Trialing Analytic Metaphors for Socio-political Economic Alterity: Epiphytes and Slime Molds

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Abstract

Many geographers researching alternative and diverse economies, particularly those following Gibson-Graham, have resisted attempts to systematize emerging non-capitalist orders so as to avoid closing off plural possible futures. We argue that researchers can hold open "spaces of becoming" while still engaging in comparative studies of diverse organizational forms. Yet we also embrace Gibson-Graham's concerns, particularly regarding power inequalities and hegemonic ideologies embedded in scholarly analyses. Found (at-hand) conceptual metaphors from unexpected domains may be useful for analyses of power in socio-political economies. We explore the utility of two possible conceptual metaphors for socio-political economic formations drawn from biology: epiphytes and slime molds. Each candidate metaphor highlights distinctive relational patterns of power and invites further analysis of the desirability of formations that echo their patterns.

Keywords

Alternative economies; diverse economies; community economies; metaphors; weak theory



Introduction

Geographers have worked to hail and cultivate attention to a wide array of potentially non-capitalist socio-political economic configurations (Harvey, 2000; Swyngedouw, 2010, 2011). The growing literature on diverse and alternative economies, in particular, has contributed crucially to understandings of contemporary socio-political economy by bringing attention to spaces of non-capitalist (but not necessarily socialist, communist, or revolutionary) human relationships on which critical geographers had not previously focused (Gibson-Graham, 1996, 2006; Healy and Graham, 2008). However, and potentially in part because this line of scholarship is grounded in post-structural and feminist ontologies, theorizations of alternative economics have engaged more extensively in critiquing and deconstructing dominant theories of economic spatiality than in working to build alternative generalizing metaphors for socio-political economic activity. Notwithstanding diverse economy scholars' commitment to weak theory and explicit resistance to premature theoretical generalization (Gibson-Graham, 2006), we point to the analytical utility in more systematically examining and comparing the distinctive patterns of power relations that might exist in various emergent, alternative socio-political economic practices.

We are sympathetic to Gibson-Graham's (2006) pointed concern about avoiding both conceptual and practical closure on what new economic diversity might look like. However, we also see in existing alternative economies scholarship a need for more widely shared framing concepts for comparative analysis. What are the important similarities among, as well as differences between, successful organizational forms that seem in some ways to resist conventional and hegemonic power relations? What strategies do such organizations employ with regard to scale, reproduction, and relationships with other organizations? What initial conditions make particular organizational forms more successful in particular contexts than others? This genre of questioning about alternative socio-political economies has both political and scholarly urgency; yet such questions are difficult to ask (much less to answer) without a more explicit and comparative conceptual apparatus.

Maintaining a "choral" (Gibson-Graham, 2006) analytical perspective open to the pregnant space of possibility requires conscious reflection and vigilance: capitalocentric conceptual metaphors tend to hegemonically recolonize analyses in ways that are difficult to recognize or expurgate. Key conceptual metaphors (for example, economy-as-machine or economy-as-cardiopulmonary-system) are repeatedly used to comprehend and analyze economies from both orthodox and critical perspectives. Most metaphors for economic activity (even when employed critically) make assumptions about the universality, rationality, and competitiveness of capitalist relations, and these metaphors can deeply shape scholarly (and everyday) thinking about "how economies work;" indeed, that is precisely their functional utility as metaphors. Thus, it is crucial to reflect on what metaphors we choose and explicate alternative terms for thinking about the patterns of economic processes in the ongoing project of examining organizational forms that generate diverse, alternative economies.

In the text that follows, we argue for an explicitly pluralistic and open-ended, but ultimately more-than-choral and strong(er) theoretical approach to trialing and evaluating various conceptual metaphors for alternative socio-political economies. By way of illustrating our approach, this article traces the lineage of conceptual metaphors for the functional organization of socio-political economic activity. We then trial two additional organic "found" organizational metaphors: epiphytes and slime molds. The discussion highlights the potential utility of each metaphor in understanding how power operates through certain existing cases in the alternative economies literature, and closes with an argument that further

¹ We use the term *socio-political economy* to signal the intrinsic imbrication of social relations with political economy.

exploration of plural non-capitalist metaphorical vocabularies is an important incremental step in extending previous scholarship on economic alterity.

