

AN AUSTRIAN ANALYSIS OF SOCIAL CAPITAL

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DEDICATION

To the freedom of “the least of these my brethren”. Η ἀλήθεια ἐλευθερώσει ὑμᾶς.

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LIST OF ABBREVIATIONS

Broadmoor Improvement Association.....BIA
Common Pool Resources..... CPRs
Federal Emergency Management Agency FEMA
Institute of Education Sciences.....IES
Mary Queen of Vietnam MQVN
Multilevel Marketing Companies MLMs
Latter-Day Saints LDS

ABSTRACT

AN AUSTRIAN ANALYSIS OF SOCIAL CAPITAL

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ABSTRACT

This dissertation consists of three chapters on the importance of entrepreneurs and their socially embedded activities.

The first chapter, “Is Social Capital Underproduced?” examines the titular question by asking whether social capital might be better conceived of as a club good than as a public good, as has often been claimed in previous writing on the subject. Furthermore, it argues that even were social capital underprovided, perhaps due to positive externalities associated with the club’s provision of it, there is not much policy can reasonably be expected to accomplish to rectify the problem. The heterogeneity, diachronic change, and cost of social capital represent an insurmountable knowledge problem for policymakers. Instead, as ethnographic evidence from disaster recovery shows, local communities working in a polycentric fashion are more likely to succeed in achieving the goal of efficient and effective social capital production.

The second chapter, “Commercial Social Spaces in the Post-Disaster Context” examines the way entrepreneurs can create social spaces, both intentionally and unintentionally, that facilitate social capital formation and use. Evidence from post-disaster social spaces demonstrates the empirical relevance of the phenomenon. One policy implication of this finding is that granting entrepreneurs the freedom and flexibility necessary to create such spaces is important for maximizing their contribution to disaster recovery.

The third chapter, “Disaster Challenges and Entrepreneurial Responses” looks at entrepreneurs’ contribution to solving major problems in the post-disaster context. These entrepreneurs may be either profit-motivated or social entrepreneurs, who often use reputation as a guiding signal for their activities. Three major categories of problems communities face after disaster include the pervasive uncertainty and ignorance disasters engender, the massive destruction of wealth disaster wreak, and the politically charged nature of the social environment surrounding disasters. Entrepreneurs navigate all three of these problems and work to both identify problems and implement solutions.

CHAPTER ONE – IS SOCIAL CAPITAL UNDERPRODUCED?

Introduction

James Coleman's paper "Social Capital in the Creation of Human Capital" (Coleman, 1988) popularized the idea of social capital as a productive resource in the form of relationships between individual agents. Earlier theorists had used the term or similar ideas (Bourdieu and Wacquant 1992; Loury 1977; Tocqueville 2012; Bourdieu 1986), but Coleman's treatment of the topic is widely regarded as a seminal contribution. For Coleman, social capital's significance is its role in information transmission and sustaining institutions. He noted that social capital is important for the development of human capital and examined the way many institutions are only compatible with certain social capital structures. Since Coleman, theorists have articulated several alternative referents for the term "social capital" and a wide body of empirical work has examined the empirical relevance of social capital in many settings.

Researchers from many fields have found social capital to be associated with many positive outcomes. Indeed, social capital is positively correlated with a range of social wellbeing indicators, including civic engagement (Son and Lin 2008), economic growth and development (Knack and Keefer 1997; Woolcock 1998; Torsvik 2000), crime reduction (Putnam 1993; DiIulio 1996), neighborhood revitalization (Hyman 2002), educational attainment (Coleman, 1988) and other forms of societal wellbeing.

Individuals often find jobs through social ties (Granovetter 1973). A long list of business performance metrics like turnover rates and product innovation improve with social capital (Adler and Kwon 2002). Social capital has also been found to support entrepreneurship (Fukuyama 1995; Kwon and Arenius 2010; Stephan and Uhlaner 2010). Some work suggests income inequality leads to greater mortality via reduction in social capital (Kawachi et al. 1997). Perhaps the most famous social capital researcher in America, Robert Putnam, found that social capital was an important facilitator of democracy in Italy (Putnam, Leonardi, and Nanetti 1994).

Not surprisingly, researchers have also found that social capital plays a key role in facilitating community rebound after disasters. Before disasters, social capital facilitates community-level disaster planning, mitigation and preparedness as well as the provision of disaster shelters and the evacuation of vulnerable populations from threatened areas. After disasters, community members leverage their social capital to coordinate their emergency response efforts as well as community return and rebuilding. Social capital can, thus, aid in disaster preparedness, response and recovery (Aldrich 2012; Chamlee-Wright 2010a; Storr, Haeffele-Balch, and Grube 2017; Storr and Haeffele-Balch 2012; Bihari and Ryan 2012; Bolin and Stanford 1998; Murphy 2007; Chamlee-Wright and Storr 2011b; Paton 2007; Chamlee-Wright and Storr 2009; Pelling 1998; Pelling and High 2005; Shaw and Goda 2004) Additionally, the private provision of public goods is likely to increase for game theoretical reasons during disasters (Hirshleifer 1983). And, disasters can push entrepreneurs into activating otherwise dormant social capital (Johannisson and Olaison 2007; Grube and Storr 2018).

For all its empirical relevance, “social capital” has remained a contested term. It has been defined to include benefits derived from membership in a social class (Bourdieu and Wacquant 1992), social ties (especially close ties) (Coleman 1988), spontaneous civic sociability (Putnam 2000), trust (F. Fukuyama 2001), informal relations between strangers (Jacobs 1961), and more.¹ For our purposes, we will focus on social capital as social ties and the immediately relevant features of social life for the use of those ties, such as the norms and narratives that govern and guide their use. However, we will occasionally have reason to refer to other senses of the term to point to instances when other social scientists have claimed that social capital is under provided and/or called for public policy encourage its production.

There is another issue with using a term with as many referents as “social capital”. There are many levels of analysis from which one might analyze the concept. One can consider the micro level, for example the individual’s decision to request, accept, or deny favors from another person. One can consider the macro level issues, such as the overall network structure of a whole society. One can work at many levels of analysis in between, such as meso level analyses of delineated groups’ norms. We will aim to specify what level of analysis we are working from at each stage of the discussion as we move from one possible referent to another.

Perhaps because of its empirical and theoretical relationship with desirable outcomes, concerns that social capital might be in insufficient supply have been common

¹ For further discussion of the many meanings of social capital with particular attention paid to the relationship between the idea of social capital and the Austrian school of economics’ approach to capital and markets in general, see (Ikeda 2008; Chamlee-Wright 2008).

even since the early days of research on the subject. In his foundational article, Coleman argued that social capital has “public good aspects” (Coleman, 1988, p. S116). Coleman concluded that social capital in the form of favors, trust, and norms will likely be underproduced because individuals do not consider the positive benefits accrued by others from their “investments” in social capital. Further, Coleman recommended that government invest in social capital formation, arguing that “the obvious solution... very likely means the substitution of some kind of formal organization for the voluntary and spontaneous social organization that has in the past been the major source of social capital....” (Coleman 1988, S118). The concern that social capital might be underproduced has influenced much of the subsequent literature. Many investigations focus on increasing the production of social capital and the need for outside entities, like governments, to step in to encourage social capital investment (Putnam 2000, chap. 24; Skinner, Zakus, and Cowell 2008; Ganapati 2012). Fukuyama (2001), for instance, while also acknowledging the importance of informal sources of social capital and even ways the state can stand athwart social capital production, argues that there is a place for the state in the creation of social capital, especially through schools.

While the “public good aspects” of social capital identified by Coleman and others do raise the question of whether social capital is underprovided and if so, what governments can do about it, we believe that the argument that social capital is a public good and, therefore, government should provide it is mistaken. A public good is a good that is both non-rival and non-excludable, i.e. one agent’s consumption of the good does not diminish others’ consumption, and agents cannot preclude others from access. We

contend that this is not an accurate description of most forms of social capital in most contexts. We argue instead that social capital is often a club good, a good which is non-rival but generally excludable. As most people who live in a society are able to attest, it is possible to exclude individuals from relationships with oneself and others, but it is generally not necessary to bump someone from one's list of trusted contacts to accommodate another, nor is it necessary to insist one person cease interpreting the world through a particular social narrative just another person may begin to do so.

Even if social capital is underprovided it is unclear what governments might do about it. Social capital structures, the complex of ties, norms, narratives, shared identities, and more that facilitate cooperation between individuals in a community and across communities, are created as the emergent product of individual decisions in civil society, i.e. from the bottom up, and so cannot be directly "increased" or substantially improved upon by governments. At best, governments can facilitate social capital creation, but even then, they risk undermining it.

As we demonstrate throughout, our argument has implications for how we understand community resilience in the wake of disasters. If social capital is a public good, then policy makers would be justified in focusing on cultivating social capital as a strategy for promoting community resilience. If social capital is a club good and there are limits to top-down strategies for creating social capital, however, then social capital creation is not an available policy lever.

Drawing on interviews with survivors of Hurricane Katrina in New Orleans, Louisiana, we highlight the key role that social capital plays in facilitating community

rebound after disasters, the potential of the bottom-up development of social capital and the limits of top-down efforts to facilitate social capital formation. In the years following Hurricane Katrina, groups of investigators supported by the Mercatus Center at George Mason University interviewed community members in neighborhoods across New Orleans about their experience before, during, and after the storm. These interviews provide first-hand qualitative evidence of social capital networks in disruption and reconfiguration due to an exogenous natural disaster. Investigators conducted semi-structured interviews using a shared instrument and asked subjects about the support they received from a variety of sources within their civil society connections, including family, friends, and community organizations like churches and neighborhood associations. Typical questions include “Was this support (or lack of support) what you expected? Why, or why not?” and “What has been the biggest challenge since returning?” At the end of interviews, subjects were asked “What do you think government could do to help in the rebuilding process?” to assess what their beliefs were with respect to the usefulness of various means of public assistance with recovery.²

The geographic coverage of the interviews included residents of communities across New Orleans and St. Bernard Parish, including the neighborhoods of Broadmoor, the 9th ward, Village d’lest, and Chalmette, as well as residents who had evacuated to other cities like Baton Rouge or Houston, Texas. The interviews also covered a broad

² See (Chamlee-Wright and Storr 2010; Storr, Haefele-Balch, and Grube 2017) for detailed discussions of the interview process and questions.

collection of ethnic identities across these neighborhoods, multiple income classes, and workers of a variety of professions.

We will proceed as follows. Section II will argue that social capital qua interpersonal ties or group norms and narratives is best conceived of as a club good and examine the implications of this for the question of whether social capital is likely to be under produced.³ Section III will discuss the difficulties associated with top-down social capital formation, arguing that even if social capital is underproduced it is unclear what governments can or ought to do to increase social capital in the societies they cover. Section IV concludes.

The club good nature of social capital

The term “social capital” has come to refer to multiple concepts. Among the related but distinct concepts all labeled “social capital” are social relationships or ties, favors exchanged by connected parties, resources held by those with whom one shares ties, norms, and collective narratives. The uniting thread between these concepts is that they are intangible resources which facilitate cooperation between group members who share them. This, then, will be our operational definition of social capital.

At the micro and meso level of analysis, one can consider social capital held by individuals, such as social ties. Social ties are the subjectively perceived connections between individuals which establish expectations of reciprocity between them. These

³ Galbraith et al. (2007) has also discussed social capital as club good. Unlike here, however, they do not analyze the implications of social capital being a heterogeneous club good for the public provision of social capital. Ours, to our knowledge, is the first paper to do so.

relationships facilitate the flow of information and resources, like favors. Favors are like a “drawing fund” that is traded across social ties (1988, S117). The ability to perform a task for another person and then delay compensation while avoiding specification of the form of compensation is an important means of facilitating cooperation. The ability of a counterparty to provide assistance impacts the ties’ usefulness to the tie-holder, so some theorists regard the resources accessible through social ties, rather than the ties themselves, as the important aspect of social capital (Lin 2001).

Moving from the micro level, individually held forms of social capital to meso and even macro level communally held social capital, norms and narratives can facilitate cooperation. Agents entering a field of action do not necessarily share the same expectations, and some problems are easier to solve with similar expectations regardless of the specifics of those expectations, like expectations about which side of the road drivers will use. Social norms that coordinate expectations or legitimate punishment of uncooperative behavior can be important to communities’ ability to work together. Shared narratives help form expectations by shaping how agents understand the world and their place in it, providing a common framework or language within which the agents may communicate and forming values that legitimate some activities but not others (Chamlee-Wright and Storr 2011b).

Coleman describes social capital as having “public good aspects” (1988). By this, he means that the benefits from social capital do not always fully return to those who create social capital. Those who support or change social norms do not always receive the benefits from their support or the changes they bring about. Similarly, those who build

new relationships sometimes provide benefits to others who are not party to the relationship formed. Moreover, the institutions which rely on social networks for their enforcement often impact more people than just those whose decisions keep the necessary social structures in place. This is certainly the case when we consider social capital in the form of shared norms or collective narratives, which are never “owned” or “traded” in the relevant sense, but do generate benefits beyond those accruing to the group members who are actively generating and supporting them.

The “public good aspects” of social capital leads to the possibility that the agent(s) capable of generating social capital will not produce as much as is desirable from the perspective of maximizing social well-being, as they do not take the benefits to others into account when making decisions about their own social capital. People may be less social, perform fewer favors, reframe community identities less often, etc. than would lead to the optimal level of social well-being. It is worth pointing out explicitly that this argument is not inherently restrained to some unidimensional measure of social capital. For example, individuals may fail in their micro level decisions to make investments in bringing about the kinds of meso level structures, norms, and narratives that would encourage socially optimal network shapes.

Public goods are only one category of good and are related to three more. Public goods are non-rivalrous and non-excludable, meaning their consumption or use by one person does not prevent another person from also benefiting from the public good, and no one can prevent another person from benefitting from the public good. Other categories of goods come from toggling the presence or absence of rivalry and excludability. Goods

like apples, consumed by only one agent and whose benefits are exclusive to that agent, are private goods. Rivalrous but non-excludable goods are often termed common pool resources (CPRs) and include things like unenclosed grazing meadows. Non-rival but excludable goods are club goods, like neighborhood swimming pools.

It is important to bear in mind that any good can fall into any of the four categories. Moreover, the category in which the good falls in any particular instance is a feature of the institutional context in which that good is provided (Cowen 1985). Factors like the intensity of the use of the good, the size of the relevant margin of choice, the temporal position of a choice along the production or consumption process, and the method of production can all impact whether a good is rivalrous or excludable. For instance, a road might be neither rivalrous nor excludable when there is little traffic down a state highway but a privately owned and heavily trafficked toll road is both. For this reason social capital is not necessarily a public good in all contexts. In this paper, when we claim that a good is or is not rivalrous or excludable, we mean under typical circumstances of its production in civil society.

Some things identified as social capital are private goods. For instance, considering social capital held and produced at the micro level, favors, conceived of as a “drawing fund” of requests for assistance, are rivalrous. The assurance that one will do another a favor at some later date entails the knowledge that one will have to give up doing something else to accomplish that favor. Doing a favor does not entitle the favor doer to claim unlimited favors in return nor does claiming a favor obligate the claimant to perform unlimited favors in return. Similarly, doing a favor for one person often makes it

impossible to do the same favor for someone else, i.e. only one friend's child could be given the internship. Favors are also excludable, as one can deny another's request, though doing so may come at a cost. Being both rivalrous and excludable, favors are often private goods.

