

RESOURCE TRANSFORMATION THROUGH CAPITALIZATION  
PROCESSES IN COMMUNITY ECONOMIC DEVELOPMENT

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ABSTRACT

This dissertation presents a critical institutionalist theory of resource transformation through capitalization processes in the context of community economic development. The arguments are presented through three articles. The first chapter is introductory and provides a synthesis of the main arguments in the articles that follow.

The first article (Chapter II) provides a brief conceptual history of the term ‘capital’ and continues by articulating a capital as process. The Community Capitals Framework provides several insights that shape the conception of resources and their use in the context of community economic development. A metatheoretic framework is developed in which emergent resource capitalization processes are seen as a social relation through which agents, constrained and enabled by both resource structures and cultural systems, pursue their development agendas by utilizing those resources they have access to in order to transform them into resources they desire.

The second article (Chapter III) seeks to identify a set of processional properties associated with capitalization processes. The eight properties are identified as: transformation capacity, temporality, cultural embeddedness, expected future yield, identifiability, flexibility, reliability, and variability/conditionality. This set of properties serve as a vocabulary by which diverse capitalization processes are analyzed and employed. Establishing a clear distinction between a community's resources and the processes involved in capitalizing them requires non-conflationary properties associated with each.

The final article (Chapter IV) serves as an application of the framework developed in the first two articles by developing a theory of resource transformation through capitalization processes in community development. This theory is evaluated by conducting a case study of the establishment of the Ithaca HOURS initiative in Ithaca, NY, during the early 1990s. This community-led initiative established a community currency, Ithaca HOURS, in order to stimulate local economic activity.

## APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of Graduate Studies have examined a dissertation titled “Resource Transformation Through Capitalization Processes in Community Economic Development,” presented by Jonathan D. Ramse, candidate for the Doctor of Philosophy degree, and certify that in their opinion it is worthy of acceptance.

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## DEDICATION

This is dedicated to my son, Hans.

## CHAPTER 1

### INTRODUCTION

This dissertation presents a critical institutionalist metatheory of resource transformation through capitalization processes in the context of community economic development. Motivation for this research stems from a number of sources. First, little literature exists that spans the divide between economic theory and practical community development. This study hopes to serve as a bridge between these two areas. Secondly, while practical community development and its analysis encounter both successes and challenges, there is little discussion of the underlying metatheory that supports it. This study hopes to provide additional understanding for why and how communities engage in community development initiatives. Last and thirdly, there exists much conceptual confusion surrounding the term ‘capital.’ This study provides some clarity with regard to various conceptualizations from past literature by identifying four camps. We suggest a processional conceptualization is most appropriate for examining processes of development, particularly community development. The arguments addressing these broad themes are presented through three articles, presented in the chapters that follow.

The Community Capitals Framework (CCF) served as an important starting point for this study. The CCF, as a community development approach, was established by Cornelia Butler Flora and Jan Flora, two rural sociologists at Iowa State University, in 2004. Their framework builds on other similar participatory approaches to community development such as the self-help (Cary, 1970), asset-based community development (McKnight & Kretzmann, 1993, 1996), and appreciative inquiry approaches (Cooperrider, Sorensen, Whitney, & Yaeger, 1999; Cooperrider & Whitney, 2005). Each

of these differs in emphasis, however they all promote development processes that are primarily initiated by local people using local resources. The CCF serves as a useful tool in not only categorizing what resources a community has access to, but also through the interactions of those resources and the utilization of those resource to achieve the goals defined by local participants.

These participatory approaches to community development beg the question: How do communities, specifically the people within them, make new or more resources from the resources they have to achieve their goals? This requires taking a position with regard to how we understand our social world. Specifically, how do people affect change they seek with regard to their community's economic development? For this the critical institutionalist (CI) (Tauheed, 2013a, 2013b) approach is used. The CI approach builds on the work of critical realists such as Roy Bhaskar (1998, 2008) and Margaret Archer (1995), as well as original institutional economics (Veblen, 1898; Commons, 1961; Ayres, 1962) by providing a transactional model of social action in which agency, constrained and enabled by both resources structure and culture, act upon their agendas through social action. This transactional model of social action provides an appropriate metatheoretic framework from which we can understand the interaction between structure and agency in social action. Particular emphasis is given to the emergent process of capitalization that occurs when resource sets are actualized. Both resources, as well as their capitalization, are seen as emergent in the sense that they are irreducible to their parts or inputs. Resources emerge through past capitalization processes. Capitalization processes occur through actual events as social relations between one or more agents and their resource structures, being constrained and enabled by cultural systems, to elaborate

their resource structures. Capitalization processes cannot be reduced to the sum of resource structures, cultural systems and the agents they affect. This ontological understanding of how people relate to their resources is consistent with the CCF approach and provides a deeper level of analysis. While the CCF literature served as a starting point, this research moves to a more basic level to establish a metatheoretic framework from which the CCF, along with other participatory approaches to development can better be understood.

In developing such a metatheory of resource capitalization, it becomes important to use a clear and consistent conception of capital. Due to the lack of clarity of the term ‘capital,’ we provide some broader context from which we can situate the CCF and further provide our own processional conception. Very little literature discusses the concept of capital as process (Bankston & Zhou, 2002; Levy, 2017). We take insights from these prior discussions but provide a distinct conception that is rooted in the CI approach and serves to enhance the CCF in the objective of enabling communities to flourish. Further clarity with regard to capitalization processes is provided through the specification of eight processional properties of capital. These are transformation capacity, temporality, cultural embeddedness, expected future yield, identifiability, flexibility, reliability, and variability/conditionality. Insights are gleaned from past literature on various properties of capital. The processional properties that are identified are non-conflationary in the sense that they do not conflate resources and capitalization processes. Understanding these processional properties of capital help in shifting our thinking of capital as substance, often conflated with resources, into thinking of capitalization processes that people direct. The processional properties extend the

development of the metatheory by discussing the characteristics associated with capitalization in social action. The properties also serve to establish a vocabulary by which capitalization processes can be compared and contrasted, as well as can be examined in the context of community development initiatives. This vocabulary is used in the final part of the study through a community development case study.

Building on the metatheory of resource capitalization and their properties, the final portion of this study puts forward an analysis of resource transformation, suggesting particular types of resource transformations through particular capitalization pathways associated with development initiatives attempting to attain or increase their stock of each of seven community resource categories. Resource transformations through capitalization pathways rely on existing resource sets as inputs into capitalization processes that produce output resources.

In the context of community development two general development processes are discussed. First, 'macro' development processes involve the overarching goal of the community for a particular initiative. All of the incremental steps that are used for a community to achieve their desired goal of the initiative are included in the 'macro' development process. The incremental steps or stages in the achievement of the broader goal are considered strategic transactions. Following the work of John R. Commons (1961), we conceptualize community development processes as occurring through strategic and routine transactions based on the complementary and limiting factors required to achieve a particular agenda. After a community has engaged in a series of strategic transactions in order to obtain those limiting factors which are required to

complete a project, those factors are combined with other complementary factors through routine transactions.

The analysis of resource transformation through capitalization processes is applied to the case of the Ithaca HOURS initiative in Ithaca, NY. Ithaca HOURS system is a community currency that was established in the early 1990s with the objective of stimulating local economic activity and keeping the wealth generated within their locality. The ‘macro’ development goal for the Ithaca HOURS initiative involves the establishment of financial resources in the form of a community currency. Ten strategic transactions, which are conducted through the capitalization of existing and available resources within the community, lead to the acquisition of the limiting factors needed to move forward with the broader goal of establishing the Ithaca HOURS system. Once the Ithaca HOURS system had been established, we continue by modeling the various capitalization processes involved in the general use of Ithaca HOURS for the purchase and sale of various goods and services in the Ithaca community.

The three articles built on one another. The first takes a few conceptual steps backward, or theoretically “deeper,” from our starting point, the CCF, and develops a metatheory to which the CCF is compatible while also providing an articulation of what actually occurs when people use their resources to engage in community development. The second article provides conceptual clarity for understanding capital as process and forms a vocabulary by which capitalization can be discussed. The final article builds off of the first two articles by applying to a case of community economic development.

This dissertation seeks to contribute to the field of community economic development in two main directions. First, it seeks to deepen our understanding of how

communities use their resources to enhance their own wellbeing. The metatheory developed here, roots what communities are already doing in terms of utilizing their resources in a deeper understanding of how people, constrained and enabled as they are, act upon their desires and goals. This study is more descriptive than prescriptive. This metatheory seeks to establish an analytic tool for better understanding the seemingly universal ability of people to use what they have to gain what they need. If there exists a prescriptive aspect to this study, it would be directed toward “the experts” in development. It is too often the case for well-intentioned development professionals to rush to providing solutions to what they perceive to be problems without much consideration for local participation. We suggest there is a role for an outside “expert;” however, that role is limited to (at most) a facilitation of community identified agendas as well as responding to particular requests of local members of the community.

The second direction we hope to expand the literature and broaden the discussion of community economic development, is to contribute a new analytical tool in which theory can inform practice and practice may shape theory. The contrasting stereotypes of ivory tower academics and grassroots activists needs to be addressed. Those that theorize about how the world functions cannot do so in isolation of it, while the people living their lives and seeking to affect change also need to realize they operate from some theory – a conceptualized reality. We hope this study contributes to the interaction between theory and practice. It is especially relevant for the field of community development because there is much good work being done on both the practice side as well as the theory side. Bringing these two approaches into conversation with each other

will enrich the field and lead to not only effective change, but effective change that is understood.

## CHAPTER 2

### THE EMERGENCE OF COMMUNITY CAPITALS

Capital is a term and concept that is shrouded in controversy. Tracing the history behind each use of the term helps in avoiding a dogmatic singular perspective that creates ‘right’ and ‘wrong’ labels for each approach. To simplify, four broad historic and loose disciplinary categories will provide some guidance. The mainstream economics perspective originally views capital as one of three factors of production. Newer uses of the term in mainstream economics includes human, social and other types of capital implying productive aspects of individual decision making. The Marxist conception roots their understanding of capital in terms of a social relationship in the capitalist mode of production. The institutional approach and use of the term revolves around the generally accepted use in society – particularly the business community. There may be differing uses in a variety of contexts. Finally, the sociological conception includes a broader set of uses and relates to socially productive activity in areas within and outside of what we consider ‘economic’ contexts.

We situate the Community Capital Framework (CCF) within this historical and disciplinary context. The CCF is an approach that comes from the field of rural sociology which provides a useful analytical tool for understanding and categorizing the various resources in a community (Flora, 2004). The CCF, we will argue, is a powerful tool for economists interested in a holistic economic analysis in which theory informs practice (and practice informs theory).

This paper aims to provide further justification for the use of a set of capitals such as the CCF. We frame our conception of capital around the notion of a structured social

ontology as articulated by critical institutionalism (CI) (Tauheed, 2013a, 2013b). Capital is recognized as emerging from resources being capitalized upon by agents fulfilling their agenda. A metatheory is developed from the understanding of capital as existing in processional state when people, who are enabled and constrained by their resource structure and cultural system, act upon their agendas. The capitalization processes specifically relate to the manner which people actualize the resources to which they have access in achieving their agendas.

When we understand the emergence of each of the resources and the subsequent emergence of capital through the social action of agents we better understand how communities use what they have to gain access to what they need for various initiatives. While this article does not address the practical application of such a reconceptualization of capitalization processes in community development, it serves as an under-laboring effort to provide a metatheoretic foundation from which future theory and practice may develop.

### **What is capital?**

Words and language are living and evolving. Thus, the original way in which the term capital was used may not be the same as the way it is used today. The term capital can be traced to the Latin *caput* meaning ‘head,’ in the context of cattle. Early usage also implies ‘principle or important.’ Some suggest that capital referred to all goods possessed, but others suggest that it was the principle sum of money used in economic transactions (Cannan, 1921).

Attempting to clearly and succinctly explain the current usage and debate surrounding the term capital is an arduous task given the hours and pages devoted to each

position held in regard to this term and corresponding conception. In 1896 Irving Fisher stated “[o]f economic conceptions few are more fundamental and none more obscure than capital” (p. 509). We will, nonetheless, attempt to clarify the history and usage of the term in as concise a manner as possible. We will set up four basic ‘camps’ where we contend the majority of views of capital fit in current usage: mainstream economics, Marxian, institutional and sociological.

Within mainstream economics, capital is generally understood as one of three factors of production along with labor and land (natural resources are included with land). In many economics textbooks capital is defined along the lines of “a produced and durable input which is itself an output of the economy” (Samuelson & Nordhaus, 2009, p. 33). Typical examples of capital goods include buildings, heavy machinery, computers and software. While this conceptualization is widely accepted, it does not preclude the fact that the term has been used in a number of different ways from the earliest days of classical political economy to current modern economics.

Most conceptions and usage of capital in economics root their ideas in classical political economy. Adam Smith, along with other classical political economists, used the term to describe one of three factors of production. There is plenty of nuance in their usage, however, distinguishing between fixed and variable forms of capital, and at times referring to land as fixed capital and workers as a form of variable capital (Smith, 1937, p. 262). The term also continued to be used to refer to money capital – as early merchants use it. John Bates Clark (1888) put forward the usage of ‘pure capital’ and ‘capital goods’ in an attempt to clarify between money capital and capital equipment (as in a factor of

production). His suggestion did not gain widespread traction and the term continued to be understood primarily as a factor of production.

Often overlooked is that before the term capital was used in the sense of factor of production proposed by classical political economists, it had a different common usage among traders and merchants of Italy. In the early thirteenth century, the concept of capital in Italy was tied to the assets of a trading company. This concept evolved and spread to other parts of Europe and came to mean the “money capital of a firm or merchant” (Hodgson, 2014, p. 1064). This early conception sees capital as an initial fund, or principle, for a business endeavor.

More recently in mainstream economics literature the term is being adapted and expanded in a variety of ways. Human capital and social capital are two primary ways in which mainstream economists are using the term. Human capital theory was developed by Jacob Mincer (1958, 1974), Theodore Schultz (1961), and Gary Becker (1994) who posit that individuals make investments in their abilities, skills and knowledge – primarily through education. Mincer, thought of as the ‘father of labor economics’ in mainstream economics, was a pioneer in the field of human capital. The ‘Mincer earning function’ (Mincer, 1974) has been a mainstay in publications examining the relationship of human capital, measured as years of schooling and years of experience, to earnings. Schultz’s writing was strongly influenced by the cold war in which ideological battles between the individualistic-capitalist west and the collectivist-communist Soviets were being played out in the halls of academia. Discussions with his colleague Milton Friedman at the University of Chicago are said to have also affected his theory in particular. Schultz initially understood human capital to be a type of public good in which

the state played an important role through public investment. The promotion of state involvement in the economy was not in line with the pro-capitalist stance the United States government hoped for. Friedman was able to use the basis of Schultz's argument, but argue that individuals, not the state, are investing in their own education. Friedman also argued that individuals have control and access to their own human capital. This translated into the ideologically charged idea that all individuals become mini-capitalists (Fleming, 2017). Gary Becker, a student of Milton Friedman and a colleague of Jacob Mincer, later articulated his human capital theory that was in large part based on his teacher's ideas. Based on methodological individualism, humans are viewed as rational and optimizing agents making maximizing decisions regarding their investment in education to increase productive potential.

In addition to human capital, social capital is a term being increasingly used in mainstream economics literature. It should be noted that 'social capital,' as used by classical political economists such as Marx, refers to a collective ownership of capital (factor of production) rather than what the term has come to mean today. Glenn Loury (1977) is the first within mainstream economics to use the term. He uses social capital in a manner that responds and corresponds to issues in Gary Becker's human capital theory of discrimination. He indirectly challenges the assumption of atomistic 'rational agents' by introducing social structures that influence and limit opportunities of black people to make decisions regarding investments in human capital. Social capital is understood by him as "the consequences of social position in facilitating acquisition of the standard human capital characteristics" (Ibid, p. 176). Literature on social capital has expanded drastically in the past decade in mainstream economics. In particular, the term has been

used as a residual variable assigned to capture effects of non-economic categories in various phenomena being studied (Fine, 2010, p. 42). The central aspect of these concepts of capital in the mainstream economic camp is its future productive capacity.

Capital, for each of the mainstream uses of the term, is directly related to the marginal product theory in which each of the factors of production is priced (paid) according to its marginal product. The Cambridge Capital Controversy of the mid 1960s illustrated severe limitations to the formal production models which relied on the idea of marginal product of capital. On one side were the titans of mainstream economics, predominantly from Cambridge (MIT) in the United States, who believed that formal modeling of the economy, using production functions, was the best approach to economic analysis. Post-Keynesian and Sraffian economists from Cambridge in the United Kingdom picked apart the assumptions and theoretical basis for such an approach. One critique was that capital, as a factor of production, cannot be understood as a homogenous entity. Capital is made-up of heterogeneous factors of production – each with differing levels of productivity. There in-lies the problem with the aggregation of a total sum of capital goods. A second critique revolved around the possibility of re-switching production techniques. The mainstream view that firms were locked-in to less productive and less profitable techniques was found to be unnecessary. Firms do have a possibility to re-switch their capital to change their production technique. Paul Samuelson, a key MIT economist, did finally concede to the possibility of re-switching in production and stated “[w]e must respect, and appraise, the facts of life” (1966, p. 583). The Cambridge Capital Controversy illustrated the theoretic ambiguity in the concept of capital, especially in regard to formal modeling (Ferguson, 2016). The controversy did not attempt to debate

the definition or conception of capital, but it did point out that capital is heterogeneous in nature. Mainstream economists continue to use a simplifying assumption of homogeneous capital in modeling; however, there does seem to be an acknowledgment that in reality capital is heterogeneous and varied in its productivity.

The second camp among the four concepts of capital is the Marxist camp. We begin with the basic traditional interpretation of Marx's capital. It is important to understand that Marx is responding to the classical political economists who came before him, in particular, Ricardo. Thus, Marx adopts a similar distinction in his conception; rather than fixed and variable, Marx adopts the dichotomy between constant and variable. This nuance emphasizes the difference between labor and non-labor aspects of the production process. By constant capital, Marx means those inputs that are embodied into the produced output, such as materials and machinery. On the other hand, he uses variable capital to mean that part of capital that is used to purchase labor-power. More important than the distinction between constant and variable capital in Marx's conception of capital is the view that capital is not a thing but a relation in the means of production. Marx states in *Capital Volume 3*,

...capital is not a thing, it is a definite social relation of production pertaining to a particular historical social formation, which simply takes the form of a thing and gives this thing a specific social character. [...] Here we therefore have one factor of a historically produced social production process in a definite social form, and at first sight a very mysterious form (1993, pp. 953–954).

While Marx uses the term in a variety of ways, he emphasizes the idea that capital is a historically contingent relation between the mode of production and the social relations of

production. This relation is characterized by the exploitation of workers by those who control the means to production, the capitalists. Max Weber (2001), the sociologist, also would fit in the Marxist camp in terms of his conception of capital. He also uses the term to describe a particular historic period where the term capital is used to express the monetary worth of productive capacity. New interpretations of Marxist theory, for example, Resnick and Wolff, understand Marx's definition of capital as 'value-in-process' or 'self-expanding value' (1989, p. 142). This newer conception within the Marxian camp broadens the concept to include a wide variety of ways in which Marx used the term.

One Marxist economist, Ben Fine (2010), critiques the growing body of literature on social capital. He states that:

[S]ocial capital has created a cordon sanitaire around itself through which criticism is ignored and incorporated, apparently strengthening the idea through acknowledging opposition. In place of the global, the economic, class, the state, conflict, gender, power and so on, social capital offers a bland alternative, highly conciliatory in principle and practice with more humanely present forms of neo-liberalism, with token incorporation on narrower terms of other buzzwords such as empowerment and participation (Fine, 2010, p. 34).

From the large body of literature from the past two decades, Fine sees social capital being used to mean almost everything and anything. This 'McDonaldisation' cheapens the analytical quality of social capital. "Social capital," Fine states, "is to social science as McDonald's is to gourmet food" (Ibid, p. 21).

Fine does extend some hospitality towards the approach that Bourdieu takes to capital. He points out three main aspects of his approach. First, social capital is one among other capitals (cultural, symbolic and economic). Second, social capital, as with other capitals, is context specific. And the third, Bourdieu addresses questions of class, power and conflict. (Ibid, p.39)

Marxists conceptualizations and use of the term capital revolve around class relations in particular historic periods. Being that we live within a capitalist period, capital is understood in the context of class relations between capitalists, workers and the subsumed class. Fine's critique illustrates the centrality of historically specific conceptualizations of capital, and the rejection of unspecified and vague uses of such an important term.

The institutional and sociological camp is where we find a plurality of approaches from different disciplines. In the institutional camp, Thorstein Veblen (1898, 1908a, 1908b, 1934, 1956) takes a broader and looser conception of capital to imply both physical capital and intangible assets. He primarily uses the term in the context of business enterprise. However, he understood that the usage of terms does not remain the same through history; he suggests adapting to those changes in conception rather than forcing and normalizing a particular conception on others (1908, p. 114). He states:

With all its shifting ambiguities, [businessmen] know it securely enough for their use. The concept has sufficient stability and precision to serve their needs; and, if the economist is to deal with the phenomena of modern life in which this concept serves a use of first-rate importance, he must take the term and the concept as he finds them. It is idle fatigue to endeavor to normalise them into a formula which

may suit his prepossessions but which is not true to life. The mountain will not come to Mahomet (Ibid).

Both John Commons and Clarence Ayres used the term capital to refer to large business activity in the context of the American capitalist system of the early and mid-twentieth century. Commons, in tracing the history of the concept, explains that Ricardo's idea of capital is rooted in that portion of past product saved for the subsistence of labor. He contrasts that with Turgot's idea that capital is "the present value of future net income" (Commons, 1961, p. 499). In one case the concept is related to physical stock 'saved' from some past production cycle. In the other case, it is an initial financial sum used to borrow for the purpose of creating future income streams. He states that "[t]hey reached similar conclusion by monetary and non-monetary roads" (Ibid, p. 498). Ayres, while focusing most of his analysis on the capitalist system - certainly dominated by finance - sums up his discussion of capital into two uses. First, the use of the term may always be associated with physical tools and their requisite knowledge; secondly, capital must be viewed as the financial fund which may be used to purchase such physical tools. He critiques the mainstream view of the accumulation of capital occurring through a process of forgoing consumption of physical tools and suggests that the notion of 'saving' for the accumulation of capital occurs only through the savings of finance.

