This essay offers a practice theoretical analysis of three prominent spatial dimensions of large social phenomena: the objective spaces they encompass, the interwoven timespaces they exhibit, and the applicability to them of the notion of levels. I begin with a few words about the spaces of social practices. I do this because my ideas on this topic inform my account of the spatial dimensions of large phenomena. This opening section also summarizes ideas developed elsewhere (Schatzki 2002, 2010).

## **Spatial Practices.**

Practices are inherently spatial phenomena. Moreover, the spaces pertinent to social life are ever increasingly the product of practices. The social practices that make spaces themselves are and have spaces.

The term "practices" is pervasive in social theory today. It is often used almost unreflectively, in a manner suggesting that the person using it construes his or her subject matter either as rooted in or as a form of human activity. Others have elaborated conceptions of social practices and explicitly theorized social life through them (e.g. Bourdieu, Giddens, Shove, Reckwitz, Kemmis, Gherardi). Their theories uphold the thesis proffered in the previous paragraph, that social practices make and have spaces. The present essay focuses on my own interpretation of this claim.

As I construe them (see Schatzki 1996, 2002), practices are nexuses of human activity, open-ended sets of doings and savings organized by understandings, rules, and teleoaffectivities. These organized activities are inevitably, and often inextricably, bound up with material entities. Doings and sayings, for example, are carried out by embodied human beings. In just about every practice, moreover, people deal with material entities. Most practices, finally, would not exist without materialities of the sorts dealt with in them, just as most material arrangements today dealt with in practices would not exist in the absence of these practices. Because the relationship between practices and material arrangements is so intimate, it is the notion of a bundle of practices and arrangements, and not just that of a practice simplicitor, that is fundamental to analyzing social phenomena. The conviction that some amalgam of activity and materiality is ontologically and dynamically fundamental to social analysis is shared by a range of contemporary theoretical approaches including actor network theory, sociocultural theories of mediated action, object-centered socialities, and some accounts of science. By a material arrangement, incidentally, I mean linked people, organisms, artifacts, and things. To say that practices and arrangements bundle is to say (1) that practices effect, use, give meaning to, and are inseparable from arrangements while (2) arrangements channel, prefigure, facilitate, and are essential to practices.

I wrote that social practices, that is, practice-arrangement bundles, make and have spaces. Bundles are inherently spatial in two key ways. First, the material arrangements that a bundle encompasses, which include the bodies of the people who perform the actions that make up the practices in the bundle, form objective spatial configurations. (Something is objective if it persists independently of human activity, experience, and understanding, even if it is or was effected through human activity). Note that activities are localized in objective space because doings and sayings are largely bodily performances and thereby located at the bodies involved. An act of waving, for example, takes place where the moving of the hand that constitutes that act occurs. Similarly, directing a promotional campaign takes place in the totality of locations where the multitude of bodily doings and sayings that constitute the activities in which directing the campaign consists (giving instructions, taking phone calls, meeting with staff, writing reports etc.), occur. The bodily movements that occur when people perform the doings and sayings that compose a practice, together with the material entities that form arrangements bundled with that practice, form an objective spatial configuration.

A second way practice-arrangement bundles are inherently spatial is that they contain interwoven activity timespaces (see Schatzki 2010). Activity timespace has both a temporal and a spatial. Its temporal component pertains to the teleologies and motivations that govern activities and will be set aside in what follows. Its spatial component embraces arrays of places and paths anchored at material entities, where a place is a place to perform such and such an action and a path is a way from one place to another. A desk, for example, can be a place to write (or to think or watch the teacher etc.), while a door can anchor a path from the classroom to the hall. Places and paths pertain to human activity not just because they are places and paths for activity, but also because people proceed through the course of their day sensitive to the arrays of places and paths about them.

The (time)spaces of different people's activities interweave due to common, shared, and orchestrated components (see below). These common, shared, and orchestrated components are features of the practice-arrangement bundles of which the activities concerned are elements. Any such bundle exhibits a complex activity space that embraces (1) common, shared, and orchestrated places for the actions that make up the bundle's practices and (2) common, shared, and orchestrated paths for getting between those places. These places and paths are anchored in the entities that make up the bundle's arrangements. This collective existential spatiality also rests on (1) the practices people enact (the activities that compose practices together with the rules, understandings, and enjoined and acceptable ends, purposes, and emotions that organize them) and (2) the material arrangements amid which they do so. In short, interwoven (time)space is an inherent feature of practice-arrangement

#### bundles.

I do not claim that objective configurations and interwoven path-place arrays exhaust the spatial features of practice-arrangement bundles. Neither phenomenon, for instance, does justice to the spatiality of the lived body. I believe, however, that these two phenomena are of prime importance for analyzing social entities, including large ones. In the following, consequently, I focus on them.