Even if favors are private goods, many forms of social capital are best understood as a club good. Buchanan's (1965) work on the theory of clubs advanced the proposition that there were several goods and services that were neither purely private (both rivalrous and excludable) nor purely public (both non-rivalrous and non-excludable). Buchanan recognized that few goods meet the strict criteria of a purely public good and, in fact, many of the goods traditionally thought of as public goods were more properly viewed as club goods (because exclusion is possible). Buchanan's theory of clubs has been extended in a number of ways (see Cornes and Sandler, 1996). Sandler and Tschirhart (1980) noted that the theory of clubs has been used to examine the public utilities, public transportation, telecommunication systems, political coalitions, public parks and international organizations. Several scholars have used the theory of clubs to explore the provision of club goods by religious organizations and communities. Kuran (2001), for instance, describes how Middle Eastern Islamic waqfs provided orphanages, light houses, water services, hospitals, and public spaces. Similarly, Ekelund et al. (Ekelund et al. 1996) found that the medieval church provided many private goods as well as club goods including a system of law and courts as well as education and aid to the poor. Additionally, Dasgupta and Kanbur (2007) argued that ethnic and religious communities

provide exclusive goods to members who share ‘ideologies of community solidarity’ (see also Dasgupta and Kanbur, 2005a, 2005b).

Chamlee-Wright and Storr (2009) explore the provision of club goods within the Vietnamese-American community in New Orleans around the Mary Queen of Vietnam (MQVN) Roman Catholic Church, and how those club goods facilitated social cooperation and community rebound after Hurricane Katrina. According to Chamlee-Wright and Storr (*ibid.*: 440), MQVN “was an inclusive, multi-product, multi-generational club which provided a bundle of highly specific culturally and linguistically appropriate club goods that fostered return.” These goods included religious services in Vietnamese, markets for selling Vietnamese produce and other goods, spaces for religious and non-religious Vietnamese groups, charitable aid in a form that’s ethnically appropriate, and importantly community leadership that drove community action. According to Chamlee-Wright and Storr (*ibid.*), members of the MQVN community used these club goods to overcome the collective action problems associated with disaster recovery, to engage in political action, and to rebuild their community.

Many forms of social capital resemble the club goods discussed above more than purely public goods. Coleman was right that aspects of social capital qua norms and shared identities are akin to public goods, as some forms of social capital are non-rivalrous, at least up to a point. Communities can incorporate new members and inculcate identification with the values and norms of the community without thereby diminishing the “stock” of social capital available to members of the community besides the newcomers. Beyond being non-rivalrous in use, social capital is sometimes even

enhanced by use. Over some margin of use intensity, social capital becomes more reliable as a community uses it (Ostrom 2000). At the micro level, a social tie connecting two individuals slowly degrades if left unused. The relationship ceases to be a recognized useful contact in the minds of the tie-holders and thus ceases to be capital. At the meso level, collective narratives must be repeated to be carried on across generations and at the micro level they will be forgotten or replaced in the mind of an actor if not used to navigate the social world.

Although social capital held in norms and narratives is non-rivalrous once constructed, communities can exclude certain people from their social networks. Ostracism and denial of trust can keep people whom community members regard as undesirable additions to their network from using social capital, for better or worse. The same forces that lead to degrading social ties through disuse can be the forces that community members intentionally use to exclude undesired agents. Refusal to regard a norm as binding on an individual can mean the individual is excluded from the benefits of membership in a community, even if the individual were to continue to behave in a manner consistent with the norm in a purely formal sense. These examples of the excludability of many different kinds of social capital imply many forms of social capital, like community membership, social norms, and shared narratives, are all club goods, not public goods. If it were the case that individuals could freely choose which communities to be a part of, communities were incapable of removing, ostracizing, disallowing, or punishing undesired members, social norms were enforced against everyone indiscriminately, shared narratives were regarded as equally applicable to everyone

irrespective of community membership, etc. then it would make sense to regard social capital as a pure public good. However, this is simply not the case.

Galbraith et al. (2007) argued that social capital within ethnic communities act as “pseudo-public goods” or “club goods,” because the benefits available to the members of ethnic groupings by virtue of their belonging to the group are at least partially non-rivalrous but certainly excludable. Specifically, they explored how ethnic traders through their membership “ethnic clubs” enjoyed both lower labor costs by employing co-ethnic workers and lower transaction costs when they exchanged with co-ethnic trading partners. They also explored the costs associated with club membership, including the “levelling pressures” and other negative aspects of social capital.⁴ Social capital as a club good might not be worth the costs associated with belonging to the club.

It is important to note that social capital conceived of as a club good can produce positive externalities, benefits that do not redound to the social capital user, producer, or network members who can access the social capital. For instance, social norms within a particular group may heavily incentivize pro-social behavior amongst group members that may produce desirable outcomes in the broader community. Non-members may benefit from the existence of these norms whether or not they obey them or contribute to their establishment or maintenance. Additionally, the overall value of social capital within a group is impacted by the individual efforts of group members to acquire resources. Group members, however, from the perspective of the group, may under-

⁴ See, for instance, Portes and Sensenbrenner (1993), Portes (2000) and Rubio (1997) for discussions of the dark side of social capital, i.e. the notion that social capital can also be harmful. See also Chamlee-Wright and Storr (2011a) for a discussion of the dark side of social capital as it relates to disaster recovery.

invest in acquiring these resources, especially if they do not place a high individual premium on the resources that might benefit the group. Think of a group member who values economic over political connections even though the group might benefit more from her political relationships than her economic relationships.

Of course, that there are potential positive effects on a third party that might result from two parties' interacting is not enough to demonstrate that there is an under-provision problem. Consider, for instance, social capital at the level of individual ties. Individuals may benefit from having ties with individuals who are more socially distant, and even from ties with individuals who have ties to others who are not connected to the first individual (Granovetter 1973). Alice may request a favor from Bob which Bob then fulfills by requesting a favor from Carl. Alice benefits from Bob and Carl sharing a tie, but it may be that Alice cannot directly influence whether Bob and Carl share a tie. In fact, it is likely that she cannot, as she would likely have simply requested the favor from Carl directly if she had sufficient influence with him to encourage a tie between him and Bob. Thus, there is a positive externality to Alice from Bob's tie with Carl. There may not necessarily be an under-provision problem, though, if Alice takes account of Bob's tie with Carl when she returns the favor to Bob. Bob may be able to ask Alice for a bigger favor because he put his more valuable social capital to use for Alice. This, of course, assumes the costs of incorporating the value of his tie with Carl into the value of the favor requested of Alice are low for Bob, which may not be the case. If Alice resents Bob and feels she is being taken advantage of by virtue of Bob's status, social connections,

etc., it may be very costly for Bob to make this kind of request and, therefore, impossible to internalize the externality.

Although social capital is arguably a club good rather than a public good, it is, thus, still possible that social capital is under provided. For several reasons, it is, however, difficult to determine whether social capital with some particular social grouping is in fact under provided. There are at least three specific challenges to answering the question regarding the “optimal” provision of social capital: heterogeneity, change, and cost.

Social capital is heterogeneous

Social capital is not a homogenous stock of a single good. In addition to the terminological heterogeneity mentioned above (i.e. social capital can refer to social ties, the resources accessed via those ties, social norms, collective narratives, etc.), even within each category there are contextual variations that complicate any neat blanket statements about social capital. Micro-level social ties, for example, fall on a spectrum from close-knit, often homogenous ties called “bonding” social capital, to more distant, weaker ties called “bridging” social capital. Moreover, the way different “pieces” of social capital fit together at the meso level, i.e. the social capital structure, matters for what possibilities become available to the relevant social group. A bridge club may need a highly decentralized, densely connected organizational structure wherein individuals can take turns hosting. A military may need a heavily hierarchical, centralized network to ensure rapid directive fulfillment, generalized internal trust, and homogeneous behavioral

expectations. A church parish may need a relatively more heterogeneous structure of connected but centralized sub-networks to enable a priest to fulfill her pastoral responsibilities, the vestry to accomplish their administrative role, the altar guild to provide their services, etc. Lofthouse and Storr (2021) discuss how the social capital structure fostered by the Church of Jesus Christ of Latter-day Saints (LDS) can be effectively leveraged by members as they engage in multilevel marketing companies (MLMs). This social capital structure which allows members to access both bridging and bonding social capital and explains the large volume of MLMs in Utah, a state with a large LDS population. No metric of social capital that reduces these nuances to a unidimensional quantity can capture all the necessary attributes of a social capital structure for accomplishing its constituent members' purposes.

If the meso level aggregation problem within a group is substantial, it is even more challenging across groups, i.e. at the macro level. An individual may be a member of a family, recreational club, professional association, religious group, workplace, neighborhood association, political entity, fan club, labor union, and many other types of groups, not to mention belonging to multiple groups of any one type. In some instances, the groups' memberships overlap, as when political groups and unions' members are the same. In some instances, the groups within the same category only partially overlap, as when only a subset of professional associations have the same political interests. In some instances, groups adopt rules regulating group membership so that group members do not belong to competing groups that might have different values or goals, as when clergy are forbidden by their church from taking public office but not from engaging in political

activism. These examples suggest that there is a substantial degree of heterogeneity across groups' social ties and the rules they adopt to navigate this heterogeneity.

This heterogeneity implies that the question of whether social capital is underproduced is somewhat malformed, even if well founded. Instead of a blanket question of whether more or less social capital is desirable, one perhaps ought instead to ask whether the appropriate form of social capital is sufficient supply for a given social function. Consider the example of disaster recovery. Whether a community hit by a storm has “enough” ties, norms, trust, and narratives is hardly sensible to ask given the degree of aggregation across incommensurables that question requires in answer. However, one might instead ask “Does this community have enough social ties between its members to facilitate a community cleanup project?” or perhaps “Do the social? norms in this group encourage enough people to come forward with solutions to shared problems?” both of which can be answered meaningfully even in cases where other constraints prevent the community from accomplishing recovery to the degree most members deem satisfactory.

The heterogeneity of social capital is apparent in the MQVN community of New Orleans East. The community was able to build groups led by Vietnamese American youth to lobby against the city constructing a landfill near the neighborhood (Chamlee-Wright and Storr 2011a). They were able to put together a Community Development Corporation to get funds for recovery and Vietnamese American businesses. They were able to coordinate return from the various places their community had dispersed to during Hurricane Katrina (Storr, Haeffele-Balch, and Grube 2015). However, despite their leaders desiring to do so, they were unable to build community groups that bridged the

divide between the local African American youth population and the Vietnamese American youth population. Before Katrina, the community had a concern about crime that they felt could be addressed through such a group, but connections between the two ethnic groups in New Orleans East were few. It seems the social capital held by the Vietnamese American community was effective for a variety of purposes, many of which were helpful to the African American community, some of whom when interviewed commented that the Vietnamese American community's return enabled their own. But, nonetheless, the social capital the Vietnamese community held was not able to build a shared group with the other members of their community, despite their desires and attempts to.

The stock and structure of social capital changes

The social capital a community relies on is not necessarily static. This is true both in the sense that change often happens somewhere in the community and in the sense that no part of the community is permanent or unalterable. A community that once was very tightly knit can become looser as the need to use the connections lessens, just as a community can invest heavily in their social life together and become closer. Similarly, the enforceable social norms in a culture can increase in number and the intensity of their enforcement increase, or they can become more relaxed, simpler, fewer in number. Furthermore, besides mere erosion or growth, social capital structures can simply change in form. A community can remain overall roughly similarly interconnected in terms of how many connections the average person has, how many degrees of separation fall

between people, and so forth, even as the ties themselves rearrange. Many people may even cross group boundaries, moving from identification with one group to identification with another, comparable group.

It is important to note that we are not claiming social capital structures are mercurial. These structures may be stable over long periods of time, and certainly most people would likely state their social connections are stable, long-term ties. Arguably, families are even defined in terms of long-term commitment to aiding those with whom one shares a kinship tie. However, when local circumstances change, it may be necessary for individuals to build new ties with specific others to address novel challenges or search out new opportunities. It is likely the case that change proceeds at a different pace in different kinds of social capital, with micro-level social ties changing somewhat more frequently than social norms and much more slowly than the kinds of narratives communities use to define themselves. In periods of extreme disruption, like adaptation to the post-disaster context, it is more likely that change will proceed at an accelerated pace, as we will show using examples from New Orleans.

Change over time in social capital structures generates a difficulty in assessing social capital's appropriateness and/or inadequacy because it may be the case that what was appropriate or adequate at a given time is unsatisfactory at a later date or vice versa. Take for example the case of the Church of the Annunciation in the Broadmoor neighborhood of New Orleans after hurricane Katrina. Before the storm, members of the parish were largely people who drove into the neighborhood from elsewhere to attend services. This made the church largely a "destination church", in the words of the rector

during and after Katrina, Father Jerry Kramer. However, after the hurricane, the church building experienced damage, the Broadmoor community needed support redeveloping the area, and many parish members were dispersed throughout the country and were not immediately returning to New Orleans.

The state of the parish and local community led Fr. Kramer and leaders in the church to take dramatic steps to change the way the church operated and its relationship with the surrounding neighborhood. After mortgaging church property, moving services and meetings to nearby trailers, and allowing other groups in the Broadmoor area to set up in the church's space for relief and recovery efforts, many parishioners left Annunciation. Fr. Kramer described his reaction by saying that if parishioners just wanted to "look at stained glass and read from the prayer book and be comfortable, [then] we got four Episcopal churches on St. Charles where you would like it better." In the long run, after the changes in the church's operations were made and recovery efforts were largely finished, the Church of the Annunciation had new parishioners, was more connected to the surrounding community, and even returned to its original worship space.

Father Kramer's attitude and the changes in the social capital ties between the Broadmoor neighborhood and the Church of the Annunciation show the way changing circumstances can lead to significant changes in what social capital is useful to a community. What appears to be lost social capital, the parishioners who left the church in dissatisfaction with the changes, may instead have been useful rearrangements of social ties. Like a firm that spins off a brand it owns into its own separate corporation, losing church members who were not interested in connecting to the surrounding community

was likely a productive change for Annunciation. Those church members were able to go to another parish that would be more likely to suit their desires, and the members of Annunciation could re-orient the shared objectives and practices of the parish to meet the changing needs of the Broadmoor community. As Ludwig Lachmann wrote on a different topic, “A progressive economy is not an economy in which no capital is ever lost, but an economy which can afford to lose capital because the productive opportunities revealed by the loss are vigorously exploited” (Lachmann 1978, 18).⁵ Assessment of the change beforehand would likely have been overwhelmingly difficult for anyone seeking to evaluate the change, as the relevant changes in circumstances that Katrina would bring were far from obvious before the storm hit. A simple snapshot assessment of the community would be unsatisfactory for determining if the community’s social capital was appropriate.

Social capital is costly to produce

Social capital is costly to produce. At the micro level, it is not trivially easy for individuals to generate social ties between themselves and other group members. Time is always expended in doing so, and sometimes parties to a potential tie must take a risk on trusting the other at first. Search costs often slow the process of finding the right agent with whom to connect. At the meso level, intentional norm change can be extremely difficult, as someone must bear the costs of acting as a first mover against the old norms, and the socially optimal new norms are not always immediately obvious. As the old

⁵ We would like to thank an anonymous reviewer for pointing us to this quote.

norms, ties, and narratives fall away there may be some agents who decide to leave the group to find another that preserves the old form of social capital, meaning groups can bear costs by splintering. All these are costs associated with creating and changing social capital structures.

If social capital is costly to produce, that means the optimal quantity to produce is less than the amount that exhausts the marginal benefit of social capital, whether at the level of individuals' decision to invest in social ties or a groups' decision to change norms. There may be benefits from new ties or different norms, but the costs of producing or changing them may render the change no longer worthwhile. Relative to some benchmark of satisfactory performance around a social outcome, social capital levels might be deficient, but this does not imply that action ought to be taken to ensure there is sufficient or appropriate social capital for accomplishing that purpose. It may simply be that the purpose is not worth achieving given the costs.