[t]he very existence of the community together with all the material progress which recent centuries have witnessed depends upon the existence and use of capital (meaning the physical tools and materials of industry, the knowledge and skills of the community); but it is only by 'saving' that we are able to accumulate capital (meaning funds of money values capable of being 'invested in capital

equipment); consequently it is upon the accumulation of capital (funds) that the whole life of the community depends (Ayres, 1962, p. 50).

K. William Kapp (2011) presents an overview of the concept of capital in institutional economics. A key idea in institutional capital theory is that capital is both tangible physical equipment and intangible human knowledge (Ibid, p. 105). He goes on to point out an inevitable critique to the institutional position in that some may claim that if capital is everything, then it loses all its unique significance. Institutional economists do not deny the expansive reach of the concept, but in fact see it as an entity in production that takes on many roles. It emphasizes the interrelated nature of factor inputs and the significant role of knowledge and technology in the production process (Ibid, p. 110).

Another important conception is from Lyda Hanifan, possibly the first to define social capital, who articulates it as “that in life which tends to make these tangible substances count for most in the daily lives of a people, namely, good-will, fellowship, mutual sympathy and social intercourse among a group of individuals and families who make up a social unit...” (1916, p. 1). James Farr (2004), in tracing the conceptual history of social capital, points out that John Dewey was not credited as the first to use the term, but was most likely influential in Hanifan’s conception of the term. Dewey used the term in a number of places with similar implication to Hanifan, however, he does not provide a definition (Dewey, 1900, 1909, 1915).

A different conception of social capital is provided by Lindon Robison, Allan Schmid and Marcelo Siles (2002). They understand social capital as sympathy which is “a property of individuals within some macro unit such as an organization, community, or society. While it is the property of individuals, it can only be described as a

relationship” (Ibid, p. 751). As can be seen from the title of their article, “Is social capital really capital?”, the authors spend much of the discussion understanding the characteristics of capital. They use the list of characteristics to evaluate if social capital can justifiably be understood as ‘capital.’ They conclude it can be. By surveying recent institutional literature, it is apparent that this expanded conceptualization of the term is rare.

Geoffrey Hodgson (2014) presents a critique of the over use of capital and suggests using the term only within the narrow confines of financial capital as used in thirteenth century Europe. For his argument, he considers five criteria that should be met in order for something to be considered capital. These criteria are: “(1) Can the use rights be owned or hired? (2) has it a market price? (3) Can it be used as collateral? (4) Can it be bought or sold (alienated)? (5) Is it readily measurable in the aggregate?” (Ibid, p. 1079). He evaluates four types of capital (capital as money or collateral, capital goods, human capital and social capital) in relation to the criteria listed above. Hodgson concludes:

[w]e need to sweep with a new broom. We should consider using the terminology of capital that prevails in the real business world. Instead of ‘capital goods’ we may use the broader term ‘capital assets’, signifying the importance of immaterial or intangible, as well as material property. Instead of ‘human capital’, why not ‘human resources’? And instead of ‘social capital’, why not ‘networks’ or ‘social trust’? Capital then becomes more meaningful and special (Ibid, p. 1080).

He thus concludes that the term should be defined as “a fund of money to be invested in some enterprise” (Ibid).

Sociological conceptions of capital predominantly revolve around social capital. Mark Granovetter (1973, 1983), while not using the term social capital, suggests that the role of weak social ties in connecting or bridging different clusters of closer social relations is essential in producing advantageous situations or opportunities. His idea of the strength of weak social ties is especially close to the concept of bridging social capital as outlined in the CCF. Another sociologist, James Coleman (1988), bridged disciplines and fits social capital within a frame with two other forms of capital: physical capital and human capital. Just as physical capital is embodied in physical objects such as metal and wood, and as human capital is embodied in individual humans, social capital is embodied in the real social relationships between people and groups. More recently, the political scientist Robert Putnam (1995), is recognized as popularizing the term social capital. He used the term to describe a trend in the United States of people becoming decreasingly engaged in civic and public debate of political issues. He used the analogy of people who used to be a part of bowling leagues, but are now bowling alone to illustrate how people who formerly engaged in civic issues are no longer engaged as a community. He describes this process of losing social capital as ‘social decapitalization.’ The last perspective of capital in this camp is Pierre Bourdieu’s conception. He conceptualizes a ‘family’ or ‘different species’ of capital containing a “potential capacity to produce profits and to reproduce itself in identical or expanded form...” (1986, p. 241). Bourdieu primarily discusses three forms of capital:

as economic capital, which is immediately and directly convertible into money and may be institutionalized in the forms of property rights; as cultural capital, which is convertible, on certain conditions, into economic capital and may be

institutionalized in the forms of educational qualifications; and as social capital, made up of social obligations ('connections'), which is convertible, in certain conditions, into economic capital and may be institutionalized in the forms of a title of nobility (Ibid, p. 242)

Capital, in the sociological conception, is broadened beyond the traditional economic production context. A final sociological approach, the CCF, will be presented below in a separate section.

Having identified these four distinct, although 'muddy,' camps, we will situate our analysis most closely with the institutional and sociological camps, although Marx's notion of capital as a social relation plays an important role in our conception. Many of the perspectives we have covered view capital as 'productive' in the sense that capital, along with labor and land, produces goods or services while not being depleted itself or in the sense that a sum of money is applied to a business endeavor in hopes of producing a pecuniary return. We rather view capital as a tool that enables people to be productive. People, not capital, are in fact what Aristotle refers to as the efficient cause. Capital is understood as a process in which agents use resources to fulfil their agendas. The processional conception of capital is further elaborated below in the context of a critical institutionalist approach. We conceptualize capital as a process that is diverse in nature. Capitalization processes occur through the use of a variety of resources types. The CCF provides an excellent manner in which we can categorize various resource types within a community.

## **The Community Capitals Framework**

A more recent use of the term is the Community Capitals Framework (CCF) put forward by Cornelia and Jan Flora, two rural sociologists at Iowa State University. This approach originally dates back to the 2004 book *Rural Communities: Legacy and Change* written by Cornelia Butler Flora, Jan Flora and Susan Fey. We will rely on the most recent, 2016, edition of this book for our analysis. The basic aim of the framework is to understand and vision how different forms of capitals within a community can be used for the development process with the broad goals of developing vital economies, increasing social inclusion and fostering a healthy ecosystem (Flora, Flora, & Gasteyer, 2016, p. 16). Capitals within this framework are defined as “resources, or assets, [that] are invested to create new resources”(Flora et al., 2016, p. 15). The CCF identifies seven interdependent capitals:

- Built capital is human-constructed infrastructure. Although new built capital is often equated with community development, it is effective only when it contributes to other community capitals. Built capital can cause deterioration of the other capitals when it is deployed without regard for its consequences. Built capital includes information technologies, chemicals, bridges, railroads, oil pipelines, factories, day care centers, and wind farms.
- Cultural capital determines a group’s worldview, how it sees the world, how the seen is connected to the unseen, what is taken for granted, what is valued, and what things a group thinks are possible to change. Cultural hegemony allows one social group to impose its worldview, symbols, and reward system on other groups.

- Financial capital includes savings, income generation, fees, loans and credit, gifts and philanthropy, taxes, and tax exemptions. Financial capital is much more mobile than the other capitals and tends to be privileged because it is easy to measure. Community financial capital can be assessed by changes in poverty, firm efficiency, diversity of firms, and local people's increased assets.
- Human capital is the capabilities and potential of individuals determined by the intersection of nature (genetics) and nurture (social interactions and the environment). Human capital includes education, skills, health, and self-esteem.
- Natural capital includes the air, water, soil, wildlife, vegetation, landscape, and weather that surround us and provide both possibilities for and limits to community sustainability. Natural capital influences and is influenced by human activities. It forms the basis of all the other capitals.
- Political capital is the ability of a community or group to turn its norms and values into standards, which are then translated into rules and regulations that determine the distribution of resources. Political capital is also mobilized to ensure that those rules, regulations, and resource distributions are (or are not) enforced.
- Social capital involves mutual trust, reciprocity, groups, collective identity, working together, and a sense of a shared future. Bonding social capital consists of interactions within a specific group or community, and bridging social capital consists of interactions among social groups.

(Flora et al., 2016, pp. 15–16)

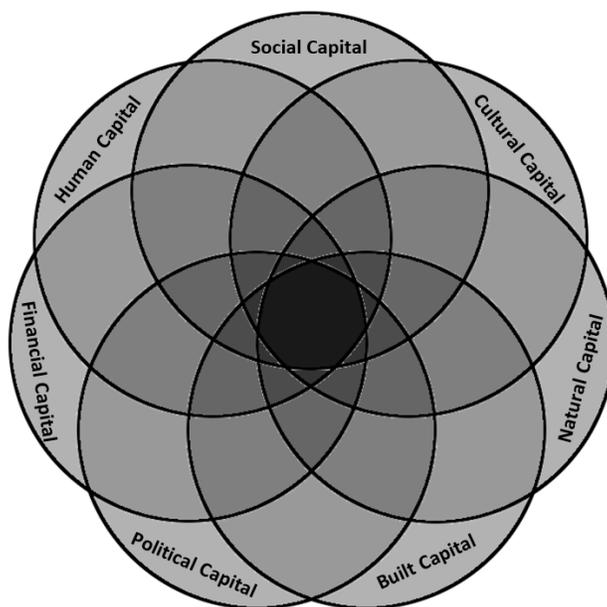


Figure 1: Community Capitals (Flora et al., 2016, p. 17)

The CCF envisions each of these seven capitals working in unison for the purposes of a community. The interconnected circles depicted above show the interdependent nature of the seven capitals in their community contexts. Healthy communities most often have a balanced set of community capitals (Ibid, p. 16).

The list above describes what each of the capitals is. We do not disagree with the perspective presented, however we do need to re-conceptualize, or elaborate on, the overall conceptualization of capital itself, and further elaborate on a few of the seven community capitals for our purposes moving forward. The need for our elaboration and reconceptualization of the CCF is not due to a disagreement in terms of how researchers and practitioners can encourage communities to engage in their own development processes. The need for additional clarification rather arises from a need to remain logically consistent with our ontological views of the nature of reality and capitals' place in it.

## **The Emergence of Capital**

An important understanding related to capital is the nature of its emergence. Emergence implies that an entity is more than simply the sum than its component parts – that it is irreducible. Here we will build an ontological argument regarding where capital comes from. We argue that capital emerges from resources, and resources emerge from nature, and/or culture and/or existing resources. In doing so we argue that nature, culture, resources, and capital are distinct ontological categories. While there is rarely an argument that nature and culture are distinct categories, as they are often viewed dualistically as categories with nothing in common, we do not take that position here, but we also do not enter that debate. Making use of Margaret Archer’s argument in *Realist Social Theory*, and John Commons’ terminology, we take the position that nature, culture and existing resources are the complementary factors for the emergence of new resources, with particular natural, cultural, and resource sets being precursors for particular emergent new resources.

The overall argument requires at least a cursory understanding of what is meant by emergence. Since our understanding of emergence depends on Roy Bhaskar’s realist stratified ontology; we discuss this first.

Bhaskar proposes a shift in ontological thinking from events, as is often emphasized by actualists, to things. He states that “[t]he world consists of things, not events” (Bhaskar, 2008, p. 51). Collier, taking Bhaskar’s lead, points out that these “[t]hings have the powers that they do because of their structures” (Collier, 1994, p. 43). Bhaskar’s ontological meta-theorizing describes causal mechanisms, events and

experiences respectively in terms of three strata: lower Real, middle Actual and upper Empirical.

The lower, Real, stratum relates to “relatively enduring” structures and mechanisms that possess the potential to generate events. The structure of a thing provides the potential for it, possibly in conjunction with other structures, to cause an event. However, if that structure does not cause an actual event, the potential still remains. The lowest stratum does not imply a middle or upper stratum because structures exist without causing events, yet alone observing or experiencing such an event. In the lower stratum, new structures and mechanisms emerge through unique combinations of existing structures and mechanisms.

The middle, Actual, stratum relates to actual events. This refers to when something happens. Events occupy in space and time. The middle stratum emerges from and implies a lower stratum, but not an upper stratum. There are cases of events happening without observation or experience.

The upper, Empirical, stratum describes the observed characteristics of an event. The upper stratum begs the transcendental question: what must be true to explain the observed? Thus, the upper stratum implies a lower strata.

As has been stated above, higher strata events emerge from lower strata: middle stratum events emerge from lower stratum structures and mechanisms and upper stratum observations of experiences emerge from the middle stratum. Emergence implies distinctive properties, powers and liabilities unique to each stratum and thus are irreducible to each other.

New structures emerge within the lower, Real, stratum through one way relations between existing structures. Deeper structures generate less deep structures. This describes what Collier calls “vertical explanation” (1994, p. 48) in which we can explain what causes a particular phenomenon based on an understanding of deeper structures or mechanisms that may have contributed to the formation of another structure. Thus, the lower stratum is itself stratified among different ‘levels’ of structures and mechanisms. Deeper, more basic, structures and mechanisms are more often ‘discovered’ than created, it is precisely this task, of uncovering and learning about deeper structures and mechanisms in our world, that we call the work of science. Actual events emerge in the middle stratum through multi-directional relations between a number of different generative mechanisms at the deep level.

To reiterate, we take the position that nature, culture and existing resources are the complementary factors for the emergence of new resource, with particular natural, cultural, and resource sets being precursors for emergent new resource structures. Capital, a phenomenon that resides within the middle/Actual strata, is emergent through the use of resources and resource sets in social action through events. In this sense, capital exists when resources are capitalized upon. When resources are not being used, capital does not exist. Capital is an emergent actual phenomenon reliant on, but not determined by, resource and cultural structures at the lower strata.

The remainder of this paper will elaborate on the emergence of both resource sets and their corresponding capital forms for each of the community capitals using Linwood Tauheed’s Critical Institutional (CI) approach (Tauheed, 2013a, 2013b). The CI approach recognizes the analytical dualism between social structure and agency (Archer), and

further following Archer, social structure (SS) is divided into Resource Structure (rS) and Cultural System (C) (however CI differs from Archer’s conceptualization of culture by using Ann Swidler’s metaphor of culture as a toolkit (1986)). Social Structure conditions, but does not determine, agency (A). These three component parts (rS, C, A) make up what Roy Bhaskar calls the “Real” strata or deep structure. Below we diagram the CI approach we will be employing in the following pages.

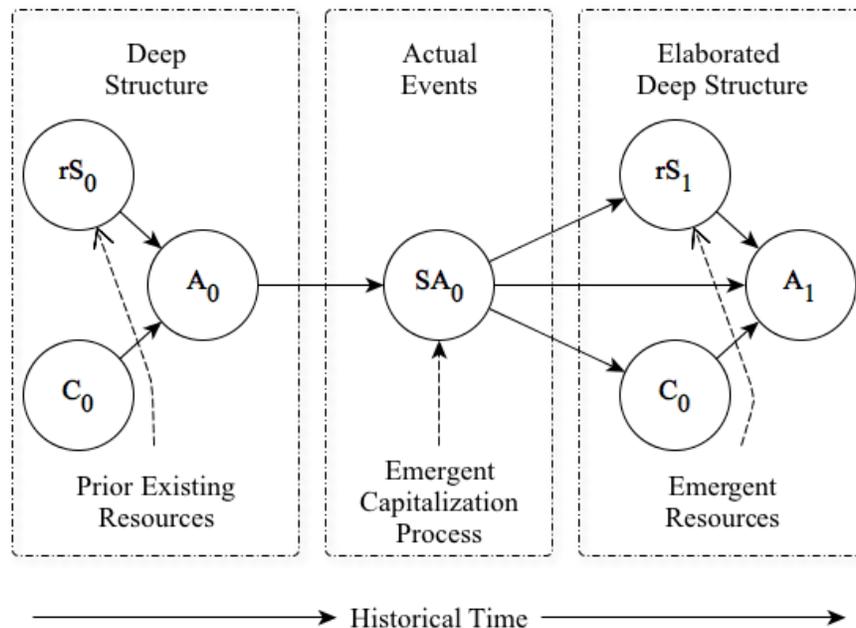


Figure 2: Critical Institutional Model<sup>1</sup>

A general emergent capitalization process occurs as actual events through social action (SA). Similar to the Marxian notion of capital as a relation in production, we understand capital as emerging through the relationship of A and rS. While capital is not a process

<sup>1</sup> Subscripts on each of the component elements denote change over time. Lower numbers indicate an earlier structures and events while higher numbers indicate later structures and events. Note that subscripts for C do not change in this and future diagrams in this article. We understand that a cultural system may or may not be elaborated through the emergence of new resources structures and/or through capitalization processes. However, we wish to focus our attention on the elaboration of rS, A and SA through capitalization. Examining the elaboration of a cultural system through resource capitalization is an important topic for future metatheorizing.

unique to one particular period in history, as Marxist may argue, we do understand that particular emergent capitalization processes are historically and culturally embedded. Capital emerges when agents use their resources in pursuing their agendas in social action.

### **Nature and the emergence of natural resources**

In this section we describe how natural resources emerge from ‘neutral stuff’ through the use of human knowledge in action.

The notion that nature serves and provides for human life dates to early philosophy and economic thought. The French Physiocrats were the first to formalize the significance of nature’s productive capacity for the economy through the *Tableau économique* (Economic Table). They held nature’s productivity in so much regard that they went as far as to claim that the agricultural sector was the only truly productive sector in the economy.

Yet, we find that to talk about nature ‘providing for human life’, or ‘nature’s productive capacity’, is to anthropomorphize nature, to give nature agency, which properly belongs to people, who are, to use Aristotle’s and Thorstein Veblen’s term, the “efficient cause” of social action.

While the term natural resources often conjures up images of timber, iron ore, and other raw material entities extracted or harvested from nature untouched by humans, we here hold the position put forward by Ayres (1962), Zimmermann (1972) and De Gregori (1987) that “[r]esources are not, they become; they are not static but expand and contract in response to human wants and actions” (Zimmermann, 1951, p. 16). We rely on Zimmermann’s expansive definition of resources as “an abstraction reflecting human

appraisal and relating to a function or operation” (Ibid, p. 9). Further, he states “[k]nowledge is truly the mother of all other resources” (Ibid, p. 11). Zimmermann and De Gregori, it is important to note, were preceded in their discussion of resources by Ayres who states:

The history of every material is the same. It is one novel combination of existing devices and materials in such a fashion as to constitute a new device or a new material or both. This is what it means to say that natural resources are defined by the prevailing technology, a practice which is now becoming quite general among economists to the further confusion of old ways of thinking (Ayres, 1962, p. 113). Thus, human action is required for nature’s productive capacity to emerge. Such human action is conditioned by social structure (resource structure and culture) mediated through human agency. Through this process, humans produce both material and immaterial resources. We will further expand on other types of resources in the following sections.

We find a similar understanding with John Stuart Mill (1900) who saw the natural world as being full of powers and potentials that had to be harnessed by humans to be useful for their purposes. This perspective of nature as a warehouse, with differentiating nuances, largely represents the perspectives of the classical political economists. David Ricardo also shows this same understanding in his discussion about rent as “that portion of the produce of the earth, which is paid to the landlord for the use of the original and indestructible powers of the soil” (Ricardo, 2000, p. 55). Land, by itself is not productive and therefore any income received by its owner is unearned. Use value emerges through the combining of human effort upon the potential powers of land. Plowing and planting converts the natural soil into farm land.

To finalize this section, we describe how natural resources emerge from ‘neutral stuff’ through the use of human knowledge in action. We then describe how natural capital emerges from natural resources when people, as agents, employ their available resources to solve particular problems and meet particular needs.

In Figure 3 we diagram how natural resources emerge from neutral stuff (NS), through action, i.e. actual events, in which Agents use available resources, enabled and constrained by the Cultural System, to transform the available set of resources. Resource set  $R_0$  represents the necessary resource complementary factors, and  $C_0$  represents the parts of a cultural system that enable and constrain.  $A_1$  represents an agent with access to these complementary resources and cultural tools, but without knowledge of (at least some of) the particular real properties (physical, chemical, biological, etc.) of NS.

In this example, knowledge of the generative pathways of NS is developed through experience ( $SA_0$ ) in which  $A_0$  ‘interrogates’ formally through experimentation, or informally through trial and error or even accidentally, the properties of NS. Through this process  $A_0$  is the efficient cause of the emergence of a new natural resource. The new emergent resource results in a change in the resource set  $R_0$  to  $R_1$ .  $A_0$ ’s sense of agency will/may also be transformed into  $A_1$ .

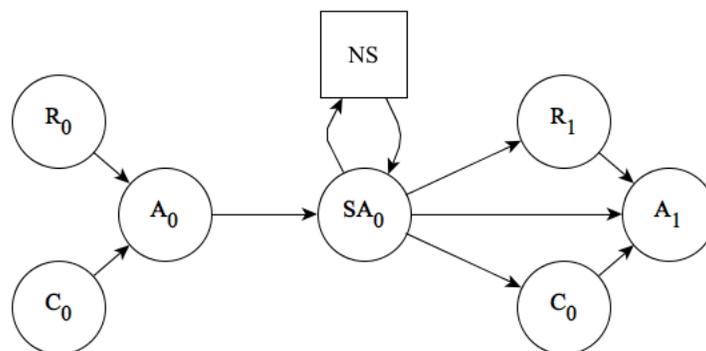


Figure 3: Emergence of Natural Resources

Agents who do not have knowledge of the generative pathways of NS are also able to gain this knowledge through learning from people who have such knowledge. This is illustrated below in a model with two agents,  $A_0:T$  and  $A_0:S$ , engaging in an educational experience  $SA_0$ .  $A_0:T$  may have learned about a particular resource through a prior experience with NS or by learning from someone else, but in this transaction the agent holds the role of teacher.  $A_0:S$  is an agent who does not yet have any knowledge of the generative pathways of NS and holds the role of student.