Practice-arrangement bundles are not just inherently spatial entities; they also bear considerable responsibility for their own spaces and contribute to the spaces of other bundles. To begin with, the activities that compose practices intervene in the world, and among the changes that they effect or that thereby result are new spatial arrangements of entities. In this way, practices bear responsibility for the objective spaces of the arrangements with which they are bundled and either directly or through intervening chains of action help effect the objective spaces of other bundles. Of course, the actions of nonhuman entities (artifacts, organisms, things) also result in altered arrangements and spaces.

A second way that bundles are responsible for their own spaces is *via* the normative organizations of the practices that are part of bundles. As indicated, activity spaces interweave via common, shared, and orchestrated elements. Places and paths are common to participants in a practice when participants proceed through the same places and paths anchored at the same particular entities or types thereof and do so because this anchoring is enjoined in the practice's normative organization. For example, in a classroom places to sit and face forward and places to stand and face the class are anchored at desks and boards for all those enacting learning and teaching practices because this anchoring is enjoined in such practices. Places and paths are shared when participants proceed through the same places and paths, but the practice's normative organization does not enjoin these places and paths but simply deems them acceptable. An example is a spot on the floor being a place for students to work on a project together. Places and paths are orchestrated finally, when different places and paths are interdependently anchored in the same or different material entities for different people. An example is a chair in the corner being a place for the teacher to discipline a student and a place for the student to defy authority. The normative organizations of the practices that are part of a bundle shape the interwoven timespaces that characterize the bundle by circumscribing common, shared, and orchestrated elements. Of course, participants in a practice can also proceed through unique or idiosyncratic anchorings of places and paths in material entities. A teacher, for instance, might stand on a student's desk to lecture.

Note that practice organization is not the only phenomenon that shapes interwoven (time)spaces. Any material arrangement (bundled with practices) also contributes to common, shared, and orchestrated spaces by being one identical set of entities at which multiple places and paths are anchored. The arrangements that are part of any bundle, accordingly, are partly responsible for that bundle's interwoven spaces. I add that because the normative organization of a practice circumscribes the actions that participants perform, it also circumscribes those actions people perform that alter arrangements and, thus, the objective spaces of bundles.

Practice-arrangement bundles exhibit objective spaces and interwoven activity (time)spaces, for which the practices and the arrangements involved are co-responsible. As I explain below, these objective and interwoven spaces also pertain to large social phenomena.

### The Constitution of Social Phenomena.

By "large social phenomena" I mean, intuitively, such entities as economies, governments, military alliances, sociotechnical regimes, educational establishments, international federations, and sports leagues. These phenomena, I claim, are constellations of practice-arrangement bundles or of slices or features thereof.

Before discussing this analysis, I should briefly mention where my account resides in the wider landscape of social ontologies. Practice theory, of which my account is a version, treats practices as the key element for analyzing social phenomena. Against individualist analyses, which build up social phenomena out of the actions and mental states of (and maybe relations among) individual people, this approach argues that actions and mental states presuppose practices and, as a result, that actions and mental states cannot be the exclusive material out of which social phenomena consist.

Typical arguments in this context are that actions are the actions they are only as part of practices and that mental states have determinate content only on the background of practices. This argument targets not just classical forms of individualism from Mill through Weber to Searle, but also contemporary analyses of human agency as an emergent phenomena as well as more exotic varieties such as actor-network theory that draw in the actions of nonhumans. Practice theory also opposes sundry structural, Deleuzean, systems, and critical realist accounts, including theories of self-organizing systems. One prominent criticism of these theories is that they promote systemic principles or abstract structures and mechanisms that are removed from and only tendentiously connected to the chief dynamo of social existence — human activity.