Diverse economies, the community economy, and the need for more specific conceptualization

Scholarship exploring diverse and potentially non-capitalist economic practices—including cooperatives, local exchange trading systems, credit unions, and other mutual aid organizations—has proliferated in recent years (eg., DeFilippis, 2003; Fuller and Jonas, 2003; Crabtree, 2008; North, 2010). While a number of scholars call these systems of practice alternative economies (eg., Fuller et al., 2010; Leyshon et al., 2003), and some label them *anarchist* (eg. White and Williams, 2012), J. K. Gibson-Graham have developed a vocabulary describing diverse economies, rejecting the binary between capitalist and alternative. Gibson-Graham argue that representing economic practices as alternative makes them subordinate to capitalism, which might be interpreted as more powerful and omnipresent (2006). Much of their work contests claims of capitalist universality, demonstrating the ways that capitalocentric hegemony is already partial and incomplete, leaving spaces that can be—and are already—colonized by more just logics. They use the metaphor of an iceberg to illustrate economic diversity. Their iceberg illustration (see Gibson-Graham, 2006, 70) depicts capitalism as only the tip (that which is visible above the water line), with the vast majority of the iceberg (submerged underwater unseen) made up of many non-capitalist diverse economic activities. The image is powerful in imagining capitalism reduced to 'merely' one mode of economic activity, which only appears dominant due to the mainstream capitalocentric discourse that relegates non-capitalist activity to a subordinate position. Gibson-Graham also present a table of diverse economic practices (2006, 71) that categorizes economic activities based on the types of market-based exchange, wage, and capitalistic endeavors they employ or not. The diverse economy in this rendering includes gift giving, cooperative businesses, household work, theft, slavery, and green capitalism, among many other forms.

While the discourse of *diverse* economies was cultivated by Gibson-Graham as part of an explicit project to unsettle capitalocentrism, the *community* economy is a concept they created as a counter-hegemonic discourse and positive articulation of the new economic activity they endorse. For Gibson-Graham, the community economy is not a model, an ideal, or a roadmap, but it instead signifies an ongoing commitment to interdependence and commonality that may change form over time or differ between communities (2006). They resist further detail in describing the community economy, warning that "any attempt [...] to define the community economy, to specify what it contains closes off the opportunity to cultivate ethical praxis" (Gibson-Graham, 2006, 98). The community economy discourse is intended to "politicize the economic" by bringing attention to the ways the economy is socially constructed, and can be "a site of decision, of ethical praxis, instead of as the ultimate reality/container/constraint" (2006, 87-88).

Rather than delimiting particular modalities or logics of community economies, Gibson-Graham identify four *ethical coordinates* around which communities negotiate their collective values: the necessities of survival, the distribution of surplus, the production and consumption of the surplus, and the production and sustenance of a commons (Gibson-Graham, 2006). These ethical coordinates can be utilized in the analysis of cases where communities use differing values to guide their organizational and economic decisions (eg. Graham and Cornwell, 2013; Cameron, 2015). The ethical coordinates framework helps to illustrate the agency communities have to create the economies they desire in an ever-evolving, open-ended way, rather than seeing community economies as subject to the structural conditions of global capitalism.

The *diverse economy* and *community economy* have been tremendously impactful as analytical concepts. Scholars in this lineage have powerfully worked to reframe thought around economic practices and subjectivity, both in scholarship and in communities on the ground (see St. Martin, 2005; Safri and

Graham, 2010; Hill, 2011). The political importance of this work should not be understated: it necessitates a recognition of social and ethical practice as an integral part of economic performance, giving agency to people who have previously been seen as helpless at the hands of capital. However, we argue that this framework can be further developed to support the growth and proliferation of community economies. Contemporary studies in the community economies literature identify ethical decisions but tend to avoid thoroughly exploring the implications of those ethical choices on organizational structure. Cameron's (2015) study, for example, shows that "different ethical commitments result in different economic practices," but concludes that "Neither of these approaches is better than the other, rather they demonstrate just how much economic diversity and experimentation is possible when ethical commitments come to the fore" (67-68). With this statement, Cameron stays loyal to the community economies tradition, emphasizing openness and ongoing experimentation in economic practices. We suggest more could be gained from analyses that go a step further. How are ethics institutionalized and sustained over time? What specific practices support and reinforce which ethics? What are the outcomes of those different economic practices?

In an attempt to extend the work of diverse and alternative economies researchers, several scholars have begun calling for more precision in the analysis of different economic formations in order to visualize the present implications of particular models and to more fully theorize future possibilities (Aguilar, 2005; Fuller, Jonas, and Lee, 2010). These scholars tend to situate themselves as researchers of *alternative economies* rather than diverse or community economies, and are not as tightly wed to the Gibson-Graham theoretical lineage. Gibson-Graham's research involves some descriptive categorization (the table of economic forms, for example), that intentionally avoids comparing the effects of the different specific practices and models in action.