The social action and experience of transference of knowledge takes place through a transaction between teacher, who instructs ( $SA_0:T$ ), and student, who learns ( $SA_0:S$ ). Each agent, with their particular roles, experiences the social action differently.  $A_0:T$  draws on their resource set  $R_1$ , including the knowledge of the generative pathways of NS in order to instruct ( $SA_0:T$ ).  $A_0:S$  draws on their resource set  $R_0$  in order to learn ( $SA_0:S$ ) about the generative pathways of NS. With the successful transmission of knowledge,  $A_0:S$ 's deep structure has been altered. The most obvious change occurs as  $R_0$  is transformed into  $R_1$ , now including the knowledge of the generative pathways of NS. Their sense of agency may also be altered to  $A_1$ .

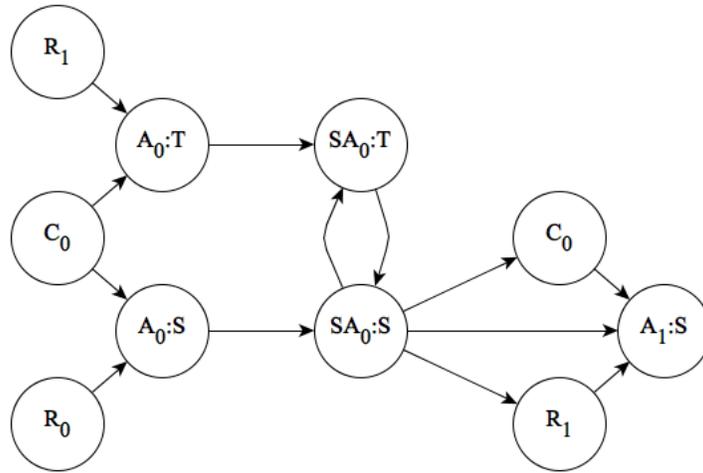


Figure 4: The Emergence of Natural Resources through knowledge

In the above models we illustrate the emergence of natural resource(s) from NS as a result of the generation of knowledge of (some of the) properties of prior NS.

### **Emergence of Natural Capital**

Natural capital emerges from natural resources being used to accomplish particular agendas people have. In this sense, natural resource sets exist at the lower, Real, strata as ‘potential natural capital’ until the point at which agents use them for productive purposes. Natural resources exist as stocks that may or may not be called upon for productive purposes. Natural capital emerge as events because it is the capitalization of particular natural resource sets. Natural capital may, in certain cases, be considered a stock and forms a new structural reality in the Real strata if it endures over a period of time. Thus, it can be said that natural capital exists as an event while the natural resource sets are being actualized; and if the actualization endures over time it can be thought of as a stock of actualized resources sets.

In Figure 5 we diagram the process of natural capital emerging from natural resources sets ( $R_0$ ) and people’s agendas ( $A_0$ ) they desire to fulfill through social action

(SA<sub>0</sub>). Cultural System (C<sub>0</sub>) conditions what agendas are chosen and prioritized and thus also influence the emergence of natural capital. The emerge of natural capital through social action (SA<sub>0</sub>) involves the ‘capitalization’ or actualization of natural resources. This requires, at the very minimum, access to particular natural recourse sets.

The capitalization of natural resources through the emergence of natural capital is done so through social action (SA<sub>0</sub>) and may in some cases involve transactions with ‘neutral stuff’(NS) or in other cases may involve transactions with other agents (SA<sub>2</sub>). However, it is also possible that agents have the requisite resource sets (R<sub>0</sub>) and cultural tools (C<sub>0</sub>) so that they do not require transactions with neutral stuff or other agents in order to use natural capital (SA<sub>0</sub>). Natural capital is used by people to transform inputs into outputs and thus necessarily alters some aspect of resource structure (R<sub>1</sub>) that conditions human agency (A<sub>1</sub>).

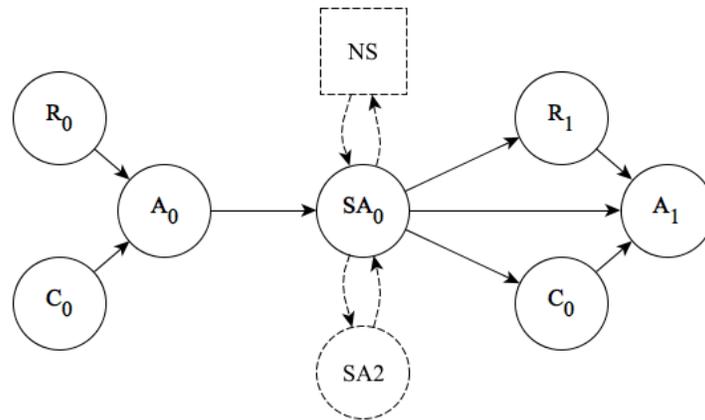


Figure 5: Emergence of Natural Capital

### **Emergence of built resources**

Built resources emerge from novel combination of neutral stuff and other resource sets. These resource sets can be diverse in the sense that they may include any

combination of the seven categories of resources as discussed above (the seven ‘capitals’). The emergence of built resources, like the emergence for all other types of resources, always includes human knowledge. It is always a deliberate process. The emergence of built resources often occurs through the use of built capital. Natural resources combined with neutral stuff and/or other resources become built resources when they are transformed to the point that they are not recognized as being a part of nature. An arrowhead is simply made from rock (a part of nature), but becomes a built resource when it is no longer recognizable in nature. While simple objects from nature emerge into built resources through simple processes, built resources are also those complex human made objects that hardly resemble any part of what one would recognize in nature, such as a modern 64-bit computer microprocessor.

A more complex example illustrates the diversity of what can be considered a built resource. A written language is in part, but not entirely, of form of a built resource. Early writing systems, such the cave drawings uncovered in Lascaux in France, are physical markings made from applying a writing medium or scratch marks onto a natural object. These markings, a form of a built resource, in combination with a cultural system provide meaning and a human’s ability to understand form a written language. Even the words you are reading in this article, electronically or printed, are a form of a built resource. Light-emitting diodes form the visualization on a computer of phone screen and various inks and toners are bonded to paper to form letters and words. These forms of built resources must be combined with cultural meaning and require a human’s ability to read to form a writing system.

Modeling the emergence of built resources using the CI approach we begin with an agent ( $A_0$ ) pursuing an agenda ( $SA_0$ ). Enabling and constraining  $A_1$ 's actions are the resources structures and cultural systems that they begin with:  $R_0$  and  $C_0$ . A built resource emerges through  $A_1$ 's ability to transact with neutral stuff (NS) and/or other individuals ( $SA_2$ ) who may have access to resources  $A_0$  requires. In most cases of the emergence of built resources, a form of built capital will be used. For example, the building of a 64-bit computer microprocessor will require the use of a number of physical tools (built capital).

### **Emergence of built capital**

Proceeding to the emergence of build capital, we again use the CI model. Once an agent ( $A_0$ ) has access to a resource set ( $R_0$ ) containing, in part, a built resource, they may capitalize on those built resources through social action ( $SA_0$ ) in order to undertake their agenda. An example is when a form of built capital, such as an excavator, emerges when an agent acts to build a road. When the excavator is parked in the shed or parking lot to await the next building project, it remains a built resource. The road however, once complete, remains capital as long as people “capitalize” it to pursue their agendas. The excavator and road are both forms of a built resources and emerge into capital when they are put to use for productive purposes. This is a simplistic example; in reality, built capital co-emerges with a variety of other forms of capital, such as human and natural capital, to engage in the agenda of building a road.

### **Emergence of social resources**

Our discussion of the emergence of social resources from “raw” social structures will need to be addressed in a different manner than we have presented the emergence of natural and build resources. This is because social resources do not exist as separate from

the people that hold them. Nor are they held by individuals; as the saying goes, ‘it takes two to tango.’

Social resources are those social relationships and networks that have the potential to be of productive value to persons or a group. Social resources emerge from structures found in human relationships, personal and professional, that are made up of trust, reciprocity and sympathy/empathy (Robison et al., 2002). Some may refer to these “raw” or natural social and psychological deep structures as human nature. In other words, these deep structures emerge through human biological, neurological and cognitive development. We will discuss this emergence in greater detail in the section on the emergence of human resources below.

Using the CI approach, we model the emergence of social resources through the relationship between existing deep structures: resource sets ( $R_0$ ), cultural structures ( $C_0$ ) and agency ( $A_0$ ). This occurs through the actualization of resource sets within a particular cultural system. Social resources emerge through the formation of relationships between people or groups; or, in Granovetter’s (1973, 1983) terminology, through the establishment or expansion of a social network. Following Nan Lin (2001), we see the emergence of social resources through ascription or acquisition.

Ascribed social resources emerge through birth. People are born with particular social resources such as gender and race. These resources can be deliberately embraced or rejected by an individual. Familial social resources are inherited by an infant. Such resources include family relations and broader personal and professional networks. The model below illustrates the emergence of a resource set ( $R_1$ ) which would include such social resources. Parents or guardians ( $A_0:P$ ) have access to a resource set ( $R_1$ ). An infant

child ( $A_0:C$ ) has little to no access to resources and thus begins with an empty resource set ( $R_0$ ), through the parent's care for the child ( $SA_0:P$ ) and the child's dependence on the parent ( $SA_0:C$ ), social resources emerge for the child that they previously did not have ( $R_1$ ).

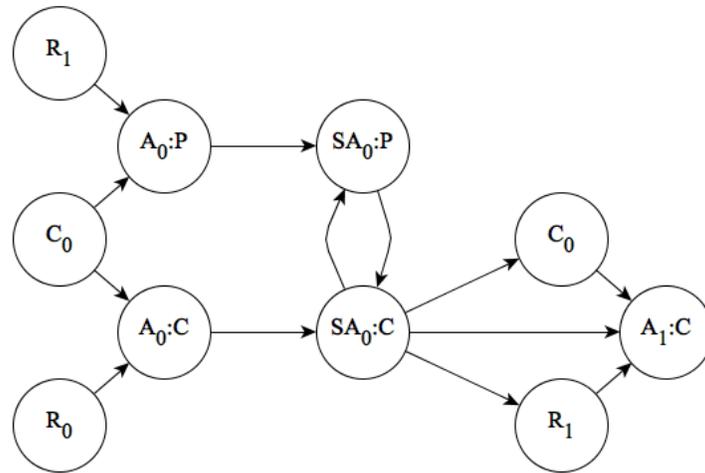


Figure 6: Emergence of Social Capital

Acquired social resources emerge through deliberate actions on the part of an Agent. Unlike ascribed social resources, the Agent has a choice to pursue or avoid a particular social resource. A common example of this is when college and university students are encouraged to develop personal and professional relationships that have the potential to be of benefit in a particular career pursuit. Also, unlike ascribed and inherited social resources, the agent engaged in the transaction may or may not share a common Cultural System with those from whom they acquire the social resource. Modeling the emergence of acquired social resources using the CI approach below we can see that the agent engaged in the transaction may also not possess such a social resource prior to the transaction themselves. Social resources emerge in people through a variety of events and shared experiences where by these agents find mutuality and shared benefit.

### **Emergence of social capital**

Social capital emerges from resource sets that include social resources. In a similar fashion to other instances of the emergence of capital, social capital can be conceptualized as the actualization of social resources for the purpose of furthering an agent's agenda. This follows, in most part, Lin's conception of social capital as "resources embedded in a social structure that are accessed and/or mobilized in purposive actions" (Lin, 2001, p. 40). Modeled in the CI approach, an Agent having access to a particular Resource Set which includes, at the very least, one form of social resource engages in a transaction with another Agent. The actualization of such resource sets takes place in time and space and thus is an experienced event. Unlike the emergence of natural or built capital, the emergence of social capital only occurs through transactions with other agents, not nature or 'neutral stuff.'

### **Emergence of cultural resources**

The emergence of cultural resources necessitates a prior Cultural System.. Recall here our distinction between the Cultural System and cultural resources we have discussed above. Cultural resources emerge through the elaboration of prior parts and/or the emergence of new aspects of a Cultural System through repetition of action, behavior or belief by a group of people or broader society. The discovery of new technology, either intended or unintended, is often a catalyst for such changes with a Cultural System. While actions, behavior and beliefs have purpose and exist prior to their being a part of a cultural system, they emerge into a cultural system and subsequently into cultural resources when they become a shared experience. Culture is broadly conceptualized as the "symbolic vehicles of meaning, including beliefs, ritual practices, art forms, and

ceremonies, as well as informal cultural practices such as language, gossip, stories, and rituals of daily life” (Swidler, 1986, p. 273). This perspective is compatible with the position held by several scholars in the tradition of the original institutionalists (Ayres, 1961; Commons, 1961; Jennings & Waller, 1994; Mayhew, 1987; Veblen, 1898). Culture involves how people “are being” which encompasses both “meaning” and “doing.” Swidler’s focus on the aspect of culture as a tool kit comprised of strategies in action is especially helpful in our understanding of the emergence of cultural resources (1986). These strategies of action consist of “symbols, stories, rituals, and world-views” (Ibid, p. 273). Rather than the broad label of ‘values,’ she proposes a conception of culture as a style or set of skills. A cultural toolkit may be used for a variety of problems being addressed. As groups of people face new problems, they must create new cultural tools and thus elaborate the cultural system.

Cultural resources emerge as agents consider the productive potential within a cultural system. That cultural system may be one in which they are imbedded or may be one for which they are considered an outsider. While agents are conditioned by the cultural system they are within, not from other cultural systems, they may access cultural resources from cultural systems they are not influenced by. Similar to the way in which social resources emerge through ascription or acquisition, cultural resources emerge through enculturation, acculturation and cultural exchange/appropriation.

The emergence of cultural resources through enculturation occurs in cases when an agent is brought into a cultural system. Child rearing is the most common example of enculturation. Children are raised to understanding their identity as a particular gender, within a religion, race and/or class. The CI modelled above, in Figure 6, diagrams this

emergence. Children ( $A_0:C$ ) raised by a parent ( $A_0:P$ ) may share a common cultural system ( $C_1$ ). Through experiences and instruction ( $SA_0:C$ ), the child becomes increasingly influenced by the Cultural System ( $C_0$ ). As Cultural System ( $C_0$ ) emerges for the child, cultural resources ( $R_1$ ) also simultaneously emerge. It is important to note that not all aspects a cultural system are recognized as cultural resources. There are many aspects a cultural system that exist unknown to the agents they influence and condition. As the child experiences and learns about particular parts of the cultural system those parts may emerge into cultural resources ( $R_1$ ) that the child considers potentially useful.

Emergence of cultural resources through acculturation involves the interaction between different cultural systems through four general strategies: integration, assimilation, separation/segregation or marginalization (Berry, 1997). Each of the acculturation strategies will result in different cultural outcomes. Integration occurs in the case when members of a particular cultural system value the maintenance of their heritage culture while also valuing maintenance of relationships with the larger society (host culture). Assimilation processes occur when members of particular cultural system do not value the maintenance of their heritage culture while valuing the maintenance of relationships with the larger society. Separation involves members valuing the maintenance of their heritage culture while not placing much value in the maintenance of relationships with the larger society. Finally, marginalization occurs when members place little to no value on both the maintenance of their heritage culture or relationships with the larger society. A group of researchers from the University of Quebec have developed an adapted acculturation model they call the Interactive Acculturation Model (IAM) (Bourhis, Moise, Perreault, & Senecal, 1997). The IAM suggests that acculturation

modeling can be refined through a multidimensional extension of Berry's dimensional model. With five categories for each of the two communities (host and immigrant), 25 possible scenarios are considered. It is noteworthy to add that Berry (1974) has also discussed the complicating matter of government mandated cultural integration. This interaction between acculturation and political resources demonstrates the interdependent nature of emergent resources. We will discuss the emergence of political resources below. Modeling the emergence of cultural resources through acculturation using the CI approach will result in a variety of outcomes based on the agents involved in the transactions. Such a dynamic model of acculturation is especially helpful in understanding the emergence of cultural resources for migrant and immigrant communities.

The final manner in which cultural resources emerge is through cultural exchange or appropriation. We will distinguish between cultural exchange and appropriation simply by suggesting that exchange is representative of permissive and respectful use of aspects of culture not one's own while appropriation is the use cultural resources without permission or respect for the originating culture. Cultural appropriation is a form of colonization and is undertaken in transaction in which agents involved have unequal distributions of power. The emergence of cultural resources through cultural exchange and appropriation, results in providing an agent with cultural resources that are not a part of their own cultural system. The example of someone using Japanese joinery in house building as described above is the result of cultural exchange. An agent may have come to know that particular Japanese technique in home building by requesting instruction

from a person in that particular culture, a Japanese home builder<sup>2</sup>. Modeling this transaction using the CI approach we theorize that the Agent seeking to acquire the Japanese building technique ( $A_0:S$ ) has a resources set ( $R_0$ ) that does not include the technique s/he desires. The limiting factor in  $A_0:S$ 's agenda to use this form of cultural capital is his lacking access and knowledge of the cultural resource – Japanese joinery ( $R_1$ ).  $A_0:S$  and  $A_0:T$ , the Japanese home builder, engage in a transaction ( $SA_0$ ) where  $A_0:S$  acts as a student by learning and experiencing while  $A_0:T$  the acts as a teacher by teaching and guiding the experience. Following the transaction of teaching and learning,  $A_0:T$  is unaffected and  $A_0:S$  now has access to the cultural resource ( $R_1$ ). Note that after an initial transaction,  $C_0:S$  is still unchanged by a single person learning a cultural resource from a different culture. However, if  $A_1:S$  engages in a number of transacts with other Agents in their own culture,  $C_0:S$  may be elaborated to  $C_1:S$ .

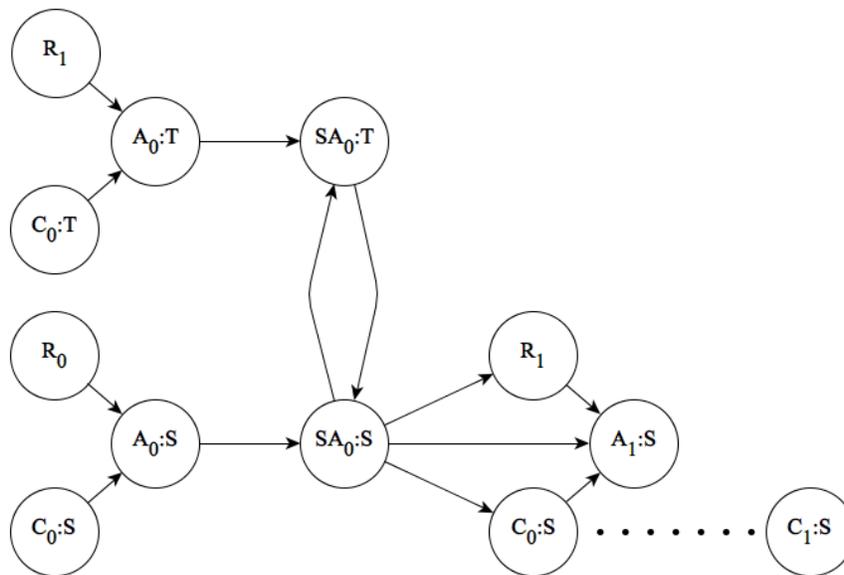


Figure 7: Emergence of Cultural Resources through exchange

<sup>2</sup> Cultural resources co-emerge with a form of human resource – knowledge.

### **Emergence of cultural capital**

Cultural capital emerges through the capitalization of cultural resources for purposeful action. Note the distinction between purposeful action, in the context of achieving an agenda, of an agent utilizing a cultural resource and the conscious or subconscious conditioning of cultural systems on agency. Carrying the example from above, the agent who acquired the cultural resource of Japanese joinery may now put that resource to use in the process of building a home or something (the emergence of a built resource). Cultural capital will most often emerge simultaneously with other forms of capital emerging through social action. A0:S will capitalize upon his/her cultural resource along with other types of resources within their resource set. In this case A0:S using a chisel, mallet and saw also involves the emergence of built capital.

### **Emergence of political resources**

Political resources are similar to the prior two forms of resources we have just discussed (social and cultural resources) in that they exist in the relations between people and groups. In this sense it is a special type of social resource. Political resources relates to governance and the ability of a community to establish and enforce standards and rules. Different political systems exist in various parts of the world. While democracy has become a political system that has been accepted by most – in particular in Eurocentric societies, there remain other forms of political capital such as monarchies, oligarchs and authoritarian regimes. Here we will focus primarily on formal democratic forms of political resources.

Richard French (2011) identifies a core relationship that exists for political ‘capital’ in the context of a democracy. He postulates that political capital exists in the

relationship of reciprocal judgment forms between political actors and citizen constituents. In representative democracies there is an acknowledged divide between the constituent agents and the representative agents in which the representative agents are given a particular level of autonomy and freedom to make choices based on their own judgement. While French states that political capital is produced through the reciprocal judgements between representative and constituent, we rather perceive political resources as emerging through the reciprocal judgment between representative agents and constituent agents. The representative agent has freedom to make choices based on their own judgment but also faces consequences for their choices. A stock of political resources are maintained by the continual approval of a representative by their constituents.

Modeling the emergence of political resources using the CI approach we begin with two agents, representative ( $A_0:R$ ) and constituents ( $A_0:C$ ). Through transaction  $SA_0$ ,  $SA_0:R$  governs with  $A_0:C$ 's best interest in mind and  $SA_0:C$  continues to provide  $A_0:R$  with freedom to make choices. As  $A_0:R$  accumulates political resources ( $R_1$ ), they then have the opportunity to capitalize upon them as political capital.