I define social life as human coexistence (the hanging-together of lives) and a social phenomenon as anything that pertains to human coexistence. Elsewhere I have argued (1996, 2002) that social life inherently transpires as part of practice-arrangement bundles and that the totality of practice-arrangement bundles marks out a plenum in which any social phenomenon inherently takes place. What there is in the world to any social phenomenon, event, or formation is some set of slices or aspects of this plenum. All such phenomena — large and small, micro and macro, local and global — share the same basic ingredients and forms of composition.

This analysis might be clarified if I point out a parallel between it and Latour's ontology. I am claiming, in effect, that all there are to social affairs are linked practices and arrangements. Not only do bundled practices and arrangements provide the basic stuff in which social affairs consist, but the total plenum of linked practices and arrangements delimits the possible objective spatial (and temporal) shapes of social phenomena. Similarly, Latour (1993, p. 128, cf. 2005) holds that all there are to social affairs, or to anything at all for that matter, are associations and more associations. An association is, at a first approximation, a set of linked actors. To be an actor is to do something (or to make something else act); just about any human, organism, artifact, or thing qualifies. So any state of affairs having to do with humans, thus any social state of affairs too, embraces an association of humans and nonhumans. Latour's associations bear an obvious resemblance to my arrangements. His account, however, recognizes no pendant to what I call "practices"[1]. On my account, social affairs consist, not just in connected associations as Latour holds, but in linked arrangements and practices. This difference reflects Latour's individualism, or rather, nominalism. On his view, an action is a property of a particular human or nonhuman entity and only contingently related to any other action or actor[2]. I agree that particular actions are performed by particular people. On my view, however, the performance of most actions is inherently part of a nexus of doings and sayings (a practice).

Social phenomena consist in slices or aspects of practice-arrangement bundles. As I use the terms, "large" and "small" denote relative spatial extension. Accordingly, large social phenomena consist in spatially extensive slices or aspects of such bundles, that is, in slices or aspects of *constellations* of bundles. As the expression "constellations" suggests, bundles connect. I explain below that the kinds of link among bundles by virtue of which they form constellations are the kinds of link that either connect practices to arrangements or connect practices and arrangements to others of their own kind. Because of this, a constellation of bundles is just a large bundle, a large linkage of practices and arrangements. The difference between smaller and larger social phenomena is the difference between lesser and greater spatial extensions of the slices of practices, arrangements, and relations that compose them.

To begin making these ideas more concrete, consider a U.S. university. Functionally, this university is composed of a set of organizations, including colleges, central administration, research and pedagogical centers or institutes, support units (physical plant, admissions, parking, housing), an alumni association, and an athletics department. A college, moreover, embraces multiple academic departments and such central units as the dean's office, a media office, and IT. All these organizations, as social entities, are constellations of practicearrangement bundles (see Schatzki 2005). A department, for instance, embraces teaching practices such as lecturing, remonstrating, using Google hangout, giving exams, and guiding active learning, which are carried out in classrooms, offices, and courtyards that embrace arrangements of chairs, smart boards, entrances, windows, pathways, benches, and the like. Such teaching bundles are tied to self-governance bundles composed of scheduling, meeting, and discussion practices carried on in offices, hallways, and meeting rooms that contain computers, desks, tables, chairs, windows, bulletin boards, and phones. Practices of teaching and self-governance also link with research bundles composed of consultation, meeting, investigation, decision-making, and other practices carried on in offices, labs, and libraries. In addition, all these bundles, which interconnectedly compose the department, connect in myriad ways to the bundles that compose other departments, the dean's office, or extracollegiate organizations such as central administration, other colleges, the physical plant, the admissions office, and the athletics department. The university, in short, is a maze of linked practices and arrangements.

I stated that the relations through which bundles link into constellations are relations of the sorts through which practices and arrangements link either to one another or to other instances of their own kind. Consider, first, relations between practices and arrangements. Practices and arrangements link through five types of relation: causality, prefiguration, constitution, intentionality, and intelligibility. I will make brief comments about each. Causal relations between practices and arrangements take two prominent forms: activities altering the world, and entities and the events befalling them inducing activities. By prefiguration, I mean the difference that the present makes to the nascent future. Contrary to the widespread analysis of prefiguration as a matter of enablement and constraint, I (2002) conceive of it as present states of affairs qualifying forthcoming activity on indefinitely numerous such registers as easier and harder, more and less expensive, nobler or baser, more or less time consuming, and so on. For instance, material arrangements ubiquitously prefigure both the perpetuation of practices — the repetition or extension of the doings and sayings that compose particular practices — and changes in practices. An example is existing arrangements in classrooms, offices, and labs making some changes in college policies easier and others harder, some changes more expensive and others cheaper, some changes time consuming and others less so, and so on. Existing material infrastructures

such as communications and computer systems likewise prefigure changes in these infrastructures or the introduction of new ones.

