutral concept of money. From issuance, it is an uphill battle to have that money circulate with a functional focus on delivering outcomes instead of circulating to create more of itself in an effort to become whole.

While it is in its nascent stage, blockchain-based currencies contrast with this central dynamic of debt-based currency. The issuance of the currency is a completed transaction at the point of issuance, an aspect that makes it closer to barter than debt. Said another way, when a bitcoin comes into existence, it comes in free and clear of the obligations of the transaction that originated it into circulation; it does not owe.

INSIGHTS

This study is not a promotion or dissuasion of the use of Bitcoin or other blockchain based currencies. What this mechanism of issuance brings to the table is the idea of truly alternative ways to issue currency.

It means that it is possible for people to get their currency, their retail-ready currency, from at least one other source, and potentially from many different sources. The idea that there are fundamentally different approaches to the issuance of currency, opens a discussion about competing currencies. There is a definite and clear contrast between blockchain based currency systems and fiat currency systems. It is overtly evidenced in fact that more and more, and particularly in cryptocurrency communities, fiat currency is a term of reference, instead of just "money" or "currency". (Donald, Westt, and Sondagar, 2017)

This contrast starts a conversation about other possible platforms that are actually different, not just versions of the past that are marginally better or worse. It also brings up the idea of what debt currency might evolve into under some competitive pressure. As well, bitcoin and blockchain gesture to larger questions about what would be the impact of currencies being less closely associated with, or decoupled from, the complex narratives that are nations and their codes of law.

The contrast that is presented by the blockchain as a currency issuing technology is a separate thing from the actual power of the blockchain. The blockchain may indeed emerge to be a hugely impactful technology in any number of important industries and verticals, but what it is doing right now for the financial industry is highlighting that there are viable, truly different alternatives to the current model. This difference, between the power of the blockchain

as a technology and the power of the blockchain to illuminate the money monoculture, might be described as the difference between fintech and perhaps a wider idea of new finance.

At this worldview level with alternatives to money there is a considerable amount of ambiguity. Questions to pose at this level in that ambiguity include what happens over a period of time when the origination of our most widely accepted holder of value does not include lack and scarcity from its very inception? How might a new currency, or a new perspective on the prevailing currency change the story of money? What happens in every monetized transaction if a different premise was being ritualized and spread? What happens if multiple premises via multiple currencies are made real through the ritual that is the transaction?

That the current banking system is paying attention to bitcoin and blockchain is a very strong signal that it is indeed a truly different alternative. That said, technology is not deterministic. In the past the same technology has been used to bolster a fascist dictatorship and a social democracy. (Harari, 2016) If the underlying myth does not change, then the technology will only serve to amplify that same story again and again.

RIGHT SIDE | APPLICATIONS LEVEL **USER USER** LITANY LITANY **APPLICATION APPLICATION SYSTEM SYSTEM** PRESENT **FUTURE** OS OS WORLDVIEW WORLDVIEW **HARDWARE HARDWARE MYTH MYTH**

FINDING ONE

Dave Chen and The Negawatt as a financial services product with an infinite game perspective.

OBSERVATIONS

There is compelling data that shows energy efficiency improvements are the most cost effective and least risky response to growing energy needs. (Lyon, 2011) Dave Chen of Equilibrium Capital talks about a reframing of the problem to consider energy efficiency as a resource instead of a cost. That the watt-not-used, the "Negawatt", is as valuable as generating a megawatt from a new energy source, no matter how clean. (Chen, 2009) From the perspective of finance and capital investment, that idea, energy efficiency as a resource instead of a cost, leads to an innovation on the product level of finance.

The way that the financial product works starts with investors with money, and a building that needs to be retrofitted to increase its energy efficiency. The deal is structured so that the upfront investment of capital to complete the project buys a revenue stream based on the savings in power expenditures the building enjoys from having upgraded its inefficient infrastructure. Essentially, an investor buys the right to receive the cost savings on the building's electricity and heating bills until they recoup the amount they invested, plus interest.

INSIGHTS

This example highlights a few things:

- **1.** This investment typifies the functional purpose of capital investment; capital catalyzes the movement of assets from a place of lesser value to a place of greater value, and incentivizes the finding and executing on those opportunities with a portion of the greater value flowing to the capital investor when the increased value is realized. The building was less valuable before retrofitting, it is more valuable after retrofitting, and the capital helps catalyze that shift. As an aside, this is very much the essence of Islamic banking; profit sharing as opposed to charging interest, and is practiced in adherence to these intentions to varying degrees. (Irfan, 2015)
- **2.** It highlights that debt at interest can be a powerful, effective and appropriate tool if it is clear what specific outcome is desired. As a comparative example, a mortgage is also, in principle, a powerful tool for outcomes. Houses, in some but certainly not all instances, are (arguably) more valuable if they are owned by the resident.

3. The focus on outcomes is in this case, on the part of the financial services provider, the creator of the financial product. This is a unique example that could be well described in the 3 horizons model. (Sharpe, 2013) It contains all the look and feel of a current system financial product; upfront capital investment in exchange for an ongoing revenue stream, the premium charged on the upfront capital based on the risk associated with the revenue stream. It provides the outputs required by the finite game of financial system today, money, but it is also contained within an outcome-focussed 3rd horizon infinite game orientation with tangible benefits beyond those included in the investment; the reduction of carbon emissions. Does this investment contribute the future benefit of society? Yes. Is there a tradeoff that sacrifices the objective reality for a fictional reality? No.

This is a story of finance as an infinite game in that there is an interaction between the finite game of making money nested in the infinite game of contributing to the wellbeing of our human habitat. The finite game, to grow in terms of money, has outcomes that could be framed as "plays" within an infinite game. At the transaction level, the experience that is the outcome of this relationship provides an incident that values not only the money, but the outcome. The assumption is that with more incidents with this expanded sense of value, the story of finance could become one where the underlying myth is an infinite game perspective, or in another word; sustainable.

Looking at the left side of the applications level the drive to "win" the finite game is a priority value; winning is about comparative accumulation with other players. When that drive is not contextualized into a wider infinite perspective, as it is in this example, it has a degrading effect in a systemic context (as well as in a personal context as will be explored in chapter 6). However, the drive to win the finite game is important to keep clear and at a high fidelity, as opposed to a half-hearted play of the finite game in the deluded service of a misguided infinite perspective. The finite game is a tool in the context of the infinite perspective.

FINDING TWO

Peter Blom and Triodos Bank: Consumer, Citizen, Banker.

OBSERVATIONS

Peter Blom is the CEO of Triodos Bank. His perspective on banking is very much aligned with the perspective of an infinite game. The ethos of the bank is that, "profit is not an objective in itself" (Blom, 2017). In essence, Triodos Bank aims to maximize sustainability, embracing the need to be profitable but only as a means to a sustainable end. (Blom, 2017)

With a commitment to be connected to the real economy since their inception in 1980, Triodos

RIGHT SIDE | APPLICATIONS LEVEL

effectively avoided the 2008 crash and in fact, grew through it. The bank invests its saver's deposits directly in sustainable companies and stays in direct contact with the entrepreneurs who run them. (Blom, 2017).

In a Theory U Course on "Just Banking", Blom said "we're at a point in the history of finance and banking, where we have to understand that we are the banks ourselves and that essentially, that it is the relationship, and not the profit, that is the connection to the future support network." (Blom, 2017)



He went on to say that "when a financial product is abstract to the point that it is difficult to understand, you are always wanting your money back because you don't know what is happening." This feeling of not knowing what is happening is described above in how increasingly derivative products increase counterparty risk as they become more and more transactions away from being ultimately settled for objective value. It is in this dynamic where he frames the shifting role of the bank from one of speculation to one of regenerating the commons. (Blom, 2017)

In that shift, Blom outlines that banking is not really the private sector, and not really government; it is a 3rd thing and to define that role, it is important for banks to make an authentic long term commitment to the real economy. (Blom, 2017)

What this means on the individual level is that people might consider themselves not only as citizens and consumers, but also as bankers. Whereas citizenship deals with an individual's relationship with government and policy, and "consumer-ship" may involve how a person is involved in contributing to others needs and preferences and fulfilling their own via the offerings of business and industry, "banker-ship" may be considered as how, on an individual level, people may relate to banks and financial services for the purposes of defining, pooling, accessing, abstracting, and making concrete, value.

INSIGHTS

Blom's ideas connect to and extrapolate from the issues that are brought forth in the discussion around Glass-Steagall regulation and the combining of investment banks with commercial banks. Blom essentially proposes that banks make a declarative move to relate to the real economy level as a priority, and has been doing so since 1980. Blom's finding is that when the focus is on the relationship, that over time, profit will arrive as a natural outcome of that perspective.

