# Resurrecting Scale in an Emergent Geography of Religion

### Dr. Michael P. Ferber

Department of Geography
The King's University College
9125 50 St. Edmonton AB T6B2H3
Canada

### Dr. Trevor M. Harris

Department of Geology and Geography
West Virginia University
330 Brooks Hall, 98 Beechurst Avenue
Morgantown, West Virginia 26506-6300
United States of America

#### **Abstract**

Scale continues to be a contested concept in human geography such that some have argued for the term to be expunsed from the geographical lexicon. Alternative viewpoints contend that as a nuanced social construction, scale can deliver engaged and self-reflexive accounts of social life, even in a field as complex and contested as religion. Critical realism and emergence can contribute significantly to the ambiguated discussion of scale as social practice, extent, level, and process. A case study of adherents in three churches in West Virginia is used to demonstrate the value of emergence in a scaled geography of religion.

**Keywords:** Scale, Critical Realism, Geography of Religion, Emergence, West Virginia.

## Introduction: Debating Scale

Issues of scale continue to permeate not just geography but also the broader social sciences and, with the advent of the spatial humanities, the humanities as well (McMaster and Sheppard, 2004; Bodenhamer et al., 2010). While many may still think of scale in its more simplistic form representing the ratio of map distance to actual distance, in reality the complexity and implications of a scaled world extends well beyond such relatively simple notions. The Brenner-Marston exchanges (Brenner, 2001; Marston 2000) are indicative of both the centrality of scale to our understanding of society and nature and to the ongoing intensity of the debates that surround the methodological and epistemological meaning of scale and its elusive social construction. Valuable as these exchanges are, the scale debate may have done as much to confuse the uninitiated as to inform. The reward, even for those who followed the intricacies of the expert exchange, was to be confronted with the stark declaration that 'scale was dead' (Marston, 2005). To advance the scale question this paper reviews the key elements of the scale debate, and links these discussions to the insights provided by concepts of emergence and as espoused in critical realism. The geography of religion is used as a vehicle to identify how an emergent geography can enable a scalar approach to geographical and ecological studies that encapsulates many of the epistemological themes raised in the scale debates and enable pluralistic methods to be used at differing scale levels of a study. The paper concludes with a discussion of how emergence might contribute to the scale conundrum facing geographical studies

## The essence of the scale debate

Marston's (2000) paper, which sparked the "Marston-Brenner Debate," assembled a decade long record of research that had contributed to contemporary understanding of the social production of scale. His anthology moved through Howitt's (1998) metaphorical use of musical scale, Agnew's (1997) work on political parties in Italy, Herod's (1998) investigation of the International Metalworkers' Federation, Adams' (1996) work on oppositional movements, Brown's (1995) investigation of AIDS politics, Leitner's (1997) examination of tension among nation-states in the European Union, Miller's (1994, 1997) investigations of state defense investments, and Brenner's (1997) extended analysis on the social production of scale. Yet despite detailing the contributions of these and other theorists to the scale dialogue, including Brenner (1997b), Smith (1990, 1992, 1997),

Cox (1995, 1996, 1998), and Taylor (1982, 1984, 1987) in the end Marston (2000: 233) was left to conclude that, "contemporary writing about scale in human geography has failed to comprehend the real complexity behind the social construction of scale and therefore only tells part of a much more complex story." Her own research on the household was used to illuminate the limitations of scale theory. While Brenner (2001) agreed with many of Marston's points, he critiqued her for the implied "analytical blunting of the concept of geographical scale," a problem common in the "noticeable slippage in the literature between notions of geographical scale and other core geographical concepts, such as place, locality, territory and space," that caused scale to collapse into "an over generalized chaotic conception" (2001: 593). Brenner's primary concern was with Marston's use of the household as a geographical scale which he suggested operated more as "a sociospatial arena, territory, locale, or place rather than as a geographical scale in the technical sense of the term" (2001: 598). Hence, the term geographical scale had been blunted and was now used to describe nearly any shift within social practices or processes.