As for *constitution*, arrangements constitute practices either when they are essential to these practices or are pervasively involved with them over a swath of space-time. Students are essential in this sense to teaching practices, just as classrooms have helped constitute these practices for decades. Conversely, practices constitute arrangements when given arrangements would not exist were it not for particular practices. In this sense, teaching practices constitute the classroom arrangements where they occur, but not the walkways students and instructors take to and from classrooms. Practices are intentionally related to arrangements, furthermore, through both the thoughts and imaginings participants have about them and the actions they perform toward them (including using them). Teachers, for instance, think various things about smart boards and classroom chair arrangements and act toward them in various ways. A final sort of relation between practices and arrangements is *intelligibility*: arrangements having meaning for — being intelligible as such and such to — participants in a practice. I will not argue the point here, but the intelligibility of the world arises from the practices people carry on : the meanings that windows, lecterns, smart boards, class management software, chalk, students, and administrators have for teachers are instituted in the practices teachers carry on amid these entities.

Thickets of relations of all five types can be thinner or denser, more compact or spread out, continuing or fleeting, and the like. Relations of these sorts are typically very thick between the practices and arrangements that compose a bundle. In fact, it is this concentration of relatedness, its density and continuity, that makes it the case that a bundle exists. For example, teaching practices maintain particularly thick causal relations with the students, chalk, essays, computers, and blogs on which teachers immediately act. These entities also tend to be the entities with which practices maintain constitutional relations and whose meanings the practices subtend. It is with these entities that teaching forms a bundle. Relations of these sorts can also link practices and arrangements that belong to different bundles. For example, teaching practices maintain causal relations with the arrangements that compose central administration or the athletics department, deans might think this or that about renovations to the central administration building, and changes in labs, communication systems, and central offices make alternative university policies easier or harder to implement, more cost effective or ineffective, and so on.

Bundles hang together to form constellations through the five just discussed sorts of relation. They also hang together through relations of sorts through which either practices link with other practices or arrangements are tied to one another.

Practices are connected to other practices through the sinews of common and orchestrated organizations and timespaces, shared activities, chains of action, and intentionality. These connections can exist regardless of whether the practices involved are more tightly and consistently knit — as when they help form a bundle — or more thinly, loosely, and discontinuously linked, as when they are components of different bundles that help make up a constellation such as the university.

Practices are linked *via* common organization when their organizations contain the same element, i.e. the same end, rule, task, emotion, or understanding. Many of the different practices that help make up the college, for instance, share the ends of improving student education or enhancing faculty research. Practices are linked *via* orchestrated organizations, meanwhile, when one item being part of one practice's organization is not independent of a different item being part of a different practice's organization: an example is the pursuit in administrative and teaching practices, respectively, of making money and educating students. Practices are linked *via* activity space, moreover, when the arrays of places and paths through which participants in the different practices proceed are the same or orchestrated. Practices are further linked by way of shared activities, including shared doings and sayings. A lab discussion, for instance, might be a moment in both research and teaching practices. Practices also link *via* chains of actions. An example is a teacher assigning a failing grade to a student leading to an advisor being notified of this grade leading to an email to the student asking for an advising session leading to a meeting between the student and his advisor.

Bundles and constellations are constituted not just by relations between practices and arrangements and links among practices, but also by links among arrangements. Two prominent forms of link among arrangements are common elements and intermediate physical processes and connections. Arrangements link when they contain the same material entities. For example, arrangements in an office and those composing the college's communications system overlap at the computer on the office desk. Arrangements also link *via* physical processes and entities that join their components. An example is the transmission of electricity linking the arrangements of the university's power generator to those of college offices and classrooms. Another is the wiring through which the electricity flows. As with practices, links can obtain among arrangements that belong to a bundle or to a constellation, that is, to a relatively tight, densely knit agglomeration of practices and arrangements or to a looser, more thinly interwoven set of such agglomerations.

