

*In Defense of the Local: Aristotelian Reflections on a Politics of Place*  
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*Part 1: Introduction*

When it comes to food, the local is all the rage. Indeed, “buy local” is a slogan increasingly heeded, at least by those who can afford to patronize their farmers’ market and buy heirloom tomatoes picked on the very day they are sold. In the grip of a technologically driven, globalized food industry, whose tomatoes have travelled thousands of miles, are rock solid and occasionally infected with noxious bacteria, wealthy consumers prefer what’s grown by flesh-and-blood farmers who live nearby and trucked into town on a daily basis.

Well-heeled shoppers don’t buy heirloom tomatoes simply because they taste better than those in the supermarket. Supporting the small, family farmer, putting cash into the hands of the very person who worked the field, and perhaps thanking him or offering a suggestion, feels good. It’s a balm that soothes the anxious concern that the local, the distinctive, the small that is within reach, is rapidly disappearing. It’s likely, for example, that the relentless expansion of mega-retail will soon annihilate the few owner-operated shops that remain on city streets. It’s unlikely that our grown children will live in the same town as their parents. In the era of globalizing, homogenizing sprawl there’s a real possibility that, other than those appearing on a computer screen, local communities, with their unique languages, traditions, and memories, small communities on whose futures individual members can actually have some impact, will cease to exist in any meaningful sense at all. Some of us worry that this is bad news.

A local institution or community, some say, is one in which we genuinely belong, have a stake, and can influence. It has a particularized identity, expressed in “stories,

memories and meanings,” that differentiates it from other communities. As such, its boundaries are determinate, reasonably fixed, and recognizable; they are, so to speak, visible to the naked eye and so are within reach. I can thank my local farmer and suggest that he grow more tomatoes next year; and he might do it. By contrast, it would be difficult even to determine exactly who or what was responsible for growing and then bringing tomatoes into the supermarket.

This paper raises the following question: what sort of argument is required to buttress a position that defends the political centrality, goodness, or even the essentiality, of the local? This question naturally tokens a more general one: what sort of argument is required to establish any normative political position, whether it be communitarian or liberal?

The one theory I will investigate with some care in this paper belongs to Aristotle. I will argue first, in Part 2 below, that Aristotle actually is a staunch defender of the local and then, in Part 3, that his defense couldn't be deeper, for it is comprehensive or even cosmological. He defends the political goodness of the local on the basis of his conception of the world. For Aristotle's world is itself thoroughly localized. The English "local" comes from the Latin *locus*, which means "place" and translates the Greek *topos*. Aristotle's world, explicated by his physics, is thoroughly "topological," for within it natural beings have their place. And places are limited and distinctive. Since political reality is itself a natural being it too is, and should be, "topological." There is, at least to my knowledge, no deeper nor more comprehensive account of what now I'd venture to call "topological politics" than that found in Aristotle.<sup>1</sup>

In Part 4, the conclusion of this paper, I will examine what contemporary relevance, if any, Aristotle's defense of the local might still retain at this late date.

## *Part 2: Aristotle Defends the Local*

That Aristotle defends the local can be established by briefly considering his discussion of the size of what he takes to be the ideal “regime” (*politeia*) found in Book VII of the *Politics*. Simply put, it must be neither too big nor too small. It must be big enough to achieve self-sufficiency, which means “having everything and needing nothing” (1326b30), but it must also be very careful not to become too big.<sup>ii</sup> For a too-big city cannot, Aristotle thinks, be well governed; that is, ruled by law (1332a25). Furthermore, “too many people will lead to more poverty, which in turn leads to instability” (1265b12) or factionalism, the disease that threatens all cities.<sup>iii</sup> Finally, and most important, a too-big city would, at some point, simply cease to be a city at all.

These points will be elaborated shortly, but before doing so a few more comments on the size of Aristotle’s ideal city. As just suggested, it is reasonably small and self-contained. For example, rather than expanding its trading economy, and thereby acting on the desire to have more and become extremely wealthy (*pleonexia*: 1327a31), it imports only necessities unavailable at home and exports surplus goods. It has a navy, which in antiquity required a large number of sailors (*poluanthropian*: 1327b7) to man the oars, but maintains it only “up to that number” (*mechri tinos plêthous*: 1327a42) required for defense of its harbor. Unlike regimes such as Sparta and Crete it does not have imperial ambitions, and its well-trained army is solely for the purpose of defense (1333b40). To gauge just how small Aristotle’s ideal city must be, consider this: in order for a regime to qualify as excellent it must organize itself by properly distributing the responsibilities for judging and ruling. And to do this well “citizens must recognize one another and know what sort of person each other is” (1326b15). Aristotle defines

him, as one who “shares in decision and rule” (*kriseôs kai archês*: 1275a23). The ideal city now sounds like a small town in which gossip flows freely and keeps the citizens well informed of each other’s characters and actions.<sup>iv</sup>

In sum, the ideal city is sufficiently limited so as to make its borders visible, intelligible, and within reach; one that allows its members to know each other and to participate in the political life of the community.<sup>v</sup> It is resolutely local.