One example of work moving toward comparative evaluation of economic models is Fuller and Jonas (2003), who divide alternative economies into three categories: alternative-additional forms, which supplement capitalist practices without challenging them; alternative-oppositional forms, which embrace their own alterity in challenging the market; and alternative-substitute forms, which fill a gap left by the mainstream market. Fuller, Jonas, and Lee (2010) suggest that future work could expand upon Fuller and Jonas (2003) by exploring the tensions and contradictions surrounding the growth and proliferation of these different alternative economic forms in relation to the mainstream. We follow these scholars in seeking to categorize and compare different alternative organizational structures to analyze the outcomes of different arrangements.

Developing abstract theories of economic alterity: necessary violence?

Abstraction has long been a nearly ubiquitous aspect of scientific analysis, offering the potential to make generalizations by isolating the causal or driving forces that characterize phenomena from background variables that can be "controlled for" in experimentation or observation (McCormack, 2012). But, as feminist scholars (rightly) note, abstraction can lead to homogenization, oversimplification, and the exclusion of particularities, closing off attention to difference and contextual specificity. Gibson-Graham (2006) draw upon Sedgwick (1997; 2003) to provide an alternative mode of research and analysis, "weak theory." Weak theory "refus[es] to know too much," avoiding generalization and closure (Gibson-Graham, 2006, 8). Where strong theory (utilizing methods of abstraction) extends its analytical domain across localities to create generalizations, weak theory offers localized and knowingly partial descriptions of phenomena (Tomkins, 1963). "Rather than closing down, categorizing, judging, modelling and getting things 'right'," weak theory remains open to surprise, seeking possibilities for new knowledge unconstrained by earlier (problematically restrictive) theoretical constructions (Wright, 2015, 39, drawing upon Lee, 2006). Weak theory, then, is not so much about explaining complex phenomena by systematically identifying their abstract 'bones' as it is about following the evolving trajectories of

objects and connections to "wonder where they might go" (Stewart, 2008, 73). Sedgwick (1997) and Gibson-Graham (2006) are responding to a particularly "paranoid" mode of abstraction practiced by many critical theorists, who, according to Gibson-Graham (with whom we agree here), tend to overemphasize the completeness of capitalist hegemony, analytically closing off opportunities to "see" difference. They have inspired a number of followers in recent years within the field of geography who see weak theory as the best practice for optimistic analysis that looks beyond and beneath capitalism (see, for example, Wright, 2015; Stewart, 2008; Lee, 2006; Williams, 2017; Cornwell, 2012; Brown et al., 2011; Brown, 2009; Mcguirk, 2011; DeMartino, 2013; Woodyer and Geoghegan, 2013).

We respect (and endorse) the desire to conduct socio-political economic research driven by curiosity and openness rather than paranoia about already-existing tentacular capitalism, with arms reaching into every realm of known life. However, we fear that a commitment to excessively weak theory and the concomitant avoidance of abstraction abandons the ability to theorize patterns in the formation of possible favorable futures. Sedgwick is careful not to undermine the value of strong theory, suggesting that scholars explore the "ways that strong theoretical constructs interact with weak ones in the ecology of knowing" (1997, 23). Weak theory can open theoretical space for new interpretations, but once these interpretations are established, strong theory is necessary to walk them forward. As Iveson (2010, 438) argues, "[t]he alternatives which we propose will mean nothing if they are not based on critical analyses of progressive trajectories in the present moment."

On one hand, then, the act of abstraction (via strong theory) can be dangerous because it is an act of exercising analytical power through selective attention. This is the location of its inevitable potential for violence. Abstraction necessarily involves identification of specific characteristics and patterns at the expense of others, leading Lefebvre (1991) to argue that it is an *inherently* violent process: it rends the everyday from the contexts which give it meaning and value.

On the other hand, however, abstraction allows attention to actually existing patterns which would otherwise be obscured by the noisy environment of the real: it enables attention to patterns and logics of (in)justice which would otherwise disappear from view. McCormack (2012) draws upon Whitehead (1967) in arguing that abstraction, while intrinsically limited and limiting, can enable new ways of seeing phenomena and provide inspiring images around which to mobilize and construct non-capitalist worlds. There is always more than one way to abstract, and scholars hold the power to create abstractions that point us toward specific alternative futures and away from others (McCormack, 2012).