In sum, the types of relation that link practices and arrangements into bundles also link bundles into constellations. What bundles and constellations exist depends on the thickets and patterns of relations that exist in the continuously evolving plenum of practices and

arrangements spread out across the globe (and currently extending into high altitude orbit). All social phenomena are slices or aspects of this mass. Social phenomena differ in the spatial-temporal spread and shape (and also continuity and density) of both the practices and arrangements that compose them and the relations among these practices and arrangements.

# Spaces of Large Social Phenomena.

Section one explained that practice-arrangement bundles contain objective spaces tied to their material arrangements. Practice-arrangement bundles also exhibit interwoven timespaces whose spatial component consists of common, shared, and orchestrated arrays of places and paths that are anchored in the arrangements involved. I explained that the doings and sayings that compose practices are partly responsible for these objective and interwoven spaces and that the organizations of the practices that belong to a given bundle circumscribe both actions and interwoven timespaces.

I have since explained that social phenomena consist in slices and aspects of the plenum of linked practices and arrangements and that such phenomena are large when the distribution in space of the slices and aspects that constitute them is extensive. "Large" and "small" are relative terms that signal greater versus lesser spatial extension. It follows that the spaces of large social phenomena are simply more extensive and differently shaped versions of the spaces of practice-arrangement bundles.

As described, each college at a U.S. university is a constellation of bundles pertaining to the teaching, research, outreach, and self-management business of academic departments or to the tasks and projects carried out by the dean's office, the IT unit, and the media unit. Each of these bundles embraces differentially evolving arrangements of human bodies and the material entities that make up or are found in offices, classrooms, hallways, laboratories, meeting rooms, communications systems, and the like. These arrangements institute objective spaces of the sort exhibited in any bundle. These arrangements also overlap with and connect to the arrangements that are part of the bundles that compose, among other things, other departments in the college and extracollegiate organizations such as central administration, other colleges, the physical plant, the admissions office, and even athletics programs. Student-athletes, for instance, take classes that faculty members in different colleges teach (at different times) in the same classrooms. It is clear that the continual changes that occur to these objective spaces are largely brought about through actions performed by participants in the practices involved, thus by teachers, students, administrators, and staff. Other changes originate from outside the practice-arrangement

bundles involved, for instance, in termites, electrical outages, and tornados. A university's objective space is patently complex, cyclic, and mutable.

In addition to objective spaces, any social formation exhibits interwoven timespaces whose spatial component encompasses common, shared, and orchestrated places and paths through which the formation's members proceed. People who carry on a particular practice in a particular setting such as teaching in a classroom or conducting research in a lab are caught up in an interwoven activity space that contains common, shared, and orchestrated places to stand, take notes, exit, titrate, heat up, and examine instrument readings. The more complex the practice and setting involved are, the more complex is this interwoven space. Large social phenomena also exhibit activity spaces. For example, the people who participate in the practice-arrangement bundles that compose an academic department are enveloped in a net of interwoven spaces that supplements the interwovenness established in particular practice-setting pairs with the interwovenness that helps join the department's multiple practices and material arrangements to one another. The lattices of interwoven timespace that characterize even larger phenomena such as a college or an university attain commensurably higher orders of complexity.

As indicated, the normative organizations of practices in conjunction with the material world both circumscribe and establish the interwoven timespaces that imbue (1) social entities such as departments, colleges, and universities and (2) the doings and sayings that make up the practices that compose these entities (and thus these entities' objective spaces in so far as these spaces are instituted in and brought about by these activities). Indeed, normative organizations and material worlds on the one hand, and activities and interwoven timespaces on the other, are mutually dependent. Objective spaces are also present in this field of mutual dependence since they are defined by the world's material arrangements. Practices, arrangements, objective spaces, and interwoven timespaces form wholes, each of whose dimensions depend — more and less directly — on the others. For many millennia, moreover, wholes of this sort have formed one overall "whole," i.e. the plenum of linked practices and arrangements. This plenum marks the objective spatial (and temporal) limits of social life.

The space of any particular social phenomenon includes the objective spaces and activity spaces that are encompassed or established by the practice-arrangement bundles that make up this phenomenon. These spaces are tied to the activities, practice organizations, action regularities, and arrangements involved. It is obvious that the objective spaces and interwoven timespaces of large phenomena are fabulously complex.