Triodos is a successful and profitable business. Triodos has an ethos of focusing on the relationship as the actual source of value of a bank. Blom says "it's not about a contract, it's about support and trust." (Blom, 2017) A focus on the relationship as an ongoing asset is what an application level looks like when informed by a foundation myth of an infinite

game of abundance. Essentially an infinite game perspective is correlated to such an approach, and in this case, has also led also to a "winning record" in the finite game. Situating profits as an output as opposed to an outcome has led to sustainable profits for this institution.

Finally, this quote from Blom connects to the chapter 6 discussion on self-esteem:

"This approach represents a radical departure for conventional financial institutions. It means re-appraising the role of our money and its place in the economy. And it goes further, because thinking like this means looking inwardly to assess what's truly valuable."

RIGHT SIDE | USER LEVEL **USER USER** LITANY **LITANY APPLICATION APPLICATION SYSTEM SYSTEM PRESENT FUTURE** OS OS **WORLDVIEW WORLDVIEW HARDWARE HARDWARE MYTH MYTH FINDING ONE**

The sou sou, a system of rotating credit is a template for how to bring value to the experience of a transaction.

OBSERVATIONS

The sou sou is a simple model typically used to leverage the trust of a small group into a makeshift

banking system. A secondary result of the sou sou is that the story of what a member of the group spends their savings on naturally becomes the shared knowledge of the group via the social interaction that the model is based on. The sou sou is the foundation of the solution model discussed in more detail in chapter 7.

DEBT & YIELD CLA ANALYSIS

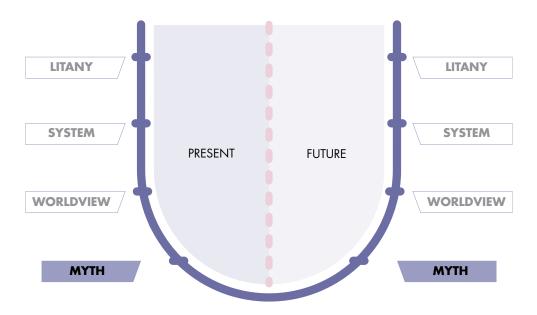


Figure 21 - DEBT & YIELD CLA ANALYSIS

EYE FOR AN EYE TO THE GOLDEN RULE

Among other things, the most pertinent outcome of the CLA analysis of these words revealed a myth level on the left side of "An Eye for An Eye" shifting to the right-side alternative myth of "The Golden Rule".

The myth of an "Eye for an Eye" articulates an ethos of doing unto others as they have done unto you, and in that framing, sets up a defensive positioning where your behaviours are determined by someone else's behaviour.

"The Golden Rule" suggests doing unto others as you would have them do unto you. This

relatively small change in the language has immense implications. This positioning can be internally driven and gestures to the pursuit of a self-knowledge of how one would like to be treated, and the tactic to manifest that treatment is in treating others in that way.

This CLA analysis happened first in the chronology of the protect timeline, but looking back after the Hybrid CLA analysis, other insights emerged.

The reason that the left side landed at an Eye for an Eye, is perhaps related to the nature of debt as an IOU and the requirement of that which is owed to be measurable, recorded and documented. Wealth then becomes a function of how much one is in control of what is owed, which necessarily incentivizes the pooling of indebtedness, and disincentivizes its mobility except in an increasingly lower-risk attempt at creating more. This quote from Paul Kedrosky helps to make this concrete: "Natural oligopoly pressures have existed in finance, with large pools of capital seen as safer than smaller ones, leading to pressure for mergers and acquisitions. This has led to the "too big to fail" phenomenon in most developed countries, with a few large banks so big that their survival becomes important to the economy. (Kedrosky, 2015)

The other side of the debt CLA gestured to wealth more as a function of how much one could "flow", as opposed to "pool". An analogy is a node in a network that has more and more throughput of information. A reliable node that grows in how much it receives and shares. In traditional systems, like the potlatch, wealth and status were correlated to the amount an individual could give away as gift. The ethos was so deeply entrenched that goods were sometimes destroyed as a showing of abundance. It was in these kinds of displays that were witnessed by the government officials of the time that the potlatch ceremony was banned by law. (Eisenstein, 2011)

The shift from the left to the right on these word-based CLA's is elegantly encapsulated in the definition of the word "gratuitous". Charles Eisenstein points out that the word, which literally means received with thanks (and not payment), has become a synonym for unnecessary. (Eisenstein, 2013) The suggestion being that the current system has diminished the importance of the receiving side of the 2-side transaction relationship, and to consider a system that values gratitude as a powerful **initiator** at the transaction level towards desirable outcomes.

CHAPTER 6

Self Esteem

Self-esteem provides a human-centered framework to explore how connecting scarcity with value impacts human beings. This chapter will first describe how self-esteem was introduced as an incident in the story that is this study. Second, the chapter will break down how the dynamics of pursuing money as they relate to the internal evaluation of worth that is self-esteem.

INTRODUCTION

In the search for ideas around leverage and the similarities between language and money, this quote from Nathaniel Branden came up:

"Just as a currency, in the process of becoming more and more inflated, has less and less purchasing power, so words, through an analogous process of inflation, through being used less and less discriminately, are progressively emptied of meaning." (Branden, 2013)

It was an intriguing quote that resonated in the context of the goldsmith parable and the discovered realities of the common currency issuance mechanism. Looking deeper, it was discovered that Branden was one of a small group of Ayn Rand's early followers who used to meet in her apartment in New York where they developed the early tenets of objectivism and the Morality of Rational Self Interest ("Ayn Rand", 2017). Also in that group was Alan Greenspan, the former head of the Federal Reserve. Greenspan correlated "growing worker insecurity" as source of the continued growth that the economy was enjoying at the time, the early 2000's. ("Chomsky on Alan..", 2014)

To give a little more backstory, it turns out that Branden and Ayn Rand had an affair, one that was permitted by Branden's wife at the time. Eventually, Branden and Rand had a very public and contentious separation. After the fracture, Branden, a once very devoted follower, moved in another direction and developed a series of books and other material on self-esteem.

In the context of the story that is this research it was an incident of note in finding the Branden quote. The connection to Rand and Greenspan, two influential figures in the current ethos and practice of capitalism as we know it today, both with thinking and behaviour very much aligned the idea of the current system being primarily driven by the self-interested pursuit of money. Further, there is an interesting divergent path after their time with Rand where Greenspan's trajectory was to become the head of the largest central bank in the world, and Branden's focus was on self-esteem. With that context, I pursued Branden's work on self-esteem and ideas that connect to money, self-worth and outside validation in his, and others, work in the arena.

WHAT IS SELF ESTEEM?

Branden frames self-esteem by these tenets: (Branden, 2004)

- 1. It is an internal valuation based on the presence or absence of specific attributes, the coherence or synergy of those attributes are one's self esteem.
- **2.** It is at a level of the "deepest vision of competence and worth"—it's a truth, (perhaps concealed to the very person making the valuation), beneath any self-delusion.

Self-esteem is how we value ourselves; it is how we perceive our value to the world and how valuable we think we are to others.

- BRANDEN, 1991

3. It's a human need, on the level of oxygen, and humans will attempt to fulfill the need; the evaluation is made one way or another.

"The root of our self-esteem is not our achievements per se but those internally generated practices that make it possible for us to achieve." —Nathaniel Branden (1991)

This quote effectively frames self-esteem as a kind of asset, the ownership of which is the bedrock upon which value can be created. In the context of design, Bruce Mau articulates a similar idea with his thoughts on the studio and refers to it as "the project where all the other projects are created" ("Bruce Mau", 2004).

These are the attributes that Branden suggests are the evaluative framework, the outcome of which is our self-esteem:

- The practice of living consciously
- The practice of self-acceptance
- The practice of self-responsibility
- The practice of self-assertiveness
- The practice of living purposefully
- The practice of personal integrity

These attributes are evaluated regardless of how much conscious attention is allocated by an individual. The framing brought by Branden and others is that bringing more conscious attention to the current levels of each attribute, and the relative levels of these attributes over time as they are internally evaluated, is the route to increasing self-esteem. (Branden, 2004)

Branden frames the importance of self-esteem in the modern context in this way:

"We have reached a moment in history when self-esteem, which has always been a supremely important psychological need, has become an urgent economic need - the attribute imperative for adaptiveness to an increasingly complex, challenging, and competitive world." (Branden, 2013)

The quote frames self-esteem as a key factor in the holding and exploration of ambiguity. A way to engage the system as an infinite player able to focus on relationships in contrast to outputs because it is not the achievements that make up the player's self-worth, but the internally generated practices and experiences that make achievement possible in the first place. Bringing this idea to the model, it is self-esteem that allows a finite player to expand their perspective to beyond the objective level of the transaction and into the wider infinite game of the story of money. In that expansion, the authorship of the story and the authority to change the rules is revealed. Self-esteem is the tool that enables play for the purpose of continuing play as opposed to play for the purpose of winning and ending the game.