This point is in line with Sedgwick (1997), who notes how strong theory can produce multiple different affects (including positive or hopeful ones), not just paranoia. Even paranoia at times can be beneficial: Sedgwick herself uses paranoia about paranoid theory to make the case for weak theory (see Love, 2010 and Barnwell, 2016 for a more extensive discussion). But paranoia need not be deprecatory (in Sedgwick's usage) or foreboding (as it often is in critical theory). Barnwell (2016) responds to Sedgwick by proposing an analytical perspective of "creative paranoia" that looks to infer, generate probabilities, and predict potential outcomes to prepare for—and encourage or discourage—particular futures. Surely, not all forms of non-capitalist organization are equally desirable as normative models. They are likely to produce different outcomes regarding justice and power, and be differentially sustainable over time. To adequately prefigure desirable future worlds, strong(er) theory, producing abstract theoretical knowledge, must work to engage in generative critique of a diversity of models (see also Marcuse, 2009; Iveson, 2010). We celebrate Gibson-Graham's influence in reworking geographers' perceptions of noncapitalist phenomena, but we also follow McKinnon (2016, 4) in suggesting it is time to extend beyond their suggestion to keep a "beginners mind" (Gibson-Graham 2006, 8, inspired by Zen master Shunryu Suzuki) in order to "redirect energy towards finding the evidence base upon which a sought for future could be built and multiplied" (McKinnon, 2016, 5). We suggest a theoretical approach to comparative analysis that is based on a relational understanding of how power operates through organizational structures, which we introduce below.

Limiting power accumulation through prefigurative socio-political economic organization

To illustrate our framework for comparative analysis of socio-political economic alternatives, we explicate notions of power and subversion, then briefly tie these ideas into contemporary anarchist geographical thought. We follow Holloway (2005) in defining power as the ability to require or prohibit action in other actors. Power, then, is a characteristic of relationships, rather than an object one acquires; that is to say, power is a way of describing the ability of an actor (individual or institutionalized) to dictate the behaviors and choices of others. Pierce and Williams (2016) argue that there is an important distinction to be made between *acquisitive* and *subversive* forms of resistance. Acquisitive resistance is when the strategies for resistance involve "taking" power from oppressive actors. Pierce and Williams (2016) suggest that in contrast, subversive resistance includes strategies of resistance that reduce the *possibility* of power accumulation by dismantling structures of power accumulation and creating more egalitarian structures in their place.

Subversive resistance continues to be usefully illustrated by the growing contingent of anarchist geographic scholarship theorizing contemporary attempts at self-management, horizontality, and decentralized prefiguration (see Ince, 2012; Springer et al., 2012; de Souza, White, and Springer, 2016; Springer, 2016; Springer, de Souza, and White, 2016; White, Springer, and de Souza, 2016). Like Eisenstadt (2016), we see anarchism as a governing practice (rather than being formless or totally without governance), where some modes of governing will be more liberatory than others, and therefore deserve analytical distinction. If the subversive political goal is to prefigure possible worlds through relationships in the present (see Ince, 2012), we must be able to first "see" the many diverse forms of non-hierarchical organization, which we argue here can productively done with metaphorical imagery.

Resituating provocative organizational concepts as metaphors for alterity

Metaphors are inherent in language as tools of comparison that facilitate understanding by treating one object as if it were another, highlighting the abstract principles the two objects have in common (Barnes and Curry, 1992). The speaker using the metaphor utilizes the power of interpretation and abstraction to strategically emphasize particular facets of the object being described by comparing it to something else (Kelly, 2001). As Price-Chalita (1994) points out, metaphorical strategies can point to new worlds and empower speakers whose perspectives are often omitted from dominant paradigms. We follow Springer, asserting the importance of metaphorical choices in rhetoric as "deeply political" because "perception defines reality, not the other way around" (2017, 3).

By definition, all metaphors are imperfect ones, emphasizing some attributes of a process while deemphasizing others. The purpose of this paper, then, is not to identify a new and better paradigmatic metaphor—or even a new definitive collection of more correct metaphors—for describing socio-political economies. Rather, we offer an example of a process of examining candidate conceptual metaphors for non-capitalist socio-political economies with regard to the analytical value might they have for geographers (and other scholars). Different conceptual metaphors emphasize varying subdomains of economies, and thus provoke scholars to ask distinctive questions about the pattern-logics of socio-political-economies, moving scholarly analysis "forward" in varying directions with strong(er) theory that abstracts in generative and strategic ways.

Diverse economies scholars have most often avoided this kind of approach. Conscious of their concerns, we note that we are emphatically not seeking to create new closure about the limits of possible economic/geographic forms, but rather to cultivate some open-ended scholarly loci for analytical process about the various forms of alternative economies. We aim to stimulate thinking about what commonality

does exist between some economic networks without foreclosing attention to other simultaneous registers of systematic difference between economies. Attempting to articulate metaphors for—and thus identify empirical instances of—differentiated economic logics need not mean identifying a dominant, antihegemonic "winner." Tentatively, iteratively, and experimentally trialing how the organizational patterns from other empirical domains as metaphors for alternative economies can do (at least) two kinds of conceptual work. First, it helps to emphasize the taken-for-grantedness of other, more widely used metaphors—and, thus, their contingency. Second, it allows us to ask whether or not there are important undergirding patterns in already existing alternative economies that might be more easily described via metaphorical comparison. Ultimately, our objective is to inspire diversity in ways of seeing alterity.