## Levels and Flatness.

Many of what I am calling large social phenomena qualify as "macro" or even "global" (sometimes "structural") phenomena. This is true of economies, some corporations, sociotechnical regimes, and maybe national governments and educational establishments, though it is not true of sports leagues many other corporations, and local governments. The standard analytic contrasts with macro and global are micro and local. All these terms are spatial. Another important spatial issue concerning social phenomena, consequently, is the applicability to them of the terms "macro," "micro," "meso", "global," "local," and, indeed, "large," and "small". The meanings of these terms are often tied to another issue in social theory, namely, the cogency of thinking that society or social life are composed of levels.

"Large" and "small" are relative terms: large phenomena are more spatially extensive than small ones are. Whether, consequently, something qualifies as large or small depends on the universe of comparison. A university is large compared to a student taking a make-up examination in her professor's office but small in comparison to the U.S. educational establishment. In social thought and investigation "macro" and "micro" and "global" and "local" are likewise sometimes construed as relative terms.

Some social theorists and researchers, however, treat them as denoting something substantial. In this section, I want to critically examine one particularly prominent alleged substantial division between macro and micro, which is also sometimes applied to global and local. According to this interpretation (which is not just philosophical, e.g. Grin, Rotmans, and Schot 2010), these terms designate distinct levels — distinct planes, if you will — of society or social life.

It is worth turning to the discipline philosophy for elucidation of the pervasive idea of levels. In the philosophy of science, levels of reality are conceived of as domains of entities between which systematic relations of causality or supervenience exist (e.g. Little 1990). The two most familiar alleged levels attributed to society are (1) a micro level composed of individuals together with their actions and interactions and (2) a macro level containing entities such as social structures, systems, and institutions. These two alleged levels are distinct only if what populates the macro level — structures and the like — systematically arise from or systematically supervene on what populates the micro level, i.e. individuals and their activities, or if they themselves exert systematic causal effects on individuals and individuals' activities. Macro level social phenomena are often conceived of as "arising from" micro ones, though some prominent theories (e.g. structural Marxism) reverse this dependence, and still other theories (e.g. critical realism) envision a reciprocal relationship

between entities on the two levels. All these positions presuppose the integrity of the two levels.

All social phenomena transpire in the plenum of linked practices and arrangements. This thesis implies that institutions, structures, and systems are denizens of this plenum. This is also true, however, of most actions and many mental states of individuals. As a result, neither social structures and their ilk nor individuals and their actions constitute distinct levels Entities of these sorts are, instead, instances of different general sorts of collections of features and elements of this one plenum. Society and social life, accordingly, are not composed of these two particular alleged levels. Nor are society or social life identical with either of these alleged levels alone. There are no levels, furthermore, different from these alleged two that constitute society. I acknowledge the existence of a "below" in Deleuze and Guattari's (1987) sense of the molecular, namely, the composition of the components of practices and arrangements. This molecular dimension embraces the physiochemical composition of artifacts and things of nature, as well as the biophysical subsystems and physical movements of people and living organisms. To be sure, the material composition and organization of these entities can be relevant to the progress of social life. They enable actions and other events to occur, ensure spatial-temporal persistence, and can affect the ("molar") activities and properties of people and the other entities they compose. But although practice-arrangement bundles might depend on and reflect a molecular materiality, they do not systematically arise from it. What, then, is the relation between macro and micro phenomena?

Macro phenomena, like micro ones, are particular slices and aspects of the plenum of linked practices and arrangements. The relations that exist between phenomena of the two sorts depends on how the terms "macro" and "micro" are interpreted and on how the slices and aspects of the plenum that constitute particular micro and macro phenomena relate. Generally speaking, because macro and micro phenomena alike consist in slices and aspects of the same one plenum of practices and arrangements, diverse, contingent relations — as opposed to systematic relations of causality and supervenience — exist between them. For instance, the national U.S. educational establishment and a particular university class are related, not through a systemic relationship of causality or supervenience, but in multiple ways, for example, through shared and orchestrated ends, common and shared places, a large number of intentional relations, and diverse chains of action embracing the circulation of educational materials, the propagation of rules, and the percolation outwards of innovations. The same comments apply to global and local phenomena.