OUTSIDE VALIDATION

Branden talks about and emphasizes self-esteem as an internal evaluation. Within his frameworks comes up the idea of outside validation. He frames it as very important and good and expansive (for example in the form of a salary or award), but when used in the valuation of self-esteem, it serves as a false source. Outside validation used as self-esteem, brings a short term "hit" but is not sustainable and actually erodes true self-esteem.

"Not all the values with which people may attempt to support a pseudo-self-esteem are foolish or irrational. Productive work, for instance, is certainly a value to be admired, but if one tries to compensate for a deficient self-esteem by becoming a workaholic one is in a battle one can never win – nothing will ever feel like "enough." –NATHANIEL BRANDEN (2013)

Rebecca Solnit articulates a similar sentiment: "A hungry ghost always wants the next thing, not the last thing." (Solnit, 2017)

MONEY & OUTSIDE VALIDATION

There is a connection between using money for outside validation in the context of self-esteem. If money is being used as outside validation to shore up a low self-evaluation based on criteria, that act will provide a short-term uptick to how one feels, but will create a long-term deficit on the evaluation that is self-esteem. It does not mean money is bad or wrong. People need it. But when used in this capacity, it has a negative impact on self-esteem.

If these premises are accepted, that a false source of self-esteem used in the internal evaluation has an eroding effect on true self-esteem, and that self-esteem is a human need in contrast with a preference or a "nice to have", the impacts are significant. Layered on top of this is the idea that outside validation, a false source of self-esteem, provides a short-term sensation that mimics a feeling of well-being similar to having a high level of self-esteem, and the dynamic is most easily explained in the context of addiction.

The fictional characters of The Wolf of Wall Street and the real-life characters typified by the earlier quotes from Franklin Raines and others like him articulate behaviours around accumulation of money that in the context of self-esteem, appear to be addictive as opposed to solely greedy.

This framing coheres with the idea of finite and infinite games, where playing the finite game without any awareness of the infinite game is similar to pursuing outside validation for the purpose of increasing self-esteem. Further, the idea of needing outside validation as an important and admirable thing to pursue, coheres to the concept of the finite game as a tool within the infinite game--if it is not used within the criteria of how one's own value is self-evaluated. The degree to which money as outside validation is being used in the evaluation of one's self esteem, is the degree to which someone is playing the finite game as if it is the only game.

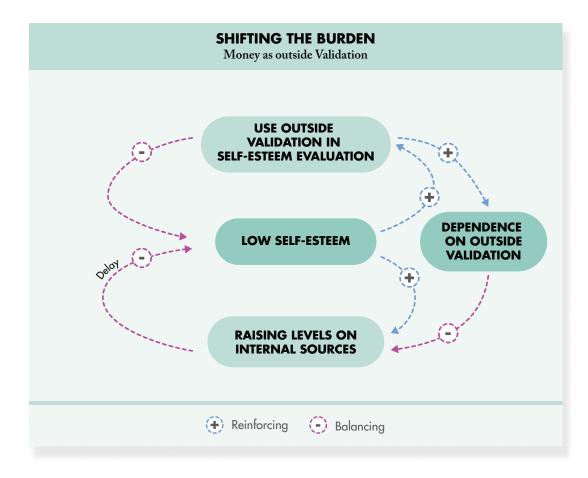


Figure 22 - SHIFTING THE BURDEN ARCHETYPE - The Shifting the Burden system archetype describes how outside validation in the evaluation for self-esteem lowers authentic self-esteem and creates a dependence on outside validation. Raising self-esteem with internal sources increases low self-esteem, and can dissuade the use of outside validation in that evaluation.

Said another way, one's self-evaluation based on their living consciously, with self-acceptance, self-responsibility etc. might be low either by not being aware of those levels, or by being aware and not adjusting behaviour to raise them. Not only will that low esteem not be remedied by including outside validation into the evaluation, it will make it worse and drive a more pressing need, at an existential level, to raise it.

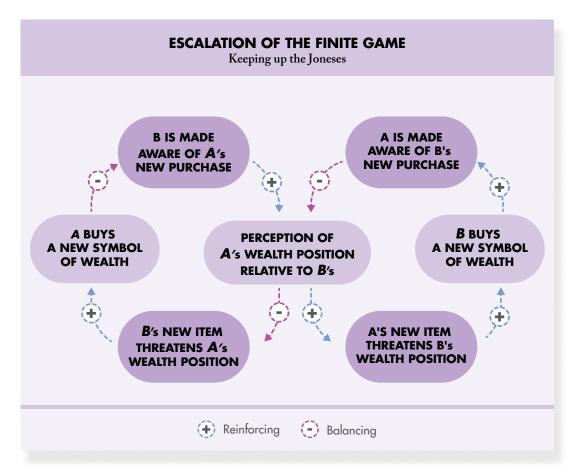


Figure 23 — ESCALATION OF THE FINITE GAME ARCHETYPE — The escalation system archetype describes the dynamic that entrenches the finite game and conceals an infinite game perspective. To the degree that money is used as outside validation in the context of self-esteem, is the degree to which one's relative wealth position is an existential threat to participant B in this dynamic. To the degree that participant B has a healthy self-esteem, (or is not using money as a part of the evaluation that is self-esteem), is the degree to which the threat posed by a differential in relative wealth position, although still potentially threatening, is not an existential threat.

Considering money, banking and finance in the context of an infinite game, it would make sense to consider the financial transaction as a relationship where experiences happen that are more about the attributes of self-esteem, and less about a focus on outside validation. In the current system, winning the finite game is about getting or having more than someone else having less, and as a result, money is a measure by which the game is validated. A solution model would focus on the experience of the transaction as source material for a story about worth and abundance, first on an individual level, and over time, system wide.

HUMAN VALUES VERSUS CORPORATE VALUES

Self-esteem framed as a human need suggests that if it continues to decrease over a long enough time frame, the human in question will cease to exist. A way to consider self esteem in this context is as a story "about" a person's internal belief about their fitness to exist; their value or worth. As mentioned earlier, on an individual level, no matter how much a person has prioritized money and the pursuit of it, as a human, there necessarily has to be something else layered into the story about "what is valuable to me". From the frame of self-esteem as a need at the level of food or oxygen, humans who consistently pursue outside validation through money reach a point where their self-esteem, their evaluation of their fitness to exist, is so low that they either switch to real sources and raise that evaluation, or they cease to exist.

As mentioned earlier, the values of a corporation can be about money only. In the corporate context, that entity can be driven strategically and tactically (operationally) by a value structure that is solely about money, and in fact, surplus money in the form of profit. Although there are many examples over time of the impact of this value structure, there is evidence in the recent example of United Airlines of it intensifying. In an article titled "Route to Air Travel Discomfort Starts on Wall Street", Nelson D. Schwartz explains that "Rich bonus packages for top executives are now largely tied to short-term income targets and fatter profit margins instead of customer service. Of course, bolstering profits and in turn, stock prices — has always been a big part of management's responsibility to shareholders, but making it virtually the only criterion for executive pay is new." (Schwartz, 2017).

The article goes on to explain that, ".. some industry veterans insist it is a mistake to simply blame investors or hedge-fund managers for fostering a race to the bottom in customer service. "The response isn't to Wall Street. It's to customer behavior," said Alex Dichter, a senior partner at McKinsey who works with major airlines. "About 35 percent of customers are choosing on price, and price alone, and another 35 percent choose mostly on price." (Schwartz, 2017) This quote suggests the degree to which the entire system is influenced by the underlying myth of finite play.

Corporate needs are largely structured to prioritize financial needs as an end goal. At the same time, financial needs are a component of human needs; money within the context of human values is a tool or bridge to the fulfillment of other needs. There is a point in that dynamic where the pursuit of the bridge to fulfill human needs, money, starts to crowd out the actual fulfillment of human needs.

What emerges in this context is a system with an entity, a corporation, that defines value solely in terms of money, and that money is embedded at its origin with a sense of lack in that it owes interest, money that is outside of the system. From this lens, it is possible to see how quickly and exponentially things can spiral. The money itself has a never-ending voracity to try and become whole and the corporate entities are valuing that very money above all else. The power to issue currency becomes more and more central to the entire system, and that centralized power is having an impact in each

HUMAN VALUES VERSUS CORPORATE VALUES

transaction of the authorship of our collective values. It becomes very inhuman and detached from the objective reality layer very quickly and speaks to the decision-making that destroys the very environments we live in.