The matter of under provision is, thus, not simply a question of whether more social capital is better for any given purpose or whether more social capital is possible in a community. The costs of social capital production must be assessed to an efficient degree of accuracy and precision, weighed against the similarly assessed benefits, and judged a worthwhile tradeoff. The epistemic limits of an individual, group, or social system's ability to assess this tradeoff is an important part of any proposed means of evaluating whether the social capital is under produced.

Fr. Vien at MQVN Catholic Church provides an example of the costliness of social capital investment. Fr. Vien estimated that in the years following Hurricane

Katrina, the Diocese of New Orleans would lose approximately 18 priests without replacement on top of those lost due to Katrina, making priests in the diocese quite scarce and increasing the marginal value of Fr. Vien's time performing clerical functions. Fr. Vien devoted substantial time to organizing his community after New Orleans. He played an important role in pastoral efforts through the church, but he also played a key role in building the Vietnamese American Youth Association and MQVN Community Development Corporation to influence the New Orleans city government. Though evidently worthwhile, this investment in social capital was a costly decision in terms of his own time and in terms of his community's need for a priest.

The Impossibility of Top-Down Social Capital Formation

The public good perspective on social capital argues that social capital, in whatever form, will be persistently underprovided because it is a public good or else will be persistently poorly adapted to local circumstances because of the public good aspects of efforts to change the larger social capital structure. This perspective neatly aligns with one contending that social capital must be heavily invested in by some entity outside the community that will benefit from the social capital, and any such entity would need to be larger than the community itself. This points to a kind of top-down strategy for the development of social capital in the public perspective. We will argue that any such top-down efforts to produce social capital are bound to fail, and that bottom-up formation processes of social capital structures from micro level social capital investments should be a preferred strategy for developing social capital irrespective of whether it is a public good or club good.

Figure 1 summarizes the public goods perspective on social capital, while Figure 2 summarizes our view.

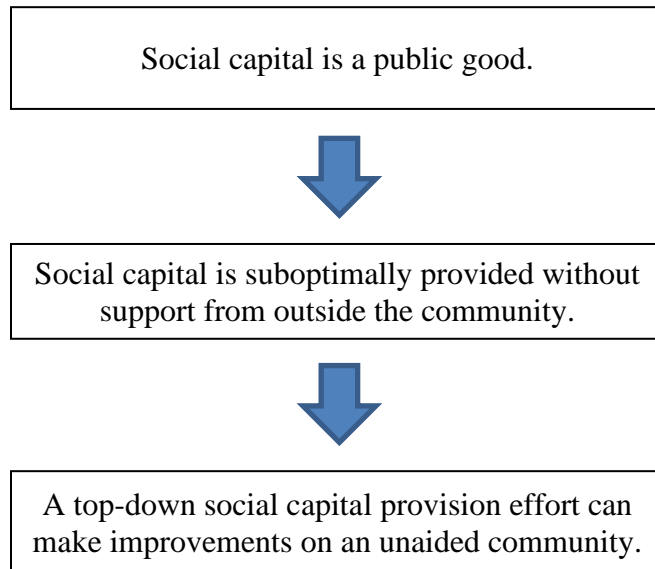


Figure 1

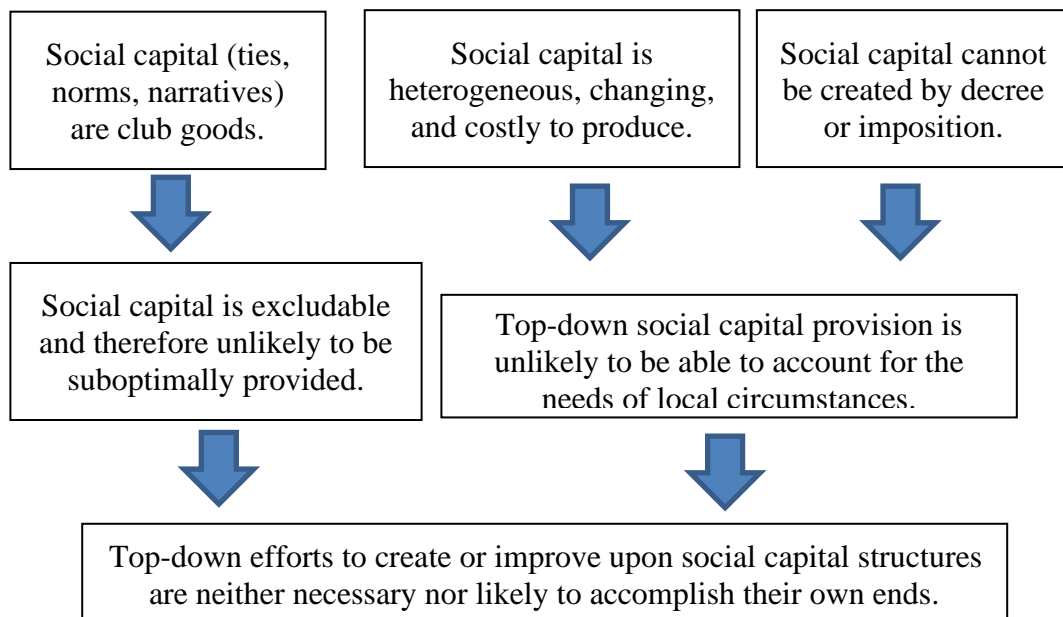


Figure 2

Determining the optimal level of social capital appears to be an intractable problem. Moreover, because social capital can have a dark side, it is possible that social capital in certain forms for certain purposes may be over produced. Even if social capital in a specific form is consistently sub-optimally produced for a specific purpose because it is a public good or comes with extensive positive externalities, and even if one regards more social capital as desirable irrespective of whether it is socially efficient, there remains a question as to what can be done about it. Coleman's (1993) suggestion that social capital be encouraged by placing a "bounty" on improving social capital for individual children, for instance, is consistent with much discussion around encouraging social capital through various schemes. Similarly, Putnam (2000, pp. 413–4) suggests that policymakers require social capital impact statements for new programs, akin to currently existing environmental impact statements, and suggests campaign finance laws be altered to incentivize more frequent in-person political participation. Likewise, Woolcock (1998, p. 187) recommends making external sources of aid to developing countries dependent on social capital policy issues being addressed. Also, Sachs (2015), writing in the World Happiness Report, recommends eleven different ways to increase social capital, including strong social safety nets, regulation of anti-social behavior, and "moral training in the schools" (p. 162). And, Hossein-Zadeh (2009) argues that military spending weakens disaster preparedness by coming at the expense of expenditure on public capital like social capital.

The important role that social capital can play in education, specifically the importance of mentor-mentee relationships, has inspired public programs to encourage mentorship. One example is the US Department of Education's Student Mentoring Program (Bernstein et al. 2009). This program authorized by the No Child Left Behind Act provided grant money to organizations seeking to connect 4th through 8th grade students, especially at-risk students, with mentors who could assist the students with various aspects of their development including education, relationships with others, and avoiding high risk behaviors like drug use or delinquency. The Institute of Education Sciences (IES), a nonpartisan statistical evaluation wing of the Department of Education, evaluated 32 grantees' performance by comparing a randomly selected subgroup of 1,272 students who received mentoring from a total sample of 2,573. The other students did not receive mentoring and served as a control. The results of the IES evaluation were not encouraging. To begin with, 17% of students in the treatment group never received any mentoring (Bernstein et al. 2009, xviii). Additionally, among those that received matches and met with them, the relationship lasted an average of 5.8 months (Bernstein et al. 2009, xviii). Furthermore, the relationships seem to have had little impact on the students. The IES evaluated three major areas of student impact, academic achievement and engagement; interpersonal relationships and personal responsibility; and high-risk or delinquent behavior. Using 17 measures across the three domains, the IES (Bernstein et al. 2009, xx) reported, "The Student Mentoring Program did not lead to statistically significant impacts on students in any of the three outcome domains."

While government programs aimed at creating social capital sometimes simply fail to create social capital, they can also degrade social capital. In Indonesia, for instance, one program intended to supplement the income of the poor as a compensation for removing fuel subsidies led to decreased social capital and consequently a rise in crime (Cameron and Shah 2014). Due to an inability to target aid directly to poor households, the Indonesian government used a composite proxy measure for poverty. The proxy imperfectly categorized households into aid recipients and non-recipients based on an estimate of their income and a threshold for receiving aid. Later statistical surveys were able to gather data useful for determining targeting accuracy. In villages where a greater proportion of households that were intended to be ineligible received aid, i.e. where there was greater “leakage”, community participation decreased and crime increased. Interestingly, while leakage was significantly associated with these negative effects, under-coverage was not. The cause of the degradation of social capital is not clear, but it may have been due to a perception of local officials not giving each household their due. It should be noted, as previous scholars have about the general provision of disaster aid in New Orleans, that in times of disaster there should be no more expectation that governments will do a better job helping to build social capital than there is during normal times, and, if anything, the exceptional nature of disasters can overwhelm public bureaucracies (Shughart 2006; Sobel and Leeson 2006; Congleton 2006).

Disaster studies scholars in particular have also called for investments in social capital, in their case to promote resilience to disasters. Social capital is clearly positively

related to a community's ability to recover after a disaster (Storr, Haeffele-Balch, and Grube 2017; Chamlee-Wright and Storr 2011b; Aldrich 2019, 2012), so the impulse to encourage policymakers to invest in more social capital following a disaster is perhaps a natural one. Aldrich (2019, 189), writing specifically about the context of Japan after the 3/11 disasters, calls for national governments around the world to put more of their budget toward strengthening communities' social capital. Similarly, Ganapati (2012) argues that governments could provide public spaces and training programs, especially for women, to encourage investment in social capital and leadership in disaster-stricken communities.

The concern that social capital might be under produced is a reasonable one and especially fits with concerns that social capital may be a public good. But, taking account of the issues raised above surrounding the hastiness of concluding that social capital is an under provided public good, the call to increase or encourage social capital through public policy reveals more difficulties associated with top-down attempts to rectify any under provision problem. In particular, meso and macro level social capital structures are the emergent result of micro level choices to invest in social capital, whatever the form. In this sense, social capital structures are created from the bottom up, and governments cannot directly "increase" (or substantially improve on the current structure of) social capital. Furthermore, while governments can facilitate social capital formation, they can also undermine efforts to create productive social capital.

The following arguments will be recognizable to those familiar with the work of Elinor Ostrom on common property arrangements (Ostrom 2015). Like Ostrom, we wish

to point out problems with the overly simplistic move from “X is not a private good” to “X must be provided by an outside entity, generally the state, for it to be provided in a manner that meets the needs of its users.” Ostrom listed a set of design principles for institutions capable of maintaining collective property arrangements through the long term (2015, 90). In particular, we view Ostrom’s seventh design principle, “minimal recognition of rights to organize” by “external governmental authorities” as important in considering how to usefully approach policy and social capital. Ostrom’s second design principle, that there must be a “congruence between appropriation and provision rules and local conditions”, is important in thinking about how private activities will produce useful social capital structures. Individuals and groups must be able to adapt their norms and use of social capital ties to their particular circumstances.

Social capital is often created from the bottom up. Social capital is constructed and maintained by those who utilize it. At the micro level, social ties, being relationships of trust, arise from the choice of two agents to trust and be trustworthy. At the meso level, social narratives that help agents put the world in view and navigate it must be adopted by the people who are going to use those narratives for their cognitive engagement with the world. Social norms arise from the expectation that others will behave in a certain way and the desire to behave likewise conditional on the behavior of others to behave that way (Bicchieri 2017). Each of these different kinds of social capital requires some kind of rational decision at the level of individual agents to interact in such a manner as to emergently produce an optimal social capital macrostructure. For example, Fr. Vien may act entrepreneurially in rearranging social capital relations within his community,

but even he cannot wholly reconstruct the community any more than a CEO of a large corporation could use every tool within her factories.

Governments cannot directly increase social capital. Trust in a specific person cannot be commanded or constructed by an agent outside of the trust-testing interaction because the choices of the outside agent have no bearing on the trustworthiness of either party to a potential tie. Governments can, of course, facilitate the development of social capital via indirect means (see, for example, community currencies in Japan (Richey 2007)). It can create or sponsor spaces where individuals interact with one another, and these interactions can lead to the development of social ties that can be characterized as social capital for those individuals. But, it cannot force the formation of a social tie that has continued life outside of the space it creates. Likewise, social norms enforced by a party outside of the relevant social setting are not norms at all but rather imposed regulations. This reduces the likelihood that an imposed “norm” of this kind, one not developed from within the community, would successfully improve the ability of the community to cooperate. Without detailed knowledge of the local culture and context, and of the community’s problems as understood by the members of the community, the “imposed norm” will likely fail to account for the goals and circumstances of the individuals in that community. It will reflect the biases and goals of the policy maker, irrespective of whether this matches the ends of the community members on which it is imposed.

Governments can facilitate but can also undermine social capital formation.

Although it may not be possible for governments to directly increase or decrease social

capital “stocks” in a community, it may be possible for them to facilitate higher levels of investment in social capital. To encourage more densely connected social networks, government might, for example, host public events that encourage community members to meet and get to know others in their community, or it might provide Schelling points to focus shared narratives around. However, just as the government may facilitate social capital development between individuals at the micro level rather than directly creating it at the meso level, government can undermine social capital development, even by performing activities that aim at creating social capital.

*An illustration from Broadmoor*⁶

To illustrate the need for local knowledge and context-dependent development of social capital, consider again the recovery efforts in Broadmoor after Hurricane Katrina. Although the Church of the Annunciation played a major role in Broadmoor’s recovery, the residents of the neighborhood were also active players in the recovery process, and their on-the-ground perspective was an integral part of the recovery effort. Before the storm, an organization existed to facilitate communication and collective decision making in the neighborhood: the Broadmoor Improvement Association (BIA). Although participation before the storm was less significant than what took place during recovery, the BIA nonetheless provided a pre-existing means of organization for all the members of the community.

⁶ See Storr and Haefelle (2012) for an extended discussion of Broadmoor’s post-Katrina recovery efforts.

Following the storm, the BIA undertook several projects to support the Broadmoor community in recovery. The Bring New Orleans Back Commission, a city-level urban planning entity tasked with producing a plan for the entire city's recovery, announced a plan that called for Broadmoor to be leveled and turned into a water catchment area. Maggie Carrol, the BIA's secretary, estimated that attendance at the next BIA meeting was between 150 and 200 people, whereas before Katrina a normal attendance had been near 20. At the meeting, attendees decided to prove the viability of the neighborhood to the city and, thereby, convince the urban planners to allow Broadmoor to return.

The BIA also began an initiative aimed at identifying the whereabouts of all property owners in the neighborhood and the state of their renovations. After conducting a survey of the neighborhood with help from students at Bard College, the BIA began identifying the owners of houses that were unoccupied and/or not being renovated. This included yard signs and door hangers with messages like "Help us find them" or "Do you know how to contact this person?". Over time, the BIA was able to identify the reasons for those who had not yet begun renovations and connect them to resources that aided in the renovation process, and for those who were unwilling to undertake the process themselves, the BIA played a role in convincing them to sell the property.

Of course, many of the changes in Broadmoor following Katrina came about through less formal social capital arrangements. Maggie Carrol also described how new connections with neighbors were a positive change she saw in Broadmoor during the recovery. As Carrol recounted,

Something that has been so incredible about this experience is that there has been this discovery of our neighbors and this network that has taken place... Before Katrina, I might have known ten neighbors. They were all great and they were all right there, but now I know hundreds of neighbors. I have their numbers and we get together. We've built a lot of friendships and stuff, and it's more of what a community is supposed to be. That's been kind of an extra benefit to have in being so organized.