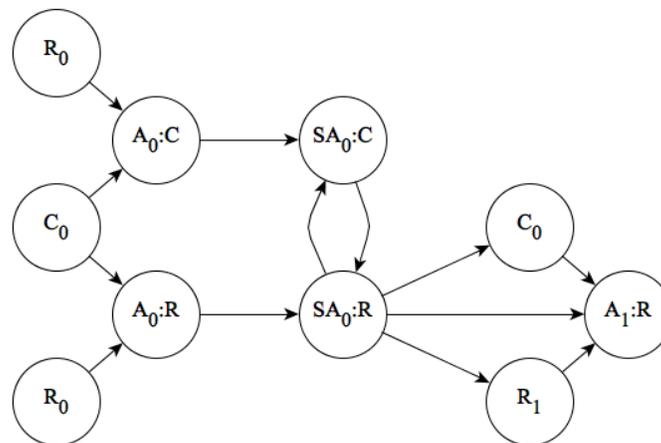


Figure 8: Emergence of Political Resources

The key relationship between holders of political power and those who give and/or submit to political power, that of reciprocal judgments, is a mutually agreed upon arrangement in a democracy. In other forms of governance those relationships may not be mutually beneficial. However, despite not being mutually beneficial, a political agents' stock of political resources is indeed dependent on their relationship with those they rule or represent. A dictator can only go so far before they have spent their political capital and have no source to replenish a stock of political resources. Because political resources reside in the constituent/representative or subject/ruler relationship, both parties of the relationship have access to the political resource. The special nature of such a relationship however, does not imply an equal ability to capitalize upon the relationship. Constituents or subjects have indirect or persuasive influence on how a political resources is capitalized on; it is the representative or ruler that has the ability to capitalize on the political resource.

### **Emergence of political capital**

In our framework, political capital emerges from resource sets which have some form of political resource. Political resources are capitalized upon through the use of political resources. This capitalization of political resources brings about the emergence of political capital. As former President of the United States, George H. Bush famously stated "I earned capital in this campaign, political capital, and now I intend to spend it" (Schneider, 2005). While President Bush has not provided his conceptualized theory of capital, we suggest that he rather earned political resources and intended to spend it as political capital. As we stated above, the capitalization of political resources emerges through the actualization of the constituent/representative or subject/ruler relationship by

the representative or ruler. Their ability to capitalize on such resources is specifically what these relationships are characterized by. The relationship, or stock of political resources, is dependent upon the capitalization of this relationship by the representative/ruler. If representative/rulers capitalize on this resource in a manner counter to the goals and objectives of the constituents/subjects, they will have difficulty maintaining such relationships. In this way constituents/subjects have an indirect way in which they can capitalize on their political resources through the representative/rulers. Because of this, community members, primarily made up of constituents/subjects, can influence the outcomes of capitalization of resource sets that in part include political resources, such as the establishment of eminent domain to build a road or the policies to enhance education.

### **Emergence of financial resources**

Financial resources are often thought of as simply “money.” We will, however, distinguish between money and finance; money is a particular instance within the broader category of finance.

Financial resources are intertemporal credit and debit relationships that have the potential to be productive and useful for fulfilling people’s agendas. For each transaction an asset corresponds to a liability – each debit, a credit. The emergence of these debit and credit relationships occurs when agents engage in transactions where by the creditor provides some benefit to the debtor in exchange for the debtor’s promise to repay – their IOU. Mitchell Innes (Wray & Innes, 2004) states that value of credit is linked to “the right which the creditor acquires to ‘payment,’ that is to say, to satisfaction of for the credit, and on the obligation of the debtor to ‘pay’ his debt, and conversely on the right of

the debtor to release himself from his debt by the tender of an equivalent debt owed by the creditor, and the obligation of the creditor to accept this tender in satisfaction of his credit” (Ibid, p. 152). In other words, finance emerges through social relationships in which agents transact in IOUs. When a creditor receives an IOU from a debtor, the creditor holds the right to be repaid while the debtor holds the right to be free from their obligation once they have repaid their debt. It is upon the discretion of the agents involved in the transaction to decide what, and in what quantity is acceptable to the creditor as repayment. In this broad notion of a financial resource there is no need for generally accepted units of account, mediums of exchange or store of wealth. These specific characteristics exist for money, but not necessarily for financial resources in general.

The primary distinction of money, what Tymoigne (2006) refers to as a monetary instrument, from the broader category of financial instruments (finance) is the ability of a debt issued by an agent to be ‘generally accepted.’ Hyman Minsky famously said “[a]nyone can create money, ...[but] the problem lies in getting it accepted” (Wray, 2015, p. 6). The effectiveness of money lies in people’s ability to trust the issuer. A set of properties associated with the cultural system, sometimes made formal through legal structures, enable agents issuing an IOU to be trusted and those accepting IOUs to have recourse if trust is broken. Thus, State issued money is almost always the most widely accepted and circulated money in a nation. Particular legal tender laws aside, any agent is capable of creating money. While an individual may find it difficult to have their personally issued IOU accepted broadly within a community, a group of individuals may find it possible to create a community currency that may be circulated in conjunction with

a national currency. Several community currencies have been successfully implemented throughout the world.

Similar to the discussion above about writing systems representing both built resources and cultural resources, we view financial resources as most often being a relationship between two parts represented and documented on a form a built resource. Various physical mediums have been used in human history: tally sticks, cattle, cowry shells, coins, paper bills, and balance sheets on a computer memory drive. While financial resource do not require a physical medium to log a transaction, money does. The built resources used to represent money are referred to as ‘money-things’ following Randall Wray’s argument that money is not a “thing” but a unit of account (2007, 2010).

Savings, of financial resources, are the specific accumulation of credits in such credit and debt relationships. Those that accumulate credits are said to have savings and while those that accumulate debits are said to have dis-savings. In the conventional understanding of money, savings are the collection or accumulation of IOUs, most likely state issued IOUs, and are saved for the purpose to capitalize on in the future.

### **Emergence of financial capital**

With an understanding of the emerge of financial resources, we move on to discussing the emergence of financial resources into financial capital. Steven Keen (1993) refers to Marx’s story of dear “Moneybags” to make the often overlooked point that ‘value’ is indeed found beyond mere labor through the use and exchange of commodities. Marx suggests that money emerges into capital through the exchange of commodities:

The conversion of money into capital has to be explained on the basis of the laws that regulate the exchange of commodities, in such a way that the starting point is the exchange of equivalents. Our friend, Moneybags, who as yet is only an embryo capitalist, must buy his commodities at their value, must sell them at their value, and yet at the end of the process must withdraw more value from circulation than he threw into it at starting. His development into a full-grown capitalist must take place, both within the sphere of circulation and without it.

These are the conditions of the problem (Marx, 2011, p. 184-185).

He continues by explaining that the capitalist capitalizes on money through taking advantage of the difference in exchange and use values:

The change of value that occurs in the case of money intended to be converted into capital... must... take place in the commodity bought by the first act, M-C<sup>[3]</sup>, but not in its value, for equivalents are exchanged, and the commodity is paid for at its full value. We are, therefore, forced to the conclusion that the change originates in the use-value, as such, of the commodity, i.e. its consumption. In order to be able to extract value from the consumption of a commodity, our friend, Moneybags, must be so lucky as to find, within the sphere of circulation, in the market, a commodity, whose use-value possesses the peculiar property of being a source of value (Ibid, p. 185).

Financial resources, in many cases in the form of money, are capitalized upon through transactions of exchange. Prior to financial capital's emergence, financial resources are a store of potential productivity and value. They, unlike other forms of resources stocks, are completely useless to human wellbeing without other forms of

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<sup>3</sup> See full explanation of M-C-M' in Marx, 2011, p. 163–173

resources to capitalize upon. Using an analytic duality, or as Marx would suggest – a dialectic, between a resource’s use value and exchange value, we frame the process of emergence. Prior to a transaction involving the exchange of financial resources for a commodity, each agent involved in the transaction holds a resource for which they are willing to engage in exchange. When agents engage in a transaction they are exchanging in equivalents, as Marx states, and thus one must give up some amount of financial resources in order to gain an equivalent value in terms of a commodity in exchange. Those that capitalize on their financial resources do so for the purpose of gaining a commodity that has a use value that was greater than the exchange value the financial resources held in the transaction. Using CI modeling, we examine the process of financial capital emerging through the use of financial resources. In figure 9 below a buyer ( $A_0:B$ ) holds a particular amount of financial resources ( $R_0:F$ ).  $A_0:B$  capitalizes upon  $R_0:F$  while engaging in a transaction of exchange where the  $A_0:B$  buys ( $SA_0:B$ ) and  $A_0:S$  sells ( $SA_0:S$ ) a commodity ( $R_0:C$ ). The original buyer ( $A_0:B$ ) now has reduced their amount of financial resources, but have gained a commodity ( $R_1:C$ ). The original seller ( $A_0:S$ ) has now decreased their amount of commodities, but has gained financial resources ( $R_1:F$ ). In future transactions each of the agents may have different roles as the seller becomes the buyer and the buyer becomes the seller.

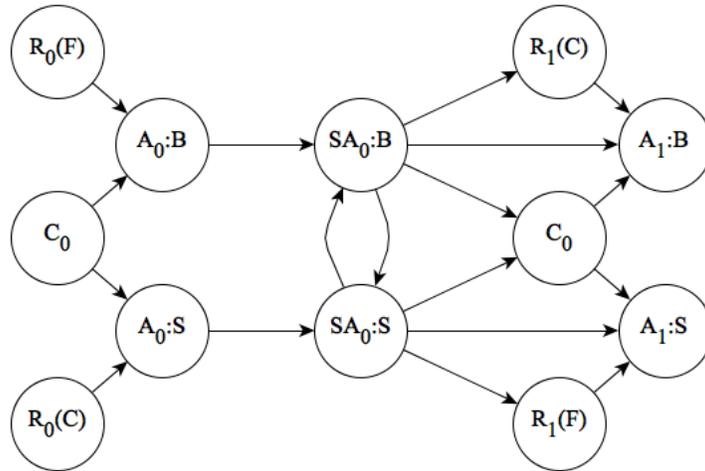


Figure 9: The Emergence of Financial Capital

Although slightly beyond the scope of our analysis in this paper, but of utmost importance to any understanding of monetary production economies, is the extension of what Marx refers to as the “first act, M-C,” to the main objective of eager Moneybags (a burgeoning capitalist) – to make a financial profit. The initial M-C transaction serves to the ends of M’ (and, as one can observe, this end itself becomes the beginning of another cycle of profit seeking: M’-C-M’). Our current globalized economy exhibits the characteristics of such a monetary production economy –commonly labeled “Capitalism.” Capitalism exhibits the dominance of capitalization of financial resources for the purpose of gaining larger financial inflows. While there is use-value in the commodities acquired in the first stage, M-C, this is not the objective of business endeavors. Making more money than one started with is the objective.

**Co-emergence of human capital with human resources**

In a break from the idea of the emergence of capital that occurs after the corresponding resource emergence, human capital co-emerges with the human resources. Human capital emerges from and through the utilization of human health, wellbeing,

knowledge and skills – human resources. Using the term ‘human resources,’ we refer to the potential of an individual’s productive activity. A person may have the ability to play a cello with grace and elegance, but this is only a potential ability until they put their skill to work through action. Likewise, knowledge serves as a potential to further human efforts until that knowledge is put to work through the person’s actions. To reiterate once again the distributional nature of all resources sets within resource structure, human resources are indeed a distributional characteristic of a social structure based on the interaction between three orders: the natural, practical and social (Archer, 2000, p. 162). People’s resources are conditioned and limited by both natural and social environments, but are shaped through the practical experiences they have between those orders.

Margaret Archer (Ibid) outlines the emergent developmental process of humans in four parts: selves, primary agents, corporate agents, actors. People first enter the world as selves, holding a sense of self prior to any socialized concept of self. Sense of self does not occur within a social order, but rather natural; concept of self occurs within a social order because people are born with a natural ability to sense that they are themselves separate from the other while concept of self is the idea of who they are. People are born into social contexts, but sense themselves in a nonsocial manner before they are socialized to think about what and who they are. Primary agency emerges through the socialization of the self and is involuntary and unconscious. As babies enter the world they have no say for which families or groups they are placed. In this way the notion of privileged or unprivileged upbringing is indeed of no fault of anyone’s own actions or efforts. Corporate agents emerge through the collective action of people trying to overcome or enhance their status as primary agents. Corporate agents “include self-

conscious vested interest groups, promotive interest groups, social movements and defensive associations” (Ibid, p. 264). The agential powers held by corporate agents involve engagement in change and promote areas of common interest. Unlike primary agents, corporate agents are intentionally and deliberately formed by people pursuing similar interests and agendas. From corporate agency emerge actors. Mature actors emerge from corporate agency as people participate in the shaping of their social selves – and create personal identities. While people do influence the shaping of their own identity, it is also true that primary agency has a profound influence on what opportunities are possible. Actors are individual people holding roles corresponding to the corporate agency from which they emerge. Actors necessarily belong to and emerge from corporate agents. Without a corporate agent, a person would have no role.

The developmental emergence of social actors implies a distribution of human resources. Initially, as babies are born into primary agencies they inherit access to particular resources and opportunities that enable and constrain the resources they have access to. As people then join corporate agencies they gain access to and are limited to other resources. Conditioned and limited initially through primary agency, then through corporate agency, an emergent social actor holds access to and may desire to develop and gain access to a particular set of human resources.

Through the emergence of identity, people unavoidably face concerns in each of the three orders discussed above (natural, practical and social). People cannot ignore the natural conditions for their own survival, that of being fed and maintaining health. Likewise, they cannot ignore the practical order in considering how they are able to accomplish what they set out to do. Finally, through the social order they confront

questions of self-worth. People see and understand themselves subjectively (social), but this subjectivity is unavoidably shaped by an objective world (natural). Human resources lies in the practical order balancing human subjectivity and the objective reality of the world.

While intimately intertwined to the concept of agency, human resources lie within a resources structure for agency to draw upon. In other words agency represents who we are while human resources represents what we have and can do. A person's resources, although a part of who they are as a human, does not imply that they draw on those parts of who they are all of the time. Human resources are to be drawn upon; sometimes alone and sometimes along with other types of resources.

Examining the emergence of human agency and resources from the perspective of psychology, we rely on Bandura's social learning theory. Bandura (1977) proposes that humans, starting as infants, develop their human resources through both behavioral and cognitive processes. Social learning theory suggests that learning occurs through reciprocal determinism. This means that an agent is active in an interchange of information and is influenced through cognitive, environmental and behavioral factors. Bandura states "people are neither driven by inner forces nor buffeted by environmental stimuli. Rather, psychological functioning is explained in terms of a continuous reciprocal interaction of personal and environmental determinants. Within this approach, symbolic, vicarious and self-regulatory processes assume a prominent role" (Ibid, p. 11-12). Particular attention is given to the process of vicarious reinforcement in which agents learn through observation of behavior or simply the observed consequences of behavior.

Agents may engage in further cognitive activity of modeling or imagining a behavior or set of behaviors and the possible consequences from those behaviors.

While social learning theory, along with other theories of child and human development, emphasis the psychological development of people, it is important to note that the process of learning occurs holistically. People learn to use their bodies and exercise physical strength as well as learn information and how to use their mental capacity through both behavioral and cognitive processes. Emotional and spiritual aspects of being human are also learned and developed in a social process.

Human capital co-emerges with human resources due to our natural ability to learn by doing. We may set out to perform a certain action, employing human capital, but in the process may discover new abilities – human resources. Human capital emerges through the use of human resources. The application of knowledge to engage in social action, as a social actor, is an example of the emergence of human capital. Further, any social action entails the use of some, however minimal, form of human capital and thus uniquely accompanies the use of each of the other forms of capital. Using a CI model similar to that of the emergence of social resources and cultural resources through acculturation, Figure 10 below models the emergence of human resources and human capital for a child learning a new skill. As  $A_0:C$  endeavors to learn a new skill, in this example they are learning to walk, they must build upon and use their existing human resources ( $R_0$ ) such as balance, ability to observe others walking, etc. The actual learning to walk occurs through the social action  $SA_0:C$ .  $A_0:P$ 's role in this transaction is passive rather than active in that they cannot instruct a child, but rather supports, encourages and

provides safety for  $A_0:C$  to learn. After  $A_0:C$  has learned how to walk, they have not only altered their resource structure to  $R_1$ , but have also altered their agency ( $A_1:C$ ).

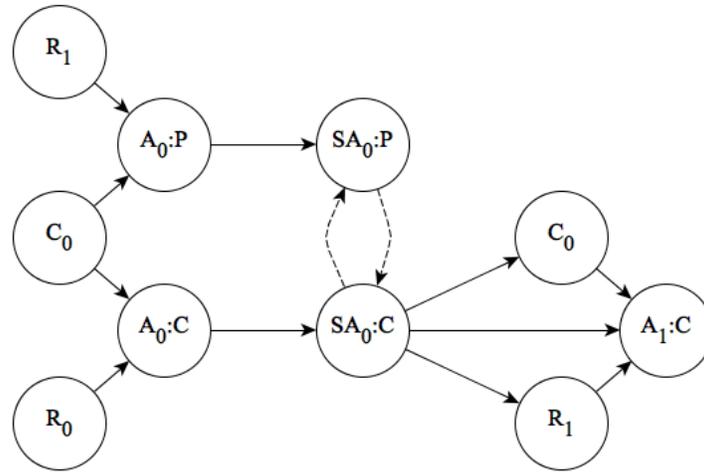


Figure 10: The Co-emergence of Human Capital with Human Resources

### Conclusion

The concept of capital remains a concept void of clarity or unity within academia. The term has been used in various ways through different periods of history and in different contexts. After a brief survey of the various conceptions of capital from four general traditions, we situate our analysis, using the CCF, within the sociological and institutionalist traditions. However, we view capital as a process.

Framing our concept of capital within the CI methodology, it is understood as emerging from the actualization of resources, conditioned by culture and mediated by agency. In concert with critical realist ontology we view capital as emerging in actual events through social action. The structural aspects of resources and culture condition and agency mediates that social action. Building on the tradition of Ayres, Zimmermann and De Gregori we see resources as socially emerging from prior existing structures, both social and natural. Human resources and human capital play a central role both the

emergence of each of the seven resources and their capitalization. Resources emerge and exist as a stock because people have an idea of their productive potential. The emergence of each of the community capitals always accompanies the application of human capital because it requires people knowing what to do when they capitalize upon resources in social action.

This methodological inquiry into the nature of the emergence of capital serves to help both researchers and practitioners understand processes of community economic development. When communities and their advocates understand what complementary and limiting resources contribute to their development agendas, they are better prepared to engage in strategic transactions in which they may use what they have to get what they need. Further work is needed in order to theorize the various capitalization processes communities engage in when pursuing their agendas. It is our hope that in evaluating this metatheory against community development practices we may improve on our understanding of the emergence of resources and their corresponding capitalization processes.

## CHAPTER 3

### THE PROCESSIONAL PROPERTIES OF CAPITALIZATION

When using a set of capitals such as the Community Capitals Framework (CCF) (Flora, 2004), it is important to define and describe the characteristics of each of the capitals. The CCF attempts to promote inclusive and participatory community development centered around local resources. The characteristics that define the use of these resources in a community are noteworthy for both practitioners and analysts engaged in community development initiatives.

As has been discussed earlier in the first article of this dissertation, the conceptual history of the term capital is vague and contradictory. Prior discussions of the properties of capital similarly present differing perspectives based on the various positions taken with regard to particular conceptions of capital. We have presented a conceptualization of capital as process through social relations. Capital is understood as the emergent actualization of resources through capitalization processes. In this sense, capital exists in the various processes of resource capitalization.

The following discussion of the characteristics of capital serves to clarify our particular use of the term by presenting a set of processional properties of capitalization. We suggest that many of the properties of capital presented in earlier literature conflate the properties of capital with resources. Our conception of capital requires a clear distinction between capitalization processes and resources and thus requires unique sets of properties. Eight processional properties are identified as: transformability, temporality, culturally embedded, expected future yield, identifiability, flexibility, reliability, and variability/conditionality. This set of prosperities serves as a vocabulary

by which we may discuss the nature of capitalization processes. Rather than the properties being seen as binary “yes/no” characteristics, we suggest that each capitalization process may hold each of the properties to a varying degree.

Having identified a set of processional properties of capitalization, communities engaged in development initiatives may be able to distinguish the unique nature in which varying resources are capitalized upon. The effectiveness of the CCF, in particular, may be enhanced through the evaluation of the characteristics of capitalization processes. It is the hope that this theoretical inquiry into the various properties of capitalization processes assists in the practical work of community development. We also, and more importantly, seek to shape the theory here proposed by the experiences and learning that occur in actual community development initiatives.

### **Conflationary Properties of Capital**

In an attempt to clear much of the confusion and misunderstanding surrounding the conception of capital several authors have presented a discussion of the properties associated with capital. We will examine two of these discussions that provide a set of properties: John Rae (Rae, 1834) and Robison, Schmid and Siles (Robison et al., 2002). Each of these outline key properties of capital.

John Rae (1834) provides one of the earliest inquiries into the characteristic and properties of capital. Rae uses the terms capital and instruments somewhat interchangeably; however, notes capital as a special class of instruments used to supply future consumption, not current consumption. Instruments he defines as:

all those changes which man makes in the form or arrangements of the parts of material objects, for the purpose of supplying his future wants, and which derive their

power of doing this from his knowledge of the course of events, and the changes which his labor, guided by his reason, is hence enabled to make in the issue of these events (Ibid, p. 16).

He continues by identifying three properties of instruments:

1. “They are all either directly formed by human labor, or indirectly through the aid of other instruments themselves formed by human labor” (Ibid, p. 19).
2. “All instruments bring to pass, or tend, or help, to bring to pass events supplying some of the wants of man, and are then exhausted. [...] When an instrument is said to be exhausted, it is meant that the matters of which it was composed have passed out of the class of instruments into that of materials”<sup>4</sup> (Ibid, pp. 20–21).
3. “Between the formation and exhaustion of instruments a space of time intervenes. This necessarily happens because all events take place in time” (Ibid, p. 22)

Rae’s conception of capital, via his articulation of ‘instruments,’ fits well with our conception of capital as process, most notably because of the second property he states. One incompatibility between Rae’s conception and our own is his focus on material objects. In this way, Rae continues in the tradition of his fellow classical political economists.

Robison, Schmid and Siles (2002) examine nine properties of capital in an effort to answer the question: “Is social capital really capital?”:

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<sup>4</sup> As noted by the editor, Charles Mixter, Rae alludes to instruments ‘producing’ something or other. This is addressed by Rae in several other sections of the book and implies the role of humans in using such instruments in production. Rae does suggest that instruments hold a generative property in that people would not be able to accomplish particular productive tasks without their aid (Rae, 1834, p.23-24).