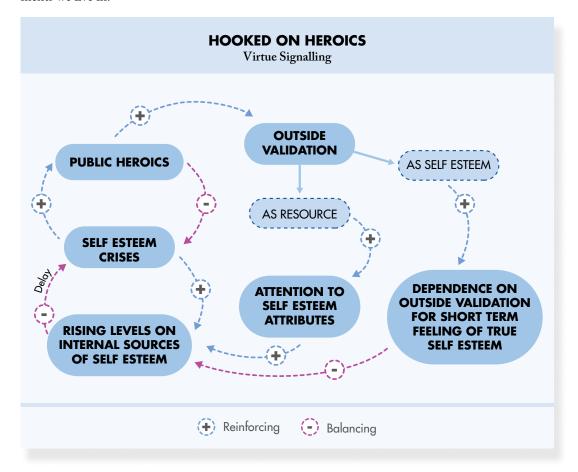


Figure 24 - HOOKED ON HEROICS ARCHETYPE - The hooked on heroics system archetype describes how public heroics generate outside validation in the form of awards, monetary compensation, celebrity etc. When outside validation is available, there is a choice in the intention of how to receive or use it. If used within the evaluation of self-esteem, it ultimately lowers self-esteem, increasing the frequency and intensity of self-esteem crises and driving behaviour towards more public heroics. Used as a resource (for example, an award can lead to collaboration with new partners, more money can lead to more time and space for internal reflection, etc.) more attention can be paid to the attributes of real self-esteem, lowering the intensity and frequency of self-esteem crises. This dynamic also describes the concept of virtue signaling; the conspicuous expression of moral values done primarily with the intent of enhancing standing within a social group ("Virtue signalling", 2017)

CHAPTER 7

Solution Model

This chapter describes a simple model, the sou sou, for how we might iteratively work to re-author the story of money by consciously considering the transaction as a site where user experience can be influenced. The solution suggests that the abstract concept of value can be shifted by taking the risk to consciously share what we're each translating money into in a trusted social framework.

Money always imposes the politics of its architecture on the useful lives of people. It is always ornamented and carefully covered in that which a culture wants universally remembered.

- NORTON, 2014

The research points to a solution model that might iteratively shift the story of money. Where the authority to create that story exists has been discussed throughout the paper. It is hinged on a few ideas coming together into a model of how the story of money is authored. Here are those ideas summarized:

- 1. From Harari, there is an objective reality and an imagined reality.
- 2. From Blind Spot, the idea that value is manifested in experiences and experiences happen in the context of relationships.
- **3.** From a definition of story being incidents in relationship to each other, most often in linear succession, but not necessarily so.
- **4.** Within relationships, negotiated premises are used to bridge the gap between the objective reality experiences of the individual and the shared imaginary of the relationship. These premises come in the form of language and symbols, currencies being one.
- **5.** Premises, when accepted by parties to a relationship provide a "this" is "that" function where, "this" (word, utterance, symbol, or ten-dollar bill) in the objective reality is "that" (idea, fact, story, value) in the shared imaginary of the relationship.
- **6.** The experiences created in relationships become the source material incidents that, when ordered in relationship to each other, create a story; the collective shared imaginary.

Money as a premise is a tool used to abstract value into the shared imaginary of the relationship, and so it follows that the story of money is a representation of, at least in part, of the collective values of those that use it.

When looking at the CLA analysis and the mechanism by which money is created, there is a natural inclination to consider structuring a solution around changing the currency itself. If the common currency shifted from being debt issued at interest it follows that monetized transactions would be less about lack, scarcity, and payback and the story might change as a result. There are several reasons to not focus on the currency itself as a lever for change:

- What the CLA provides is a perspective that suggests a myth that informs the worldview and that if that myth remains intact, (that the finite game is the only game) then even if a new worldview was swapped in where the current OS resides, it is possible and likely to continue to manifest similar outcomes in the future.
- Although there are many interesting and impactful experiments in the realm of competing currencies, the public dialogue about alternative or competing currencies has a history of being dismissed and devalued. Competing alternative currencies may be a natural outcome from an

THE SOU SOU

infinite game intervention into the authorship of the story at the transaction level.

• Form, the currency, will logically follow the function that is the transactional relationship.

And so, the solution model is structured to hold the right-side myth, that money is an infinite game about abundance, while making a coherent intervention at the right-side litany/user level with an eye on shifting the narrative on a transaction by transaction basis by focusing attention on the content of the transaction; the experience.

THE SOU SOU

The proposal is to run a sou sou, a rotating savings and credit association within a community, for example, students within an academic program. As mentioned earlier, a sou sou is a savings arrangement where a group of people each pool an equal amount of money for a period of time (a month, two weeks, etc) and after that time is up, one person in the group gets all that money, also known as "the hand". The group keeps doing this until everyone in the group gets their turn and receives that full lump sum at least once. To be clear, the sou sou would be a next step that is inspired by the project, not a University research project.

The short term goal is to use transactions as content-generating tools to intentionally build and/or strengthen a community. With an in-person meet-up once a month where willing participants both contribute their share of the "hand", and provide a platform for whomever had the hand in the previous month to tell the story of how they used it. In the context of the dynamics of transaction and story outlined above and throughout the paper the sou sou works like this:

- The monthly cash contribution of each participant is a transaction that creates a relationship within which the premise of cash is used, and enforces that narrative of value.
- Whomever has the hand for the month engages in a transaction (or transactions) with that cash and gets whatever they want, with the expectation that the participant will be sharing the story with the rest of the group.

There must exist a paradigm, a practical model for social change that includes an understanding of ways to transform consciousness that are linked to efforts to transform structures.

— HOOKS, 2006

 When the group meets again whomever had the hand shares what they bought. The experience that is the outcome of the purchase transaction effectively becomes the premise in an exchange with the group

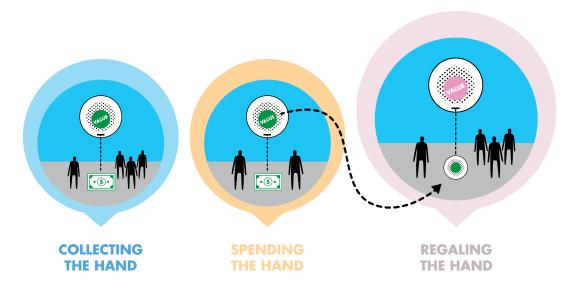


Figure 25 — THE STEPS OF THE SOU SOU — The experience of how a participant spent the hand effectively becomes the premise in an exchange transaction with the group.

In the "this" is "that" comparison where "this" is debt at interest and "that" is everything to be had in modernity (Schull, 2014), the "that" is very widely defined as a result of the monoculture around the currency. This exercise is a route to narrow "that" down within the context of a relatively small group by intentionally using the experience of a transaction as a premise in a subsequent group transaction. The sou sou shifts the value of money from whatever it can turn itself into, a more specific story about what this group actually turns money into. The use of the experience of a transaction as a premise in another subsequent transaction values the experience and gives the group another piece of the story of what they hold valuable.

The proposal is that the standard group size would be six people, each contributing \$100 a month. This amount aims to be enough to spark consideration and thought, but not so much that it would cause undue anxiety. The communicated intention would be to spend the money on whatever is valuable to you, knowing that you will be required to share how and on what you spent the hand when it came to you. Considered in the perspective of transparency, a \$600 purchase can be an interesting reflection of personal values, and as a qualitative data point, an interesting lens into group values. Scaled out as modules over a larger group, say thirty people in five person groups, the data starts to get more interesting while the community builds.

THE SOU SOU

With respect to self-esteem, framing the sharing of the experience of the transaction as a new transaction that uses the experience-as-premise allows for a venue where the attributes of self-esteem can be accessed in the context of the group. There is a component of personal risk in having a group know what you would spend \$600 on and there is an opportunity to be honest, have integrity, take responsibility etc. There is a reflection of personal values in the articulation to others, as the intentioned point of the exercise. Also, through the various, seemingly painstaking steps of the sou sou to save and spend \$600, there is necessarily an increased consciousness around money and one's relationship to it. It is a route to pay attention to the experience that is the financial transaction of a certain size in the hope that the very act of paying attention is a first step in infusing the experience with elements that are at least new, at best preferable, and either way, towards an experience that could be designed for needs and preference. Essentially, the goal of the exercise is to build community using the transaction as a tool, instead of using a community to accumulate the tool via a transaction.