Subsequently, Marston and Smith (2001) agree there had been an analytical blunting of scale but they refute Brenner on two fronts. First, they disagree with Brenner's perceived idiosyncratic genealogy of the scale theories he asserted, arguing that these were based on the same slippage between scale and space that he rejected, since his "reading depends on the insinuation of many statements about space as statements about scale" (616). Second, Marston and Smith question why the scale of the household is dismissed as a singular rather than as a plural construction and they express disappointment about the perceived patronizing dismissal of gender and social reproduction at the household scale. They subsequently posit a potentially more volatile question themselves: "One can imagine the response if the original article had dismissed states as 'relatively stable background structures" (618).

Intervening in the debate, Purcell (2003: 319) described these interactions as a "disconnected nondebate," arguing that while both Marston and Brenner are essentially correct in their main arguments and in their critique of the other's limitations, they were unable to hear each other's argument. Purcell argued that Brenner was not suggesting that a household cannot be a scale, but that Marston offers a singular analysis of the household, and not an analysis of the household's scalar nature. Purcell also contended that Brenner essentially ignored Marston's original suggestion to methodologically expand scale research away from islands of practice that caused scholars to remain embedded in research and writing practices that limited engagement beyond immediate interests such as the household and to the exclusion of other scales. Brenner's approach, Purcell suggests, is topical, focusing as it does on capitalist production and the state. Hence, Purcell calls for a methodological agenda for the discussion of scale that would broaden the scope of analyses and create a more synthetic critical geography.

In similar vein, ecologists such as T.F. Allen (1998) also raised concern about the symbiotic relationship between process and scale. Allen questioned the appropriateness of observing levels of organization without taking into consideration the processes and relationships that are present. Allen uses a scalar metaphor and compares the properties of an elephant with those of a pond skater, stressing that fundamental relationships exist between the size of organisms and the surface tension of water. He jests, "It would have been very convenient for Hannibal if his elephants could have skated like insects across the Mediterranean to Rome. However, there was nothing he could do to achieve pond-skating pachyderms, even if he had conceived such an idea." The processes that enable a pond skater to remain afloat would have been altered by the changing allometry of the pond skater and not least the insect's new weight. Significantly for most social science and humanities studies, changing scale is not merely a case of 'scaling up'. Jumping scale implies redefining the relationships and processes that are intrinsic to the phenomena under study. The concepts of emergence discussed later provide valuable insights for scholars in addressing these critical scale issues.

Sayre (2005) and Paasi (2004) consider the relationship between scale and process to be so critical that Sayre declared scale to be the "fundamental conceptual problem in ecology, if not in all of science" (277). Sayre suggested that Purcell's argument did little to bring resolution to the Marston-Brenner debate and he drew attention to the differentiation that ecologists make between an *ontological* moment of scale, in which scale appears as intrinsic to some external reality, and an *epistemological* moment of scale, in which one's choice of scale heavily determines what is seen. The epistemological moment emphasizes how one observes something, rather than what is observed. The ontological moment conceptualizes scale in terms of relations which are considered to be objective realities.

In this sense, the elephant-sized pond skater sinks because of its altered allometric relations to the surface tension of water (Allen: 1998). Ecologists largely define scale in the epistemological moment in which grain and extent closely parallel the use of the terms resolution and extent in geography (Sayre: 2005). Grain is the finest level of resolution available for a given dataset, while extent is the size of the study area or the duration of the study. In the ontological moment, ecologists make a distinction between scale and level where scale refers to processes and relations, while level is an abstract device imposed on data by the observer. Sayre (2005) concludes that had these distinctions about scale that were developed in ecology been applied to the Marston-Brenner debate, there might not have been any disagreement at all. Sayre suggests that in Marston's original paper, the case study is about scale as it links processes across levels of social organization, but that the case study did not demonstrate why scale matters for the particular processes under examination. In Sayre's opinion, it would have been preferable to perform an analysis of processes associated with one level (the household) that would then elucidate processes at other levels such as at the municipal, state, or national government levels.

Also helpful in linking the ecological conceptualization of scale and human geography's concepts of scale is Sayre's (2005) analysis of Brenner's 'analytical blunting' of the singular and plural senses of scale. In this respect, Sayre argued that the distinction is again essentially similar to the ecological distinction between scale and level and here framed the argument: "If one conflates scale and level, then any analysis of any level – household, community, region, etc... - can be deemed an analysis of (a) scale, without necessarily treating the processes that determine that level of social organization, and that mediate its relations to other levels" (Sayre, 2005: 285). Ultimately, he suggests, different processes can be discerned at different scales, and the ability to identify and understand these processes necessarily changes with the scale of study. This is of course a tenet that is central to ecological fallacy (Openshaw, 1983; Author 2, 2006; Purcell, 2003; McMaster and Sheppard, 2004).