Common orthodox and critical metaphors for capitalist economic relations and spaces: competitive and colonizing

Many already-existing metaphors are widely used to emphasize particular qualities of capitalist socio-political economies. Whether these metaphors were conceived with the intention of painting capitalism in a positive or negative light, they have proliferated in mainstream economic discourses and theory, reinforcing images and abstract principles of capitalism that alternative economies scholars seek to deconstruct. As Cudd (2007) points out, metaphors for economic activity have importantly facilitated the dominant ideology of capitalism. Since the 17th century, for example, the economy has been imagined as a self-regulating entity separate from other aspects of social life (Poovey, 1996). The economic sphere imagery importantly excluded "non-economic" activity, such as household work and the state, creating the notion of "separate spheres" of activity, which feminist scholars have deconstructed in favor of a more messy and interconnected understanding of economic activity (see Cameron and Gibson-Graham, 2003; Smith and Stenning, 2006; Lee et al., 2008).

Another set of metaphors emphasizes capitalism's rationality and competitiveness, drawing upon Darwinian notions of the "survival of the fittest" (Limoges and Ménard, 1994), or comparing the economy to a machine that operates rationally toward maximum efficiency, and a living body that requires the extraction and consumption of resources to produce outputs (Christensen, 1994). Adam Smith additionally used the metaphor of circulation, derived from images of blood in the circulatory system, to promote the idea of the economy as "naturally" fluid and self-perpetuating without outside interference (Alborn, 1994).

Marxist theorists also depended on metaphors of capitalism as a natural system with its own logic and self-perpetuation in order to illustrate its persistence and the necessity of its eventual death (Block, 2012). Other critics of capitalism began using the image of an octopus with arms tangled in many facets of social life to illustrate the ubiquitous power of corporations at the turn of the century (Block, 2012). Block (2012) notes that while these metaphors were first utilized by critics of capitalism, they were later embraced by neoliberal proponents of capitalism to suggest that "there is no alternative."

These metaphors tend to suggest that capitalism is the singular economic form, possessing its own agency (see Daya and Authar, 2012) as a self-perpetuating, ubiquitous, "natural" entity with its own rational order, separate from other realms of social life. Furthermore, popular economic metaphors assume that economic activity requires competition, linear methods of resource use and production, and the advancement of some players at the expense of others (i.e. the acquisition of power through dominating relationships). Either by assuming capitalism as totalizing, on the one hand, or requiring growth (individually and systematically), on the other, the metaphors above tend to take for granted the accumulation of material and relational power, occluding other imaginations for the internal logics of economic activity.

Two (potentially) provocative biologic conceptual metaphors for interrogating power

Many of the widely used analytic metaphors for economies discussed above emphasize dimensions of economies that align with accumulation of wealth and relational power. Since the predominant metaphors for socio-political economic order tend to emphasize hierarchical power relationships, subversive organizational models can be especially difficult to apprehend because they do not align with an accumulative or hierarchical metaphorical logic. This point is also made by Springer (2014), who demonstrates the ways critical (specifically, Marxist) geographers tend to assume all political organization must be hierarchical (and arborescent, following Deleuze and Guattari, 1987). Springer (2014) pushes for more rhizomatic ways of seeing already-existing political strategies (using the metaphor of the rhizome from Deleuze and Guattari). We take this argument a step further to look beyond the rhizome for multiple metaphors to help visualize subversive modes of organization that limit the possibility of accumulating power, either internally or in relation to other organizations. Rather than relying upon individual and collective ethics to drive new socio-political economies (as the diverse economies scholarship does), we ask whether particular organizational forms might have practical implications for--and differentially desirable outcomes with regard to--power dynamics in emerging non-capitalist spaces.

To this end, we propose two possible metaphors to help conceptualize alternative economies. These metaphors come from the biological sciences, so they are examples of real, existing order where power relations are structurally prohibited from accumulation. We highlight the importance of remaining open in theorizing new abstractions (which are inherently violent in nature), and of remaining dedicated to the value of conceptual and theoretical diversity in imagining alternatives (see Fickey, 2011; Lee, 2010). Upholding the diversity of abstractions also permits attention to the "continuing influence of locatedness both on theory's applicability and on its production," as Lawhon et al. (2016) emphasize. The positionality of the researcher as well as the specificities of place will affect the abstractions that are created and their ability to fit a situation. Therefore, we propose these two metaphors to begin an ongoing and iterative process of trialing metaphorical abstractions (among an arbitrarily wide number of possibilities) in order to help enable further empirical research that differentiates between various alternative modes of economy.