MECHANICS

It is a social event, it could be as long or as short as makes sense, but probably 90 minutes once a month. The sou sou has a natural arc, and a natural end which makes it a useful tool to structure story development. If it is six people, each contributing \$100 a month, there would be six separate meetings where the agenda of the meeting would be to receive the story of someone in the group spending \$600 on whatever they wanted or needed. If stories are resonant incidents juxtaposed against each other, in this case within a time frame, the sou sou has the potential to have a relatively standard template with an endless amount of diversity of the stories within that six instalment structure.

The focus will be to build a network of trust in the interactions. The experiment tests the hypotheses that trust that is volunteered as opposed to coerced or enforced makes for shared imaginaries with greater degrees of freedom. The establishment of boundaries by flowing trust into a relational dynamic as opposed to entering into a relational dynamic only when the establishment of enforceable recourse for a breach of trust is assured, is a significant shift and it would be interesting to use the results as data for the development of better transactions.

The proposal is that the student body of the Strategic Foresight and Innovation program at OCADU be used as a pool of potential participants. There are approximately 300 people that have been through the program over its eight year existence. Extrapolating from participation in earlier surveys, it is reasonable to expect thirty people to be interested in committing \$100/month (that they will get back), an hour-long meet up once a month, the spending of the "hand" in the month they receive it, and the sharing and documentation of the story of what they decided to spend the hand on when it was their turn.

The most knowledgeable of people is the one with the most knowledge of people's differences

- ABU HANIFA

COMPONENTS

- 30 people broken into groups of 6, all groups starting in the same month.
- Very short entry survey
- If people do not want to spend \$100 a month, it is possible to break the share in 2, and therefore some groups may have more than 6 people.
- It is also possible for participants to "buy" 2 shares, in which case some groups would have less than 6.
- Groups should be no more than 8, and no less than 5.

One person needs to be in charge of the group coordination. This organizer role includes;

- collecting and disbursing the money,
 - -**COLLECTING:** Every participant gets their monthly share to the group coordinator at the beginning of the month, either by:
- emailing your money
- dropping off cash to the coordinator
 - -**DISPERSING:** Coordinator brings cash to the meet-up in an envelope gives it to the participant whose turn it is.
- coordinating the meet ups (suggesting this be done and diarized prior to the beginning of the sou sou.)
- serving as the collection point for the documented versions (written, recorded, or otherwise), but not necessarily assuming the role of enforcement.
- A standard story template will be included in the package, this community speaks the language of "deck" and the standard template would be in this format.

COMMENTS & FEATURES OF THE COLLECTING & **DISPERSING**

The goal of the sou sou will be to take these transfer costs out of the relational dynamics by covering them for participants and coordinators.

THE SOU SOU

There is a cost to send money via email, .50 each transaction.

There is also a cost for the coordinator to withdraw the hand as cash, up to 3 dollars.

So the total cost of the sou sou's transfer costs are:

\$.50x 6 months=\$3 for each participant to make transfers to the organizer. \$3x6 months=\$18 for each coordinator.

So, participants get \$3 at the first meeting to cover the transfers they'll make over 6 months. Coordinator gets 18+3=\$21.

Total transfer costs to run 5 sou sou's with 6 people each for 6 months=(24x5 + 6x18)=\$228.

PROPOSED MEETING STRUCTURE

Meet at a home, in a bar, wherever works for the group.

- **1.** Meet and greet.
- **2.** Tell the story of the last month. (Story is documented with notes and/or audio)
- **3.** Disperse the money for the upcoming money.
- **4.** Wrap!

ENFORCEMENT

If someone does not contribute or backs out, or if the coordinator loses a hand, there is really no recourse. The way it is structured typically is that the coordinator takes responsibility for someone who misses a share. That is not an obligation of this exercise, and in fact, it is interesting to include any of those losses into the telling of the stories and to see how the group adjusts.

COORDINATOR WORK

The custom of the sou sou is that sometimes money from participants flows back to the coordinator for that work when they get the hand, but not in a structured format. It is not intended to be a money-making endeavour. It is about taking that off the table as much as possible for the purposes of sharing stories of value.

At the end of the 6-month cycle, the collection all the data/stories will map out the findings into something that helps to describe the values and connections of the participants.

The findings will be shared at a gathering of all participants, the wider SFI community, and anyone else who would like to join. In the aftermath, refine the package as a templated exercise and then aim to start another one with different groups.

CHAPTER 8

Conclusion

Finally, the study concludes with a revisiting of each of the elements of the research question and a suggestion for what the future of wealth might foundationally be about.

When you attack the founding myths of a society, the society trembles, you putitin danger because they are foundations. If you attack something upon which society is based on, you will be attacked by the society and condemned to death. But when you take the founding myth, and you reinterpret it, in that case, society starts to change.

— ALEJANDRO JORODOSKY

REVISITING THE RESEARCH QUESTION

In conclusion, the study circles back to the research question and re-considers the components in the context of the analysis.

HOW MIGHT — The mechanics of "how might" are outlined in the model of how the experience of a transaction contains the abstracted concept of value, and those experiences together in relationship make the story of money.

An objective reality premise influences an imagined reality concept of value within a transaction. The model highlights that the story of money is influenced by the premise that bridges the gap between the objective and the imagined, and that the power to author the story is a function of the negotiation of "this" being "that". By addressing the current system dynamics around the origins and entrenchment of the common currency and the evolution of what it has come to exist as in the abstract, the lever for how we might get really rich was identified. The analysis revealed not only "how" but "where" we might get really rich; at the transaction in the negotiation of the terms of the premise.

With the transaction as a site for the design of the story of money, experience by experience, a suggestion to intentionally include the specific attributes that when internally evaluated together, is our self-esteem. It is with an increased level of self-esteem that money as outside validation is no longer used in an addiction dynamic to try and fill the human need that is self-esteem. Free of this dynamic, a finite game loss (or a rule change) is decoupled from an existential threat, and infinite play is possible.

WE — The analysis that the standardization of the common currency with the intent of providing consistency to the holder of value, revealed that the nuanced concept of value is diminished in the quest for homogeneity for the sake of convenience. A step in how we might get really rich was revealed to be through a more modular definition of what value is, (or means, or is about) to more specific definitions of "we."

The solution model of the sou sou suggests a pragmatic route to redefining the scope of "we" and what "we" value to a very small group over a relatively short timeframe. The purpose of which is to clearly delineate a difference between money that is the central signification of our age and the bridge to everyone and everything that is to be had in modernity, (Schull, 2014) and a currency that had its value defined in a specific set of transactions, the experiences of each shared with the intent of a variable-controlled understanding what that group "transforms money into." (Atwood, 2008).

GET — "Getting" there, to real riches, was addressed in the framing of the foundational myth shifting from a finite game about scarcity to an infinite game about abundance. We might get really rich by considering how the transaction, and the experience of it, is implicated in the wider story of money that is the shared agreement of its value.

"Get" was also shown to connect to self-esteem inasmuch as an acceptable level of self-esteem is a precursor to infinite play. Increasing the relative levels of the attributes of actual self-esteem are the first steps in getting really rich. Self-esteem was also depicted to inoculate the infinite player from the allure of outside validation which is essentially what the finite player plays for, and is rewarded with, for winning the finite game.

In the context of the sou sou, the "get" is connected to the risk and vulnerability that the participant brings to the sharing of the story of their experience spending the hand. And, on the other side of that transaction, "get" is related to how much boundaried non-judgement, can be offered to those sharing the story by those who are receiving it. We might get really rich if we can hold the ambiguity of other's values without judgement while maintaining our own boundaries.

REALLY — True riches were explored to be in our unique ability to create fictional realities in the shared imaginaries of our relationships. To get really rich is to connect value with any host of things other than scarcity in the imaginary. The study revealed a rationale to the current system's knee-jerk reaction to reject as "fluffy" anything that is not concretely measurable which constrains what value could be associated to in the abstract. Free from that constriction on the right-hand side of the "U" the study asks, what might be associated to value in the abstract that would make us really rich? The example could be hope — what if hope was associated to value in the abstract representation of the common currency? And a deeper meaning of hope than what is communicated in sentences like "I hope I get a job", or "I hope this goes well". Hope, in the sense of the ineffable quality that pushes a green shoot out of a seed. What if that was associated to value in the abstract and then circulated through market forces? The point, is the abundance myth is based on a technology that we have access to; the ability to create fictional realities. The study opens the dialogue to how "really" might be defined.