In similar manner, Mansfield (2005:460) also questioned the use of hierarchical scale suggesting that "spatial scales should not be taken for granted as ontologically given, discrete objects, but should be questioned and examined as relational processes" and as dimensions of space. She suggested that scale should be thought of in relational terms of simultaneous multiple scales and that the concept of dimensionality best demonstrates how multiple scales are intertwined and work together as relational processes. In her study, the national is not a level, but a dimension of social practice. In this manner, relationships and processes are central to understanding the complexity of changing scales of analysis. This reigns true for traditional debates such as ecological fallacy and the Modifiable Area Unit Problem (MAUP), as well as for more recent debates in ecology, political geography, and economic geography.

One would assume from the above discussion that although scale is complex and nuanced it is nonetheless robust and merits celebration even in the midst of this complexity. Yet, for some geographers, the intricacies and nuances surrounding scale is justification alone for its demise, making one wonder once again whether there truly is progress in human geography (Bassett, 1999). Marston, Jones and Woodward (2005) gave four reasons why scale should be stricken from the geographical lexicon and banished to the annals of history. First, there is too much confusion between "scale as size – what is also called a horizontal measure of 'scope' or 'extensiveness' – and scale as level – a vertically imagined, nested hierarchical ordering of space" (Marston et al., 2005: 420). Arguing that there is insufficient ground to maintain a distinction between the two, Marston et al. assert that scale as size and scale as level should be collapsed one into the other, and that more often than not the horizontal will fall victim to the vertical. Second, moving between scales such as between the local and the global requires a reimagination of oppositional associates between phenomena such as place and space, difference and sameness, concrete and abstract, and agency and structure and there is thus the "difficulty, if not the impossibility, of disentangling scalar hierarchies from a Trojan horse" (Marston et al., 2005: 421).

Third, "hierarchy has become the vertical equivalent of the spatial scientist's 'grid epistemology,' recruiting researchers to its scaffold imagery" (Marston et al., 2005: 422). Thus, empirical work is "lashed to" specific *a priori* levels such as "body, neighborhood, urban, regional, national, and global"; and "scale is a classic case of form determining content" (ibid.). Finally, scale is bound to a "methodological perspectivism" whereby "levels of scale suggest an epistemological hoist – a methodological leg-up" granting a "transcendent position for the researcher" (ibid.) that undermines every attempt at self-reflexivity. Geographers, claim Marston et al., are forced into making one of three responses to hierarchical scale: 1) affirm it, 2) develop a hybrid model, or 3) abandon hierarchical scale in its entirety (ibid.).

They (2005) reject hybrid solutions that link hierarchical with network conceptualizations of socio-spatial processes arguing that even among network theorists a verticality that structures the nesting so central to the concept of scale, and with it the local-global paradigm, reigns supreme. In the light of these criticisms, Marston et al. conclude that scale is "found deficient: it does the same heuristic work as its cousins of scope and extension; it is bound to reproduce a small-large imaginary and with that, pre-configured accounts of social life that hierarchize spaces of economy and culture, structure and agency, objectivity and subjectivity, and cosmopolitan and parochialism, and....cannot deliver engaged and self-reflexive accounts of social life" (ibid.). As a result, the authors "elect to expurgate scale from the geographical vocabulary." Scale is, for these geographers, dead! While most reactions to the article have been negative (Neumann, 2009), many are sympathetic (Collinge, 2006; Hoefle, 2006; Jonas, 2006; Leitner and Miller, 2007). Among the sympathizers, Moore (2008: 213), suggests, "it is unclear why geographers should continue to maintain a commitment to scale as a category of analysis."