1. Transformation capacity: “the essential characteristics of capital goods; i.e. goods to make goods by transforming inputs into outputs and is itself not necessarily transformed” (Robison et al., 2002, p. 9).
2. Durability: “capital’s ability to retain its identity after and during the process of providing services.[...] In contrast to durables are expendables that lose their identity during their provision of services” (Ibid, p. 10).
3. Flexibility: describes the “range and number of services available from a capital source<sup>5</sup>” (Ibid, p. 11).
4. Substitutability: refers to whether the capital source is a substitute or a complement for a different kind of capital source.
5. Decay (maintenance): “refers to the manner in which the service capacity of durables is reduced (maintained)” (Ibid, 2002, p. 12).
6. Reliability: “concerns the predictability of a capital’s service delivery” (Robison et al., 2002, p. 13).
7. Ability to Create Other Capital: “capital’s ability to be used to create the same or different kinds of capital” (Robison et al., 2002, p. 14).
8. Investment and Disinvestment Opportunities: “refers to one’s ability to create new capital (or destroy existing capital)” (Robison et al., 2002, p. 15).
9. Alienability: “[e]xisting capital may be transferred from its creator to others by gift, inheritance, sale, or rental” (Robison et al., 2002, p. 16).

We intend to ask a similar question, “is... capital really capital?”, in relation to each of the seven community capitals associated with the CCF. However, we focus not on the properties of resources, but the processional properties associated with capitalization.

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<sup>5</sup> *Capital source* is a term used by Robison et al. to describe a particular type or form of capital.

In addition to the properties of capital discussed by Rae and Robison et al., Jonathan Levy (2017) as well as Bankston and Zhou (2002) provide a conception of capital as process that address additional properties. Levy (2017) focuses his analysis on the history of capitalism and the accompanying conceptions of capital. He understands capital as a pecuniary process with a particular property of “forward-looking valuation” (2017, p. 1). Bankston and Zhou (2002) alternatively examine the concept of social capital. They conclude that both the substantive quantity and processual interpretations of social capital result in problems. We agree that social capital, along with other intangible forms of capital processes, certainly do run into problems associated with measurement as they conclude the substantive quantity conception does. We find, however, the problems they associate with the processual interpretation of social capital – namely, the “variability, contextuality and conditionality” (2002, p. 286) of such processes – to be characteristics that define many social processes and thus are not so much problems as they are simply the nature of the world.

Before we examine the properties in relation to the CCF, we must briefly reiterate our conception of capital as process. While it may not be the intention of Rae or Robison et al. to give capital the property of agency, a few of descriptions of the various properties make it seem as such. We will thus be clear in our discussion that capital cannot do anything. People do things with resources through capitalization processes. Capital is understood as the emergent actualization of resources through capitalization processes. People, enabled and limited by cultural systems and resource structures, actualize their agendas through the capitalization on resources.

The following section provides a thorough analysis of the processional properties associated with the capitalization of community resources. We build on several of the properties discussed above. We suggest that Rae's (1834) third property of temporality certainly fits within our conception of capital as process. Additionally, we suggest that Robison et al. (2002) provide processional properties in their discussion of capital's transformative capacity, durability/identifiability, flexibility and reliability. Levy (2017) provides insights in addressing the forward-looking characteristic of capital processes. Finally, Bankston and Zhou (2002) link capital processes with the property of variability/conditionality. Examples are given throughout to elucidate how we see the property being understood in actual cases of people using each of the resource capitalization processes. In these examples, it will be clear that most particular forms of these processes of capitalization will rely on a set of input resources, rather than a single resource. Money, for example, is a form of built resource that represents financial resources. That financial resources requires particular cultural resources to be useful to society. The capitalization on these financial resources, thus implies the capitalization on not a single resource, but an input resource set. Our world is complex and thus our relationships between people and resources are also extremely complex and multidimensional.

### **The Processional Properties of Capital**

Processional properties of capital assist us to better understand and describe the various capitalization processes that people engage in to make productive use of the resources they have access to. The following list of properties serves as a vocabulary by which the diverse number of capitalization processes may be compared and contrasted.

1. Transformability: ability for people to capitalize on resources to transform inputs into outputs while not necessarily transforming the capitalized resource.
2. Temporality: capitalization processes occur in time and space. Capitalization processes are not instantaneous, but occupy some period of time.
3. Cultural embeddedness: embedded ‘working rules’ associated with capitalization. These rules condition how and when capitalization is appropriate.
4. Expected future yield: capitalization processes are implemented with an expectation that they will produce a yield.
5. Identifiability: ability of a capitalized resource to retain its identity during and after capitalization processes. Durables retain their identity during and after capitalization while expendables alter or lose their identity during capitalization processes.
6. Flexibility: describes the number of different services capitalization processes may facilitate.
7. Reliability: consistency by which capitalization results in producing an expected yield.
8. Variability and conditionality: ability of a capitalization process to result in an expected outcome is dependent upon not only the capitalized resource(s) and inputs, but on the environmental and social conditions that the process takes place within. Different conditions will result in variable outcomes.

Rather than these properties being seen as binary “yes/no” characteristics, we suggest that each capitalization process may hold each of the properties in varying degrees. For example, when describing the property of flexibility in relation to the capitalization on

financial resources through the use of an American Express credit card, we do not intend to describe it as being inflexible, but rather relatively inflexible as compared with other major credit cards and even more so relatively inflexible in comparison to the use of physical currency notes such as US Dollars. The properties are also layered in the sense that different properties will combine to describe particular aspects of capitalization processes. Continuing with the example above, cash transactions may be a relatively more flexible form of financial capitalization, but that is conditional on the cultural context within which the transaction is occurring. Tanzania may be a location where cash transactions provide more flexibility than the use of credit cards. In the United States, major credit cards may provide a relatively higher level of flexibility for financial transactions. As processional properties, each of these may vary in degree but are nonetheless a part of how we describe what the capitalization process is and how it is being used. These properties provide a vocabulary by which we can compare the capitalization processes and evaluate how they provide unique opportunities for people to use them.

Before we delve into a discussion of the various processional properties of capitalization, it is important to make a note regarding the special case of human capitalization processes. Using an Aristotelian framework of causation, as articulated in Aristotle's *Physics II Part 3* and *Metaphysics V2*, capitalization can be seen as a process by which people capitalize upon available resources and thus we situate humans as the efficient cause. Human action (efficient cause) is the primary source of the emergent process in that people capitalize upon resources (the material cause) for a particular purpose (the final cause). Particular capitalization processes can be seen as the

confluence of the efficient and material causes and are thus relational in nature. This relationship between various structures, both resources and agents, constitutes the formal cause. The capitalization on human resources plays an essential and necessary role in other forms of resource capitalization. “Knowledge is,” as Zimmermann states “truly the mother of all other resources” (Zimmermann, 1951, p. 10). Without knowledge of how to capitalize upon other resources humans would not be able to engage in capitalization processes. Capitalization on human resources is unique in that it always accompanies other capitalization processes used to transform inputs into outputs. With this in mind, the following discussion of the processional properties of capitalization may not explicitly refer to application of human knowledge to each process, but will, nonetheless, imply that human resources are being capitalized upon.

### **Transformability**

Transformability is recognized as the central characteristic of capitalization processes. This is often the characteristic people casually refer to as to what capital does. We must caution, at the forefront, against the idea that capital can do things of its own volition. People capitalize on resources; and in particular, people capitalize on resources to transform inputs into outputs. A particular set of resource inputs are used, and thus capitalized upon, to produce output resources. All or a portion of the input resources may or may not be exhausted through this transformation process. This capacity for transformation is the most fundamental function of capitalization processes.

Human capitalization is a process through which people transform inputs into outputs. Knowledge of how to begin a community organization allows people to transform an input resources set composed of other people’s knowledge and abilities,

publicity tools and materials into the output resource – a community organization.

Human resources are unique in the sense that it is frequently the output, or the product, of capitalization processes on other human resources. People use their abilities, skills and knowledge to gain more of each to enrich their lives.

The capitalization on built resources is the most recognizable form of capitalization transforming inputs into outputs. The use of the term capital in standard economics textbooks allude to this form of capitalization – the capitalization on ‘plant and equipment.’ An office building is capitalized on in order to transform inputs (many of them other types of built resources such as computers, desks, etc; and human resources such as the skills of security and janitorial staff) into an appropriate physical space used for a particular purpose. People capitalize on pens which hold ink as an input to create written symbols and letters on a surface. In this case, the input resource set includes the built resources: ink and the pen. The output resource that is created is a form of written symbols and letters are a forms of built and cultural resources.

Cultural resources are capitalized on to transform inputs into outputs A pre-school is used by a community to teach children ‘normal’ social behavior. Speaking a language is a form of cultural resource, as well as human resources, that gives people the capacity to transform words and meaning into relationships and identity, as well as new experiences and perspectives.

Social resources are capitalized upon in order to transform inputs, such as human emotions and relationships, into outputs or services that are a potential benefit, advantage or for preferential treatment of others. Bonding social resources capitalize on the human need for identity and builds stronger ties within a community. A friend-of-a-friend, or a

situation in which ‘I know someone who knows someone,’ brings together two separate groups through the capitalization on bridging social resources.

People capitalize on political resources to transform input resources into outputs. A community or group that has a common interest in protecting the environment uses its collective interest and relationship with a politician to promote the establishment of new regulations that provide standards and enforcement of environmental conditions. In our current political arena, in which professional politicians dominate, political resources are often capitalized in order for the politician to gain stronger or more numerous political resources in the form of relationships with constituents or other politicians.

Financial resources are capitalized on by people to transform inputs in the form of promises and obligations into the outputs of goods, services or other forms of financial resources. Wages and salaries earned through human effort – which we commonly understand as employment – are transformed into those things we need and desire: shelter, food and other things that are sold. Financial resources that are accumulated or saved can also be stored for a variety of useful purposes. Standard economic textbooks refer to John Maynard Keynes’ (1965) three motives for holding liquid financial assets: security motive, speculative motive and transaction motive. In most cases the capitalization on financial resources requires spending or the relinquishing of those resources, but in some cases a stock of financial resources could be capitalized upon without requiring the relinquishment of those resources. An example of this would be when financial resources are capitalized on as a form of collateral.

Natural resources are capitalized on to transform inputs into different outputs and services. An apple orchard is capitalized to produce apples for sale. A fish hatchery,

which is a form of both built and natural resources, uses the inputs of concrete holding pools (built resources), water, feed and fish eggs (natural resources) to enable the natural process of fish to grow. For the case of the apple orchard, the primary objective is to create something to sell; the fish hatchery is used for human recreation and enjoyment.

### **Temporality**

The temporal nature of capitalization processes implies that capitalization processes occur in space and time. The idea that capital, conceived both as a thing or a process, is temporal is very old. John Rae states that “[b]etween the formation and exhaustion of instruments a space of time intervenes” (1834, p. 22). Later, an economist in the Austrian tradition, emphasized the important role of time in capital theory. Böhm-Bawerk (1923), famously put forward a notion of the “roundaboutness” of capital. What Böhm-Bawerk meant by this was that capital is used in production processes and thus occur through time. Production using different forms of capital occupy differing amounts of time. He provides an example: “the various branches of production adopt roundabout ways of various length: mining, for instance, or railway building, takes a much more roundabout and lengthy method than wood-cutting” (1923, p. 106). Framing capital as a process implies it is an event and therefore necessitates that it occurs through time and space.

The capitalization on human, cultural, social and political resources occur in time and space. Processes occur through events that vary in duration. Some capitalization processes occur seemingly instantaneously and others occur over a relatively long period. The capitalization on knowledge, in regards to responding to the dangers of an attacking bear, occurs in a fraction of a second leading a person to fight or flight. Political

capitalization, through the utilization of constituent/representative relationships that are used to create new laws, occurs through time. Each time the political representative writes, or even votes, to establish a law, they capitalize on the relationship. Some political capitalization processes take longer than others.

The capitalization on built and natural resources also occur through time and space. Mostly encompassing physically tangible resources, these capitalization processes can visibly be seen to occupy physical space. The temporal nature of capitalization processes differ greatly between different resource capitalization processes. The capitalization on an electric grid in a city or town is seemingly continuous. The temporal nature of capitalization on an electric grid is further articulated by referring to ‘peak’ and ‘non-peak’ times. Other forms of built resources are capitalized on in a mere fraction of a second. A gun is used to propel a bullet up to several hundred feet in less than a second. The impact of a hammer or another tool also occurs in a fraction of a second. New forms of digital built resources are capitalized in even smaller increments of time.

It is important to distinguish the temporal characteristics associated with natural processes, that are neither resources nor capital processes. Magma, a natural substance that certainly has an effect on other natural geologic processes, does not hold any known direct uses for human society, yet exists in a temporal state. These non-resource natural processes, along with the natural processes involved in the formation of resources such as petroleum, are distinct from the capitalization processes when people capitalize on natural resources. Natural geological processes, within Earth are framed in a geologic time scales. The process involved in the capitalization on a natural resources may vary in their temporal duration. Trees being cut down from the rainforest occur through time, the

processed timber is transformed into lumber (a built resource) before being further capitalized in various ways. An apple orchard, which is both a form of natural and built resource, takes time to produce apples for which the owner may capitalize on by selling directly or using them as an input to make something else.

Financial resources are capitalized on through time. The very definition of finance (financial resource) as intertemporal credit and debit relationships signifies the importance and essential role of time. While financial resources exist in time, the capitalization on these resources also occur through time and space. Referencing Marx's story of "Moneybags," the conversion of money into 'capital' occurs through the extraction of value from the consumption of some commodity (2011, pp. 184–185). Marx's discussion of the conversion of money into capital occurs through two "acts;" the first, the conversion of money into a commodity; and the second, the conversion of the commodity back into a greater sum of money. This is commonly understood as the M-C-M' process. Other forms of financial resources are capitalized on in different manners. A number of shares are issued and sold by a publicly traded company to raise funds. The sale of shares occurs at a particular time and the capitalization on a share by the purchaser occurs over the period of time they hold the share – earning a portion of the profits the company earns. Finally, the capitalization on a stock of savings occurs through the spending of the savings. Depending on the commodity being purchased, the transaction may take a shorter or longer period of time. The purchase of a car without the need for debt finance will occur in a short period of time while the purchase of a car with additional debt finance will take a longer period of time.

### **Cultural embeddedness**

All social entities are culturally embedded. Where society exists, there also exists culture. In our conception of capital as process, we understand capitalization occurring through social relations. These relations are between people and structures, thus they are enabled and constrained by the cultural systems within which they are embedded. The cultural systems enable and constrain capitalization processes by establishing ‘working rules’ that guide when and how capitalization is appropriate. While it may be easier to understand the cultural characteristics of cultural, political, social and human resource capitalization than the capitalization on built, natural and financial resources, each of these processes are nonetheless embedded in cultural systems.

The property of being culturally embedded implies that capitalization processes occur within cultural systems. This suggests that capitalization upon similar resources may differ in different locations and cultural systems. Cultural resources, such as an education system, are capitalized upon in a manner reflective of the cultural system from which the agents involved are embedded. The education system in the United States places importance on subjectivity of knowledge and critical thinking, while the education system in Japan places importance on the objectivity of knowledge and rote learning. Human, social and political resources are also capitalized upon in a culturally contingent fashion. An additional example is the manner in which Germany and England structure their respective democratic political systems. Capitalizing on each of these democratic political systems results in the similar broad outcome of democratic participation, however culturally unique the capitalization processes achieve the outcomes.

Financial resources and the processes that capitalize upon them are also culturally embedded. Traditional Christian and Islamic religious teaching prohibits the collection of

interest on lending and thus establishes a set of ‘working rule’ that limits the process of capitalization on financial resources. In Islamic banking, the practice of Murabaha guides the lending of financial assets. Murabaha is defined as “resale with a stated profit; for example the bank purchases a certain asset and sells it to the client on the basis of a cost plus mark-up profit principle” (Hassan & Lewis, 2007, p. xvii). Particular credit ratings and accumulated savings serve as rules that either enable or limit someone from acquiring a loan. The capitalization on financial resources are embedded within a particular cultural system and thus are conditioned by the various rules, both formal and informal, that they accompany.

Built and natural resource capitalization processes may on first impression seem void of cultural properties. This, however, is an oversight. The built structures and tools that humans build and use are indeed full of cultural characteristics. Not only do these built resources exhibit cultural characteristics, their very inception occurs within a cultural context with a particular purpose in mind. The capitalization on built resources is culturally embedded because the manner in which we go about using such resources has culturally embedded meaning and purpose. Through the capitalization on a road, for example, different groups of people have created a set of ‘working rules’ that define the appropriate use of the resource. In some locations people drive on the right side of the road, and others on the left side. Rules that guide who has right-of-way and who yields. These rules reflect the broader cultural system and demonstrate that the capitalization on such a built resources is culturally embedded. Natural resources are also capitalized upon in a cultural context. The tribal cultures of the Columbia River Basin in the Pacific Northwest region of the United States are often referred to as the “Salmon People” due to

the significance of the salmon to their culture and way of life. The process of fishing for salmon is as significant as its consumption. Salmon and the water they live in are considered the first gifts provided by the Creator in order to provide for people's survival and thus have an special importance. Fishing for salmon became a way to connect with the Creator and gain an appreciation for the forest, river and salmon. Dipnetting from platforms became a common practice among the tribal fishers (Columbia River Inter-Tribal Fish Commission, n.d.).

### **Expected future yield**

Jonathan Levy conceptualizes capital as process and further, states “[c]apital is property capitalized – a legal asset assigned a pecuniary value in expectation of its capacity to yield a likely future pecuniary income” (2017, p. 494). While we do not limit capitalization processes to the narrow confines, however important, of finance and pecuniary valuation, we follow Levy's line of logic in the sense that capitalization processes are engaged in due to their expected capacity to yield some outcome of value to the person or people capitalizing upon a resource. The expectation of future yield certainly is linked to the property of transformability discussed above, but more specifically we frame capitalization processes as teleological. Veblen's asserts that “human activity, and economic activity, among the rest” (Veblen, 1898, p. 390) is teleological:

...in the sense that men always and everywhere seek to do something. What, in specific detail, they seek, is not to be answered except by a scrutiny of the details of their activity; but, so long as we have to do with their life as members of the economic community, there remains the generic fact that their life is an unfolding

activity of a teleological kind. It may or may not be a teleological process in the sense that it tends or should tend to any end that is conceived to be worthy or adequate by the inquirer or by the consensus of inquirers (1898, p. 391).

Capitalization processes hold a teleological characteristic linked to their expected capacity to yield an outcome of some value.

The temporal, future, expectation of a particular yield, implies that a capitalization process is engaged in with particular attention to the resultant output resource. While we have thus far presented the properties of capitalization processes in the context of a resource being capitalized, here the focus is rather on the resources that expected to emerge, as an output, from a capitalization process.

The case that both Levy and Veblen make is with regard to the capitalization on resources in which the capitalizing agent seeks a pecuniary, or financial resource, yield. We do not seek to make the point that it does not happen or is unimportant. Indeed, the capitalization on resources in seeking a financial return is most certainly the archetype of capitalization processes in this 'capitalist age.' We, however, seek to broaden the discussion of capitalization processes to include non-pecuniary expected yields.

Human, social, cultural and political resources are each capitalized on for the expected yield of a variety of output resources of value to those involved in the capitalization process. Communities engaged in a development initiative may seek to capitalize on cultural resources in order to yield a political resource that legitimizes a governance structure in which perceived leaders are given freedom to make judgments and visions regarding the community. This form of participatory capitalization differs greatly from other manners of capitalization on cultural resources from outside agents. It

is the unfortunate case that cultural resources are often capitalized on for pecuniary or political yields by agents who are cultural outsiders. The European colonizers of the Africa, Asia and Latin America notoriously capitalized on cultural differences between groups in order to yield deviant political strategies to weaken their opposition. Cultural tourism continues in many regions of the world to capitalize on cultural resources for a yield of human resources; in most cases this involves the wealthy individuals or groups gaining an exotic experience most likely for the purpose of bolstering their social status.

Built and natural resources are also capitalized with the expectation of a particular yield. Natural resources are often capitalized upon in order to yield a built resource. Such is the case with much natural resource extraction: bauxite being mined to produce aluminum, sand being mined as one of the inputs into concrete, etc. Varying built resources are capitalized on in order to produce a yield. Current development of artificial intelligence, a type of built resource, seeks to produce an expected yield in terms of semi or fully autonomous technology.

Finally, financial resources are capitalized in order to produce an expected future yield. Conventional purchases of goods and services yields the benefit an agent receives from its consumption. Other purchases, such as the case with Marx's "Moneybags" capitalize on financial resources through the purchase of a commodity which yields the potential to be sold for the purpose of yielding further financial resources (2011). It is important to note that while financial capitalization is frequently undertaken for the purpose of an expected pecuniary yield, for most people and communities, financial resources are still capitalized on for the purpose of an expected non-pecuniary yield.

### **Identifiability**

The property of identifiability relates to capitalized resources maintaining their identity through the capitalization process. While Robison et al. (2002) refer to this property as durability (see property two) and use the distinction between durable and expendable goods, we will rather distinguish between capitalization processes that enable durable resources to maintain their identity through the process while expendable resources lose their identity through the process. Expendability refers to a capitalization process that depletes or transforms the capitalized resource in such a way that it is no longer identifiable as the input resource. Durability refers to a capitalization process that maintains a capitalized resource's identity, while nondurable goods are either transformed into a different identity or are simply used up while its identity is not changed.

Human, cultural and social resource capitalization processes tend to enable a retention of resource identity through the process of providing services. This makes them more durable than expendable. By using one's business knowledge, that knowledge remains the same if not improves. A person's ability to run or jump will remain with them after they run or jump multiple times. Educational institutions tend to endure in identity over the course of many students using them; however, they may change in appearance over time. The strategies of action that shape behavior and values that underlie the education institutions tend to endure in the long-run. In the case of social resource capitalization, a friendship or professional relationship may be used for a variety of services over time, but it can still be identified as a social connection.

Natural and built resources both vary in regards to their ability to maintain their identity through capitalization processes. An apple orchard remains an orchard through

the process of producing apples. However, a stock of seed will not remain seed after it has been planted and turns into plants. A hydroelectric dam remains a dam through several cycles of producing electricity and is considered durable. Electricity, however, is depleted in the process of using it and is considered expendable.