RICH — Through the analysis and the building of the model of how the story of money is authored, "rich" shifted from a focus on the quantitative accumulation of an objective reality premise related to a transaction, to a focus on the qualitative componentry of a fictional reality incident related to a transaction. We might get really rich by considering the attributes of the experience of a transaction in the short term for a longer term shift on the values that money, a technology designed to hold and spread value through exchange, might hold.

How might we get really rich has shifted through this project to a structured program of how we will build authentic wealth by acknowledging that we are able to define the abstract concept of what is valuable in the terms that we desire, towards the outcomes that we want.

CONSCIOUSNESS AS WEALTH

What wealth has been over time has shifted in priority:

- In the agricultural era is was about property; chattel, your herd, your land, or your tools;
- In the industrial era, it was about how much you could produce;
- In the information age, it was about how much you knew and when.

What this study gestures to is a concept of wealth that is related to consciousness.

In the context of a shift from a finite game about scarcity to an infinite game about abundance, it was made clear in the analysis that the naming of a foundational myth of abundance is not simply because the word "abundance" is the opposite of the word "scarcity". It is the output that those two words are opposites in their meaning, but the source of the abundance is in the conscious awareness of our unique human ability to create an imagined world in the shared experiences of our relationships. Said another way, the right-hand side of the "U" is truly new, and not an improved version of the past. Although they may end up looking very similar in terms of form, the OS, applications, and user levels can truly be different because the hardware is completely different, not an upgrade.

This ability to create is a demonstrable fact and not a new-age postulation. It is evidenced in imagined realities like Canada, Google, and Human Rights. If we were to cut open a human body, there are no human rights inside, (Harari, 2016) and yet we have deep and meaningful relationships with that imagined reality and those like it; they impact and drive our motivations and behaviours. This study has argued that the same is true for money. The value of money is not only an objective reality fact, it is a narrative that has been authored to varying degrees of consciousness at the site of the transaction. The study has revealed that over time, there have been design choices that have manifested a transaction site that conceals the impact of the experience on the story of money.

The good news is that each of us can contribute to the construction of the imagined reality that is money in our conscious consideration of what we turn it into, how we do it, and who we do it with. We can collectively write the story of money to hold the values that we prefer by taking the authentic and uncomfortable risk to understand what we each hold as valuable, and then to share with each other what our true values are.

Said another way, we can play infinitely in the context of money towards an outcome of keeping the game going. The process of becoming more conscious of our values, of what we hold as valuable, that process itself is the value of the future.

It is important to note that the current system engaging in this subject matter might generate the terrifying question of how will we monetize consciousness? The unease that comes with this question from the left-hand side of the "U" speaks to the stakes of dealing with foundational myths; it is precarious in the transition. From an infinite perspective, the study reveals that it is about going

CONSCIOUSNESS AS WEALTH

the other way, changing where the momentum is; from a hierarchical mandate of what value is to a decentralized discovery of the values we want money to hold. We might get really rich by bringing our conscious values to the holder, or holders, of value.

References

- 25 People to Blame for the Financial Crisis. (2009, February 11). Retrieved September 01, 2017, from http://content.time.com/time/specials/packages/article/0,28804,1877351_1877350_1877335,00.html
- Atwood, M. (2008). Payback: Debt and the Shadow Side of Wealth (CBC Massey Lectures). House of Anansi Press.
- Ayn Rand. (2017, September 02). Retrieved September 02, 2017, from https://en.wikipedia.org/wiki/Ayn_Rand
- Bad Debt. (2015, September 18). Retrieved September 02, 2017, from http://www.investopedia.com/terms/b/baddebt.asp
- Bank of Canada. (2017, August 26). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Bank_of_Canada
- Bank. (2017, August 28). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Bank
- Barter. (2017, September 01). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Barter
- Bayles, D., & Orland, T. (1993). Art & Fear: Observations on the Perils (and Rewards) of Artmaking. Santa Cruz, CA: Image Continuum Press.
- Bitcoin. (2017, August 31). Retrieved September 02, 2017, from https://en.wikipedia.org/wiki/Bitcoin
- Black, B. (2011, April 04). Stephen Moore's Ode To The American Workers His Policies Harm. Retrieved September 01, 2017, from http://www.businessinsider. com/stephen-moores-ode-to-the-american-workers-his-policies-harm-2011-4
- Black, W. K. (2008, December 04). Adam Smith Was Right about Corporate

- CEOs' Incentives absent Effective Regulation. Retrieved September 01, 2017, from https://www.cato-unbound.org/2008/12/04/william-k-black/ adam-smith-was-right-about-corporate-ceos-incentives-absent-effective
- Blom, P. (n.d.). Peter Blom's, CEO of Triodos Bank, vision on Sustainable Banking. Retrieved September 02, 2017, from https://www.triodos.com/en/about-triodos-bank/ what-we-do/our-expertise-overview/sustainable-banking/peter-blom/
- Branden, N. (1991). Our Urgent Need for Self-Esteem. Retrieved September 02, 2017, from http://www.nathanielbranden.com/our-urgent-need-for-self-esteem
- Branden, N. (2004). Honoring the self: self-esteem and personal transformation. New York: Bantam.
- Branden, N. (2004). The Six Pillars of Self-Esteem. New York: Bantam.
- Branden, N. (2013). Self-Esteem in the Information Age. Retrieved September 02, 2017, from http://www.nathanielbranden.com/self-esteem-in-the-information-age
- Branden, N. (2013). Valuing Love. Retrieved September 02, 2017, from http://www.nathanielbranden.com/valuing-love
- Bruce Mau. (2004, September 11). Retrieved September 02, 2017, from https://charlierose.com/videos/5317
- Buchan, J. (2001). Frozen Desire: The Meaning of Money. New York: Welcome Rain.
- Capital requirement. (2017, August 05). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Capital_requirement
- Carse, J. P. (1986). Finite and Infinite Games: A Vision of Life as Play and Possibility. New York: Free Press.
- Causal layered analysis. (n.d.). Retrieved September 01, 2017, from https://www.shapingtomorrow.com/webtext/55
- Central bank. (2017, August 31). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Central_bank
- Chen, D. (2009, September 08). David Chen: Commerce With Conscience. Retrieved September 02, 2017, from http://library.fora.tv/2009/09/08/ CAPITAL_David_Chen_on_Capital_Markets_for_Social_Good
- Chomsky on Alan Greenspan and Worker Insecurity (2014). (2014, June 08). Retrieved

- September 02, 2017, from https://www.youtube.com/watch?v=Jix1zRziC0A
- Chomsky, Noam. (2014, February 17). Language Design Noam Chomsky. Retrieved September 01, 2017, from https://www.youtube.com/watch?v=MLk47AMBdTA
- Coincidence of wants. (2017, June 06). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Coincidence_of_wants\
- Collin, R. (2016, November 10). Arrival review: dazzling science-fiction that will leave you speechless. Retrieved September 01, 2017, from http://www.telegraph.co.uk/ films/0/arrival-review-dazzling-science-fiction-that-will-leave-you-spee/
- Commercial Bank. (2015, February 06). Retrieved September 03, 2017, from http://www.investopedia.com/terms/c/commercialbank.asp
- Consumer Debt. (2008, May 21). Retrieved September 02, 2017, from http://www.investopedia.com/terms/c/consumer-debt.asp
- Consumer debt. (2017, August 25). Retrieved September 02, 2017, from https://en.wikipedia.org/wiki/Consumer_debt
- Controlled supply. (n.d.). Retrieved September 02, 2017, from https://en.bitcoin.it/wiki/Controlled_supply
- Counterparty Risk. (2015, July 23). Counterparty Risk. Retrieved September 01, 2017, from http://www.investopedia.com/terms/c/counterpartyrisk.asp
- Curtis, A. (Director). (2016). Hypernormalisation [Motion picture]. United Kingdom: BBC.
- Dayen, D. (2017, May 18). Steven Mnuchin Goes Through the Looking Glass-Steagall in Strange Exchange With Elizabeth Warren. Retrieved September 01, 2017, from https://theintercept.com/2017/05/18/steven-mnuchin-goes-throughthe-looking-glass-steagall-in-strange-exchange-with-elizabeth-warren/
- Demirguc-Kunt, A., Klapper, L., Singer, D., & Oudheusden, P. V. (2015). The Global Findex Database 2014: Measuring Financial Inclusion around the World. Policy Research Working Papers. doi:10.1596/1813-9450-7255
- Derivative. (2017, August 01). Retrieved September 01, 2017, from http://www.investopedia.com/terms/d/derivative.asp
- Diller, S., Shedroff, N., & Sauber, S. (2016). Blind Spot: Illuminating the Hidden Value of Business. Brooklyn, NY: Two Waves Books.