Earlier this week, I got together with some neighbors around my age that we boiled some crabs, sat around, ate, had some beer, and it was fun.

When asked who helped her do the manual labor of fixing up her house, Carrol said it was neighbors, and described how her new social network helped her find trustworthy contractors, saying, "It was networking. Everybody needed a carpenter and probably still does. It was just like, 'Hey, do you know anybody?' And they'd say, 'Don't call this person.' If they did a bad job."

The changes in Broadmoor show how local knowledge and the bottom-up process of social capital structure formation are important. The BIA was not a program imposed from the top down, but instead a pre-existing organization that, if anything, experienced an organic groundswell of support to fend off an outside, top-down threat to the community. Fending off this threat entailed gathering dispersed and hard to observe local knowledge to demonstrate to a centralized, formal apparatus that the proposed plan did not accord with local circumstances. Much of BIA's usefulness was in its ability to obtain information through informal channels, contact those in need of assistance, and facilitate recovery across the neighborhood. Furthermore, the social changes that came about from the neighborhood acting together in this way assisted in improving the transmission of knowledge about which outsiders were trustworthy to work with. These informal information channels then made recovery easier for all the members of the community. In

Broadmoor, having social capital ties that were formed through the free choices of individuals to trust each other and share information was integral to the process of coordinating recovery.

Broadmoor's diversity illustrates the challenges of on-the-ground organizing that the community was able to overcome, i.e. the social connections' heterogeneity in the neighborhood. The residents described Broadmoor as diverse along every major social and economic dimension. Income estimates for residents ranged from poverty to more than a half million per year, estimates of ethnic makeup placed the population at more than two thirds ethnic minority members, religious affiliations included Catholic, Episcopalian, Methodist, Lutheran, Muslim, and non-religious residents, all ages were present from children to the elderly, etc. These groups also had different means of communication. One resident noted that the different ethnic groups frequently used different communication media, with African Americans more likely to use texting than Caucasians. Nonetheless, BIA managed to find ways to communicate with members of the entire community formally and informally, such as by using publicly available change of address data to hire a firm to mass mail members of the community at their address even if they were currently not living in New Orleans.

In the words of Latoya Cantrell, president of BIA from before Katrina through much of the recovery and today the mayor of New Orleans, the source of information used in decision making for the neighborhood wasn't formal surveying, but rather "...talking and discussions and consensus building. I think that's where it starts." and "You have to get your priorities from the people who live there." When asked how she

would advise governments about the potential harms and benefits they could do in aiding recovery, Cantrell specifically mentioned the impossibility of developing social cohesion through top-down mechanisms, saying “Government could not bring this neighborhood and bring the people together. It would be the people who live in it. So those are values that have to remain as a priority and pushed forward by the residents at a grass roots level. Government can’t do that.”

Multiple Broadmoor denizens complained about the impediments to their neighborhood’s recovery that the city government imposed, especially through burdensome bureaucracy. A common theme was the belief that the city was intentionally resisting the neighborhood’s efforts to organize for fear of losing control to the local community. As one Broadmoor resident remarked, “[W]e’re being blockaded by city bureaucracy.” Because “They were pissed that we were trying to take control of the situation. That’s what I’ve heard through the grapevine.”

Community members in Broadmoor partnered with multiple outside funders to have a library built, raising the necessary funds on their own. Cantrell remarked “So bottom line is the library still isn’t under active construction, although we’ve done all the work in two years for our library. And it’s all bureaucracy... So when you talk about barriers and walls, that’s an example of this community still pushing forward.” Residents claimed the city instead wanted to build a larger library outside of but near Broadmoor, consolidating branches that existed before Katrina. This effort to centralize a community center undermines the process that produces an effective meso level social network from the many disparate micro level social capital investments made by individuals. Treating

Broadmoor as homogenous with the other areas near the neighborhood ignores the social capital structures built up in Broadmoor and capable of supporting shared community enterprises even without municipal financial support. Indeed, the strings attached to even just the approval process enabled the city to slow down and threaten the community efforts in Broadmoor. This kind of expectation-setting behavior can alter future recovery efforts after natural disasters, including by reducing investments in social capital (Chamlee-Wright and Storr 2010).

Conclusion

Fears that social capital might be in danger have been common since at least Coleman's popularization of the concept but are likely overblown. Social capital is not a public good but is often a club good. Social capital may have positive externalities but is so heterogeneous and changing it is difficult to say what the optimal social capital arrangements and quantities are for any community or individual in any given situation. Even if it were clear that any particular form of social capital was underproduced, it is not clear at all that social capital is easily altered through public policy. Direct public investment seems bound to fail, and bottom-up formation of social capital structures seems necessary for the structures to be usefully adapted to local circumstances. All in all, the case that social capital-promoting policy is called for is overbroad and hasty.

In light of the foregoing, an improved understanding of the processes shaping social capital in all societies takes on a new importance. If social capital is not always underproduced and the needs calling for its application are frequently changing, researchers need to develop a theory of the process that individuals in communities

engage in that develops, arranges, rearranges, and destroys social capital as they go about seeking their ends while limited in their means. Rather than directing primary interest in how communities can develop more social capital, researchers should ask how and why they do form the types and levels of social capital which they in fact do, and what the determinants of the optimal level of social capital truly are, if such a notion is practically relevant and rigorously operationalizable.

Within the quantitative research literature, our paper sounds a note of caution. Quantitative metrics that take a momentary snapshot of a unidimensional aspect of social capital are likely to leave out important context for understanding that capital. Furthermore, institutional context matters. Likert scale measures of trust, network density, betweenness centrality, and other measures of social capital may be informative about particular communities and at particular times, but without extensive research situating these numbers into the subjective understandings of the actors involved overgeneralization becomes an easy trap into which one can fall. Furthermore, we wish to caution researchers against moving quickly from the positivist hypothesis testing scientific paradigm to the idea that public policy can rectify measured social inefficiencies. Metrics of social connections that are well verified in one context may not be sufficient to guide any kind of action in another community or even in the same community after social norms have shifted.

In the area of disaster recovery, the implications of the argument advanced in this paper are a recommendation of humility and an invitation to new lines of inquiry. Disaster policy should account for social capital, as is clear from its demonstrable impact

on recovery rates, but it should not attempt to direct social capital investment choices, either in quantity or quality. Instead, disaster policy should aim at producing the kind of environment that is generally called for in encouraging economic and social activity, i.e. predictable and general rules that respect the autonomy of the actors and afford them flexibility to respond to their local circumstances. The issues raised above point to the importance of this in the treatment of social capital just as much in the treatment of economic matters. Furthermore, disaster scholars and policymakers alike should resist the urge to conflate social life and political life, treating political life as a merely more formal version of social life. The flexibility and immediacy of community substantially outstrips those of policy, so the development of social lives emphasizing those features of social capital is more likely to be of aid during and after a disaster than social lives centered on rivalrous political activities. This points to the limits of the scope of useful government activity in social capital generation: the limits of the community that will share the social capital. Self-governing communities of individuals are more likely to be able to promote the development of social capital in a community because the governance arrangements of that community are co-extensive in authority and jurisdiction with the community itself. In this regard we once again echo the work of the Bloomington school of political economy, as when Ostrom herself argues “the boundaries of any one system [must] fit the ecological boundaries of the problem it is designed to address.” (Ostrom 2005, 258) Notably, this does not imply little investment in governance, only that the governing entity match the size of the resource management problem.

Disaster studies scholars should also inquire more deeply into the different kinds of social capital that are of use in disaster response and recovery, as well as the differences in the kind of social capital used during those phases. Recognizing the heterogeneity and temporal change of social capital networks over time in a serious way will require more culturally attuned work for which ethnographic methods are well suited. Investigating the norms that change between disaster response, when a disaster is immediately impending or ongoing, and disaster recovery, as life reaches a new normal, would be one example of this kind of work. Many others are possible, such as uncovering what kinds of group boundaries define the members of the “clubs” that maintain social capital, or understanding whether explicitly engaging in disaster preparedness activities is worth the tradeoff that not spending the same time on socialization represents.

CHAPTER TWO – COMMERCIAL SOCIAL SPACES IN THE POST-DISASTER CONTEXT

Introduction

Research examining community recovery after disasters has found that entrepreneurs are important to the recovery process (see Chamlee-Wright and Storr, 2010; Kaufman et al., 2007; Storr et al., 2015; Zolin and Kropp, 2007). For instance, Chamlee-Wright and Storr (2010) argue that social entrepreneurs help solve collective action problems, organize and engage in community outreach, activism, and advocacy, and provide direct assistance in rebuilding after disasters. Storr et al. (2015) find that entrepreneurs, more broadly construed, promote recovery by providing goods and services, restoring disrupted social networks, and showing that recovery is already in progress. These functions are inherently social, connecting networks, advocating for communities, and serving as focal points for rebound. In many ways, all entrepreneurs in the post-disaster context help rebuild and foster their communities. Understanding how entrepreneurs impact community recovery and influence social connection can add to the economic analysis of entrepreneurial ventures.

One particularly important function for entrepreneurs in the post-disaster context is to create and maintain places where community members can gather, network, and share stories, resources, and strategies for rebuilding (see Chamlee-Wright and Storr, 2014). Markets in the everyday setting serve as social spaces, fostering connection in addition to providing a setting for the exchange of goods and services (Storr, 2008, 2009). Individuals often form friendships with their coworkers and with the employees at

their favorite restaurant, bar, or coffee shop, and can meet their partners or spouses in these settings as well. Indeed, community is often entangled with commerce. A group of friends will likely get together over a nice meal at a restaurant, a book club may meet at a book store or café, and an activist organization may advertise their meetings and rallies by putting up posters in the windows of a variety of local businesses. While some entrepreneurs may intentionally create such spaces from the start, others may realize the social importance of their ventures over time. After a disaster, these spaces shift from facilitating everyday social interaction to being a place where community members can share important resources, strategies, and challenges related to recovery.

This paper argues that commercial entrepreneurial activities have social implications and can provide needed social spaces during the disaster recovery process, and that viewing commercial enterprises as socially valuable has implications for post-disaster public policy. This paper contributes to the growing literature on the role that social spaces play in the post-disaster context. It also aims to contribute to the social entrepreneurship literature by highlighting the social effects of commercial entrepreneurship and to the market process literature by discussing the social impacts of markets beyond what may be conventionally included in the notion of mutually beneficial exchange.

This paper builds on disaster recovery research by utilizing fieldwork from Hurricane Katrina. Several researchers with the Mercatus Center at George Mason University interviewed community members in New Orleans, Louisiana, and Houston, Texas, in the years following the storm. The interviews focused on what their

communities were like before and after the storm, their experience during the storm, and what people and organizations were helpful to (or hindered) their recovery. In total, there are more than 350 interviews.⁷ In this paper, we utilize these original interviews and the previously published research that has come out of this project to highlight the social impact of commercial entrepreneurship through the creation and maintenance of social spaces.

The paper proceeds as follows. Section two explores the social impact of entrepreneurship, and section three applies this approach to post-disaster context. Section four provides examples of how entrepreneurs create and maintain social spaces from the interviews conducted in New Orleans after Hurricane Katrina. Section five discusses the implications for public policy. Section six concludes.

The Social Aspects of Entrepreneurship

The concept of entrepreneurship often invokes the notion of innovators who create new products, cultivate new industries, and turn old practices obsolete (see Schumpeter, [1934] 2012). It might recall images of individuals finding new uses for current products or improving production processes, highlighting the roles of arbitrage and adaptation rather than creative destruction and invention (see Kirzner, 1974). Or entrepreneurship might solicit images of self-employed owners of small businesses that consistently provide goods and services for their clientele (see Landstrom, 2007 for an overview of this strand of literature). Entrepreneurs may also be viewed more broadly as

⁷ For more details on the project and methods used, see Chamlee-Wright (2010) and Storr *et al.* (2015).

change-makers, and be categorized based on the sector or industry they operate within or by the type of change they seek. For instance, commercial entrepreneurs engage in activities for profit, social entrepreneurs tackle social problems, political entrepreneurs find new ways to provide government services or, possibly, new ways to obtain rents from political officials, and academic entrepreneurs might spearhead new educational initiatives.

Denoting social entrepreneurship as a particular subcategory brings social change to the forefront. As Alvord et al. (2004, 261) contend, while commercial entrepreneurship focuses on “the creation of a viable and growing business organization,” social entrepreneurship is about being a catalyst for “social transformation.” While a commercial entrepreneur may start a business in order to produce and sell a new product that individuals find useful and convenient, a social entrepreneur may start a grass-roots initiative to alleviate poverty in their city. This focus on social purpose may be the motivation of entrepreneurs across sectors, making them more similar to one another than to their peers within their own sector. As such, a unique framework with the concept of a “social value proposition” can provide for better understanding of social ventures (see Austin et al. 2006). However, the delineation of social entrepreneurship also has its challenges. For instance, there is not a unifying definition across studies of social entrepreneurship and there may be advantages to extending and embedding the concept of social entrepreneurship within the broader entrepreneurship literature (Dacin et al., 2017).

Further, there are a variety of ways social entrepreneurship is characterized within the literature. Some focus on the efforts of nonprofits, social movements, or governmental programs that address social problems, others focus on businesses that emphasize corporate social responsibility or goals beyond what we conceive of as conventional fitting within the market sector (see Dacin et al., 2017 for a thorough assessment of the definitions and approaches in the literature). Studies that delve into the organizational structure, motivations, and performance of such ventures are necessary for understanding them and assessing their performance. Yet, such studies may also overemphasize the social impact of these efforts or underemphasize the social impact of other entrepreneurial actions.

The desire to contribute to a community and be an active participant in the social networks in which one is embedded is a common motivator for many people, and entrepreneurs may act on that desire independently of or in connection with their profit motivations. If the social aspect of the entrepreneur's venture is at the center of the business plan, it will impact the entrepreneur's strategic decisions. Even if the social aspect is not the primary goal though, the survival of the venture may nonetheless depend on it. For example, an entrepreneur may open a law firm with the express intent of aiding immigrants facing deportation as a way to promote immigration and oppose restricting borders (March, 2017). The social intention or social value proposition of this venture is clear. However, even if social goals are not in the primary calculus of entrepreneurs, their social value may still alter future business decisions and outcomes. For example, another law firm may open with the primary intent of being a source of income and prestige for

the partners, but over time they may narrow their focus on social justice issues and become vocal proponents of social change. In this case, focusing on initial motivations or mission statements may underscore their social value.

Indeed, all entrepreneurs exist in a social system that shapes their behavior, incentivizes their actions, and determines their success or failure (see Granovetter, 1985). Over time, entrepreneurs that consistently provide goods and services that others find valuable can be viewed as productive and contributing positively to their society. Their efforts may also create secondary benefits, such as inspiring others to engage in entrepreneurship or creating a space where community discussions and interactions take place. Furthermore, completely atomistic exchange is rare; commercial exchange is comprised of informal bonds and relationships develop over time (see Meadowcroft and Pennington, 2008). Market exchanges often lead to the formation of relationships, connecting people of differing backgrounds and viewpoints, and encouraging toleration and friendship (Bridge and Baxter, 1992; Storr, 2008, 2009).