So, after at least a thirty-year ongoing debate among human geographers, some have reached the position that a funeral for scale is in order. We disagree, for the processes and relations that occur at various physical and social scales still remain, whether or not we frame them in terms of hierarchical scale or Actor Network Theory (ANT). Nonetheless, many geographers might argue we are in denial, and dealing with this tragic demise through Kubler Ross's five stages of death. But, before singing a dirge for scale and ordering consolatory flowers, perhaps there is still hope for it as an epistemological and even, dare we say, an ontological tool. Death is always tragic, and when confronted with such dilemmas it seems appropriate to turn to one or both of two sources: religion or philosophy. Since philosophy has fallen short in clarifying the issue of scale, let us turn to religion.

## Emergence, critical realism and the Geography of Religion

We propose that a critical realist concept of emergence is a valuable framework for addressing the scaled complexity of adherence and fidelity in Geography of Religion (GOR) and, indeed, in geography as a whole. Geographers of religion would certainly benefit from the ongoing dialogue on scale outlined above, not least because there has been little recognition in GOR regarding what scale is, or means, to religionists and religious studies (for an exception see Stump, 2008). This is not to suggest that all geographers of religion are unaware of the conversations that have taken place about scale (Author1, 2010b; Holloway, 2000). Rather, it appears as though geographers of religion, as with many other scholars in the social sciences and humanities, have been content to allow these discussions to transpire in other communities and predominantly in human geography and ecology. In this respect geographers of religion are perhaps not atypical of the majority when it comes to understanding scale.

While there is little debate on the meaning or implications of scale in GOR, there are nonetheless many scaled studies within the field. With the exception of non-hierarchical work from scholars such as Holloway (2000) and his use of Actor Network Theory, and Tweed's (2006) theory of religious crossing and dwelling that transcend scale, the vast majority of GOR studies involve hierarchical scale and the aggregation of data (mostly adherent census data) at scales beyond that of the individual. The classic cartographic metaphor of this work in United States GOR is the choroplethic map portraying religious adherents mapped by county and as captured in many religious atlases (Knippenberg, 1992; Henkel, 2001). Despite the emphasis on county-based mapping, geographers of religion have been remiss in not thoroughly investigating issues of cartographic representation and scale in the mapping of religion. What critique that does exist is waged against largely empirical studies as used in the three landmark atlases of religion in the United States (Carroll, 2000; Gaustad et al., 2001; Newman and Halvorson, 2000). Arguably, the use of county level data masks processes and patterns occurring at sub-county levels and the studies are rife with the Modifiable Areal Unit Problem which is rarely acknowledged, if at all. We suggest that a critical realist (CR) emergent approach offers significant insight into the scale debate.

In CR, the world is stratified hierarchically with physical mechanisms in one stratum, chemical mechanisms in another, biological in a third, and psychological and social strata at the highest levels (Danermark, 1997). Each stratum is formed from the powers and mechanisms of the underlying strata. The objects in these strata have emergent powers, defined by Sayer (1992: 119) as "powers or liabilities which cannot be reduced to those of their constituents." Critical realism founder Roy Bhaskar and methodologist Berth Danermark (2006) suggest that a laminated reality is comprised of several different levels comprising a) the sub-individual or psychological level, b) the individual or biographical level, c) micro- and small-group level analysis as studied by ethnomethodologists and others, d) the meso level of functional roles such as those of disabled workers or capitalists,

e) the macro level typically associated with society, f) the mega level of civilizations and traditions, and f) the planetary level of globalization. Bhaskar and Danermark (2006) do not posit these levels as permanent structures but as an unending process in which each hierarchical framework represents the best understanding "at the moment" (Archer, 2007)

Significantly, emergence occurs "when the properties of underlying strata have been combined," and "qualitatively new objects have come into existence, each with its own specific structures, forces, powers and mechanisms" (Danermark et al., 1997: 60). In CR the stratification of reality in such a way implies that causal mechanisms can be recognized as one moves through these strata and new non-reducible properties and mechanisms are identified at each specific stratum. Inkpen (2005) suggests that each stratum is composed of entities that are not reducible to entities found at lower strata and that each stratum may have unique entities which interact according to relations and processes appropriate to the strata while also interacting with relations and processes found in lower strata." The concept of emergence then potentially avoids a major criticism of scaled approaches in geography, namely reductionism. Researchers may "jump scale", but without reducing one strata to another.