For each of the metaphors discussed below, we will introduce and situate the biological model of organization, noting how relational power works through each one. In the analysis and conclusion that follow, we will consider the potential utility of each for comparative analysis of actually existing diverse economies and propose directions for future empirical research.

Epiphyte organizations: autotrophic, nonparasitic, and nonscalable?

Epiphytes, a form of plant life, comingle spatially and often sit or rest upon more conventional (arboreal, etc.) structures. They are fed only by the ambient nutrients and water in the air around them, and despite their sometimes-mossy appearance are neither parasitic nor symbiotic with the biomass they tend to drift upon (most often trees or vines). Furthermore, epiphytes do not grow individually large, because of intrinsic scalar limits related to the ambient atmospheric nutrient load. Yet they do replicate themselves into very large communities of similar, small-scale organisms. There is no command center in an epiphytic agglomeration, no point of control. However, where the ambient conditions allow, epiphytes can collectively constitute a significant portion of the total biomass of a region. Epiphytic organizations, therefore, have scalar limits to the power that can accumulate within their boundaries, and they have no significant power relationship with regard to other socio-political economies beyond their individual organization's bounds.

Epiphytes might be helpful in conceptualizing particular economies that cease to function (or become something else) beyond a particular scale because of practical limits to their economic organization. One type of economy that could be described as epiphytic is a Really Really Free Market (RRFM), an event where people contribute unwanted household items to a collection and take items as desired (like a yard sale made up of free items from multiple sources) (Albinsson and Perera, 2012). RRFMs exist alongside mainstream markets, and are made possible by "ambient" resources, resources for which there is little or no competition, or, in this case, objects that sit around the house without use. RRFMs typically are organized by anarchist volunteers as monthly events, where their scale is determined by the items donated and the available local infrastructure (Albinsson and Perera, 2009). If a RRFM were to become too big for the volunteers and space to manage, it would be forced to replicate itself (either in time: holding events more often, or in space: forming multiple independent locations), rather than grow. To grow would require more organizational labor and space to manage the amount of items, ultimately requiring pay and the commodification of the market, at which point items would cease to be free and the RRFM would become a garage sale or a thrift store. Therefore, the RRFM has inherent, intrinsic limits to a particular organizational scale.

A more conventional and commercial example of an epiphytic understanding of organizations might be a new perspective on the prototypical "small business." The vast majority of entrepreneurial organizations do not grow beyond roughly ten employees. Research indicates a number of factors that limit small business growth, including restrictions to finance, the number of employees, and type of products or services they offer, but management practices and the goals and decisions of the business owner are typically considered the most important factors (Wiklund and Shepherd, 2003). Growth of small businesses beyond this scale takes particular kinds of initiative, desire, and (importantly) a systematic change in the character of the firm. Some scholars clearly differentiate between "slow growth" firms and "high growth" firms to emphasize this distinction (Johnson et al., 1999). In other words, a small business that stays comfortably small typically does not change in character much over its lifetime, but a business that grows beyond a particular scale (which may be unique to each business) is best understood as becoming a different kind of organization through the growth process. As Wiklund and Shepherd (2003, 1920) note, "Growth implies radical changes of the business characteristics. These changes may run counter to the founder's initial goals of, for instance, personal independence." While the literature on small businesses constructs growth as desirable for the economy and firms, several scholars also mention that business owners may intentionally keep their businesses small for personal or lifestyle reasons (Headd, 2003). They may be pursuing their business as a creative passion rather than an investment opportunity, they may wish to stay in the production line rather than work as manager, or they might want to keep their work hours minimal to allow time for family and community activities (Carter and Allen, 1997; Headd, 2003; Neshamba, 2006). Therefore, most small businesses do not fit into the dominant capitalist framework that assumes market growth to be desirable and typical.

The literature on small businesses is extensive, and clearly differentiates between businesses that scale up and those that do not. Other types of businesses or organizations may also exhibit a resistance to scaling, or else witness a complete change in character if they do scale (see Tsing 2012 for discussion of scalability and nonscalability). Less research has been conducted on the scaling or nonscaling characteristics of alternative organizational and business structures such as makerspaces, book cooperatives, or grassroots nonprofits. Organizations like these may have to remain small to maintain their original values and operational structure. For instance, member-owned food cooperatives that begin as oppositional organizations, but then scale up to gain benefits of efficiency or market reach, tend to mimic more conventional corporate grocery stores in their practices and ideology (Zitcer, 2013). Similarly, Cameron (2010) describes how two community supported agriculture (CSA) programs, when encountering high membership demand, remained cautious and intentional about growth due to their ethical commitments. One of the CSAs in her study limited its size and membership, while the other intentionally replicated itself in different localities so as not to grow beyond a manageable membership in each agricultural region.