Research on social ties has found that being well-connected can have significant benefits to both individuals and communities. Portes (1998) identifies three major functions of social capital: governance or social control; benefits from close familial ties; and benefits from nonfamilial ties. The enforcement of rules and norms aids communities in coordinating and achieving certain desired outcomes. This approach highlights how community involvement and interconnection impacts childhood development, job opportunities, and other socioeconomic outcomes. Close connections matter. Coleman (1988) found that active parents correlate with lower dropout rates in individual children,

and schools embedded in religious communities have shown superior educational outcomes. Weaker ties matter as well. Granovetter (1973) notes that people more commonly find jobs through acquaintances than through close ties, and close-knit families with weak ties to their community better cooperate with one another to fend off outside threats than less-connected communities. Beyond the mere strength of the ties that an individual possesses or a community is comprised of, the structure of the network matters. Those with ties to people who are otherwise not connected to their primary network are more likely to be able to draw on knowledge from other groups and make uniquely productive contributions to shared endeavors, as judged by their group leaders (Burt, 2004). Social networks aid individuals within them as well as the broader community.

The provision of social spaces is a particularly important role of entrepreneurial endeavors of many forms. Simply put, social spaces are the physical or virtual spaces that allow people to interact with one another. Such places are important for community strength and redevelopment (Oldenburg, 1997; Putnam, 2000; Chamlee-Wright and Storr, 2014). Lefebvre (1991) describes social spaces as the site or geographical location where social life takes place. These spaces can encourage and foster connections, by providing a gathering place for existing groups to meet as well as by providing opportunities to make new connections or join new groups. These spaces may also serve as a place where individuals feel disconnected or isolated from social life, or where power dynamics and social tensions may arise (see Lefebvre, 1991; Bourdieu, 1989). Scholars have voiced concern about these effects within commercial social spaces (such as Lefebvre, 1991;

Gudeman, 1992). Yet, others have highlighted how the market can create, maintain, and promote relationships, familial bonds, and community (see Storr, 2008).

The creation of social spaces can be the intention or mission of entrepreneurs seeking to create novel social environments in their community. One might imagine, for example, a restaurateur who generates consumer interest through a stylistic environment where young professionals and social elites can network in addition to eating a quality meal. On the other hand, social spaces may be the secondary effects of more conventional commercial entrepreneurship. A coffee shop in a business district may open for the primary purpose of providing working professionals caffeine but end up becoming a space where those same working professionals network with one another as well as where students study for exams and friends meet for book club discussions. Likewise, a celebrity may turn to social media to promote their new movie and end up cultivating a community of followers who interact in the comments and come together to help one another or support causes. These spaces fulfil social needs that may otherwise lack a recognized location for such social activity.

By examining the importance of social spaces within what may be categorized as conventional or commercial entrepreneurship, this paper aims to show that entrepreneurs need not have a specific social mission in order to make social contributions, and that commercial entrepreneurship can produce secondary, social effects that impact exchange relationships and society more broadly. The post-disaster context provides a landscape for examining the multifaceted role of entrepreneurship.

The Social Aspects of Entrepreneurship After Disasters

The post-disaster context offers a unique set of challenges for communities. For a community to recover, many different kinds of information are required, much of which cannot be known before the disaster hits.⁸ Residents can feel enormous uncertainty regarding the future of their community and must make a tradeoff between rebuilding their home and community, starting anew elsewhere, or remaining in their place of refuge if displaced. Many of the benefits of recovery are tied to the other people who choose to rebuild. Cultural values, economic opportunities, social networks, and other important cultural and economic considerations depend on the participants to have lasting impact and value.

When response and recovery organizations arrive and assistance programs begin, community members and aid workers must identify and assess various needs and prioritize activities. Residents may have to prove their neighborhoods should have their streets cleared, utilities restored, and so on, and to make decisions about which recovery activities should be tackled first. Likewise, aid organizations must prioritize where and to whom resources should be distributed.

Often the only way to gather the relevant information for solving these technical problems, coordinating recovery efforts, applying for government assistance, and so on, is to begin the process of addressing these challenges and figuring it out along the way. Entrepreneurs are important for starting this process of recovery, and for interpreting and disseminating information in the post-disaster context. Storr et al. (2015) find that local

⁸ This collective action problem is further articulated in Storr *et al.* (2015).

entrepreneurs (broadly construed to include economic, social, and political entrepreneurship) help spur recovery by providing goods and services, restoring disrupted social networks, and showing that recovery is underway. They argue that this broad approach to entrepreneurship has its advantages:

First, analyzing the work of an entrepreneur qua entrepreneur allows for examining the full set of activities that entrepreneurs engage in and their outcomes.... Second, a more general framework of entrepreneurship takes into account and appreciates the complex and integrated nature of social activity.... Third, this framework allows for a broader appreciation and understanding of the importance of entrepreneurship in all aspects of social life as well in the social change process. (Storr et al., 2015, 31)

This approach allows for scholars to look across a broad array of entrepreneurial activity and find patterns that may not be obvious if only looking at particular categories of entrepreneurship. For instance, Storr et al. (2015) highlight how nonprofit ventures provide similar services as conventional businesses, how commercial entrepreneurs help restore social networks after disasters, and how community leaders of various types encourage community recovery. From this line of inquiry, potentially overlooked or underappreciated findings may arise, such as the role of commercial spaces as social spaces.

There is a growing literature on the importance of social capital, including both tight and weak ties, after disasters and its link to community preparedness, response, and recovery (see Bolin and Stanford, 1998; Hurlbert et al., 2000, 2001; Shaw and Goda, 2004; Paton, 2007; Chamlee-Wright, 2010; Aldrich 2012, 2019; Storr et al., 2015).

Individuals, organizations, and communities that utilize the skills and expertise of those in their networks can obtain resources, rally support, and overcome bureaucratic challenges to recovery (Aldrich, 2012; Storr and Haeffele-Balch, 2012). In the midst of recovery, groups can also learn from their broader networks, mimicking and altering the successes of others to fit their community's needs (Storr et al., 2017). Further, Chamlee-Wright and Storr (2010) argue that social entrepreneurs—such as church leaders, activists, and superintendents—help solve collective action problems, organize and engage in community outreach, activism, and advocacy, and provide direct assistance in rebuilding after disasters.⁹

Social spaces—spaces where community members can come together to commiserate with one another and share best practices for dealing with common problems—are also important for community recovery. Chamlee-Wright and Storr (2014) describe how social spaces can allow for pre-existing networks to reconnect (i.e., by seeing one another again after the storm passes), for creating of new ties (i.e., meeting new people who can help with recovery), for allowing people to see how the pace of recovery is going (i.e., seeing how their neighbors are doing and how quickly, or slowly, the community is coming back together).

Such spaces take many forms. In the immediate aftermath of a disaster, residents may congregate at their local church, school, diner, or fast food restaurant to seek shelter, get a hot meal, or gain access to electricity and the internet. These locations also become hubs for information sharing. Residents may explicitly stop by in order to seek advice,

⁹ See also Kaufman *et al.* (2007) for the role of social entrepreneurs after disasters.

emotional support, or a pleasant distraction. The Federal Emergency Management Agency (FEMA), other government agencies, and nonprofits may post resource lists or hold application intake in places where residents are regularly gathering. Pictures and videos of bustling cafés, full churches, and parades may show that recovery is happening and worthwhile, encouraging others to return. Such places may serve as gathering points before the disaster, or may emerge due to their convenient location, long hours of operation, and constant supply of sandwiches and coffee at a time when services and resources are limited.

As the recovery phase continues, social spaces remain essential for community recovery. Conversation may turn from commiseration and immediate needs to swapping information on contractors, sales on needed equipment, and strategies for dealing with insurance companies and appeals for FEMA assistance. Over time, as normalcy returns, these social spaces may shift to hosting book clubs, business meetings, and church services. Certain social spaces may also lose their appeal over time, becoming less important as recovery ends.

While we might expect churches, community centers, and schools to be natural social spaces for communities, commercial spaces also often serve as social gathering points. Chamlee-Wright and Storr (2014), examine how commerce can spur relationships and spaces for social interaction by creating the connections necessary for mutual assistance, reconnecting networks, and helping to create new networks and social connections. These spaces need not be the primary goal of commercial entrepreneurs, but may shift their activities, influence their success, and encourage further social action. In

the next section, we discuss several commercial entrepreneurs who created and maintained social spaces and impacted community recovery after Hurricane Katrina.

Commercial Social Spaces after Hurricane Katrina

Hurricane Katrina pummeled the Gulf Coast of the United States as a Category 5 hurricane in August 2005. At the time, the hurricane was the most costly and destructive storm on record, causing over \$100 billion in damage, over 1,800 deaths, and over 600,000 displaced residents (Knabb et al., 2006). New Orleans, Louisiana, was particularly hard hit, when several levees failed after the storm, resulting in flooding 80 percent of the city (Plyer, 2016). Approximately 70 percent of homes were damaged from the storm, flooding from the levees, and mold from prolonged exposure to the elements (Plyer, 2016). Weeks and months later, when residents were allowed to return, they were faced with the daunting challenge of rebuilding their homes, neighborhoods, and city. The recovery efforts that followed varied across the city, with some areas recovering quickly and others slowly and disjointedly. Residents not only faced the financial burden of recovery, but also conflicting policies and displaced networks that hampered coordination. Despite these challenges, many residents dedicated to rebuilding forged ahead and signaled that recovery was occurring.

Entrepreneurs were key drivers in this process, signaling their dedication to return, filling the gaps in service and needs for their communities, and fostering social connection (Storr et al., 2015). Neighborhoods relied on their social ties to share information, to find out who wanted to return, and to identify the skills needed to return,

access resources, and challenge policies that would adversely impact their community (Chamlee-Wright 2010a; Aldrich 2012; Storr et al., 2015). Social spaces for community members to gather and share information became particularly important in the aftermath of Hurricane Katrina (Chamlee-Wright and Storr, 2014). Such spaces allowed for people to find new resources, connections, and approaches to recovery in a time of incredible uncertainty.

While many common social spaces are outside of the commercial sphere (e.g. churches, schools, and community centers), many businesses became important gathering places after the storm. The following cases, from extensive interviews conducted in New Orleans in the years following Hurricane Katrina, highlight how such businesses not only provided goods and services to their community, but also grew to become a space for information sharing and collective action, and how their success in being a social gathering place impacted the success of their businesses, their status in the community, and overall community recovery.

A Grocery Store as Social Space

Mike Dean⁺ ran a grocery store in Central City, New Orleans¹⁰. Dean described the store, which has been in his family and open for over 30 years when Hurricane Katrina hit, as a “big social place.”

After Katrina, it became a location for people to gather and find work. In his words,

¹⁰ When possible, pseudonyms are used for interviewees. This is denoted with a ⁺ symbol.

We open early in the morning, 6:00. People come in, they get their ice to load trucks up to go do their work or haul or whatever they're doing and they pick up labor here also. Labor people sitting around... Yeah, day laborers. They'll get a breakfast out in front of the building. Yeah, a lot of people come get breakfast here. We have barbecue. We do a lot of stuff. Dean's store became a location where recovery efforts were coordinated.

Laborers gathered every morning to get a meal, socialize with other laborers, and find jobs. Residents and business owners, likewise, stopped by to get provisions and hire laborers for the day.

Dean recognized that some customers needed a place to do paperwork and use equipment not commonly available in the area. He obtained several devices for his store—including an ATM, printer, and fax machine—and made them available to his customers. Describing the range of services his store offered after the storm, Dean said he could help people “pay their bills, copies, anything pertaining to—I've got an ATM—anything pertaining to business. Faxing, all that. A lot of people use us to contact FEMA through faxing—faxing back and forth.” Dean also allowed customers to use his fax machine as a point of contact while other means of communication was unavailable. He would receive and hold faxes for his patrons until they came back by the store to stock up on supplies and pick up communications.

Dean told researchers that his store helped signal to those who had moved away from the neighborhood after the storm that the community was rebounding. Specifically, he said,

I think by my store opening here, I had approximately 500 people call me in the last two years, two and a half years—two years since we opened, call to see if we reopened. So, I want to say that we're like a little heartbeat in the city. We had so many customers that [asked] “are ya'll open?”, and by us saying “yeah, we're open, come on back,” I think that

has been a worm on a hook type thing to get people back. It has been instrumental in bringing people back here.

Because his store was open, returning community members could get necessary supplies and displaced community members could see that people were committed to recovery. This likely contributed to the surrounding community recovering faster than it otherwise would have (Storr et al., 2015).

Dean's grocery store was a place where customers could not only reliably obtain supplies but also find laborers, get jobs, utilize communication services, and socialize with the rest of the community. It became a social space where community members could gather for multiple purposes and contribute to the area's recovery. Dean also recognized the additional services he could provide clients and installed new communications technology and served as a message keeper, further cementing his role in the community. Dean himself benefited from turning his store into a social hub, both by ensuring people would come to his store and buy his products and by playing a role in his community's rebound.

A Coffee Shop as Social Space

Ben Cicek, a resident of St. Bernard's Parish for five years before Hurricane Katrina struck, realized that the community of Chalmette, New Orleans lacked a place where coffee, internet access, and food were available after the storm. In response, he opened Da Parish Coffee House with a friend. Cicek said that when he noticed people looking for coffee at a nearby establishment, he saw a profit opportunity and seized it.

Describing the discovery and thought process that lead him to open Da Parish Coffee House, Cicek said,

actually, one of my friends had a business just right across the street... He was my partner. So, I used to come down here ... to see what's going on, and we were talking about and a lot of people were asking for the coffee... We realized that it's just a good opportunity to open it up, help people, and also help ourselves.

Cicek went on to describe how his customers were patient while the store was undergoing construction because they too were trying to repair their homes and businesses. He noted that,

The good thing is everybody – like, most people still live in trailer[s] or they're trying to fix their houses, and I was fixing this place when I was open during the day. We were painting; we were doing a lot of stuff. And we had customers that were sitting here—they really didn't care about it, because ... they're used to it.

Early on, Cicek said the clientele were primarily from out of state, mostly construction workers, but over time, as residents returned, the customer base transitioned into primarily locals. Cicek said that he built relationships with his customers that were more significant than merely transactional exchanges. “We get to visit, I’m just talking to my customers,” Cicek recalled, “We have, like, friendship. They’re not my customer anymore... Yeah, they’re my friends... So, everybody knows each other so we talk about our problems.” Customers would come in for a cup of coffee, a bite to eat, and sit and talk amongst themselves or with Cicek about their experiences with and frustrations about trying to rebuild their community. Common topics of conversation included FEMA aid and insurance claims. Cicek noted that they discussed their challenges and the recovery process. “We just talk about it every day, so it’s good to be there [for them],” he

said. The coffee shop became a social space where people could commiserate and strategize about rebuilding.

Even though Cicek's motivation for opening the business was in the pursuit of profit (noticing an unmet demand of coffee after the storm), his success depended on the social space he created. He summarized that, "I like to take a risk and help the community a little bit and make money." During recovery, people came to his coffee shop for caffeine, food, internet access, and social connection. However, as normalcy returned, the coffee shop struggled to continue to satisfy consumers, and it eventually shut down. While the business venture was not sustainable in the long-term, it was successful in the aftermath of Hurricane Katrina, providing sustenance and connection for the community.

A Gas Station as Social Space

Casey Kasim ran a gas station and convenience store, called Discount Zone, in the Lower Ninth Ward, both before and after Hurricane Katrina. Kasim saw a profit opportunity in an area where few outsiders invest in businesses, given the low income and high crime rates in the area. He built a laundromat, gas station, and convenience store, investing a total of \$2 million in his business venture. Kasim described the reaction of others as surprise, and even disapproval. Describing what he believed to be a racially motivated bias against the Lower Ninth Ward, he said, "A lot of people told me, 'You're crazy. Why did you invest \$2 million here?' I told them I have lived with . . . African Americans. They are good people." Over time, his business became social place in the

surrounding community, and Kasim built social connections with his customers. Kasim noted,

80-85 percent were local that come every day and you see them and you get to know them by name. You know their problems, you know their children, socialize with them... Yeah, I mean they come here and it takes probably 30 second for the transaction—but ... when I get a break I stand outside and talk to people coming in and out and so it was like that.