Instead of examining social life through the idea of distinct, systematically related levels, it is better to think of a single plenum of practices and arrangements that varies in the

thinness and thickness, and in the directness and circuitousness, of relations among practices and arrangements. Practices and arrangements form bundles and constellations of smaller or larger spatial-temporal spread as defined by these variations and gradients. As a key dimension of variation in social phenomena, this ontology promotes smaller and larger, not micro/macro or global/local. This thesis is not original.

I believe, for example, that it is Gabriel Tarde's (1899) position (see also Collins 1981). Tarde held that much social development takes the form of unidirectional progressions that begin from a small version of something and eventuate in a large version of it. A good example is war and competition among individuals widening into strife between larger groups, which in turn enlarges into war and competition between very large collectivities such as nations. I do not think that many large social phenomena arise in this unidirectional expanding way. Nonetheless, this progression illustrates an important theme, namely, that what contrasts with small phenomena are large phenomena construed as something not fundamentally different in kind than small ones.

To concretize this position, return to the university. This example is a bit misplaced since nothing about the university is a macro or global phenomenon, and no one (I think) would consider the university and its suborganizations to lie on distinct substantial levels. Still, the composition of the university illustrates the flattening of social life that I advocate. As discussed, the university is composed of colleges, a central administration, support units, and, among other things, an athletics department. Each college, moreover, is composed of departments, a dean's office, an IT unit, a publicity and communications unit, and the like. Each college department, finally, encompasses linked practices of teaching, advising, selfgovernance, and research that are carried on in offices, hallways, classrooms, labs, libraries, and the like. These different suborganizations of the university do not form hierarchies or lie on different levels. Rather, they all transpire in the one plenum of practices and arrangements. For instance, the settings in which the practices belonging to all these organizations are carried on form one overall arrangement that is the materiality of the university. Consider, moreover, the relationship between the dean's office and a given department. Each department, like the dean's office (and the College's IT and PR units etc.), is a complicated bundle of practices and arrangements embracing a concentrated set of direct or relatively direct relations. Relations of the same types as ones occurring in the department (e.g. common and shared activities and ends, chains of action) link the department's practices to the practices of the dean's office. Similarly, relations of the same sorts as ones present in the department link arrangements in the department to arrangements in the dean's office (e.g. shared settings, interwoven spaces, connecting physical networks). Relations of all these types likewise link the department's bundles to

those of other departments. So, the dean's office does not stand above the departments, but instead lies alongside them, or better, *amid* them tied to them in intricate ways. The same holds of the central university administration: it does not hover above, nor is anything superimposed on, the colleges. It simply adds, amid and alongside the dense practice-arrangement networks that are the colleges, *further* bundles of practices and arrangements that are linked to these networks and, together with them, compose a larger network of linked networks.

This picture of the social can be called a "flat ontology"[3]. Individualism in its many forms is the original flat ontology since it reduces everything social to the plane of individuals (and their relations). Individualists, however, have not understood themselves to be laying out social life on a single plane. A more explicit flat ontology is found in Deleuze and Guattari (1997), who treat society, or the social, as one of many "planes" that compose reality. For these authors, society, or what Deleuze sometimes dubbed the "social field" (see Deleuze 1997), is the plane on which, the open expanse in which, the assemblages that compose social phenomena exist. The assemblages involved are composed of what Deleuze and Guattari call "regimes of power" and "regimes of enunciation". These are, respectively, people, artifacts, and things organized according to functions, statuses, and relations, and sounds and inscriptions organized as meaningful expressions. Social phenomena consist of pairs of these regimes laid out on the same "plane" of reality[4].

Latour (2005) has more recently appropriated the term "flat ontology" to name the ideas that all there is to social entities (or anything else) is associations and more associations and that nothing "larger" such as social systems or structures holds these associations in place. These ideas converge with my picture of social entities as slices or aspects of linked practices and arrangements — minus the practices. Among other things, I second Latour's intuition that what happens in the maze of associations (in my language, the plenum of bundles) is mostly determined by features of and events occurring in the maze unbeholden to any layer or dimension of phenomena hovering above it[5]. Regarding macro phenomena in particular, moreover, Latour claims that they are not wider and more encompassing sites, but a type of local or micro site, namely, sites that are connected to many others. An example is the dean's office, which is connected to the many practice-arrangement bundles that constitute the college's departments or the provost's office. Latour calls these sites "oligoptica": sites that see a narrow band of other sites very well. I agree with Latour that a macro phenomenon is not a site. This claim, however, follows logically from his implicit definition of sites as local associations. His real point — which I affirm (see also Latour 1986) — is that all action is local: activity can achieve effects at a distance only through intermediaries such as email, letters, and chains of action.