In which situations might it be advantageous or necessary to operate as an epiphyte rather than some other form? Cameron (2010) highlights the *ethical* nature of the decision to not scale, but the use of organizational metaphors allows us to ask: Are there ways to scale an operation without compromising ethical intentions, and in which situations is this unproblematic scaling possible and impossible? Using these metaphors, researchers could explore the qualities of epiphytic organizations that make them resistant to scaling (contra other organizations—perhaps more essentially arboreal—that *do* scale without a significant change in character) and evaluate the benefits and drawbacks of economies that replicate rather than scale up. Researchers studying epiphytic organizations might also look for the ways in which these economies sustain themselves through various kinds of "ambient" resources and how these resources become available. The resources available might depend upon local incomes, for example, which could make epiphytes in some localities difficult or impossible. Further research could also explore threats to epiphytic organizations stemming from mainstream ideologies and practices. Really Really Free Markets, for example, are sometimes challenged by consumers who take items for free in order to sell them later, going against the values of the RRFM (Albinsson and Perera, 2012).

Slime mold organizations: voluntarist, coordinated, and flexibly scaled in response to stress?

Slime molds consist of single-cellular, independent, amoebic organisms, which can spend much of their lives acting independently. However, in colonies of sufficient size and under the right ambient conditions, these colonies/collectives begin to act in coordinated ways, as though a single organism, to mutual benefit. Colonies become collective (or, viewed differently, singular/unitary) under conditions of resource adversity. Operating without a centralized site of control, these now-collective organisms develop routes to food sources that are maximize efficiency *for the collective* rather than for individuals, and then share these resources equitably among the individual organisms. When operating as a collective unit, the slime mold mass can form fruiting bodies that emit millions of spores that can be carried by the wind and other organisms to new areas of greater abundance. During times of relative plenty, the colony then transitions back to a community of relatively independent cells. Organizations that resemble slime molds exhibit a temporary relinquishment of individual autonomy for collective benefit, yet exhibit no durable central node through which power may accumulate.

Slime molds can be a conceptual metaphor for social activity that responds to stress with resource sharing and mutual help. In the period directly following disasters, for example, researchers have found that stressed localities sometimes see a brief period of increased social support with mutual help occurring across racial and economic boundaries, with low rates of conflict, and high incidence of peaceful cooperation (Kaniasty and Norris, 1995). Most disaster victims, in the very beginning of the recovery process, rely on this informal system of social support even when formal aid programs are present (Kaniasty and Norris, 1995). The initial period of mutual aid and strong social support after disasters typically disintegrates quickly, either when the community becomes fragmented and polarized due to social difference, or when their needs begin to exceed their available resources, and they turn to conventional aid programs bringing resources from outside of the locality (Kaniasty and Norris, 1995). In October 2012, when Hurricane Sandy hit New York, the network of mutual support that emerged grew into a sustained, coordinated effort, Occupy Sandy, which mobilized roughly 60,000 volunteers at its peak (Ambinder et al., 2013). While some volunteers ultimately had more power over decisions than others, the effort aimed to decenter power as much as possible, using on-the-ground volunteers and the web to crowdsource information and ideas (Huang, 2015). Occupy Sandy distributed information and coordinated volunteers to facilitate resource distribution from those with excess food, water, and other necessary items to those most affected by the storm (Huang, 2015). Its horizontal structure was praised, even by the U.S. Department of Homeland Security, for its ability to address local needs where mainstream, more bureaucratic relief efforts fell short (Ambinder et al., 2013).

Slime molds echo classic anarchist calls for "free federation," which is imagined as a model of social organization in which individuals contribute to collectives with which they agree and which they wish to support without recourse to force or duress; Ward (1966) calls this organization in "the absence of authority." Kropotkin writes (1927, 184):

We seek progress in the fullest emancipation of the individual from the authority of the State; in the greatest development of individual initiative and in the limitation of all the governmental functions, but surely not in their extension. The march forward in political institutions appears to us to consist in abolishing in the first place the State authority which has fixed itself upon society and which now tries to extend its functions more and more; and in the second place, in allowing the broadest possible development for the principle of free agreement, and in acknowledging the independence of all possible associations formed for definite ends, embracing in their federations the whole of society. The life of society itself we understand, not as something complete and rigid, but as something never perfect--something ever striving for new forms, and ever changing these forms in accordance with the needs of the time. This is what life is in nature.