During the storm, Kasim tethered his boat to the store and sent his children out of town to stay with family members in Texas. As the levees broke and floodwaters rose, Kasim did his best to protect his store and salvage food and water. Once the storm passed, Kasim used his boat to help rescue neighbors and bring them back to his store until they could evacuate the city.

He recalls that, "...after we opened, a lot of churches came here and they were asking for help or they have a party and would needs some drinks, some food we did this a lot, I helped a lot of them." Kasim recounted that customers would tell him, "[P]lease, we will give you as much of the business, support you and stay with you, but just be patient and things will be back because we need your service, we need your gas."

Kasim's store provided the goods and services his customers demanded and was a social nexus where people could visibly recognize a return to normalcy was in progress.

A Clothing Store as Social Space

Sandra Green⁺ was the general manager of a women's clothing store chain in Gentilly, Orleans Parish, both before and after Hurricane Katrina. Customers would return to the store to see Green, discuss the storm, recovery process, and generally check

in with one another. Customers who would frequently stop by Green's store to check in with her and the other regulars and share stories about their experiences during and after the storm. Describing the interactions, Green said

They'll come in when they're checking on property. A lot of it is social. They come in to socialize, see how everything's doing. They wanna see familiar faces when they come home... [Y]ou may have a group of people in a corner talking or they'll come in and say, "Hey, how ya doin'?" And they'll look around, and they might tell you where they're at, what they've been doing, that kind of thing... And when I see them, it's a load off my chest, because a lot of them were elderly and you wonder how they're doing. And when you see them, and to know that they're okay, it's a good feeling.

Green clearly cared for the customers she got to know over the years and enjoyed seeing them return, rebuild, and rejoin the community. Without seeking to do so, Green had built a social space that was important in the lives of many New Orleans residents.

These cases show how commercial entrepreneurs can not only engage in mutually beneficial exchange but also have a social impact on their community. After a disaster, entrepreneurs can and do fulfil social purposes by creating and maintaining social spaces. Understanding the social impact of entrepreneurship is important for understanding the disaster recovery process and implementing successful public policy in the post-disaster context.

Implications for Public Policy

Entrepreneurship generates both economic and social benefits for communities. The social ramifications can be considered spillover effects—benefits for society that result from commercial ventures or benefits that accrue to a larger percent of the population than just those directly affected through exchange. In the post-disaster context, entrepreneurship plays an important role in encouraging community members to return and rebuild their homes, businesses, and social connections (Storr et al., 2015). Specifically, commercial entrepreneurs can provide social spaces for community members to gather, share resources, and coordinate recovery. Given this, it is warranted to consider how public policy might facilitate and encourage the creation and maintenance of social spaces.

The literature on post-disaster recovery has established several ways that government intervention hinders recovery including regulatory barriers, regime uncertainty, and superfluous entrepreneurship (Sobel and Leeson, 2006, 2007; Chamlee-Wright, 2007; Chamlee-Wright and Storr, 2010; Shugart, 2011; Storr et al., 2015, Haeffele and Storr, 2020a). Likewise, several policy solutions are offered to remedy these issues, including creating alternative regulatory regimes, devolving the ownership and responsibility of planning and implementation to the community, and allowing entrepreneurs to step in and find creative solutions for recovery (Chamlee-Wright, 2007; Chamlee-Wright and Storr, 2010; Storr et al., 2015; Haeffele and Storr, 2020b).

The nature of social spaces is reason in itself for caution in policymaking. While many social spaces occur in easily anticipated settings (such as churches and community

centers), others emerge in places policymakers may not be able to identify ahead of time (such as grocery and chain clothing stores). Given that, policymakers should avoid trying to create new social spaces or attempt to encourage or predeclare where social places will be located, and instead learn from and utilize the social spaces that emerge after disasters.

Policymakers and bureaucrats implementing policy, especially those who are disconnected from the communities affected by disasters and the activities happening on the ground, can potentially utilize emerging social spaces to disseminate information on government programs and to help select which activities to support. Instead of selecting new locations to set up food banks and assistance intake centers, government officials can set up their operations within or near already established social spaces so that more people learn about their programs and are able to get access to needed goods and services¹¹. Disseminating flyers and holding discussion forums at coffee shops and other emerging social spaces may better distribute information and aid to citizens in need. By focusing on existing gathering places, policymakers may also be able to identify the community's needs, find organizations or community leaders to partner with, or discover projects or initiatives that are worth supporting.

Formalizing such partnerships for continued collaboration in future disasters, however, may not be effective. First, businesses that emerge as social spaces after one disaster are not guaranteed to still be effective social spaces after the next disaster. Cicek's coffee shop (discussed in section four) served as a useful gathering point for

¹¹ To the extent possible such operations only occupy space that has been voluntarily offered as not to interrupt other potentially valuable recovery and relief efforts or force participation.

residents and workers in Chalmette, New Orleans, after Hurricane Katrina but has since gone out of business. Second, formalizing public-private partnerships and providing public funding can shift the goals and activities of affected enterprises in ways that may be less beneficial or responsive to local demand (see Bryce, 2014; Haeffele and Storr, 2019).

When seeking to promote or encourage commercial social spaces, policymakers should caution against regulatory barriers that may hinder the reopening of businesses and give the space for entrepreneurs to step in and find novel solutions for their communities after disasters.

Policy Barriers that Hinder Social Spaces

Regulations, often designed to ensure the safety and credibility of expertise of particular industries, can restrict activity that could help spur recovery after disasters. Specifically, zoning laws, building permits, occupational licensing, and even prescribed daycare adult/children ratios can impede businesses from being able to reopen and provide for their customers (Chamlee-Wright, 2007; Skarbek, 2008; Chamlee-Wright and Storr, 2010; Storr et al., 2015). Not only will such businesses' operations be delayed, but their likelihood of becoming a social space will be delayed or diminished as well. Such laws adopted before a disaster will not necessarily reflect the changing needs and transformed geographic profile of a city. Especially after disasters like Hurricane Katrina where there is extensive destruction of housing, commercial buildings, and public spaces, greater flexibility of land use can be extremely important in spurring rebuilding.

If policymakers are not sure which regulations are worth preserving versus relaxing after a disaster, this uncertainty can cause what Chamlee-Wright (2007) terms “signal noise,” which distorts the signals that encourage or dissuade recovery. Entrepreneurs need to be able to take in and interpret information about their environment that minimizes the cognitive burden and search costs associated with pursuing recovery. Entrepreneurial action then generates additional signals that impact the decisions that other entrepreneurs and community members make about returning and rebuilding (Storr et al., 2015). After disasters, this is particularly challenging because of the damage incurred, displacement of residents, and uncertainty of rebound. The noise that public agents can introduce further distorts the ability of entrepreneurs and community members to interpret information and decide to rebuild. This can result in either an underestimation or overestimation of the possibility of recovery.

Signal noise from policies that are in flux after disasters can include promised but unimplemented programs (e.g., buy-out programs are often discussed after a disaster but can take years to implement), the delayed relaxation of regulations (e.g., relaxing occupational licensing on construction can help speed recovery but it can also frustrate rebuilding efforts if it occurs weeks or months after the storm), the delayed implementation or continued extension of benefits (e.g., tax relief programs that get announced months after the storm or continued unemployment benefits even when businesses are struggling to find workers), and confusing or changing flood maps and redevelopment plans. When such uncertainty is present, entrepreneurs end up spending

time trying to stay up-to-date on the shifting regulatory regime and may end up delaying their activities or shifting their activities based on anticipated changes.

Restrictive regulatory barriers and signal noise can deter entrepreneurs from reopening their businesses, which can prevent them from becoming social spaces for their communities. For instance, the longer it takes for a coffee shop to get its business license or building inspection, the longer residents have one less option for hot coffee, internet, and a space to share information and commiserate over the challenges they face. Since it is difficult to know what businesses may serve as social spaces, simplified regulations and clear policies that aim to encourage businesses to open will ensure that social spaces will emerge.

Policy Reforms that Encourage Entrepreneurs

Policymakers can encourage entrepreneurship in the post-disaster context by creating alternative regulatory regimes, devolving the ownership and responsibility of planning and implementation to the community, and allowing entrepreneurs to step in and find creative solutions for recovery (Chamlee-Wright, 2007; Chamlee-Wright and Storr, 2010; Storr et al., 2015). Such an approach will allow for entrepreneurs to step in and serve their community and adapt to their new surroundings. And in doing so, will encourage the creation and maintenance of social spaces.

Before a disaster takes place, policymakers should consider devising an alternative regulatory regime that clearly articulates which regulations and laws will be suspended or simplified and what benefit programs would be instituted or extended in the post-disaster setting. Such a regime would also define how long it would remain in place,

or what indicators of recovery would need to be met before the everyday regulatory regime would be reconstituted¹². This plan would reduce signal noise. As Storr et al. (2015, 139) state, it would also

reduce noncompliance, as entrepreneurs would have a clearer sense of which regulations government officials intend to enforce, which they are unwilling to change, and which they are willing to disregard. Additionally, this alternative regulatory regime would reduce delays that result when governments are forced to make ad hoc regulatory concessions after a disaster.

Policymakers should also devolve more the ownership and responsibility of planning and implementation to the community members themselves (Chamlee-Wright 2007; Storr et al., 2015). While redevelopment plans are pursued by cities in an effort to coordinate recovery and implement mitigation efforts to increase resilience for future disasters, they will not accurately reflect the desires and plans of citizens without their direct input. Such efforts would allow entrepreneurs to step in and find creative solutions for recovery (Chamlee-Wright and Storr, 2010; Storr et al., 2015). Entrepreneurs acquire and act on locally held information, finding creative ways to encourage recovery and satisfy demands in the post-disaster context.

Devolving disaster recovery activity to the community is, arguably, another way of saying that government should restrict their own activities or restrain from policy interventions. This is consistent with other studies on entrepreneurship and public policy,

¹² It should be noted that the rules and regulations should apply universally, rather than treating some groups differently than others (whether living in different neighborhoods, or of different political affiliations, occupations, races, or other differences) which can introduce uncertainty regarding which rules apply to any given individual or group.

such as (Lucas et al., 2018), and may help remedy public deficits and other political challenges (Kucher, 2012).

Such governance approaches provide the space for entrepreneurs to act quickly after a disaster and find new ways to serve their customers and communities. In turn, social spaces are more likely to emerge as businesses reopen and community members engage with one another. In other words, when policymakers create an environment where entrepreneurship can take place, they also promote social spaces and the social connectedness that aids communities in disaster recovery.

Conclusion

The social ramifications of entrepreneurial activities are important for social cooperation and disaster recovery. The entrepreneurs highlighted above pursued profit-motivated businesses that ended up providing social spaces for their community. These social spaces provided an opportunity for community members to gather and discuss their troubles and recovery strategies, and enjoy one another's company. Such efforts should be considered when designing and implementing public policy.

Policymakers can reduce barriers to recovery and encourage entrepreneurship, and thus encourage the creation and maintenance of social spaces, by establishing alternative regulatory regimes and allowing entrepreneurs and community members to be actively involved in redevelopment planning and recovery efforts. Policymakers can also learn from and utilize the emerging social spaces in the post-disaster context. However,

formalizing partnership and support with enterprises that emerge after disasters may lead to reduced effectiveness over time.

Further, the role of commercial entrepreneurs in the creation and maintenance of social spaces should be studied by social scientists and further incorporated into economic analysis¹³. For instance, there is room for new research on the market process, social capital, and disaster recovery that (1) explores how traditional entrepreneurs (commercial innovators seeking profit) act to pursue social purposes in mundane times, (2) seeks to understand people conceive of and develop normative opinions about markets and other types of private activity, and (3) pursues more fieldwork to determine the role of entrepreneurship in disaster recovery in different locations and after different types of disasters. Such research would further our understanding of the social aspects of commercial activity, in normal times as well as after disasters, and how public policy may hinder or encourage social aspects of entrepreneurship.

¹³ See McCloskey (2016) for how the moral and social value of business and commerce impacts economic growth and wellbeing.

CHAPTER THREE – DISASTER CHALLENGES AND ENTREPRENEURIAL RESPONSES

Introduction

Much of the research on disaster recovery seeks to describe the sources of resilience to disaster and the determinants of the speed and extent of recovery. The uncovered sources are numerous. Some argue, for instance, for the importance of urban planning to mitigate disaster risk (see Dhyani et al. 2018; Tingsanchali 2012; March and Kornakova 2017). Other research argues, for instance, for the importance of social capital (see Aldrich 2012, 2019; Chamlee-Wright and Storr 2011b; Ganapati 2012; Kaufman et al. 2007; Shaw and Goda 2004; Storr and Haeffele-Balch 2012). In the aftermath of disasters, several studies have now found that community members rely on both their strong and weak bonds for direct aid as well as information and other forms of support.

Likewise, entrepreneurship is emerging as an important source of recovery in the post-disaster context. Entrepreneurs provide needed goods and services in the aftermath of disaster and studies have explored the management structure of big businesses like Wal-Mart as well as the role of family firms and individual entrepreneurs (see Herbane 2010; Horwitz 2009; Llanos-Contreras et al. 2020; Linnenluecke and McKnight 2014; Monllor and Murphy 2017; Storr et al. 2015). Entrepreneurs also provide social functions after disasters, reenforcing community norms and culture, repairing and building new social networks, and contributing to broader social change (see Alvord et al. 2004; Chamlee-Wright and Storr 2010; Linnenluecke and McKnight 2017; Chandra and Paras forthcoming; Rayamajhee et al. forthcoming; Storr et al. 2015). Disasters can also

negatively impact entrepreneurship (see Boudreaux et al. 2019; Bullough et al. 2014; Doern 2016; Irvine and Anderson 2004; Runyan 2006). In the past few years, several special issues explored the connection between entrepreneurship and disaster recovery and community resilience, while also advocating for more research in the field as it is still a fairly underappreciated channel for promoting disaster recovery and resilience (see Aldrich 2018; Doern et al. 2019; McNaughton and Gray 2017).

Because of entrepreneurs' ability to address local problems with solutions adapted to local circumstances, however, they are ideally situated to contribute to addressing the challenges disasters pose. Indeed, after disasters, entrepreneurs perform the on-the-ground and in-the-moment work of disaster recovery (see Grube and Storr 2018). They take the initiative to rebuild and address the problems left behind by a disaster. Specifically, they recognize opportunities for improvements in social organization, the arrangement of resources, and other factors that contribute to individuals' wellbeing in a social setting. And, then they act to make these improvements happen.

When a disaster is imminent and ultimately strikes, community members must overcome a variety of problems to return to something resembling the pre-disaster way of life. They must make preparations, if possible, before the disaster to mitigate its effects once it hits. They next must find ways to endure and survive the disaster. This might mean evacuating to a safer location or weathering the storm (metaphorically or literally) by sheltering in place. Once the disaster has passed, they must assess the damage, rebuild what is worth restoring, as well as decide what aspects of their lives they should begin anew. Each of these phases requires solving different problems, and communities that

experience different kinds of disasters or even different communities that experience similar disasters may face versions of these problems with locally peculiar nuances.

In this chapter, we discuss the entrepreneur as an agent of social change, building on and expanding from the definition emphasized in market process theory to a definition which includes those seeking both monetary profit and social reward from acting as a change agent in their community. Entrepreneurs are epistemically situated in such a way that they can recognize the specific problems confronting a community post-disaster and address these problems using their understanding of their local circumstances. These entrepreneurial projects address a community's various problems in a piecemeal fashion that builds into a community-wide recovery process. Specifically, entrepreneurs are confronted three major problems as they fulfill their role, helping disaster survivors (a) manage uncertainty in the post-disaster environment, (b) repair their damaged homes, businesses, and community spaces and replace what was destroyed, and (c) negotiate the difficult politics of disaster recovery.