Political resources vary in the degree to which they retain their identity through the process of capitalization. A petition creates certain political outcomes by organizing individual voices into a strong collective interest, but will not retain its identity after the issue has been resolved. An enduring regulation, representing the power relationship between government officials and citizens of a locality, regarding the right for people to possess firearms, retains its core identity although specific details may change over time.

Capitalized financial resources are highly variable in terms of their identity. While the built resource making up the physical coin or currency note is designed to be highly durable, the credit-debt relationship that is a financial resource remains as long as it provides services and is thus expendable. Some quantity of financial savings may be capitalized as a means of collateral or credit verification in order for a person to engage in a financial transaction. In this case the capitalization process has not depleted or altered the financial savings in any manner. Alternatively, a quantity of financial savings may be capitalized to make a purchase. While the financial resource maintains its identity, it has changed ownership and thus is no longer a resource held by the purchaser. Finally, an example of an expendable financial resource is a purchase made using a credit card. When a credit card is used to make a purchase the credit card company creates a liability in the user's account and an asset in their own account. Once the credit card user pays

their credit card bill, both the liability and asset are deleted. After the debt has been repaid to the creditor, the financial resource ceases to exist.

### **Flexibility**

The property of flexibility relates to the variety of different services capitalization processes may facilitate. Capitalization processes that are flexible enable people to produce a variety of different outputs. Inflexible capitalization processes tend to have a single or limited number of outputs that can be produced. Particular capitalization processes can be used for either specific or general purposes.

The capitalization on built, natural and financial resources can be found to be flexible or inflexible. A flat-bed trailer can be used to transport a variety of different items; while a milk-tanker is very useful for transporting milk, but is not good for storing other things. Capitalizing the soil in a field can be used for a variety of crops; however, an apple orchard only produces one kind of fruit. The value and usefulness of financial capital is often associated with its flexibility. A visa credit card can be used to purchase items almost everywhere in the world and thus is very flexible. A gift card to a particular store can only be used for purchases in one location and is thus inflexible.

Human, social, cultural and political capitalization processes can also be found to be either flexible or inflexible. Someone may use their upper body strength for a variety of tasks, while knowledge about a specific accounting software only allows someone to work within that specific software. Capitalization upon family relations may provide a number of different outputs such as an organ donation, financial loan, affirmation as well as other benefits. Inflexible social resource capitalization would be associated with a co-worker, where the expectations are far lower and strictly professional. Cultural

capitalization may make use of a belief that a river and fish have spiritual significance and thus results in particular sustainable fishing practices. Using a particular style of painting or art can be used to express a variety of images and communicate many different messages. The capitalization on certain political resources have specific productive capacity as is the case with someone who has been elected to a public-school district's board of directors. However, a politician elected to the US Senate or House of Representatives has the ability to capitalize on the constituent-representative relationship in a variety of matters. In general, the larger the constituency the broader and more flexible the political resource capitalization may be.

### **Reliability**

Capitalization processes vary in how effective they are in producing expected yields. Reliable capitalization processes will be highly predictable in producing expected yields while unreliable forms will experience frequent failures to produce expected yields. Reliability varies within each of the community resource capitalization processes. While the property of reliability may also be applied to resources, we here refer specifically to the reliability of the capitalization on resources. That is, the particular property of reliability in association to resources being utilized through capitalization processes. Predicted reliability varies depending on two factors: the collective experience of capitalization processes in the past and appropriate matching of input resources.

The reliability of built and natural resource capitalization processes are often related to whether or not such a capitalization process has occurred in the past. The development of new technology and natural or built resources requires much experimentation and an unproven natural or built resource capitalization process will

most likely be unreliable. In general, the reliability of a capitalization process requires correct matching, for which we imply that the resource set being capitalized is appropriately applied. For example, a common source of unreliability comes about from a lack of knowledge with regard to a capitalization process. Another example of an unreliable capitalization process is the use of inappropriate input, such as using diesel fuel in an engine that requires gasoline. Some communities experience frequent power-outages while others only experience them during inclement weather. A corn field in a desert climate is not reliable due to inappropriate input resources. Wild rice cultivation in lakes of the northern parts of the United States tend to be reliable due to the decades of cultivation that has occurred and due to the appropriate climate. As an example of innovation in agriculture, the Land Institute in Salina, Kansas has done significant research on natural ecological systems and self-sustaining agriculture. In the coming years, they hope to “develop an agricultural system featuring perennials with the ecological stability of the prairie and a grain and seed yield comparable to that from annual crops” (Land Institute, n.d.). Engaging in capitalization on natural resources that relies on natural processes increases its sustainability and decreases negative human impact on nature. While initial experimentation may have provided unreliable results, increased experience will lead to more reliable results that have the potential to lead to significant industry disruption.

Capitalization processes of financial resources vary in their reliability; for example, if someone has US Dollars, it will be nearly certain that they can buy something for sale, even in locations outside the United States. Other forms of currency, such as community currency, will be less reliable for making general purchases due to fact that a

community currency is only an appropriate resource to be capitalized in a particular location. The expansion of an individual's credit availability can be more or less reliable depending on a variety of factors, such as employment status and income.

The reliability of cultural resource capitalization is related to how prevalent a practice is found in a community or society. A cultural system that practices formal K-12 schooling will tend to be reliable in creating a society with educated and socialized individuals. Cultural practices that are not maintained, such as traditions passed down from ancestors from another place or country may not be effective in normalizing behavior. The capitalization on the cultural resource found among Norwegian-Americans' celebration of Norwegian independence on May 17<sup>th</sup> will not generally form normalized behavior, while Americans celebrating July 4<sup>th</sup> will contribute to the persistence and normalization of American pride and patriotism.

Human, social and political resource capitalization varies in the degree to which they are reliable. An apprentice craftsman will most likely not be as reliable as a master craftsman at producing a particular craft due to insufficient knowledge or experience. Different accountants will vary in their ability to find credits and deductions so that a business would have different tax liabilities. Family ties tend to be extremely reliable form of social resource capitalization for the services of affirmation, acceptance and love. A school-mate, on the other hand, may be an acquaintance, but may not be a reliable source for these services. Communities that are smaller tend to produce more reliable yields in social resource capitalization processes due to the higher frequency of interactions between the same group of people. A petition with few signatures is a form of political resource capitalization that will be less reliable to achieve the desired

outcome than a petition with many signatures due to ensuring the a capitalization process has the appropriate input resources. The process of government regulation of the financial markets proved to be unreliable prior to the great financial crisis of 2008.

### **Variability and conditionality**

Bankston and Zhou (2002), in a critique of social capital, suggest that much of the confusion in the social capital literature stems from attempts to use social capital in the conventional quantitative sense that has been used to discuss financial capital or human capital. Social capital, they contend, emerges across different levels of analysis as a process of goal-directed social relations. Further, they suggest that the variable, contextual and conditional nature of social capital processes complicates defining and locating such a concept. While the variable, contextual and conditionality may frustrate conventional concepts of capital, we see these characteristics as important properties that in fact assist us in our understanding of how capitalization processes work in our world. It is this property that helps us articulate why capitalization processes produce expected outcomes in some instances, while not in others.

We will begin by examining the variability and conditionality in the capitalization on social resources. Bankston and Zhou (2002) reference a study by Steven Gold (1995) that follows the establishment and use of social resources in community relationships in Israel and the subsequent change in social resources upon their emigration to Los Angeles. The study finds that while migrants give up a social environment in which they maintain identity and support, they gain financially. The variability in the social environment between Israel and Los Angeles led to divergent social resource capitalization processes among migrant women. The study also found that women, while

facing adversities, developed robust social networks and contributed to the establishment and expansion of social and cultural activities (Ibid, 1995). The outcomes from the capitalization on social resources differed greatly depending on the context from which it was occurring.

Human, cultural, and political resource capitalization processes are highly variable and conditional as well. Such capitalization processes vary depending upon the context and environment in which they occur. In extenuating circumstances, capitalization on human resources yield atypical results. For example, in the context of emergency situations a surge of adrenaline makes it possible for humans to yield unusual levels of strength that would not be possible under normal circumstances. The capitalization on political resources through decision making in the context of the Quaker community is unusual due to their policy of non-voting. The capitalization on political resources requires close ties between community members through a process of ‘sense-of-the-meeting’ which emphasizes seeking what is best for the community, not an aggregate sum of individual needs. Such a capitalization process will result in varying outcomes depending on the context from which the process occurs.

The capitalization processes of built and natural resources also vary depending on the context from which the process is occurring. Outcomes are conditional on particular contexts and environments. Related to the property of reliability, discussed in the section above, a capitalization process conducted in two different contexts will result in divergent outcomes. The use of a sloped bridge will yield different results depending on weather conditions. While the bridge may be used as expected during warmer months, cold temperature and the presence of ice will most likely prevent the bridge from being useful.

The capitalization on coffee trees is also variable depending on the geographic location of the process. In locations closer to the equator coffee trees will produce two harvests of coffee beans each year, while in locations farther away from the equator coffee trees will only produce one harvest per year. Each of these capitalization processes is also conditional upon a particular altitude to ensure the coffee trees thrive.

Variability and conditionality also shape the nature of financial resource capitalization processes. The use of a government issued fiat currency within that nation's context tends to be highly standardized. While contexts may vary within the nation, the capitalization on such financial resources tends to be similar. In contexts in which a country is dealing with excessive levels of inflation or other macroeconomic instability, the capitalization on financial resources will vary. Such is the recent case in Zimbabwe. Macroeconomic conditions and government policy caused inflation rates to reach such levels as to make even the most basic financial transaction burdensome and near impossible to complete. The credit markets are also highly variable; conditional on a person or business's credit rating, cash flows and credit history, debt may be capitalized with ease or much difficulty. The conditionality of credit markets serves as a significant barrier to community development initiatives seeking to capitalize on debt instruments.

### **Conclusion**

Capital is a term that continues to plague economists and other social scientists through both its conceptual confusion as well as through the contentious dialog between staunch supporters of conflicting conceptions. We do not intend to suggest that our conception and use of the term concludes the discussions and debates over the centuries. We do however, aim to promote and contribute to the use of such frameworks as the

CCF, in the context of community development. We extend and provide some additional specificity with regard to our defining capital as process. To maintain conceptual clarity, we distinguish between resources and the processes of capitalization on those resources. In this way the location of analysis lies within the active process of resource capitalization. While there are broad social and economic implications to such an approach to capital theory, we find it especially useful in the context of community development initiatives; such as is attempted through the CCF.

Prior literature that attempts to understand the various properties of capital are seen as conflationary perspectives due to the lack of distinction between resources and the actualization of those resources through capitalization processes. John Rae (1834) as well as Robison, Schmid and Siles (2002) provide several properties of capital that we review. Some of these properties, are appropriate in the context of capital as process while others are better described as properties of resources. Gleaning a number of properties from Rae, Robison et al, as well as Bankston and Zhou (2002) and Jonathan Levy (2017), we suggest there are eight processional properties of capitalization: transformability, temporality, culturally embeddedness, expected future yield, identifiability, flexibility, reliability, and variability/conditionality. These properties are not meant to function as a decisive list of essential properties that all capitalization processes must possess, but rather a common guide to describe each of the different capitalization processes associated with community resources. The processional properties of capitalization processes functions as a common conceptual thread through the variety of ways community resources are actualized to achieve people's objectives and goals.



## CHAPTER 4

### RESOURCE TRANSFORMATION THROUGH CAPITALIZATION PROCESSES: AN ITHACA HOURS CASE STUDY

The Community Capitals Framework (CCF) was developed by rural sociologists Cornelia Butler Flora and Jan L. Flora (2004; 2016) and has been a useful tool for rural community development in a number of different contexts in the United States and beyond for more than a decade. The CCF focuses on how communities utilize seven interdependent capitals – natural, cultural, social, human, political, built and financial – in achieving the development goals of a vital economy, social inclusion and a healthy ecosystem (Flora et al., 2016, p. 16). The CCF fits within a broader participatory approach to development in which communities define and guide the development process from within their own community using as many of their own resources as possible.

The aim of this article is to understand and describe the role of resource transformation in the overall process of participatory development. Community development is seen as a form of social action and transformation. Social action and transformation are viewed as having cumulative effects that cause further change. These processes are emergent and continually evolving. While various aspects of a community encounter change and transformation, particular attention is often placed on the transformation of resources. We build on a conception of capital that is understood as process. In this context, resource transformation occurs through various resource capitalization processes. This theory of resource transformation is framed in Linwood Tauheed's Critical Institutional (CI) approach (2013a, 2013b). It is the hope of the

authors that an articulation of a theory of this resource transformation process will be of significant benefit to understanding how communities engaged in development.

Following the tradition of the CCF, our theory of resource transformation is oriented towards being of practical help for analysis working in community development. A case study will be presented to better understand how resource transformation occurs in the context of community development. We provide a brief overview and analysis of the emergence of Ithaca HOURS from Ithaca, New York. This community economic development initiative aimed to create a community currency to spur community oriented and controlled economic activity. The case study examines the various strategic transactions involved in obtaining the full set of complementary factors required to successfully being the use of HOURS. This case study illustrates the potential for a theory of resource transformation to be of benefit to community development practitioners and researchers in other contexts.

### **Community Capitals Framework**

As we stated in the introduction, the CCF was developed by the researcher-practitioners Cornelia Butler Flora and Jan Flora in the field of rural sociology. The CCF was established in much part from their practical experience in community development. Three similar approaches to community development look at ways in which development can occur from within a community rather than finding development assistance from outside the community: asset-based community development (ABCD) (McKnight & Kretzmann, 1993), self-help development (Cary, 1970), and appreciative inquiry (Cooperrider, Whitney, Stavros, & Fry, 2008). These three approaches within the community development field have a significant amount of overlap in terms of theory

and practice and I will refer to them in general, as a group, as participatory community development (PCD). The CCF fits well within a PCD approach because it provides a basic framework for understanding what resources a community has to work with. This is stated especially clearly by Lee Cary:

[t]he organization of people in a locality to deal themselves with problems and opportunities close at hand that affect their lives and patterns of living is the central theme of community development (Cary, 1970, p. 1).

While much of community development focuses first on identifying problems and issues within a community, PCD focuses first on the strengths of a community.

Conventional development is framed as a task of ‘solving the problem of... poverty, unemployment, low literacy, infant mortality, etc.’ These approaches that focus on problems are referred to as ‘needs-based’ development. The metaphor of looking at a glass half empty rather than half full is often used to describe the difference between needs-based and asset-based approaches. The problems in a community do indeed exist and are in many instances extremely serious; however, the PCD approach holds that community members have insights, knowledge and abilities to change their own lives and affect change in a meaningful manner. The idea that members of any community have human agency is central.

PCD often involves the implementation of one or more specific development projects; however, its overarching aim is about institutionalizing an on-going development process rather than about completing projects. Understanding community development as a process increases communities’ capacity to build on strengths and take ownership of the social change they affect. Increasing participation and collective self-

governance are key outcomes which in turn provide a way in which communities can vision together and overcome challenges that obstruct their goals. Development is an iterative and ongoing process that a community engages in continually.

The CCF can be most closely associated with ABCD because of the emphasis on assessing a community's assets<sup>6</sup>. Asset mapping is a common tool used in ABCD (McKnight & Kretzmann, 1996). This is a process of identifying assets and understanding how they are connected to other assets. Assets are initially identified by the community members themselves. Understanding how these assets are related is important for understanding how the transformation of community resources occurs through the development process. Illustrated in the most basic forms of asset maps it becomes clear that 'no resource is an island.' It is not possible for a community to have a functioning hospital (built resource) without a set of other resources being capitalized on such as trained doctors, nurses, and other health deliverers, administrative staff, specialized equipment, a physical location, etc. Likewise, schools only function in a community when a variety of resources are used together in a transformative way.

Due to the fact that many lower income communities have limited control of the change affecting their communities, identifying who owns and/or controls an asset is an important attribute in describing an asset. Asset mapping, in addition to identifying the connections between assets, helps trace a history of how assets came to be a part of the community resource structure. This history uncovers how assets became part of the

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<sup>6</sup> While the terms assets and resources are use synonymously in the ABCD approach, we conceptualize assets as a type of resource with a particular ownership status. One may have access to a variety of resources, which they may or may not own. An asset is owned by an agent and may be used by the owner or by non-owners.

community and who controls them. In most lower income communities, hospitals and schools are controlled by people from outside the community.

Thus, McKnight and Kretzmann (1996) discuss assets as primary, secondary and potential building blocks. Primary building blocks are those assets located within and controlled by a community. Secondary building blocks are assets that are located within a community, however are controlled by people outside the community. For example, in many lower income communities, hospitals and schools are controlled, for the most part, by people from outside the community. Finally, potential building blocks are those assets that originate from and are controlled by those outside the community.

When engaged in a development process within a community, the CCF provides a base from which we can study the ways different assets are transformative and related to one another. People are the most important asset of any community and have within themselves access to a variety of different transformative resources that can be used for development objectives as defined by themselves. Appreciative inquiry (AI) is similar to the self-help model (Cooperrider et al., 1999). The approach finds ways in which development can occur from within a community rather than finding development assistance from outside the community. An adapted AI approach involves a progressive process of ‘6-Ds’<sup>7</sup>:

- Define the scope of interest.
- Discover the assets and what is working well within a community.
- Dream together as a community about how things could work even better.
- Design a plan that will actualize that dream.

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<sup>7</sup> Note that the originally AI approach had ‘4-Ds’ (Cooperrider & Whitney, 2005).

- Deliver the plan together and sustain the change.
- Debrief and dance to reflect on and celebrate the change affected.

(Paraphrased from Flora et al., 2016, pp. 450–451)

Inclusive participation and collective self-governance can be viewed as resources that provide a way in which communities can vision together and overcome challenges that obstruct their goals. Interestingly, when we examine the ‘6-Ds’ of AI we can see that step 6, debrief and dance, works in conjunction with steps 1 and 2, define and discover. AI is an iterative and ongoing process that a community engages in continually (Ibid).

Each of the particular approaches to PCD brings a unique nuance and focus to community development. ABCD emphasizes the resources and assets of a community. Self-help approaches focus on the importance of community members engaging and owning the process of development. AI stresses the creativity and diversity of community members visioning and planning their own process and objectives of development. The CCF fits well with these while bringing a unique approach to understanding the productive potential that a balanced set of resources provides for a community.

The hypothesis of this research is that agents have the capability to capitalize upon resources within a community to engage in resource transformation. A community, a group of people, has within it human resources and the potential to create cultural, social, political, and financial resources in their interactions. The physical buildings, streets, and utilities within a community are built resources; and trees, ponds and rivers are natural resources. These resources are not isolated assets within a community, but are put to work together through capitalization processes by a community’s initiative.

A key feature of the CCF is the understanding that capitals relate in a dynamic and interdependent manner. Gutiérrez-Montes (2005) and Emery and Flora (2006) discuss how capitals within a community tend to “spiral up and down” together in different contexts. The idea that capitals tend to operate in spirals means that “capacity cannot be measured merely by increase in stocks of assets within the specific capitals, but requires an increase in the flow of assets that build stock in additional capitals” (Emery & Flora, 2006, p. 22). Gutiérrez-Montes shows how in the context of the Chimalapas communities in Mexico, forest fires destroyed natural capital which thus had severe effects on each of the other community capitals. Because of the fires, social capital declined as seen through growing distrust and disruption of communication, cultural capital declined because of the influx of outsiders and their imposition of new ways of life, human capital was hampered due to the health problems, political capital was affected due to attempts to impose a nature reserve, financial capital was reduced because families experienced declines in incomes, and finally built capital was damaged because of overuse of roads by trucks in the firefighting effort (Gutiérrez-Montes, 2005, p. 121). As can be seen by Gutiérrez-Montes’ description, the capitals in the Chimalapas community are interdependent and are affected by variations in each other.

An alternative perspective on the dynamic and interdependent nature of community capitals is that of Kenneth Pigg and fellow researchers (Pigg, Gasteyer, Martin, Apaliyah, & Keating, 2015; Pigg, Gasteyer, Martin, Keating, & Apaliyah, 2013). Their research suggests a far more controlled relationship between capitals based on the needs and objectives of the community engaging in a particular initiative. In this sense, the relationship between community capitals is always contingent upon a particular

person or group of people intentionally and selectively using capitals to which they have access. Community members select from the available assortment of community capitals available to them like an artist selects particular colors of ink when painting a picture. While the colors are separate to begin with, the artist combines and mixes them to achieve the desired end result. The community capitals thus have a similar characteristic in that at the beginning of a community development initiative participants must conduct an asset or capital inventory to understand what they will have to work with, as they collectively envision the particular end they desire.

A primary goal of this paper is to understand the specific interdependent relations between resources and the people that have access to them that lead to resource transformations. Resource transformation happens when one resource set is transformed into new resource sets. An example of this is when cultural resources are transformed into a resource set which includes social resources or when a particular human resource set is transformed into a new set of human resources. We hypothesize that rather than seeing isolated one-to-one resource transformations occurring at a particular time, resource transformations are dynamic and most often occur in multiples. An example is when we see built resources transformed into financial and also social resources, or a series of transformations such as the case when political resources are transformed into social resources, and then that social resource set is transformed into a financial resource. In addition to the dynamic and multidimensional nature of resource transformations occurring concurrent or sequentially, these resource transformations are seen as contingent and emergent capitalization processes of social action. In the next section,

resource transformations will be situated within the broader context of social action in community development.

### **Resource Transformation in Participatory Development**

Capital processes within the CCF are dynamic and interrelated. Resource transformation through capitalization processes are initiated and mediated by agents. Capital is fundamentally a social relation and is seen as a part of the emergent actualization of resources through social action as has been discussed in Chapter 1. PED approaches to development are reinforced by a this conceptualization of capital as process that roots social actions, primarily through resource transformations, in agents that act. Given that people's actions are enabled and constrained by both structures as well as their own agency, it is important to understand how people organize these actions toward the accomplishment of particular development agendas and goals.