Free association can be seen metaphorically in slime molds: individuals (i.e., cells) seek to maximize their individual outcomes except when conditions require collective actions that maximize collective benefit in order for the wider community to thrive best. But these patterns of organization are not durable; they are, as per the anarchist view, discovered iteratively and discarded when they are no longer immediately necessary.²

Slime molds as a metaphor might help researchers ask questions about the conditions that facilitate the most effective and equitable resource distribution during periods of resource scarcity or social crisis, in relation to the scale and scope of the effort, methods of decision-making, the coordination of volunteers, and sourcing materials for distribution. Researchers might additionally deploy slime mold metaphors when trying to wrestle with the implications of volunteerism or non-durable organizational forms. For example, volunteerism is believed to be evolutionarily selective in slime molds just as social organization is believed to in humans; thinking of volunteerism through a slime mold metaphor might help draw attention to the benefits and drawbacks of permanence in social organizations, or the 'natural' temporal rhythms of organization and organizational decay.

Conclusion

Each of the two metaphors described above emphasizes certain attributes of socio-political economies more than others and foregrounds a distinct set of relations of power which might counteract dominant narratives about the inevitability of capitalist economic hegemony. These relational vocabularies are metaphorical because they analogically apply patterns of power relations in one domain (e.g., techniques of reproduction in epiphytes) to another (the nature of relations within and between small businesses). They are conceptual in the sense that they abstract away the characteristics of socio-political economies that do not map onto the model pattern. Such metaphors help to do the hard work of peeking beyond the horizon of captialocentric power relations. They offer counter-concepts that have not already been internally colonized by hegemonic patterns of thinking, and they can provoke a questioning analytical approach that serves as a hybrid between (choral) eternal openness and the pre-question closure

² It may be that slime molds also echo anarchist thought in that on first contact, they are sometimes found intuitively repulsive to those accustomed to more arboreal imaginations.

of a "communist hypothesis" (Baidou, 2008; Swyngedouw, 2010) that Gibson-Graham so consciously resist.

Having a diversity of metaphorical models can aid in comparative analysis that explores different research questions. Epiphytes are unable to grow beyond a particular scale and unable to actively compete with other organizations for resources, which raises questions regarding the political implications of these limits on power and resources. Slime molds collectivize relationships without permanence, drawing analytical attention to the moments in which individual autonomy is surrendered for collective gain, and collective organization is dissolved for individual autonomy.

We emphasize that these trial metaphors are points of analytical entry rather than guarantees of alternative 'success,' either analytically or in supporting the development of actually existing alternatives. But—truly—from where else are we all to draw conceptual inspiration? How telling is it that eminent scholars such as Harvey (2000) and Badiou (2008) lament the great challenge of imagining possible futures in concretely positive rather than abstractly negative terms, while others (Gibson-Graham, 2006) resist imagining them specifically at all?

We identify two key characteristics in seeking candidate conceptual metaphors to trial. First, and responding to Gibson-Graham, they should be non-totalizing: we are skeptical of metaphors which seem plausible only in the instance that they completely replace the existing socio-political economy with a new state of the field. Second, and responding to Marx, they should be at least somewhat resistant to cooptation: alternatives are not alternative if they are straightforwardly integrated into the ongoing project of capitalist development. Additionally, we are particularly interested in metaphors that are relatively resistant to the production of hierarchical power relations: we adopt the stance that a key strategy for thinking about alternatives to existing hegemonic power relations is identifying possibilities for resistance that do not accumulate relational power (see Pierce and Williams, 2016 for larger discussion).

We are also, following Gibson-Graham, wary of the potential for new conceptual hegemony and hopeful for a plurality of alternative metaphors. Pierce and Williams, in examining Purcell's (2014) adoption of Deleuze and Guattari's rhizome as a conceptual metaphor, articulate this concern:

The rhizome is surely a powerful metaphor, but only one example of a potential multitude of metaphors for the social/spatial annihilation of power through the act of escape from hegemony. [...] We argue that rather than privileging the rhizome per se, the rhizome can serve as a signpost—a well established vanguard—toward a plurality of minoritarian, alternative political imaginations and metaphors. (Pierce and Williams, 2016, 180)

The present intervention expands on Pierce and Williams' concerns by proposing an ongoing process of identifying and trialing metaphors, rather than adopting and consolidating any one.

The crucial work that new conceptual metaphors can do is to provide atypical yet imaginable conceptual objects against which to evaluate the chaotic noise of the real. These metaphors are useful if they help researchers to identify candidates for useful socio-political economic patterns in actually-existing alternative economies. It is beyond the scope of this paper to say whether or not particular organizational forms resembling epiphytes or slime molds are (toward any particular end) superior to other socio-political economic orders—including capitalist ones, for that matter. Instead, we strive to model a process for identifying and comparing socio-political economic patterns which can then be evaluated for the (putative, distinctive) social and political work that they do. We intend to identify a point of experimental conceptual departure. Like Gibson-Graham, we also hope to indefinitely postpone final conceptual closure.

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