- Donald, J., Westt, C., & Sondagar, B. (2017, July 19). Cryptocurrencies vs Fiat Currencies - Comparison Chart. Retrieved September 07, 2017, from http://www.ehowportal.com/cryptocurrencies-vs-fiat-currencies/
- Durden, T. (2013, January 06). 41 Years After The Death Of The Gold Standard, A Look At "How We Ended Up In This Economic Purgatory". Retrieved September 01, 2017, from http://www.zerohedge.com/ news/41-years-after-death-gold-standard-look-how-we-ended-economic-purgatory
- Durden, T. (2013, January 06). Fractional-Reserve Banking: From Goldsmiths To Hedge Funds To... Chaos. Retrieved September 01, 2017, from http://www.zerohedge.com/ news/2014-05-23/fractional-reserve-banking-goldsmiths-hedge-funds-chaos
- Durden, T. (2013, January 06). 41 Years After The Death Of The Gold Standard, A Look At "How We Ended Up In This Economic Purgatory". Retrieved September 18, 2017, from http://www.zerohedge.com/ news/41-years-after-death-gold-standard-look-how-we-ended-economic-purgatory
- Ebert, R. (1987, December 11). Wall Street Movie Review & Film Summary (1987) | Roger Ebert. Retrieved September 01, 2017, from http://www.rogerebert.com/reviews/wall-street-1987
- Economic epidemiology. (2012, June 16). Retrieved September 02, 2017, from http://www.economist.com/node/21556903
- Efficient-market hypothesis. (2017, September 02). Retrieved September 06, 2017, from https://en.wikipedia.org/wiki/Efficient-market_hypothesis
- Eisenstein, C. (2011). Sacred Economics: Money, Gift, & Society in the Age of Transition. Berkeley, CA: Evolver Editions.
- Eisenstein, C. (2013). The More Beautiful World our Hearts Know is Possible. North Atlantic Books.
- Eisenstein, C. (2016, November 10). The Election: Of Hate, Grief, and a New Story. Retrieved September 01, 2017, from https://charleseisenstein.net/essays/hategriefandanewstory/
- Epstein, Gerald A. (2005), "Introduction: Financialization and the World Economy", in Epstein, Gerald A., Financialization and the world economy, Cheltenham, U.K. Northampton, Massachusetts: Edward Elgar Pub, pp. 3–16, ISBN 9781845429652. Pdf.
- Evans, J., & Habbard, P. (2008). From shareholder value to private equity the changing face of financialisation of the economy. Transfer: European Review of Labour and Research, 14(1), 63-75. doi:10.1177/102425890801400107

- Exotic Derivatives. (n.d.). Retrieved September 01, 2017, from http://www. financialadvisory.com/dictionary/term/exotic-derivatives/
- Federal Reserve System. (2017, August 29). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Federal_Reserve_System
- Fidelity Bond. (2011, December 28). Retrieved September 01, 2017, from http://www.investopedia. com/terms/f/fidelity-bond.asp?ad=dirN&qo=investopediaSiteSearch&qsrc=0&o=40186
- Finance. (2017, August 28). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Finance
- Financialization. (2017, August 27). Retrieved September 06, 2017, from https://en.wikipedia.org/wiki/Financialization
- Flight-to-quality. (2017, July 17). Retrieved September 05, 2017, from https://en.wikipedia.org/wiki/Flight-to-quality
- Fractional-reserve banking. (2017, August 30). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Fractional-reserve_banking
- Fraser, N. (2016, Fall). Capitalism's Crisis of Care. Retrieved September 01, 2017, from https:// www.dissentmagazine.org/article/nancy-fraser-interview-capitalism-crisis-of-care
- Fraser, N., & Hamade, H. (2017, August 07). A new leftist narrative is required. Retrieved September 01, 2017, from https://www.opendemocracy.net/ nancy-fraser-houssam-hamade/new-leftist-narrative-is-required
- Gadacz, R. R. (n.d.). Potlatch. Retrieved September 01, 2017, from http:// www.thecanadianencyclopedia.ca/en/article/potlatch/
- Gansky, L., & Kedrosky, P. (2016, March 9). The Future of Jobs, Money, and the New Continuum. Retrieved May 26, 2016, from https://soundcloud.com/instigatingco/the-future-of-jobs-money-and
- Gilligan, V. (2011, November 30). Vince Gilligan on breaking a story in a writer's room - EMMYTVLEGENDS.ORG. Retrieved September 01, 2017, from https://www.youtube.com/watch?v=ULaKzwivJQI
- Glass-Steagall legislation. (2017, August 31). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Glass%E2%80%93Steagall_legislation
- Graeber, D. (2017, January 05). Promises, Promises: A History of Debt, The Origin of Money.

- Retrieved September 02, 2017, from http://www.bbc.co.uk/programmes/b054423q
- Green, Stephen (2000) 'Negotiating with the future: the culture of modern risk in global nancial markets', Environment and Planning D: Society and Space 18: 77–89.
- Greenwood, R. M., & Scharfstein, D. S. (2012). The Growth of Modern Finance. SSRN Electronic Journal. doi:10.2139/ssrn.2162179
- Gregory, C. (1982). Gifts and Commodities. Londra: Academic Press.
- Harari, Y. N. (2014, September 30). Yuval Noah Harari on Imagined Realities. Retrieved September 01, 2017, from https://www.youtube.com/watch?v=zen-m0rMp4I
- Harari, Y. N. (2017). Homo Deus: A Brief History of Tomorrow. S.l.: Vintage Publishing
- Harding, S. (2011). Grow Small, Think Beautiful: Ideas for a Sustainable World from Schumacher College. Edinburgh: Floris Books.
- Hooks, B. (1999). All About Love: New Visions. New York: William Morrow.
- Hooks, B. (2005). The Will to Change: Men, Masculinity, and Love. New York: Simon & Schuster.
- Hooks, B. (2006). Killing Rage: Ending Racism. New York: Henry Holt and Company.
- Huber, J. (2017). Split-Circuit Reserve Banking. Retrieved September 01, 2017, from https://www.sovereignmoney.eu/split-circuit-reserve-banking/
- Hülsmann, J. G. (2008). The Ethics of Money Production. Auburn, Ala: Ludwig von Mises Institute.
- Inayatullah, S. (1990). Deconstructing and Reconstructing the Future. Futures, 22(2), 115-141. doi:10.1016/0016-3287(90)90077-u
- Inayatullah, S. (2005). Causal Layered Analysis Deepening The Future. Retrieved September 1, 2017, from http://www.bing.com/cr?IG=604A60EC-21FA4E95805099259A61C2EF&CID=1B8D489F33366DE42A0A426F32306CE7&rd=1&h =uQ59a0g4UmEWmENNnxeZbwUkBjVv_OU_iz3xoq0Q0us&v=1&r=http%3a%2f%2fwww. metafuture.org%2fcla%2520papers%2fInayatullah%2520Causal%2520layered%2520ana lysis%2520-%2520%2520Deepening%2520the%2520Future.pdf&p=DevEx,5063.1
- Inayatullah, S. (2005). Causal Layered Analysis: Poststructuralism as Method. Retrieved September 01, 2017, from http://www.metafuture.org/Articles/CausalLayeredAnalysis.htm

- Irfan, H. (2015). Heaven's Bankers: Inside the Hidden World of Islamic Finance. New York, NY: The Overlook Press.
- Is the Dollar Gold Price controlled by JPM in Cooperation with the BIS? (2016, March 29). Retrieved September 01, 2017, from http://www.commoditytrademantra.com/ gold-trading-news/is-the-dollar-gold-price-controlled-by-jpm-in-cooperation-with-the-bis/
- Kalas, J. E. (2011). Faith From the Back Side: A Different Take on What it Means to Believe. Nashville: Abingdon Press.
- Kedrosky, P. (2015, May 27). Here's why finance is about to be disrupted. Retrieved September 01, 2017, from https://www.oreilly.com/ideas/finance-transformation-oreilly-next-money
- Keen, S. (1996). Fire in the Belly: On Being a Man. London: Piatkus.
- Krippner, Greta R. (May 2005). "The financialization of the American economy". Socio-Economic Review. Oxford Journals. 3 (2): 173–208. doi:10.1093/SER/mwi008.
- Legacy Asset. (2009, April 19). Retrieved September 01, 2017, from http://www.investopedia.com/terms/l/legacy-assets.asp
- Legacy. (n.d.). Retrieved September 01, 2017, from http://www.dictionary.com/browse/legacy
- Legal Tender. (2013, May 22). Retrieved September 01, 2017, from http://www.investopedia.com/terms/l/legal-tender.asp
- Legal tender. (2017, August 23). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Legal_tender
- Lender Of Last Resort. (2015, July 29). Retrieved September 01, 2017, from http://www.investopedia.com/terms/l/lenderoflastresort.asp
- Let us take a few things off your plate. (n.d.). Retrieved September 01, 2017, from https://www.soylent.com/
- Leverage. (n.d.). Retrieved September 01, 2017, from http://www.dictionary.com/browse/leverage
- Lewis, M. (2015). Flash Boys: A Wall Street Revolt. New York: W.W. Norton & Company.
- Lewis, M. (2017). The Undoing Project: A Friendship That Changed Our Minds. New York: W.W. Norton & Company.
- Lewis, N. (2017, April 18). What Is A "Legal Tender Law"? And, Is It A Problem? Retrieved