Integrating the CCF and PED with Linwood Tauheed's Critical Institutional (CI) approach (2013a, 2013b) provides an understanding of development as an iterative and evolutionary process that involves people drawing on existing resource sets, constrained and enabled by a cultural system, to engage in social action promoting good change which results in elaborated resource sets, cultural systems, and agents. The following diagram provides some clarity as to the general model of development we are proposing:

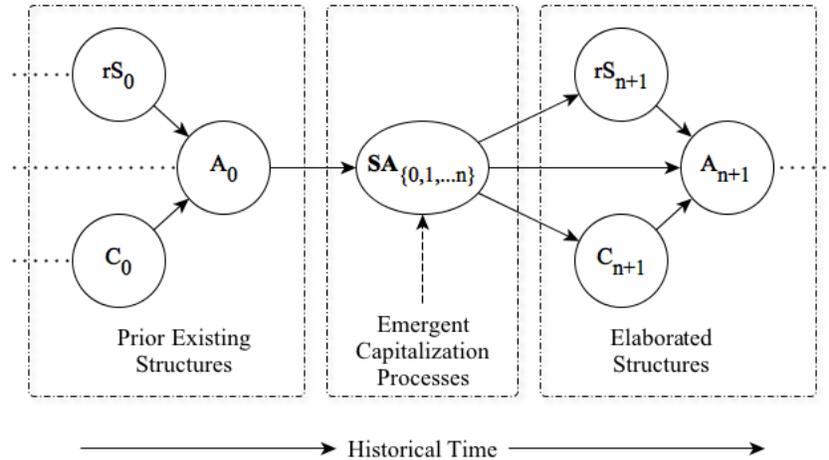


Figure 11: Macro Development Process

The macro<sup>8</sup> development process begins with Agents ( $A$ ) in time period 0 with their desired development agenda. Their desired end of the development process will most likely not come to fruition exactly as they envisioned, however the visioning and establishment of goals is nonetheless an important causal force in the development process. Agents ( $A_0$ ) are enabled and constrained by Resource Structure ( $rS_0$ ) and Cultural Systems ( $C_0$ ). Agents ( $A_0$ ) act on their agendas and goals through an number of emergent transactional Social Actions ( $SA_{\{0-n\}}$ ) through capitalization processes. Transactional social action, if affective, will result in some combination of elaborated Resource Structure ( $rS_{n+1}$ ), Cultural Systems ( $C_{n+1}$ ), and the Agents ( $A_{n+1}$ ) themselves<sup>9</sup>. Any macro development process will require some number of smaller, micro, strategic and routine transactions for agents to accomplish their agenda. Strategic transactions address limiting factors that prevent Agents ( $A_0$ ) from accomplishing their agendas. Once limiting factors have been addressed through strategic transactions, the various

<sup>8</sup> The term *macro* in this usage refers to overarching process involved in achieving the primary goal of the community project or initiative, as opposed to the intermediate, *micro*, steps they may take to achieve that goal. It does not imply a national or aggregate approach to economics such as macroeconomics.

<sup>9</sup> Social actions that reproduce and/or maintains existing structures are what Archer refers to as morphostasis (1995, pp. 15–16).

complementary factors are used to pursue Agents ( $A_0$ ) agendas (Commons). The diagram below illustrates the various micro sequential and concurrent strategic transactions involved in a macro development process:

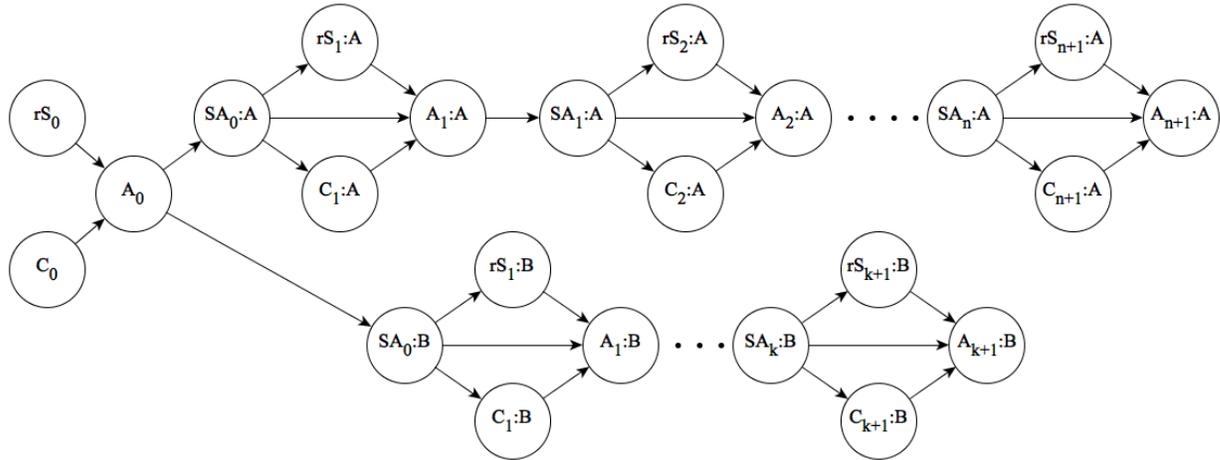


Figure 12: Sequential and Concurrent Strategic Transactions

Resource transformations can be depicted in the above diagrams as moving from initial social structures and agency to the transformed or elaborated social structures and agency. Resource transformation is thus seen as a three part process moving from initial social structures and agency to social action through particular capitalization pathways and finally to the transformed social structures and agency. The pathway is a specific social action when agents capitalize upon a set of resources to transform resources, as is depicted above through the specific strategic and routine transactions. Capitalization upon resources can occur in a variety of ways due to the varied nature of resources as well as the multitude of ways in which agents use those resources. Each of the seven community resource types includes a wide spectrum of specific historically and culturally contextual cases.

Each of the seven community capitals have unique capitalization pathways. Below is a table outlining what resource transformations are occurring via which capitalization pathways:

Table 1. Resource Transformations and Capitalization Pathways

<u>Resource Transformations</u> through Capitalization Pathway:	Output Resource Form:	
<u>Building</u> through engineering and design (industrial arts)	Built Resources	It is
<u>Enculturation/Acculturation/Exchange(Appropriation)</u> through child rearing, migration, travel, exploration and colonization.	Cultural Resources	imp orta nt to
<u>Financialization</u> through commodification	Financial Resources	note
<u>Human enrichment</u> through education, training and healthcare	Human Resources	that unli
<u>Naturalization</u> through sustainability, conservation and cultivation	Natural Resources	ke a
<u>Politicization</u> through lobbying, advocating and civic engagement	Political Resources	clos ed
<u>Social networking</u> through bonding and bridging relationships	Social Resources	syst em

or precise scientific experimentation, participatory community development processes are dynamic, complex and open where actual outcome rarely match the initially envisioned outcomes or goals driving the initiative. This happens for three reasons. First, as agents go about accomplishing their desired goals, they discover new and better goals and thus alter their agenda. Secondly, while agents are in general a cohesive collectivity of individuals joined by a common interest, there may be slight differences in how actors

within agency carry out their agendas leading to outcomes that no individual necessarily envisioned. Third, unforeseen influences and factors out of the control of an agent, may prevent agents from completing their agenda as envisioned. In either or any of these cases, while the outcome may differ from the initial envisioned outcome, it may meet the general acceptance of the agent. Indeed, the agent themselves may be changed through the processes. The outcomes of development processes result in elaborated structures, intended and unintended.

The overall macro development process (#1-6) and micro strategic subprocesses (#4.a-4.b) can be summed up in the following steps:

- 1) Assess resources available to agents through Resource Inventory.
- 2) Determine desired development goal(s).
- 3) Assess complementary and limiting factors (resources and culture).
- 4) Determine strategies to acquire limiting resources – plan strategic transactions.
  - a. Capitalize upon available resource sets to acquire limiting resources.
  - b. Repeat resource capitalization until all limiting resources have been acquired. (Engage in Sequential /Concurrent Strategic Transactions)
- 5) Capitalize upon complementary resources to complete desired development goal(s).
- 6) Evaluate outcomes.

The framework outlined above is rooted in an explicit ontological position that sees people as agents that act upon the world. It further sees the material and social world as existing with causal powers in enabling and constraining people's actions in the world. The framework is designed to be a scaffolding of sorts. To provide a basic structure

around broad and general themes and categories often used in PED; however, not too specific to limit or constrain the diversity that exists in terms of PED in practice.

### **Case Study: Ithaca HOURS and the Creation of Financial Resources**

Of the possible scenarios of resource transformation, financialization is one of the more complex processes. Most economic development efforts focus their attention on the building of financial resources. This is unfortunate, but unavoidable. It is unfortunate because the desire to accumulate financial resources has become the sole aim of most economic endeavors in the world of the 21<sup>st</sup> century. And, it is unavoidable because the global economy is indeed a monetary production economy. Much has been written on the topic, beginning with Marx, Veblen, Keynes and Minsky, which we will not delve into in this article.

The following case study covers a type of financialization that is often overlooked: community currency. While a nation's sovereign currency, and various policies that influence it, can hardly be considered a 'community' economic issue due to the lack of influence from individual communities within a nation, much effort has been expended in community economic development efforts for the purpose of attracting and retaining a national currency within the community. Community currencies, on the other hand, are established and controlled by a community for the community's purposes. The establishment of Ithaca HOURS began in 1991 by Paul Glover in Ithaca, New York. Glover began with the idea: "Our city needed more money and more control of what money does so we thought, 'Why not print our own?'" (Kennedy, Lietaer, & Rogers, 2012, p. 155). Glover and other community members started with an agenda to expand financial resources in the community.

Ithaca, New York is located in the south-central portion of New York State referred to as the Finger Lakes region. Lying on the southern tip of Cayuga Lake, Ithaca is known for its natural beauty and attracts a large number of tourists. As the lake's name suggests, the regions surrounding Ithaca were first settled by the Cayuga Nation, a nation within the Iroquois Confederacy. Revolutionary War veterans were the first European settlers of the area in the late eighteenth century. Agriculture and timber were primary industries following European settlement. Home to Cornell University, founded in 1868, as well as Ithaca College, founded in 1892, Ithaca became a town known for its commitment to education. Ithaca has maintained its reputation for excellence in education and has become a center for progressive ideas and liberal politics (Kammen, 2008).

Before beginning our analysis of the Ithaca HOURS initiative, it will be useful to provide some basic context of the economic conditions in Ithaca in the early 1990s from which the initiative emerges. While Ithaca fared better than the national average, unemployment rate rose during the recession from July 1990 to March of 1991. While the national unemployment rate was 5.2 percent, Ithaca's was an impressive 3.7 percent in June of 1990. At the end of the recession, in March of 1991, the national unemployment rate stood at 6.8 percent while Ithaca's stood at 4.4 percent (US Bureau of Labor Statistics, 2018). Ithaca did better than the national average in terms of joblessness, the city and region, none-the-less, dealt with growing unemployment through the early 1990s.

Central to Paul Glover's desire to start a community currency was the idea that the community had underutilized resources that could be harnessed. A local currency is a means to redirect control from global and national interests to local stakeholders. In

describing his ‘Step-by-Step’ procedures of how HOURS came to be established, Glover provides several steps that led to the successful creation of a community currency (Glover, 1996). Examining Glover’s steps for a successful community currency helps us understand the complementary and limiting factors that are used to arrive at the end objective of creating financial resources. The steps can be viewed as a set of complementary factors, each corresponding to a particular community resource category. The variety of complementary factors can be understood as the set of resources required to achieve a community’s project goal(s).

The various resources for which a community already has access, which merely need to be applied to the initiative to create a community currency, involve what John R. Commons refers to as routine transactions (1961). For example, Paul Glover has skills as a graphics designer and experience working as a community economist, both aspects of his human resources, which would be used to initiate and promote the use of a community currency. Paul did not require any additional education, training or experience before he would have the requisite abilities to promote the new community currency. There were, however, a number of resources that had to be acquired or accessed before directly applying them to the implantation of the community currency. These missing resources are what Commons refers to as limiting factors. Several limiting factors need to be addressed through strategic transactions before the community members in Ithaca could proceed to use HOURS in everyday purchases:

- T1. Design the money.
- T2. Recruit a networker.
- T3. Sign up participants (collect sign-up fee).

- T4. Design Ithaca Money newspaper.
- T5. Sell display ads.
- T6. Establish Barter Potluck.
- T7. Print currency & Issue currency (serial number and signed).
- T8. Print Ithaca Money newspaper.
- T9. Distribute HOURS and Ithaca Money newspaper.
- T10. Issue press release.

(Glover, 1996)

Glover began by creating a design for a currency note (T1) (Glover, 1996, p. 38). A compelling design would assist in the promotion of the currency. The preliminary design was needed early in the process while a final design and mass printing would wait until later in the process. Glover, having a background in graphic design, simply drew a few sketches of potential currency notes. Copies of these preliminary designs were used in the process of building a network by recruiting businesses to accept and use the new currency.

The next step was the recruiting of a networker (T2). The purpose of a networker was to create a social network of currency users. The person, or persons, recruited as networkers used their human resources and existing social resources to further the agenda of the initiative through social networking. Recruiting a networker most often requires that the employer have financial resources in order to pay the networker. In the case of HOURS, Paul Glover and a student, Patrice Jennings, began reaching out to the community to solicit support for the project on a voluntary basis. Glover and Jennings were not initially paid, however, two years after the first Ithaca HOUR began circulation

in 1991, Glover was funded through the VISTA (Americorps) program (Glover, 1996, p. 39). A networker is essential in the establishment of a community currency, but also plays an important role in maintaining and expanding a network of currency users once it is established.

Starting a local currency is a labor intensive endeavor and requires that businesses and residents within a locality are informed of the project. A networker works with businesses to help them brainstorm how they can spend the local currency they would earn. Just like a national currency has a vast network of financial institutions, businesses and individuals willing to accept and spend the currency, the networker works to establish a local network of businesses and individuals that would accept and spend HOURS (T3). A networker can use existing social connections to create bonding social resources or make new connections to create bridging social resources. For each new currency participant, the networker collects a small fee to offset the various US Dollar denominated expenses incurred by the initiative organizers in starting a community currency. As the networker signs up participants a social network forms. Both the networker, working on behalf of the community currency initiative, as well as businesses gain a social resource in the form of a network of currency users. Initial participants to sign up included Jim Rohrsen – Papa Jim’s Toys, Cartherine Martinez - Farmer’s Market food vendor, Rich Szany and Lynn Cohen – movie theater owners, and Greg Spence Wolf – cleaning serves (Glover, 1996, pp. 38–39).

As businesses and individuals sign up to participate it is important to create a platform by which they can learn where HOURS are accepted. This involves the design of a newspaper (T4). The Ithaca Money newspaper served as a directory of currency

users. In designing the newspaper Glover made sure to leave space for ads and coupons to encourage further participation. Once a basic layout of the newspaper had been designed, organizers would sell ad space to local businesses (T5). While ad space was initially offered in exchange for US Dollars, it later became possible to sell ad space in HOURS (Glover, 1996, p. 48).

Following the emergence of an initial, although small, network of HOURS users, another limiting factor that had to be addressed was establishing a management process to issue and regulate the currency (T6). This required the emergence of two forms resources: cultural resources and political resources. Creating a set of working rules which governed the daily transactions involving HOURS was the formation of a cultural resource. The establishment of the democratic process by which currency users, made up of both businesses and community members willing to offer a good or service, establish the rules and guidelines for the currency could be understood as a form of political resource. The Barter Potluck was established as the governing body to decide when and how much currency would be issued. Anyone willing to advertise their acceptance of the currency would be able to vote. Two local administrators, Patrice Jennings (same person as networker above) from Ithaca's Alternative Federal Credit Union and a local historic preservationist, sign the HOURS as a currency issuance after decisions have been made in a democratic fashion (Glover, 1996, p. 46). The establishment of cultural resources in the form of working rules, as well as grassroots political resources that involves the democratic relationship between HOURS users, guide the administration and governance of the local currency. The informal nature of this form of governance is fitting of this grassroots movement in Ithaca. Social resources, which were established and expanded

by the networkers, would be used to create the Barter Potluck. This form of governance, made up of cultural and political resources, would be used along with other complementary resources toward the successful creation of local financial resources. Several years after the establishment of HOURS an elected Advisory Board of Governors was established to streamline and formalize the decision making process (Glover, 1996, p. 39).

Concurrent to the resource transformations discussed above, another limiting factor for the creation of a successful local currency is a credible and professional physical currency note (T7). Glover states, “[m]ake the currency [note] look both majestic and cheerful, to reflect your community’s best spirit. Feature the most widely respected monuments of nature, buildings, and people” (Glover, 1996, p. 41). While a preliminary design was done early in the process, the final design and printing was completed after a critical number of participants had committed to the project. Design of the physical cash was undertaken through the capitalization of cultural and human resources. The design of the currency was made to invoke a sense of belonging and meaning that is rooted in a shared history. In the process of making physical currency notes, the organizers relied on people’s ability to use computers and a design software (human and built resources) as well as draw on a community’s heritage (cultural resources) through symbols, notable people or natural beauty. The printing of currency involved capitalizing upon other forms of built resources such as printers, specialized paper, and security devices. HOURS were printed locally in Ithaca on cattail paper and soy ink. The first bills were printed in a size larger than wallet size. Further printing was made in wallet sized bills to facilitate convenience. A watermark was added on later

printings for security. The printer, David St. George of Fine Line, accepted 10 percent of the cost in HOURS and the remaining 90 percent in US Dollars (Glover, 1996, p. 39). As can be seen from this example, there are many small intermediate resource transformations within each larger transformation. In the diagram and table below, the process of printing the actual physical community currency is undertaken through design and printing.

As currency notes are printed, another task was the printing of the Ithaca Money newspaper (T8). The newspapers were printed at Our Press in Chenango Bridge, New York. There were enough copies of the newspapers printed for those who signed up as well as additional copies to solicit more participation and distribute information about where people could use the HOURS (Glover, 1996, p. 39).

The initial HOURS payment distribution was organized with the distribution of the newspapers for those that signed up (T9). HOURS and newspapers were distributed through the mailed service. Each participant received four HOURS in a variety of denominations in accordance with Barter Potluck policy (Glover, 1996, p. 50). While currency issuance was ultimately under the control of the Barter Potluck, a facilitator working on behalf of the initiative followed through by mailing the currency. Newspapers were also distributed beyond the network of currency users to solicit more participation from the broader community. Stacks of newspapers were left for free pickup at stores, churches, laundromats among other locations (Glover, 1996, p. 52). The distribution of currency notes and newspapers was coordinated with a press release.

A broader audience was informed of HOURS through television, radio and other newspapers (T10). Media coverage began at a local level at first, then moved to national

and even international media outlets. Media coverage in 1991 included Community Ink, Cornell Daily Sun, Ithaca Journal, Ithaca Times, and Radio WHCU. National media coverage in between 1991 and 1994 included New York Times, Mother Earth News, and CBS This Morning (Glover, n.d.). Key to the successful implementation of a community currency is awareness, using multiple platforms to spread the information is essential.

The scope of the HOURS project does not stipulate what specific activities the community currency would be used for, and thus it was a means for the community at large as well as smaller groups within Ithaca to achieve their own goals and agendas. However, there is a clearly specified community agenda that Paul Glover and other organizers were aiming to attain. They desired to create a local currency to increase economic activity while maintaining as much local control as possible.

Summarizing the various resource transformations involved in the creation of HOURS (financial resource), we can isolate ten limiting factors that were required. Note that the sequence of particular factor acquisition may or may not be conditional on being before or after the emergence of other factors. The diagram below depicts each of the resource transformations involved. The columns in the table below present a series of transactions presented in logical time rather than historic time, thus it may have been the case that T6, T7, and T8 all occurred simultaneously in historic time. Other transactions, such as T2 and T3 necessarily follow a particular sequence as we will discuss below. Rows in the table represent different roles held by the various actors involved in the Ithaca HOURS project. Each cell of the table corresponds to an actors role in a particular transaction ( $T_i$ ), represented by circles. Transactions emerges from structural factors, represented by sideways triangles. Structural Factors (F) include three factor types:

Human Agential Factors (HA), Resource Structural Factors (rS), and Cultural System Factors (CS). The various Structural Factors are outlined in full detail in Appendix A.



The diagram above, Figure 13, presents the story of the emergence of Ithaca HOURS through logical time diagramming the various actors with specific roles engaging the various strategic transactions to obtain those limiting factors that are required to begin community currency use. Note that this does not imply that this was the only way HOURS could have emerged, rather it describes how it occurred. It is very much possible that HOURS could have emerged in a different fashion with a set of alternative resources and strategic transactions.

The discussion above has focused exclusively on the initial strategic transactions involved in the emergence of Ithaca HOURS up to the point when the currency would be used to spur local economic activity. We now turn to how the HOURS system functioned through various day-to-day transactions. The transactions involved in making these day-to-day exchanges are understood as being routine transactions. While someone involved in the transaction may have a strategic purpose in engaging in the transaction, from the perspective of the HOURS system they are routine in nature. The story below follows an HOUR currency bill on a journey over five months. An initial transaction describes how a community member acquires HOURS (T11). The subsequent transitions provides a useful sample to illustrate the potential of community currency in action. This series of transactions was first described in Paul Glover's book *Hometown Money* (1996) through an illustrated cartoon that is included in Appendix B.

We have highlighted only seven out of the many transactions involved in the journey of this HOUR currency note.

Ethel, a local bookkeeper in Ithaca, begins with a desire to participate in the HOURS system. After receiving a copy of Ithaca Money newspaper, she mailed a coupon

back to the newspaper by which she provided her phone number and indicated that she would accept HOURS as payment for her bookkeeping services (T11). Once the HOURS organizers, who publish Ithaca Money newspaper, receive her coupon, they issue one HOUR in accordance with the Barter Potluck policy. After logging the disbursement in their records, they mail the HOUR to Ethel (T12) (Glover, 1996, p. 11).