This chapter will proceed as follows. In section II, we lay out the entrepreneurs' role in identifying and solving problems. Section III, then, examines the significance of fulfilling this role in the post-disaster context, specifically focusing on how entrepreneurs help communities deal with the uncertainty, destruction, and politics following disasters. Then in Section IV, we conclude by discussing the significance of this emphasis on entrepreneurship both for understanding disaster recovery and for normative concerns surrounding disasters.

Entrepreneurship as Recognizing and Solving Social Problems

One important lens for understanding the entrepreneur is that of Israel Kirzner, especially in his work *Competition and Entrepreneurship* (Kirzner 1973). Kirzner focuses on the role of the entrepreneur in driving the market process toward equilibrium through alertness to opportunities for profit. Another important lens for understanding how entrepreneurs function is that of Joseph Schumpeter, especially his work *Theory of Economic Development* (Schumpeter [1934] 2012). Schumpeter focuses on how entrepreneurs drive the process of economic development through innovation, by creating new processes and products. Together, these two thinkers help us to understand the two essential moments of entrepreneurship: opportunity identification and opportunity exploitation (Baker and Nelson 2005; Baron 2006; Bhave 1994; Corbett 2005; Cunneen et al. 2014; Fayolle 2007; Hornsby et al. 1993; John and Storr 2018; Jones and Coviello 2005; Moroz and Hindle 2011). Opportunity identification is the act of noticing, discovering, or otherwise recognizing profit opportunities, which occurs in the mind of the entrepreneur. Opportunity exploitation is the act of creating or supplying and, hopefully, reaping the profits of their ideas (such as developing and selling a product or service, engaging in arbitrage, etc.). A successful entrepreneur, then, is someone who sees a profit opportunity and seizes it effectively.

According to Kirzner (1973), opportunities to earn profit abound in the world and it is up to entrepreneurs to see them. These opportunities exist because real world action is necessarily uncertain, and actors inevitably make errors. Often, we buy items for more than we ultimately could because we are unaware that they are being sold for a lower

price elsewhere. Or we sell items for less than we could because we are unaware that there are other potential buyers who are willing to pay more than the buyer before us. The existence of these errors means that there are opportunities for someone to make a profit by engaging in arbitrage. According to Kirzner (*ibid.*, p. 81), the successful entrepreneur is “alert” to these errors and the subsequent opportunities for profit:

For me, the important feature of entrepreneurship is not so much the ability to break away from routine as the ability to perceive new opportunities which others have not yet noticed. Entrepreneurship for me is not so much the introduction of new products or of new techniques of production as the ability to see where new products have become unsuspectedly valuable to consumers and where new methods of production have, unknown to others, become feasible. For me the function of the entrepreneur consists not of shifting the curves of cost or of revenues which face him, but of noticing that they have in fact shifted.

Thus, the critical moment of entrepreneurship for Kirzner is the moment when the entrepreneurial opportunity is identified. Viewed this way, all actors have the ability to notice entrepreneurial opportunities.

According to Schumpeter ([1934] 2012), however, the critical moment of entrepreneurship is the moment when the entrepreneurial opportunity is exploited. Indeed, Schumpeter (*ibid.*, p. 66) focuses on “the carrying out of new combinations” (emphasis added). Entrepreneurship, then, is about creating and offering a new good or service, developing a new method of production or a new way of organizing an industry, expanding the extent of the market to new communities or by establishing a new type of industry, discovering and exploiting new sources of raw materials, and so on. Stated another way, entrepreneurship “consists primarily in employing existing resources in a different way, in doing new things with them” (*ibid.*, p. 68). Schumpeter (*ibid.*, p. 79)

sees entrepreneurs as “a special type” of actor, where Kirzner views everyone to have entrepreneurial potential. Although Schumpeter stresses creativity and foresight when discussing the entrepreneur, leadership is arguably their most important characteristic. As he (ibid., p. 85) describes,

The specific problem of leadership arises and the leader type appears only where new possibilities present themselves [. . .]. It is no part of his function to “find” or “create” new possibilities. They are always present, abundantly accumulated by all sorts of people. Often they are also generally known and being discussed by scientific or literary writers. In other cases, there is nothing to discover about them, because they are quite obvious [. . .]. Now, it is this “doing the thing,” without which the possibilities are dead, of which the leader’s function consists [. . .]. What is to be done in a casual emergency is as a rule quite simple. Most or all people may see it, yet they want someone to speak out, to lead, and to organise. . . . It is, therefore, more by will than intellect that the leaders fulfill their function, more by “authority,” “personal weight,” and so forth than by original ideas.

While for Kirzner it is the seeing of the entrepreneurial opportunity that matters most, for Schumpeter, entrepreneurship is primarily in the doing.

Taken together, the two moments of entrepreneurship that Kirzner and Schumpeter articulate, we argue, are crucial for understanding the role of entrepreneurship in disaster recovery (i.e., entrepreneurship is recognizing and solving problems that promote community recovery and resiliency). Additionally, although both Kirzner or Schumpeter discuss entrepreneurship in a market setting, recognizing the fine, somewhat blurry line between commercial and social entrepreneurship is also important for understanding post-disaster entrepreneurship.

Entrepreneurs recognize problems

As argued above, entrepreneurs identify potential solutions to social problems. Impacted communities may be clamoring for solutions, such as the obvious need for clearing debris or setting up temporary shelter after a disaster. However, they may not yet consciously recognize that they are confronting a solvable problem, such as how a community bulletin or database may be beneficial for identifying and scheduling quality contractors to repair their homes. In both cases, however, entrepreneurs are incentivized to see solutions where others may not, whether to satisfy known or latent demand.

This focus on noticing problems for others may seem somewhat counterintuitive. Indeed, the case for relying on markets to organize economic activity (as opposed to say a central planner) ultimately turns on the privileged epistemic position of individual agents vis-à-vis their own preferences and resources (i.e., Adam Smith's ([1776] 1981) seminal articulation of how it is not benevolence but self-interest, broadly construed, that drives market exchange). However, the significance of the entrepreneur is that in their pursuit of profit they are incentivized to recognize problems with solutions that no one else has recognized and that benefit more than just themselves (i.e., Smith's (ibid.) notion that through individual market exchange, economic growth occurs). In other words, entrepreneurs are incentivized to be alert to errors and problems that do not just impact themselves personally but their community as well. This turns their interest toward arbitraging away inefficiencies and solving problems for others.

The entrepreneur's ongoing hunt for solvable problems makes a further contribution to others' wellbeing: unsystematizable, locally peculiar problems can be

recognized across large areas of society. Some problems are easy to predict and systematically check. For instance, infrastructure with a known construction date and scientifically observable features can be examined at regular intervals and repaired or replaced according to generalizable rules. That said, infrastructure is still challenging to maintain and improve, as became evident after Hurricane Katrina and the resulting failure of levies in New Orleans or with the recent concerns over the soundness of aging bridges. Many other problems are even more challenging to manage and solve. Consider the problem of providing food for families and communities in the days after a disaster. After a disaster, blocked roadways may delay the delivery of food, power outages accelerate the expiration of available food, and so on. Further, members of a family or community may have varying dietary practices, restrictions, and allergies. One-size-fits-all approaches are unlikely to satisfy needs. After Hurricane Sandy, a community youth group in the Rockaway Peninsula in New York noticed that the food pantries and resource centers being set up by FEMA, the Red Cross, and other organizations had long lines and limited items (Storr et al. 2015). They also noticed that many people living in the government-subsidized high rises were unable to get down to the food pantries, due to injuries, illnesses, or difficulty navigating the darkened stairwells to exit their building. The youth group then began going door-to-door to check in on neighbors, find out what supplies they needed, and delivering food. Similarly, in an Orthodox Jewish community further up the Rockaway Peninsula, synagogues began collecting food and cooking kosher meals to ensure religious practices could still be observed (ibid.). No two communities, or even families, are likely to have the same needs, and it is unlikely that

their needs will vary in systematically predictable ways such that general rules can be used to feed everyone. An entrepreneur can recognize the heterogenous nature of their community's desires and provide flexible solutions across a population, like specialty grocery stores that cater to specific culinary backgrounds and traditions or delivery services for those who cannot venture out on their own.

Furthermore, changing circumstances can complicate matters diachronically. Solutions can change over time as new problems arise and old ones become less pressing. For instance, the needs of community members will be different in the beginning stages of rebuilding than after recovery has occurred. After Hurricane Katrina, an entrepreneur realized the community of Chalmette lacked a coffee shop where people could get a hot cup of coffee, a sandwich, and reliable internet (ibid.). Their venture did well in those first few years after the hurricane but later could not keep with competing coffee shops and eventually shut down.

Entrepreneurship, then, is first and foremost about seeing (novel) problems and imaging (potential) solutions. The more local or specific the problem, the less obvious the solution, the greater the need for entrepreneurship.

Entrepreneurs solve problems

Of course, in order to benefit from the recognition of a problem, the entrepreneur must also take action to see their solution through. Simply identifying a problem and a potential solution is not enough. There must be someone to take action to exploit the opportunity to result in social change. Much like when recognizing problems in the first

place, the nature of any given solution to a problem does not always permit a widespread and systematic application of the same solution to every iteration of the problem. For instance, it may seem obvious that providing food to disaster survivors is a problem worth addressing, but the various ways of going about it will depend on the community's particular circumstances. While FEMA and the Red Cross have standardized their approach to food provision, the examples of local adaptation mentioned above were driven by entrepreneurs living within or familiar with these communities. Similarly, government agencies and national nonprofit organizations often rely on local community members to spread the word about their programs and encourage residents to apply for support.

Furthermore, identifying a problem and a solution are a good start, but if the institutional, social, or economic circumstances on the ground prevent anyone from taking action, the problem will remain unsolved. Such barriers to entrepreneurship can include uncertain or changing politics and regulations, murky property rights or a lack of a medium of exchange, and changing cultural and social norms, all of which can occur in the post-disaster context. Encouraging entrepreneurship will necessarily means being aware of and removing barriers for entrepreneurial activity.

Social entrepreneurship is also entrepreneurship

There is a large and robust literature on social entrepreneurship (see, for instance, Alvord et al. 2004; Austin et al. 2006; Chamlee-Wright and Myers 2008; Dacin et al. 2017; Dees 1998; Storr et al. 2017). Dees (1998, p. 2), for instance, has described social

entrepreneurs as “entrepreneurs with a social mission.” Similarly, Alvord et al. (2004, p. 262) has described social entrepreneurship as “a catalyst for social transformation.”

Social entrepreneurs attempt to bring about social change by identifying and developing solutions to social problems. Often, social entrepreneurs are contrasted with commercial entrepreneurs (e.g., social versus commercial missions, donors versus investors, clients versus customers, and donations and approbation versus profits). Indeed, Kirzner and Schumpeter focused on entrepreneurship within the market process, where there are prices for goods and services and the feedback mechanisms of property and loss. In the social sphere, goods and services may be given out for free or for a small fee to clients because of the donations of others and feedback may be driven more from the views of donors than the constituents they aim to serve. In this setting, reputation becomes the primary feedback mechanism whereas in the market, the impact of reputation is channeled through profits or losses.

There are, however, arguably advantages to collapsing the different kinds of entrepreneurship. To be sure, the feedback into entrepreneurial action through nonmarket social systems is often weaker, less precise, and generally in need of more interpretation, but nonetheless, it is a real form of feedback (Chamlee-Wright and Myers 2008; Storr et al. 2017). Moreover, difference in the nature of the opportunities that different kinds of entrepreneurs notice and in the type of social change that different kinds of entrepreneurs are trying to bring about is often exaggerated. Indeed, it is hard to imagine opportunities for commercial gain where some form of social transformation is not likely to occur. Entrepreneurs often start commercial enterprises for a social purpose or earn profits

through their social enterprises. Additionally, the differences in the feedback mechanisms in market settings and in nonmarket settings are not as stark as is sometimes suggested. Profit signals in a market setting are not unambiguous. Also, the difference between an investor and a donor is only fully obvious over time, certainly not ex ante.

The most immediately relevant form of nonmarket entrepreneurship for the post-disaster context is entrepreneurship that seeks to organize and re-organize social relationships. Neighborhood associations, religious congregations, clubs, professional societies, and other social groupings often need leaders who can direct the group, whether by simply managing the sundry organizational details or taking a bold stance on the direction the group needs to take. These leaders are relevantly entrepreneurial, and they serve an important role in the post-disaster context. Taken together, market and social entrepreneurs do recognize and solve problems after disasters in ways that can fuel recovery and resilience.

Entrepreneurial Solutions to Disasters

Entrepreneurs' role in disaster response and recovery is an extension of their role in mundane circumstances. Their alertness to opportunity, recognition of problems, and provision of solutions is integral to rebuilding society. It is reasonable to conceive of the disaster recovery process as a special case of the standard development process. In building up society from poverty, entrepreneurial recognition of opportunities for wealth creation is the central phenomenon to which economists must attend. Likewise, in rebuilding society after disaster, entrepreneurs are a driving force towards the re-

establishment of normality (Storr et al. 2015). The primary disanalogy between the two settings is that a general picture of what economic possibilities exist is often available to communities recovering from disaster, whereas it must be invented anew for developing economies. Nonetheless, the basic process of identifying problems and solutions, building up from the ground, and achieving a better standard of living is parallel between the two settings.

In this section, we discuss three ways entrepreneurs contribute to disaster recovery that are apparent from the framework elaborated in Section II. First, entrepreneurs address uncertainty and beat back ignorance in disaster affected areas. Second, they also rebuild what was destroyed, repairing or replacing what was lost to the disaster and creating new spaces and opportunities. Third, they navigate the difficult politics around disasters and disaster recovery, aiding their communities by obtaining collective goods and fending off political threats.

Disasters are circumstances rife with uncertainty and ignorance

Managing the problems surrounding disasters involves navigating considerable uncertainty and ignorance. Before the disaster, it can be unclear when or where one will strike. What form it will take can often be unclear as well, as many areas face multiple kinds of disaster risks. The intensity, duration, and other features of the disaster can all impact the appropriate preparation strategies. After a disaster, affected communities are often plunged into an environment lacking the usual means of coordinating daily activities. Individuals might face challenges which they had never considered before:

communities must (re-)organize to address new problems, legal constraints can be in active flux, and social norms can feel upended. Those impacted by disasters must deal with an environment in which things that were previously not even consciously regarded become objects of significant concern. From relatively straightforward questions like “How many houses may have mold from flooding?” to much more amorphous ones like “How long will it take for me to feel like my neighborhood has returned to normal?”, uncertainty can pervade the post-disaster environment.

There is a variety of means by which one can handle uncertainty. Such as adopting a one-size-fits-all strategy and declaring that all damaged buildings in a disaster-affected area must be torn down and rebuilt to their original blueprints. This would enable property owners to be certain that the area would look the same architecturally as before the disaster, but it would come at the cost of forbidding possible improvements and adaptations to any new features of the community. Another approach to minimize uncertainty might include specifying certain features of the solutions to be adopted to many problems. For example, buildings might not necessarily have to be rebuilt according to their original blueprints, but they might have to be rebuilt to contain the same number of housing units, square feet of office space, etc. This could enable some improvements to be made while ensuring a similar degree of population density and commercial traffic in an area.

These two types of general rules strategies for reducing uncertainty have severe limitations. For one, it presumes that such general rules could and would be propagated in a timely enough manner that allows them to be a useful guide for post-disaster action.