- September 01, 2017, from https://www.forbes.com/sites/nathanlewis/2017/04/18/ what-is-a-legal-tender-law-and-is-it-a-problem/#71d228ca25da
- Lietaer, B., & Belgin, S. (2011). New Money for a New World. Qiterra Press (Dec 15 2011).
- Lyon, T. (2011, May 24). Equilibrium Capital Group: Investing in Energy Efficiency. Retrieved September 02, 2017, from https://hbr.org/product/ equilibrium-capital-group-investing-in-energy-efficiency/W91C06-PDF-ENG
- Martin, W. (2016, March 10). These are the 23 European countries where people have the most debt. Retrieved September 02, 2017, from http://uk.businessinsider.com/eurostat-data-on-household-debt-2016-3?op=1
- Maurer, B. (2010). Repressed Futures: Financial Derivatives' Theological Unconscious. Money and Calculation, 148-173. doi:10.1057/9780230298019_8
- McChrystal, S. (2015). Team of Teams. London: Penguin.
- Michael, G. (2010, December 08). 5 Failed Currencies And Why They Crashed. Retrieved September 01, 2017, from http://www.investopedia. com/slide-show/5-failed-currencies-why-they-crashed/
- Moka exchange. (2016, October 02). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Moka_exchange#cite_note-10
- Money. (2017, August 18). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Money
- Moral Hazard. (2017, March 13). Retrieved September 01, 2017, from http://www.investopedia.com/terms/m/moralhazard.asp
- Narrative. (2017, August 27). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Narrative
- Norton, Q. (2014, February 20). A Ledger and a Network Notes from a Strange World – Medium. Retrieved September 01, 2017, from https:// medium.com/quinn-norton/a-ledger-and-a-network-89d7809e7416
- Peter, Kimberley and Schaus, Michael (2016) Understanding bitcoin currency and blockchain technology as a media system. In: Relating Systems Thinking and Design Symposium (RSD), 13- 15 Oct 2016, Toronto, Canada. Available at http://openresearch.ocadu.ca/id/eprint/1940/
- Paul Summerville: A Review of Capital. (2014, May 19). Retrieved

- September 02, 2017, from http://tvo.org/video/programs/ the-agenda-with-steve-paikin/paul-summerville-a-review-of-capital
- Piketty, T., Saez, E., & Zucman, G. (2016). Distributional National Accounts: Methods and Estimates for the United States. doi:10.3386/w22945
- Potlatch. (2017, July 24). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Potlatch
- Premise definition of premise in English | Oxford Dictionaries. (n.d.). Retrieved September 01, 2017, from https://en.oxforddictionaries.com/definition/premise
- Premise. (2017, August 04). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Premise
- Price discovery. (2017, August 31). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Price_discovery
- Rational choice theory. (2017, August 31). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Rational_choice_theory
- Rollert, J. P. (2014, February 26). An Ethicist on Wolf of Wall Street: The Most Anti-Greed Movie Ever? Retrieved September 01, 2017, from https://www.theatlantic.com/entertainment/archive/2014/02/ an-ethicist-on-em-wolf-of-wall-street-em-the-most-anti-greed-movie-ever/283806/
- Rotating Savings and Credit Association. (2017, August 25). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Rotating_savings_and_credit_association
- Rushkoff, D. (2016, February 18). Twitter Is Not a Failure. Retrieved September 01, 2017, from https://www.theatlantic.com/business/archive/2016/02/twitter-failure/463248/
- Rushkoff, D. (2016). Throwing rocks at the Google bus: How growth became the enemy of prosperity. Londen: Portfolio Penguin.
- Santelli, R. (2008, July 01). Rick Santelli oil speculation debunk. Retrieved September 02, 2017, from https://www.youtube.com/watch?v=_3eeLZA71EM
- Scharmer, O., & Kaufer, K. (2013). Leading From the Emerging Future: From Ego-System to Eco-System Economies. San Francisco: Berrett-Koehler, Inc.
- Schull, N. D. (2014). Addiction by Design: Machine Gambling in Las Vegas. Princeton, NJ: Princeton University Press.

- Schwartz, N. D. (2017, May 28). Route to Air Travel Discomfort Starts on Wall Street. Retrieved September 02, 2017, from https://www.nytimes.com/2017/05/28/ business/corporate-profit-margins-airlines.html?mcubz=1&_r=0
- Scorcese, M. (Director). (2014). The Wolf of Wall Street [Motion picture]. United States: Paramount Pictures.
- Sharpe, B. (2013). Three Horizons: The Patterning of Hope. Axminster: Triarchy.
- Soddy, F. (2012). Cartesian Economics: The Bearing of Physical Science Upon State Stewardship. S.l.: COSIMO CLASSICS.
- Solnit, R. (2017, May 31). Rebecca Solnit: The Loneliness of Donald Trump. Retrieved September 02, 2017, from http://lithub.com/rebecca-solnit-the-loneliness-of-donald-trump/
- Sou sou. (2017, August 30). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Sou-sou
- Standardization. (2015, July 29). Retrieved September 01, 2017, from http:// www.investopedia.com/terms/s/standardization.asp#ixzz4nBUohBSK
- Stiglitz, J. E. (2015, January 31). Joseph E. Stiglitz on capitalist fools. Retrieved September 01, 2017, from https://www.vanityfair.com/news/2009/01/stiglitz200901-2
- Stone, O. (Director). (1987). Wall Street [Motion picture]. United States: 20th Century Fox.
- Story. Definition of story in English | Oxford Dictionaries. (n.d.). Retrieved September 01, 2017, from https://en.oxforddictionaries.com/definition/story
- Story. (n.d.). Retrieved September 01, 2017, from http://www.dictionary.com/browse/story
- Strathern, M. (2010). The Gender of the Gift: Problems with Women and Problems with Society in Melanesia. Berkeley, CA: University of California Press.
- Terrio, S. (2017, April 28). Drowning in debt is the new normal in Canada. Retrieved September 02, 2017, from http://www.macleans.ca/news/ canada/drowning-in-debt-is-the-new-normal-in-canada/
- The Great Untangling. (2008, November 08). Retrieved September 01, 2017, from http://www.economist.com/node/12552204
- Thomson, A., & Neufeld, E. (2008). Bank of Canada. Retrieved September 01, 2017, from http://www.thecanadianencyclopedia.ca/en/article/bank-of-canada/

- Tickell, Adam (2000) 'Dangerous Derivatives: Controlling and Creating Risks in International Money', Geoforum, 31, 87–99.
- Tranches. (2017, March 13). Retrieved September 01, 2017, from http://www.investopedia.com/terms/t/tranches.asp
- Virtue signaling. (2017, August 16). Retrieved September 07, 2017, from https://en.wikipedia.org/wiki/Virtue_signalling
- Vuillemey, G. (2105, February 12). Do derivatives make the world safer? Retrieved September 18, 2017, from http://voxeu.org/article/do-derivatives-make-world-safer
- Waddington, D. I. (2005). A Field Guide to Heidegger: Understanding 'The Question Concerning Technology'. Educational Philosophy and Theory, 37(4), 567-583. doi:10.1111/j.1469-5812.2005.00141.x
- Waller, C. (2012). The Semiotic Theory of Money. Retrieved September 01, 2017, from http://www.economania.co.uk/chris-waller/semiotic-theory-money2.htm
- White, G. B. (2016, January 19). Where Is All the World's Money Going? Retrieved September 01, 2017, from https://www.theatlantic.com/ business/archive/2016/01/widening-wealth-gap/424695/
- Wong, C. (2017, March 15). Canadian household debt hits another record in fourth quarter. Retrieved September 02, 2017, from https://www.thestar.com/business/2017/03/15/ canadian-household-debt-hits-another-record-in-fourth-quarter.html
- Zero-sum game. (2017, August 23). Retrieved September 01, 2017, from https://en.wikipedia.org/wiki/Zero-sum_game