Ethel, having received her HOUR in the mail, spent her HOUR buying apples at Littletree Orchards (T13). Littletree Orchards then spends the HOUR they earned from Ethel along with many other HOURS they earned from other customers to pay for services at their orchard. After a number of other transactions, we will not detail here, the HOUR is held by Bill and Chris who earned it through their landscaping services. Bill and Chris then use the HOURS they have earned to pay back a 300 USD loan they owed Dan and Diane (T14). Dan and Diane may or may not have been official members of the Barter Potluck but decide to accept HOURS at their own discretion. Dan and Diane now have 30 HOURS to spend on local goods and services. They decided to spend some of their HOURS at the Eddy Street Cafe for a meal out (T15). Eddy Street Cafe then uses some of the HOURS they have earned to buy a large ad in the Ithaca Money newspaper in order to let community members know about their business and that they accept HOURS (T16). After a series of other transactions, we will not detail here, the HOUR is held by Susie of Susie's Seitan. Susie earned her HOUR from selling vegan epicure seitan to the Oasis Natural Grocery store. Susie then decided to spend her HOURS for bookkeeping services provided by Ethel (T17) (Glover, 1996, p. 11). Figure 4 below presents a diagram of the various transactions (T11-T16) involved in the five month

journey of an HOUR. Each row represents different actors involved in particular transactions.

There is nothing important or natural about the fact that an HOUR may take a journey through many different hands in a community and end up in the possession of the original owner. This series of transactions rather serves to illustrate the varied ways in which the HOUR was used in the community over the course of five months. Many of the transactions involved business to businesses exchanges, but non-business community member were also able to come into possession of HOURS and then spend them at businesses or with service providers who would accept them as payment.

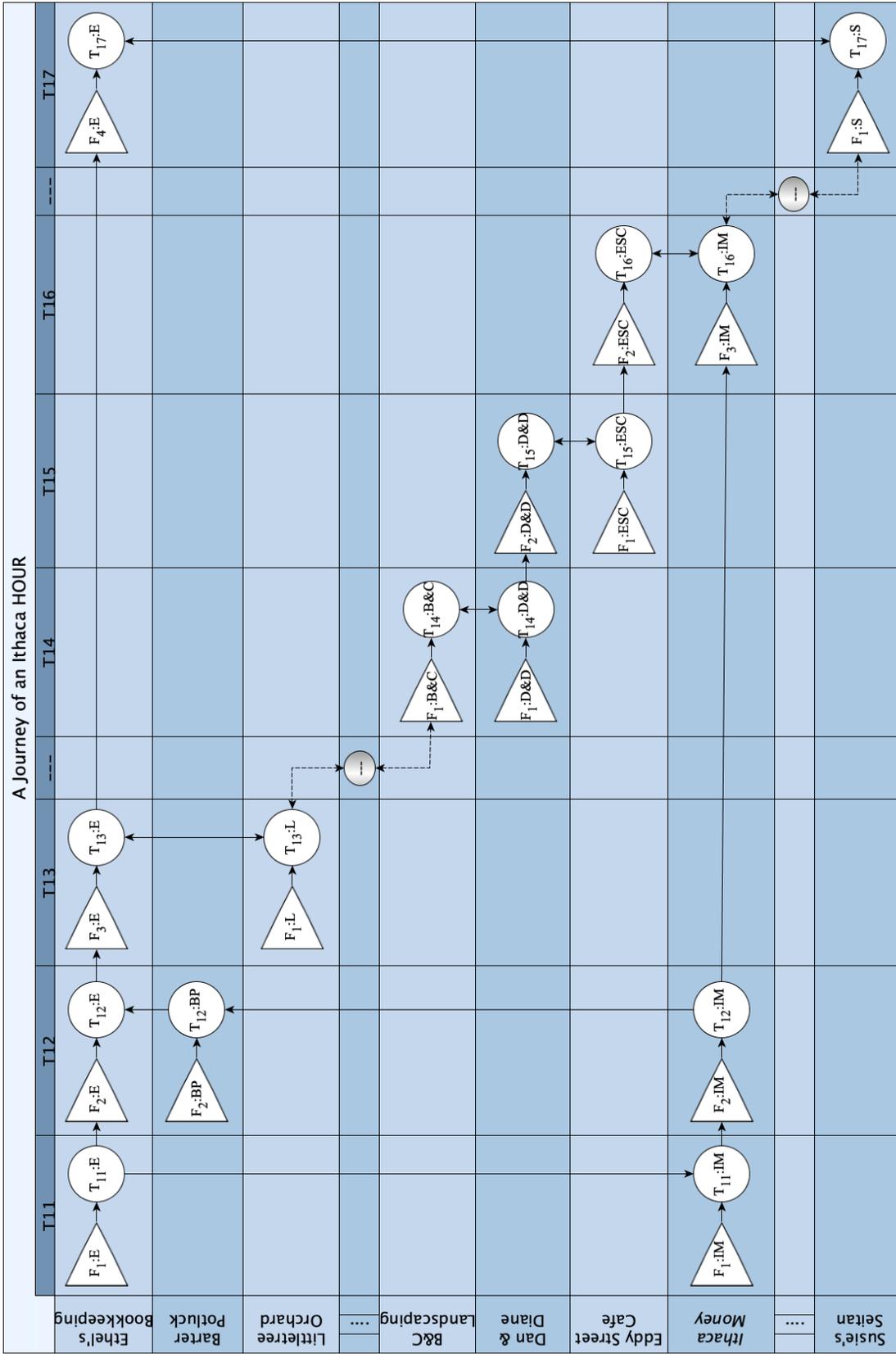


Figure 14.

The Ithaca HOURS initiative presents an excellent case study to examine how a group of people engaged in a process of participatory community economic development. After reflecting on the abundance of local resources, Paul Glover identified a clear goal of how to enhance local economic activity that would be built on local resources and local control of those resources. Next, Paul and other initiative participants evaluated what complementary factors would be needed in order to begin using a community currency. Those limiting factors that they would need to address would then be acquired through a series of strategic transactions (T1-T10). Once the limiting factors were acquired the HOURS system could be used in the community to capitalize upon local resources to achieve their established goal of spurring local economic activity.

While the circulation of Ithaca HOURS has by and large stopped, the initiative remains by and large a success. Having starting in 1991 and lasting until at least 2015 (Meckley, 2015), the local currency system provided a way in which the community in Ithaca could harness local resources to spur economic activity. Recently, in 2015, a new community currency emerged called Ithacash (i\$) (Meckley, 2015). Attempting to serving the local community using a cryptocurrency certainly fits with the fast pace of technological change occurring in Ithaca, along with the much of the world. Further research into the community impact of Ithacash is needed in order to understand how community currency may function through a digital medium.

### **Conclusion**

This article has argued that the CCF, complementing a variety of other participatory approaches to community development, serves as a useful base upon which to construct a specific theory of resource transformation through capitalization processes.

We blend the CCF with the CI metatheory to frame our conception of community development as social action. Agents are seen as central to emergent social action aimed at addressing an agenda while constrained and enabled by preexistent social structures. Thus, it is people or groups of people that do the transforming with the desired outcomes of the community in mind.

Our theory of resource transformation relies on John Common's concepts of complementary and limiting factors. Resource transformations through capitalization processes require particular complementary resource sets. Much of the activity involved in community development is thus gaining access or control of those limiting resources that are required but not yet accessed or controlled. The various processes of using what resources a community has access and/or control of in order to attain those limiting resources are called strategic transactions. Strategic transactions involve the transformation of resources through capitalization processes. While specific capitalization processes are numerous and vary upon the diversity of preexisting resource sets, we provide a set of general capitalization pathways for each of the community capitals. Resource transformations do not occur in isolation. In community development efforts they will most likely occur sequentially and/or concurrently. The identification of these capitalization processes and pathways is an expansion of the CCF.

The case study of the Ithaca HOURS initiative provides a useful example to examine how resource transformation occurs through community development process aiming at creating financial resources. A set of limiting resources are identified and serve as a guide by which the community engaged in a series of sequential and concurrent strategic transactions. Initial transactions involve the emergent capitalization processes of

social networking in order to build a network of community currency users. Later processes involve the design and establishment of rules for the HOURS through the Barter Potluck, which is a form of both a built resource and financial resource. The Ithaca HOURS case study serves to provide evidence of the practical and analytic applicability of a theory of resource transformation through capitalization processes. It is our hope that this theory can be applied to other instances of community development in order to empower and appreciate more deeply the underlying processes involved when communities engage in development.

APPENDIX A

Transaction	Role	Factor	Resource Type	Factor-In	Change	Factor-Out
T1 - Design Currency Notes						
	D: Designer					
		HA				
				Glover appears to hold a high degree of self-efficacy based on his writing and past experiences.		Unchanged.
		rS				
			H	Graphic design knowledge and ability.	Inc.	
			C	Natural heritage, historic figures, symbols that hold meaning for the community.	N.C.	
			B	Basic design tools: pencils, pens, and paper.	Dec.	Preliminary currency design and layout.
		CS				
				Current legal structure limits the design to be similar, but not resembling, US Dollars.		Unchanged.
T2 - Recruit Networker						
	O: Organizer					
		HA				
				Unchanged.		Unchanged.

		rS				
			H	Organizing and recruiting knowledge and skills. Specific ability to engage others in a common interest.	Inc.	Jennings's knowledge and ability can be used by the organizers.
		CS				
				Ithaca NY maintains a strong activist community engaged in alternative social systems and identities.		Unchanged.
	N: Networker					
		HA				
				Jennings appears to hold some level of self-efficacy in that offering to volunteer suggests that she believes her actions will make a difference.		Jennings is most likely affirmed by the acceptance of her willingness to volunteer as a networker.
		rS				
			H	Good communication ability. Jennings may provide some knowledge and evidence of other abilities she may use as a networker.	Inc.	
		CS				
				Ithaca NY maintains a strong activist community engaged in alternative social systems and identities.		Unchanged.

T3 - Sign up participants (collect sign-up fee)						
	N: Networker					
		HA				
				Unchanged.		Unchanged.
		rS				
			H	Jenning's ability to communicate as well as her knowledge of how a local currency system could work in Ithaca.	Inc.	
			S			A network of businesses willing to accept and pay in Ithaca HOURS.
			F			USD revenue from the sign-up fee.
		CS				
				Ithaca NY maintains a strong activist community engaged in alternative social systems and identities.		Unchanged.
	B: Businesses					
		HA				
				Business owners and managers have a variety of levels of self efficacy.		Unchanged.
		rS				
			F	Businesses have varying access to	Dec.	

				financial resources in USDs.		
			S	Business have connections to customers. Some customers are regular shoppers while others are less frequent shoppers.	Inc.	Business form a network of currency users which provides a way for businesses to spend the Ithaca HOURS they earn.
		CS				
				Business owners and managers find themselves conditioned and limited by two primary cultural systems: the local cultural system and broader working rules that govern business in the United States.		Unchanged.
<b>T4 - Design the Ithaca Money newspaper</b>						
	D: Designer					
		HA				
				Unchanged.		Unchanged.
		rS				
			B	Large sheets of paper and ink.	Dec.	
			B	Computer with design software and printer.	N.C.	Printed samples of Ithaca Money newspaper.
			H	Graphic design knowledge and ability. Particular ability to design newspaper layouts.	Inc.	
		CS				
				Past newspaper practices guide the		Unchanged.

				design process for the Ithaca Money newspaper. Newspapers in the US typically are black text on white paper, large sheets of folded paper with simple graphics.		
<b>T5 - Sell display ads</b>						
	O: Organizer					
		HA				
				Unchanged.		Unchanged.
		rS				
			S	Having a network of participating businesses serves to encourage other businesses to participate (network externality).	Inc.	
			B	Sample Ithaca Money newspaper.	N.C.	
			F			USD revenue from ad space sales.
		CS				
				Advertising practices and working rules constrain and limit how the organizer can sell ad space.		Unchanged.
	B: Businesses					
		HA				
				Business people, having signed up to participate in the Ithaca HOURS initiative appear believe they play a part in the local economy.		Unchanged.

		rS				
			S	Businesses hold a network of patrons, some of whom will use Ithaca HOURS.	Inc.	
			F	Businesses hold USDs to pay for ad space.	Dec.	
			B			Ad space in the Ithaca Money newspaper.
		CS				
				Advertising practices and working rules constrain and limit how businesses can buy ad space.		Unchanged.
	T6 - Establish Barter Potluck					
	O: Organizer					
		HA				
				The organizer provides a vision of how the Ithaca HOUR initiative will go about making decisions in a democratic fashion. The organizer acts to share that vision and expects participants to 'buy in'.		Unchanged.
		rS				
			C	A cultural practice and tradition of members of a local community coming together to engage in bartering and sharing. The forum serves also as a low-structure democratic decision making	Inc.	The Barter Potluck establishes working rules by which the community of Ithaca HOURS users make decisions and operate.

				apparatus.		
			H	Organizing and leadership skills as well as knowledge of the structure and functioning of the Barter Potluck.	Inc.	
			P			The establishment of the Barter Potluck provides a system by which participants can work to make decisions together in a democratic fashion. The organizer serves to gain credibility as a representative of the growing initiative thus gaining political resources.
		CS				
				Ithaca NY maintains a strong activist community engaged in alternative social systems and identities.		Unchanged.
	BP: Barter Potluck					
		HA				
				Each participant is given a vote in the actions of the Ithaca HOURS project. Special roles are given to representatives from the Alternatives Federal Credit Union		Unchanged.

				and a local historic preservationist.		
		rS				
			S	A social network of individuals and businesses participants willing to offer goods/services. They function as both buyers and sellers of local products and are thus interdependent.	Inc.	
			H	Participants have knowledge, however limited, regarding the financial needs of the community and provides a perspective on the quantity of HOURS needed.	Inc.	
			P			The establishment of the Barter Potluck provides a system by which participants can work to make decisions together in a democratic fashion.
			C			The Barter Potluck establishes working rules by which the community of Ithaca HOURS users make decisions and operate.
		CS				
				Democratic practices are a common across the United States and "one-person, one-vote" is often viewed as a fair manner to make decisions.		The establishment of the Barter Potluck enforces grassroots democratic practices

						in the community.
T7 - Print & issue currency						
	D: Designer					
		HA				
				Unchanged.		Unchanged.
		rS				
			B	Sample currency notes that were used to recruit potential participants. They may use additional tools, such as computers or hand art supplies, to edit or add to the existing design.	N.C.	Currency notes are now available to be signed and mailed to participants. Initial prints of Ithaca HOUR notes were larger than wallet sized notes. Further printing of the notes were scaled down to fit into people's wallets.
			C	Symbols and images that reflect a local sense of identity.	Inc.	
			H	Design requires skill and ability. The designer has the knowledge and ability to create credible and attractive designed currency notes.	Inc.	
			F	The designer and organizer needed to pay the printer using primarily in USDs, the remaining payment was denominated in HOURS.	Dec.	
		CS				

				Current legal structure limits the design to be similar, but not resembling, US Dollars.		Unchanged.
	P: Printer					
		HA				
				David St. George, an experienced printer, is excited and confident about his ability to print Ithaca HOURS.		Unchanged.
		rS				
			B	Seventy-pound tinted recycled paper, soybean ink	Dec.	
			B	Printing press & industrial paper cutter.	N.C.	
			H	Knowledge and ability to use printing and finishing equipment.	Inc.	
			F			David St. George earns some income from the printing of the Ithaca HOURS currency notes.
		CS				
				No Information.		Unchanged.
T8 - Print Ithaca Money newspaper						
	D: Designer					
		HA				
				Unchanged.		Unchanged.

		rS				
			H	Graphic design knowledge and ability. Particular ability to design newspaper layouts.	Inc.	
			B	Computer and design software. Samples of Ithaca Money newspaper.	N.C.	Ithaca Money newspapers
			F	USDs and HOURS.	Dec.	
		CS				
				Unchanged.		Unchanged.
	P: Printer					
		HA				
				Unchanged.		Unchanged.
		rS				
			B	Paper and ink	Dec.	
			B	Computers and printing press.	N.C.	
			H	Knowledge and ability to use printing and finishing equipment.	Inc.	
			F			David St. George earns some income, USDs and HOURS, from the printing of the Ithaca Money newspaper.
		CS				
				No Information.		

T9 - Distribute Ithaca HOURS and Ithaca Money newspaper						
	O: Organizer					
		HA				
				Unchanged.		Unchanged.
		rS				
			B	Currency Notes and Ithaca Money newspapers	Dec.	Organizers, with the broader Ithaca HOURS community, have access to the goods and services provided by business that now accept HOURS.
			F	Ithaca HOURS.	Dec.	
		CS				
				Unchanged.		As businesses and individuals begin to receive Ithaca HOURS they begin to alter and shape the Cultural System within Ithaca.
	BP: Barter Potluck					
		HA				
				Unchanged.		

		rS				
			S	A social network of individuals and businesses participants willing to offer goods/services. They function as both buyers and sellers of local products and are thus interdependent.	N.C.	
			B/H	Businesses possess whatever goods (B) / services (H) they are selling.	N.C.	
			F			Each participant receives four Ithaca HOURS in a variety of denominations (1/4, 1/2, 1 and 2 hr).
		CS				
				Unchanged.		As businesses and individuals begin to receive Ithaca HOURS they begin to alter and shape the Cultural System within Ithaca.
<b>T10 - Issue Press Release</b>						
	O: Organizer					
		HA				
				Unchanged.		Unchanged.
		rS				
			H	The organizer understands how the Ithaca HOURS system works and is	Inc.	The media campaign, if successful, will

				able to communicate how new businesses or individuals may participate.		increase people's knowledge and awareness of the Ithaca HOURS local currency.
			S	The network of businesses and individuals willing to accept and pay in HOURS serves as a basis for further recruitment.	Inc.	The media campaign seeks to increase the number of potential currency users and increase the network.
		CS				
				Unchanged.		Unchanged.
	M: Media					
		HA				
				Unknown.		Unknown/unchanged.
		rS				
			B	Media outlets possess and have access to a variety of built resources used to publish their content. Examples include printers, video cameras, radio towers, etc.	N.C.	
			S	Media outlets generally have a network of readers, listeners, or watchers. This audience is a key resource that media outlets spend much effort to develop.	N.C.	
		CS				
				Local and national media practices		Unchanged.

				guide what and how the organizer is able to communicate. Local media sources tend to serve smaller audiences while national media sources tend to serve larger audiences. Mainstream media outlets tend to be more formal, while niche media outlets may not follow standard formatting or presentation practices.		

APPENDIX B

**Five Months in the Life of an HOUR**

an actual Ithaca HOUR trading path

by Houghton/Glover

**THEL** MAILED THE COUPON FROM THE BACK PAGE OF **ITHACA MONEY**, OFFERING BOOKKEEPING. SHE AGREES TO KEEP HER PHONE NUMBER UP-TO-DATE.

SO ONE **HOUR** WAS ISSUED TO HER FOR BECOMING A PUBLISHED BACKER OF HOURS, ACCORDING TO **BARTER POTLUCK** POLICY.

**AN HOUR IS BORN!**

AND **ETHEL** RECEIVES IT IN THE MAIL.

SHE SPENT IT AT **LITTLTREE ORCHARDS** FOR APPLES...

...WHO PAID IT TO **ERICA** FOR PRUNING...

...WHO BOUGHT GROCERIES AT **GREENSTAR**...

...WHO PAID **DAVID**, ONE OF 12 **GREENSTAR** EMPLOYEES ACCEPTING HOURS...

...WHO PAID RENT TO HIS LANDLADY **DEBBY**...

...WHOSE FRIEND **JIM** BOUGHT SEVERAL HOURS FOR DOLLARS (AT \$10 PER HOUR)...

...AND SPENT THEM FOR LAND-SCAPING WITH **BILL & CHRIS**...

...WHO REPAID A \$300 LOAN WITH 30 HOURS TO **DAN AND DIANE**...

...WHO, AMONG OTHER THINGS, BOUGHT SANDWICHES AT **THE EDDY STREET CAFE**...

...WHICH BOUGHT A BIG AD IN **ITHACA MONEY**...

...WHICH PAID ITS OFFICE RENT TO **NEIL AND KATHY**...

...WHO MADE A MORTGAGE PAYMENT TO **MARTY**, A MASSAGE THERAPIST ON THE LIST...

...WHO GOT FIDDLE LESSONS FROM **DAVID**, WHOSE WIFE **CAROL** SPENT IT FOR NOTE CARDS...

...FROM **ACORN DESIGNS**, WHICH PAID EMPLOYEE **SALLY**...

...WHO PAID PART OF HER RENT TO **ELSON & JULIA**.

...FROM **BARBARA**, WHO BOUGHT A DRUM FOR HER GRANDSON FROM **TOKO IMPORTS**...

...WHICH THEY USED TO GET PHOTOCOPIES AT **COPY CENTRAL**...

...WHICH PAID EMPLOYEE **COREY**, WHO GOT ACUPUNCTURE FROM **ROBERT**...

...WHO SPENT HOURS FOR SWING DANCE LESSONS FROM **JEAN & ASWIN**...

**ELSON** GOT EFFECTIVE BACK INJURY THERAPY...

...WHO PAID THEIR FRIEND **JAN** FOR A MASSAGE...

...WHO SPENT THE HOUR AT **OASIS NATURAL GROCERY**...

...WHICH PAID **SUSIE** FOR A SUPPLY OF **VEGAN EPIGURE SEITAN**...

...WHO THEN PAID **ETHEL** (WHO STARTED THIS SEQUENCE) FOR BOOK-KEEPING...

...WHO KEEPS THE HOURS MOVING AND READY FOR MORE!

TO BE CONTINUED!

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## VITA

Jonathan David Ramse was born in Tansen, Nepal on January 14th, 1986. At the age of 11, the family moved to Dubuque, Iowa in the United States. After completing junior and senior high school in Dubuque, Jonathan attended Wartburg College in Waverly, Iowa. He graduated with a BA in Economics and International Relations in May, 2007.

Following his undergraduate studies, Jonathan served as an English teacher in Kumamoto, Japan for two and a half years. In 2013, Jonathan was admitted and began graduate studies at University of Missouri-Kansas City (UMKC). December of 2015 he earned a MA in Economics. After completing course work, concurrently working on dissertation research, Jonathan was offered a position as Visiting Instructor of Economics in November, 2016, at George Fox University in Newberg, Oregon. Jonathan has continued at George Fox University and currently has the title of Assistant Professor of Economics. He teaches a variety of courses ranging from Principles of Macroeconomics to International Trade and Finance. In December of 2018 Jonathan successfully defended his dissertation.

Jonathan is married to Bethany Ramse, who works at George Fox University as a graduate admissions administrator for the Graduate School of Counseling. They have a son, Hans, who was born in March, 2018.