# An emergent geography of religion

CR recognizes that a stratified structure to reality is characterized by synchronic emergent powers materialism in which reality is divided into strata in a similar sense to that of sub-surface geological strata. In order to demonstrate the concept and value of emergence we conducted a case study involving two denominational congregations and one independent church in Harrison County, WV (Author1, 2010a). It is primarily at the level of the local church that a denomination encounters the world and the structures of society. In this sense, "local church" refers to a specific body of believers meeting in a specific community, and "church" refers to the larger denomination. This perspective emphasizes that local churches are not isolated from society at large. Rather, they are "linked to other parts of the community through the multiple memberships and loyalties of their members" (Ammerman, 2003). While the local church is the primary organizational and recognizable entity in most ecclesiastical bodies, it is possible to discern two other sub-church scales: the individual adherent and small groups. The individual adherent represents the non-modifiable unit in the geography of religious adherence because it is impossible to disaggregate beyond the individual. Combinations of individual adherents may form into small groups to meet under the umbrella of the local church for spiritual or specific administrative purposes.

An important question arising from this emergent framework concerns the point at which small groups of adherents "emerge" into a new phenomenon with new powers and mechanisms that are different from those of the individual adherent or the larger church congregation. Arguably, small groups could qualify as a new emergent stratum, particularly those groups that impact the decision-making capacities of the church itself. One could also argue that most small groups are simply amalgamations of individual adherents, and that any new powers and mechanisms are, in reality, not new but already present in the adherents themselves. In this latter case, when adherents come together on a committee to make decisions representing the local congregation, it is actually the actors (the adherents) themselves who are activating mechanisms and making decisions on behalf of the rest of the church. Yet, from a critical realist perspective, it is the structure of the committee that imparts the authority to make decisions and this structure is not available to other congregants. It is from this scaled structure of the small group that new powers emerge. Members of a finance committee, for example, may have the power as agents of the church to spend money on behalf of the congregation who, although they give money to the organization, do not have such power.

This example is in contrast to a small group that meets to satisfy the spiritual needs of adherents rather than to act for the congregation as a whole, in which case new emergent powers and mechanisms do not necessarily exist at the structure of the small group. Hence, "jumping scale" from individual adherent to small group may reveal new powers and mechanisms in some instances but not in others. While the emergence of new powers at the scale of the small group is perhaps intermittent, it is arguably less so at the scale of the congregation where powers and mechanisms are revealed that are not present at the scale of the individual or the small group. A "church" congregation is discussed in the singular tense, even though the adherents within a church are discussed in the plural. This linguistic distinction alone reveals that new emergent powers have formed; a fact recognized in that most churches are legal entities. The physical structure of the church building itself can be an ideological and symbolic icon for entire communities.

Obviously, churches cannot be reduced to a mere physical structure but rather they exist as an intricate and multifarious web of relationships spun between families and friends, neighbors and neighborhoods. Nonetheless, it is at the scale of the local church that the individual faces of adherents begin to merge and emerge into generalized, highly complex, structures of ideologies and programs that represent the emergence of the church.

Like congregations, the church corporate also demonstrates emergent powers. Local groups of churches in hierarchical denominations coalesce to form vicariates or districts that provide for, and enable, training activities and mission opportunities. In both the Catholic and the United Methodist denominations, churches are subdivided into parishes that are largely informalnetworks lacking a central office or paid administrative staff. Representatives of churches, especially local clergy, serve the parish in ways similar to that of a non-governing committee in a local church. The parish does not make decisions that affect the governance of the local churches, nor does the parish have any authority over the staff or lay members of a local congregation. Hence, like the spiritually oriented small groups of a local church, the parish may or may not have its own emergent powers that are different from those of individual churches. However, some parishes are organized into vicariates or districts that do have central offices and paid staff. In these instances a vicar or district superintendent oversees the operations of all local churches in the district, and has direct authority over the clergy in those locations. The existence of a central office with a staff and a budget represents new emergent powers at this level of the hierarchy. These powers are further removed from those present at the scale of the individual adherent.