Moreover, they both presume that the kind of uncertainty faced after disasters is the kind that can be solved by establishing a rule and ensuring compliance. After a disaster, however, there are many kinds of uncertainty that no such rule can reasonably be expected to eliminate. Like many social challenges, the nature of post-disaster uncertainty cannot be systematized in a scientific manner. For example, no local policy can ensure that an entire neighborhood will return, which can mean that the new population produces different shared practices, expectations, and desires for the future, all of which must be accounted for if recovery via general rules is to take place.

In contrast, entrepreneurial solutions are likely to be tailored to the circumstances in which the entrepreneur is operating. To act, the entrepreneur must eliminate uncertainty. The solution they propose must be tested against the local circumstances. If found lacking, the entrepreneur has discovered a hitherto underappreciated dimension to the problem and can begin the search for a better fitting solution. The key difference is that the entrepreneurial approach to solving problems involves a feedback loop from the problem to the proposed solution to the next problem and so on. The next problem may be a new matter entirely or may be finding a new solution to propose after the previous one failed, but either way, uncertainty and ignorance about the post-disaster environment is gradually reduced.

Profit seeking entrepreneurs can reduce uncertainty and ignorance in the wake of disasters by re-establishing commercial activity in the impacted areas. The role of prices in conveying knowledge about local circumstances has long been appreciated and the entrepreneur plays a crucial role in price formation (Hayek 1945). In the post-disaster

context especially, wherein markets are often thin and the penetration of commercial trade networks may be shallow, entrepreneurs make a critical contribution to recovery when they begin the process of reintroducing their goods and services. Indeed, some have even argued that it is the absence of markets that is the fundamental cause of some woeful efforts to aid recovery (see Sobel and Leeson 2007).

The importance of the informational role of entrepreneurs in re-establishing markets is hard to overstate. Before a disaster, the range of possible needs a community could face are enormous, and preparation beyond certain basic steps may not be feasible. A household may keep a small stockpile of batteries, medical supplies, food, and water that help them weather the storm, but may not have the necessary supplies to repair their home after the storm passes. Likewise, their stock of food may only last a few days and they will soon need to be able to obtain fresh groceries, medicine, and other goods. The ability for grocery stores to reopen is determined by how much damage the store sustained, whether gasoline shortages have delayed deliveries, and so on. The answers to these questions and more are unknowable *ex ante*, and what preparations are possible are often expensive. It is likely necessary and arguably more effective to leave to Entrepreneurs on the ground, in these scenarios, are able to find out what needs must be met, how they can be met, and at what cost.

One illustration of the usefulness of entrepreneurs' local knowledge and general flexibility in responding to disaster comes from Wal-Mart's response to hurricane Katrina in 2005 (Horwitz 2009). Although Wal-Mart is not generally known for being a dynamic, innovative brand, its local store managers have considerable autonomy, and this was

emphasized in communications ahead of the storm. Store managers and employees were able to give away goods when appropriate, and make other decisions that served the community, such as tearing down damaged warehouse doors to access and distribute needed supplies. Wal-Mart employees were able to reopen 111 stores and redistribution centers within ten days of the storm, much faster than FEMA was able to bring in resources, and these stores were able to provide goods that were needed to begin clear debris and repair damage. By enabling local managers to respond to the specific needs of their community, Wal-Mart was able to help fuel recovery efforts.

Another way that entrepreneurs eliminate uncertainty is by signaling community rebound. Many of the benefits of rebuilding, as contrasted with relocation somewhere new, are tied to whether others choose to return. That is, community recovery is a collective action problem (Storr et al. 2015). For communities where individuals have pre-existing ties to one another, there is a risk that those ties atrophy or change if the majority of the community does not return. Otherwise, residents must incur the costs of establishing those ties with new residents or even go without as many connections as they had previously. This also means that any benefits that derive from local culture are dependent on there being community members who carry on that culture and can preserve that valued way of life.

Beyond addressing community ties, other kinds of costs and benefits to recovery depend on how many social and business connections return. The difficulty of finding resources needed for rebuilding depends on how many businesses serve the recovering area. The discomfort of living through the recovery phase can be ameliorated if

entrepreneurs can rapidly re-establish businesses providing creature comforts. Employment opportunities, needed goods and services, community gathering possibilities, and even simple morale boosts all turn on whether the individuals from a disaster-affected area choose to return. These examples demonstrate that having some means of signaling to community members that return is taking place can be an important component of spurring recovery. Entrepreneurs who (re-)start businesses demonstrate their commitment to an area, signaling that at least one person with a stake in the community believes that enough others will return.

Beyond for-profit entrepreneurs, leaders of social groups can also signal rebound that inspire others to commit to recovery. They might creatively imagine a new future for the community with substantial improvements over the pre-disaster situation, or they might simply give assurance that life can return to normal. Either way, they contribute to recovery by demonstrating that a community will return.

One such illustration is that of Father Vien at the Mary Queen of Vietnam (MQVN) Catholic Church in Village de l'Est in New Orleans after Hurricane Katrina (Chamlee-Wright and Storr 2009; Storr et al. 2015). Fr. Vien worked to locate parish members dispersed across the United States after the storm and asked them to return to New Orleans. He also worked to ensure that the church received media coverage and that images of its membership attending services were available for many people to see, thereby demonstrating to people outside the community return and recovery was underway. Fr. Vien's clerical role and the community's organization around the church and Vietnamese ethnic community made for a potent combination, and the MQVN

community was one of the swiftest to recover from the storm. Fr. Vien successfully acted as a social entrepreneur. He noticed the problem of needing to demonstrate community return in order to obtain necessary resources and realized his authority as a religious leader in the community to help solve the problem.

Finally, entrepreneurs that facilitate social spaces can help reduce uncertainty. In general, markets can be sites of relationship formation and meaningful social interaction (Storr 2008). Even big-box stores maintained by large corporate conglomerates must keep an awareness of the social dimension of their business, as evidenced by Wal-Mart's policy of not raising prices before a disaster to avoid looking like they were gouging their customers (Horwitz 2009). Entrepreneurs who build social spaces can contribute to recovery by facilitating social connections (Haeffele and Craig 2020). An entrepreneur might (re-)build a coffee shop, parish hall, or convenience store where community members can gather, swap stories and information, and help one another. Without these commercial social spaces, communities might lack places and mechanisms to share best practices, organize to address collective action problems, or even just provide emotional support, which all help ease uncertainty (Chamlee-Wright and Storr 2014).

Disasters are destructive

Disasters often destroy homes, businesses, infrastructure, and natural resources. Dealing with the physical loss often comes with further economic costs beyond replacement, especially in the short term as those impacted by the disaster scramble to make alternative arrangements for their various needs and plans. Hurricane Katrina, for

example, was estimated to have caused more than \$100 billion of damage and killed more than 1,800 people (Knabb et al. 2006). It led to more than one million people being placed under an evacuation order, and due to damage to their homes, thousands of these people remained displaced in hotels or other temporary housing arrangements for months after the storm.

Entrepreneurs are an important channel through which a community can address destruction and rebuild. The idea of the entrepreneur as a profit seeker entails the idea of the entrepreneur as wealth creator, at least when situated within a proper institutional framework. By noticing a means of rearranging resource use to improve the efficiency of an economy, the entrepreneur can create value to others as well as themselves. This dimension of entrepreneurship is not a wholly separate point from that above about uncertainty, though it is relevantly different. Entrepreneurs act to create wealth by knowing (or guessing) and then meeting the needs of their customers. In the case of disaster, this often takes the form of replacing things that were lost. Because of the exogenous destruction of significant amounts of wealth, the community must create new wealth to replace what was lost.

Entrepreneurs can start (or expand) operations that do the actual work of rebuilding, like surveyors, carpenters, engineers, glaziers, inspectors, etc., who contribute to the repair of impacted buildings and infrastructure. Local contractors may be able to offer flexible services and payment plans to their community members, like was the case with Ed Williams after Hurricane Katrina (Storr et al. 2015). And neighborhoods may

find ways to save money by pooling together projects or may share information on which repairmen are reputable.

It is important to bear in mind the context in which the more obviously reconstruction-related entrepreneurs do their job. These professionals require a further set of supporting roles that enable them to do their work, like convenience store managers, who might provide gasoline and coffee to fuel the worksites, or laundromats, who might ease the discomfort of working in disrupted environments. These in turn require still further support from other businesses and organizations. For example, being able to reopen a convenience store or expand services at a grocery store to include faxing services can further enable recovery (ibid.). Considering the importance of these interconnections, it may come as no surprise that the absence of many small businesses is one of the most frequently listed barriers to recovery (Rouhanizadeh et al. 2020). In light of this, it may be impossible to know which entrepreneurs are contributing to rebuilding and which are conducting business as usual, as the two roles are sometimes not substantively, or observably, differentiable.

Beginning the reconstruction process often entails using temporary measures that meet community needs well enough for individuals to work on other projects. One example of an entrepreneur solving this kind of problem is Doris Voitier, superintendent of St. Bernard Parish Unified School District after hurricane Katrina (Storr et al. 2015). She knew that families would not return unless their children could return to school and so found enterprising solutions to reopen the schools. For instance, Voitier used school district funds to provide portable classrooms while the main school buildings were being

repaired as well as trailers to offer as temporary housing while teachers rebuilt their homes. This kind of stopgap solution may be essential to rebuilding when destruction is so severe as to preclude even piecemeal rebuilding in their absence.

Disasters are politically charged

In many ways, disasters and politics are intertwined. At the local level, politicians and government officials are both impacted by and responsible for responding to and recovering from disasters. They must assess the need to evacuate, establish shelters, lead rescue operations, prioritize which streets to clear first, repair infrastructure, and so on, all while also likely dealing with their own personal circumstances. Likewise, over time, calls for federal responses to disasters have increased, in order to coordinate recovery, provide assistance, and signal a commitment to recovery. Research, however, has shown how politicians are more likely to support disaster recovery in states that tend to vote for their political party and that assistance can be used as a reelection strategy (see Husted and Nickerson 2014; Reeves 2011; Salkowe and Chakraborty 2009; Schmidtlein et al. 2008; Sobel and Leeson 2006). Further, the bureaucratic process can lead to more uncertainty rather than stability, hinder rather than enable entrepreneurship, and discourage rather than promote recovery (see Chamlee-Wright 2010b; Storr et al. 2015). Entrepreneurs can help navigate and circumvent these challenges.

The usual network of signals that individuals rely on to make their way through the complex world is often disrupted by post-disaster policy changes (Chamlee-Wright 2007). From price distortions that create misinformation about the relative scarcity of

resources (e.g., licensing restrictions on contractors and childcare) to city plans that render unclear whether an individual will even be allowed to rebuild their home, the shifting policy environment complicates making plans for recovery. Further, reputations for reliability can become inaccessible and unreliable if social networks remain disrupted. The problem is exacerbated when politics prevents the necessary feedback loops for error correction.

City officials must often make difficult tradeoffs surrounding which areas to prioritize in making repairs or re-establishing public services like water and electricity. If a community can demonstrate the value of prioritizing their needs, they can obtain significant, valuable resources that accelerate recovery. Furthermore, cities may choose to use disaster recovery as an opportunity to make significant changes, such as by rearranging land use or establishing new policy emphases in the post-disaster period. If a community leader can organize a political movement for their neighborhood, church, etc., then they may be able to provide input to the city that makes the proposed changes better suited to the needs of those living in the impacted areas. For example, after Hurricane Katrina, the city of New Orleans released a series of redevelopment plans that exacerbated uncertainty and disrupted plans. Many neighborhoods with severe flooding were initially designated to become green space unless they could prove their commitment to return. The Broadmoor neighborhood was able to rally together through the network established through the Broadmoor Improvement Association, connecting dispersed residents and organizing return and recovery (Storr and Haeffele-Balch 2012).

Community leaders in Broadmoor not only noticed the problem of the uncertainty of their neighborhood's future but pursued solutions that ensured their vitality (ibid.).

Aldrich (2019) presents evidence that following the 3/11 disaster in Japan, a triple disaster of earthquake, tsunami, and nuclear meltdown, those communities with social ties to government officials recovered more quickly than communities without those connections. This points to the importance of community leaders who can petition and persuade government officials to influence policy outcomes. Aldrich (ibid., p. 73) refers to these officials as, among things, "champions" of their community; they are entrepreneurs. Take an example from Fr. Vien and the MQVN community after Hurricane Katrina. In addition to persuading hesitant residents to return, Fr. Vien's efforts to demonstrate the viability of his community had political influence¹⁴. By advertising the return of church services on Vietnamese language radio, Fr. Vien gathered a large, approximately 2000-person, attendance at mass. Images of the crowd were then used to influence the power company to restore electricity to the neighborhood. Likewise, as mentioned earlier, Voitier found enterprising ways to go obtain supplies and circumvent bureaucracy in order to reopen St. Bernard Parish schools (Storr et al. 2015).

¹⁴ In some cases, it may be that this efficiency-enhancing role of political organization strays deeper into lobbying and rent seeking, turning from socially useful information transmission to what may be social wasteful political jockeying (Chamlee-Wright and Storr 2011a). In the case of the MQVN community, Fr. Vien's role became more political over time, and the community that he had worked to build up continued its progress by becoming better able to obtain special public funds to support senior housing, a hospital in New Orleans East, and even a Vietnamese business corridor. These funds were certainly of use to the recipient community, but it is not clear that they were socially efficient. Subsidies to businesses that do not necessarily provide a public good or produce positive externalities are quite difficult to justify on economic efficiency grounds, and it is far from clear that constructing housing for seniors in a socially well-connected community which had recovered faster than others was the most effective means of spending funds to care for the potentially vulnerable or suffering.

Although politics can complicate the post-disaster context, it can also present opportunities. Needed changes that previously would have been impossible to gain momentum behind can become more politically feasible. With the leadership needed to organize these changes, substantial community improvement can occur. This can take place both within governmental arenas, as when a city might decide to alter land use regulations to accommodate building new housing, and within social groups, as when a local parish might reorganize their shared priorities to better serve their community. In both of these examples, entrepreneurs can guide a community through these changes and foster social change.

Conclusion

Disasters are profoundly destructive and upend everyday life in ways that are extremely difficult to manage. In response, entrepreneurs can utilize their knowledge of their local circumstances and act as change agents to spur recovery. The entrepreneurs' solutions to community problems, tailored to the needs of their specific circumstances, help to cut down on the uncertainty disasters inject, rebuild after destruction, and navigate the difficult political waters of the post-disaster social environment.

An emphasis on the role of entrepreneurs in disaster recovery has certain important implications for the way scholars should approach the study of disaster recovery. Perhaps most importantly, it should draw their attention to the role of contextually-held and individually-interpreted knowledge of the problems disaster survivors face. Highly aggregated statistical examinations of disaster recovery can help

identify and analyze broad patterns, but they can often overlook the locally specific features of each disaster. Fieldwork and ethnography are productive complements to such studies, providing access to the contextual peculiarities of various communities and highlighting the innovative ways in which community recovery takes place.

A focus on entrepreneurs can also draw attention to the importance of the rules that either enable or limit entrepreneurial activity. Rules that enable entrepreneurs to quickly and flexibly go about their work of noticing problems and offering solutions will facilitate rapid recovery¹⁵. General rules that are known to everyone, applicable across circumstances, simple to interpret, predictably enforced, and minimally restrictive are desirable. Rules with these features that also establish clear realms of responsibility and freedom can go far in preventing harm while also enabling bottom-up recovery efforts.

¹⁵ This is not to say that a legal or social free for all is warranted. Entrepreneurs who direct their energies towards fraudulently obtaining profits are not socially beneficial.

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