I also concur with Latour's claim that place, size, and scale are produced. Latour links this claim, however, to his analysis of macro phenomena and argues that large phenomena exist only through the actions of special local sites: not just oligoptica, but also what he calls "panoramas" and "centers of calculation" (sites that, respectively, see a broad band of other sites dimly or systematically produce mathematical calculations that affect human activity elsewhere). Size is achieved only through actions performed at such sites because large phenomena exist only when multiple sites are linked, and multiple sites can be linked only *via* actions performed at these sites.

Oligoptica, panoramas, and centers of calculation certainly exist. Examples at the university include the offices of the deans, the provost, and the treasurer. Activities at these sites establish links with many bundles at the university, resulting in the initiation or perpetuation of such matters as college initiatives, campus-wide campaigns, new travel expense policies, and undergraduate educational reform, not to mention the maintenance of the departments, colleges, and university themselves. Two points, however, must be made about such sites. The first is that the emergence of mobile communication, to the extent that its technologies free actions from dependence on particular settings, threatens the importance of sites, which have fixed material locations. The second point is more consequential. Latour passes over the fact that the networks of relation whereby bundles form large constellations need not center on or be anchored in bundles particularly rich in connections. A college embraces a large number of bundles and adds up to an overall constellation, but the oligoptica and centers of calculation involved are not any more constitutive of, and only marginally more responsible for the existence of, this constellation than the other bundles involved are. Latour is right that place, size, and scale are produced, but he is wrong that they are produced only by the actions of power centers. In particular, he is wrong that multiple sites (read "bundles") can connect only through actions performed at such sites. Size and scale arise from, in the sense of being constituted by, all the types of relation among bundles and constellations by which bundles form constellations and constellations form larger constellations. Similarly, a large phenomenon is brought about through *all* the activities and events that compose its bundles and constellations, not simply through those pertaining to power centers. Social life is vast, and power centers can only effect so much. Their spheres of influence are limited, and myriad actions in other sites (bundles) must be performed in order for social affairs to move in the direction power centers seek. Indeed, as Hegel famously observed, the success of power centers depends on actions freely performed in the sites that they "affect" or "influence". In addition, it sometimes happens that the confluence of large numbers of actions drives social affairs in a particular direction. Examples include stock market gyrations, economic crashes and booms, and sudden large-scale political adjustments. Power centers certainly play a role in

many, if not practically all, instances of such events. More often than not, however, nets of cascading chains of action simply pass through power centers, and the character of the latter as power centers is not essential to what happens.

What is essential to a flat ontology is Tarde's intuitions that large phenomena have the same composition that smaller phenomena do and that the former arise from actions emanating from the latter. In my hands, these intuitions become the ideas that large phenomena are far-flung slices and aspects of the plenum of linked practices and arrangements and that they arise through the myriad of activities and events that bear on and constitute these slices and aspects. It follows from these ideas that the progression of social affairs is thoroughly contingent. That, however, is a topic for a different essay.

Large social phenomena are slices and aspects of constellations of practice-arrangement bundles. They take the spatial form of variably dense regions of diverse relations and boast — among other things — scattered interconnected objective spaces and interwoven activity spaces that track the gradients of relation concentration. Large social phenomena are also flat in the sense that their parts possess the same sort of composition that they themselves do. Flatness is a paramount feature of social existence: all social phenomena are slices and features of the one plenum of linked practices and arrangements. This commonality entails, among other things, that the just mentioned topological and constitutional features of large social phenomena characterize smaller social entities too (and so-called "macro" and "micro" and "global" and "local" entities as well); that practice-arrangement bundles are not inherently large or small, macro or micro, global or local; and that the objective spaces and timespaces that characterize practice-arrangement bundles are ingredients of, or drawn on by, the objective spaces and activity timespaces of large social phenomena.