United Methodism is not the only church hierarchy with structures that are organization-wide and that seek to bring about transformation. Indeed, denominations reflect differing organizational and doctrinal structures ranging from the hierarchical Roman Catholic Church to Independent Churches that only loosely associate across denominational lines. The emergent powers of a church therefore may vary markedly. Denominationally-sponsored organizations such as Catholic Charities, for example, draw on local Catholic churches to enable a global outreach program to support communities and countries in need. These emergent denominational powers and properties, which are facilitated through national and international offices with trained staff members, look very different from the approaches utilized by independent churches, particularly in terms of strategic intervention in national and international initiatives. In an independent church, missions beyond the community are based on relationships and networks of local congregational adherents with other individuals or churches in another state or country. The contrast between mission support and outreach in an independent church and outreach in denominational churches are effective and important demonstrations of congregational outreach and yet they are operationalized in very different ways.

Emergent powers and mechanisms exist in these denominational structures that are not possible in the structures of independent churches. Powers and mechanisms exist in local churches, including independent churches even though they do not have a strictly defined hierarchical structure that could potentially impact national and international scales. Yet, without the emergent powers of a church hierarchy this impact is arguably different. Over the course of the last forty years more independent churches have entered the religious landscape of North America, leading to a growing loss of the emergent stratum present in the upper levels of most church hierarchies. The transition from a geography of religion focused on adherents to a geography of religion focused on emergent irreducible entities, and the methodological implications of this distinction, reinforces a specific nomenclature separating a geography of religious 'adherence' from a geography of religious 'adherents'. A geography of religious adherence involves the relations, processes and mechanisms surrounding why, when, where, and how a specific adherent attends, participates, and relates to a specific congregation and denomination and how this participation impacts the organization at other scales such as the church, parish or denomination.

A geography of religious 'adherents' would involve a statistical accounting of the number of people attending a specific church in a particular place and include general, aggregated characteristics of those adherents. Importantly, an emergent geography of religious adherence would, by necessity, incorporate the scale of the adherent, but would not neglect emergent bodies through aggregation. This definitional separation is valuable since it distinguishes the emergent geography of adherence with its scaled relations, processes and mechanisms, from the study of adherents with its focus on a fixed scale and statistical aggregations. In an emergent geography of religious adherence, other important criteria become apparent. A methodologically pluralistic critical realist study of the GOR could be oriented toward either approach, but would arguably be more concerned with adherence without neglecting the value of adherent studies because it would place central importance on the relations and processes that emerge at differing scales.

A geography of religious adherence is thus focused on asking questions rooted in scaled relationships and processes in order to discern emergent properties and mechanisms. A geography of religious adherents on the other hand, is rooted in questions of numbers, tallies, aggregated units, and statistics to gauge the state of a religious body and the church corporate.

#### Conclusion

Scale remains problematic in the geography of religion and in geography in general. We suggest that emergence is a powerful mechanism that links the epistemological and ontological moment of scale with the ecologists' concepts of scaled process and extent. A robust understanding of the geography of phenomena, let alone religion, cannot consist solely of aggregated choroplethic maps, for this approach neglects the role of agents and offices operating in church hierarchies at scales beyond, or below, that of the scale of analysis in question. We have sought to demonstrate here that geographies are both emergent and irreducible. In the social sciences and the humanities, questions about scalar relationships between an individual and society are critical. Danermark et al. (1997) suggest that the relationship between the parts and the whole does not have to result in reductionism. In the geography of religion, the individual adherent is the non-modifiable unit of religious adherence, yet numerous scales with associated emergent powers exist beyond the adherent, including the congregation and the denomination. These emergent congregational and denominational powers and properties, which are facilitated through scaled structures and hierarchies, do not reduce the non-modifiable adherents.

Rather, the new mechanisms and powers functioning at these emergent scales are given dominance and enable pluralistic methods to be brought to bear appropriate to the scale in question. Because questions pertaining to adherents, churches and church hierarchies are unique to the powers and mechanisms functioning at each stratum, methodological pluralism is necessary, and possible, for a robust and scaled geography of religion. What is important for this discussion of emergent scale in GOR is that a hierarchical understanding of scale is not inappropriate, because at each level the researcher is not reducing or conflating properties, powers and mechanisms, but is seeking and recognizing unique emergence. We suggest that the concept of an emergent geography, and the value of pluralistic methods appropriately applied, may not resolve the scale debate but certainly moves the field incrementally forward. As a conceptual tool, scale need not be expunged from the geographical lexicon. Rather, a non-reductionist emergent scale incorporating abstraction and methodological pluralism is sufficient to "deliver engaged and self-reflexive accounts of social life" (Marston et al., 2005).

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