Aristotle remarks that these quantitative limitations are rarely appreciated because, as he puts it, “most people suppose that it is appropriate for the best [*eudaimona*] city to be great (*megalên*)...and they judge greatness on the basis of the number of inhabitants” (1226a10). Most people, in other words, think that bigger is better. But this is false since “to be a great city and a populous one are not the same thing” (1226a25).

To return to an earlier point: even if it’s not huge the city can’t be too small either. First, as just mentioned, it must become self-sufficient. But second, like a work of art, it must be beautiful and fine, qualities it cannot achieve if it does not have sufficient magnitude. In general, a city does not become great “by number,” but by its “capacity” (*dunamis*: 1326a12), by what it can do. Aristotle offers the following comparison: “as is the case with animals, plants and tools, for a city there is a certain proper measure (*metron*). For each of these will not achieve its own potentiality if it is too small or too big” (1326b35-38). A ship only a few inches wide or ten miles long cannot do what a ship is meant to do, sail the seas and transport cargo and men, and so is not really a ship. Similarly, living beings are big enough when they have matured, attained their proper form, and can actualize those capacities, perform those functions, that are intrinsic to their species. When it comes to politics, a city is big enough when it is self-sufficient and, most

important, able to generate the conditions that allow its citizens, or at least some of them, to live excellent lives that fulfill their natures as human and political beings.<sup>vi</sup>

A reformulation of this point: the best city, Aristotle says, must be of such a size as to afford a “synoptic” view of itself; it must be “easily seen as a whole” (*eusunopton*: 1327a2). It has visible, intelligible, reachable, borders that are small enough to be traversed by an individual, and is therefore small enough to allow participation. By contrast, Babylon was so big that it took three days for some parts of it to realize that it had been invaded (1276a27). As a result, Babylon, due to its vast size, was not really a city at all. (Instead, it was what Aristotle calls a “people” [*ethnos*: 1276a29]).

To understand why Aristotle makes these claims, return to his definition of a city. It is, he says, says a community (*koinonia*: 1252a1) that is composed of several smaller communities, such as the family, the household, and the village, which is a group of households (1252b10). The city is “prior to” and the most “authoritative” (1252a5) of these communities because it embraces them all as parts. It is a well-formed whole that “reaches a level of self-sufficiency” (1252b27). This notion of the “whole” (*to holon*) is crucial here. As Aristotle defines it in the *Metaphysics*, it is that “from which is absent none of the parts of which it is said by nature to be a whole” (1023b26). This definition comes close to that of the “all” or the “sum” (*to pan*). But there’s a difference: in the case of an “all” the position, the order of the parts, is irrelevant. “All” the letters of BAT are “b, a, t.” But these can be combined to form TAB as well as BAT. “If position does make a difference, then it is a whole” (*Metaph.* 1024a1-3). Alternatively formulated, the whole is that “which has a beginning middle, and end (*telos*)” (*Poetics* 1450b27).<sup>vii</sup> It is an orderly, an in-formed, unity of parts. It is a whole community defined or

characterized by “a certain ordering (*taxis*) of those who live in the city” (1274b36). This ordering is the *politeia* or “regime.” A *politeia* does not come into being simply upon the establishment of geographical borders, nor is it constituted only by maintaining the continuity of a population through successive generations, although both are necessary conditions of a city. Instead, a city requires a form; it must be unified by means of its *politeia*, which makes the otherwise disparate and ever changing number of its parts into a whole, into a unity.

The regime is the organization of the city. It designates who and who is not a citizen, who is responsible for the judicial, legislative, executive, and military activities. It determines the kind of education citizens require. As a result, simply living within the borders of a city or being subject to its laws is not sufficient to qualify an individual as a citizen (*politês*). For a citizen in the full sense of the word “is defined by nothing other than participating in decision and ruling” (1275a24). To be a citizen is to be engaged in the working of the city.

This discussion of the *politeia* allows us to return to Aristotle’s description of the “synoptic” character of the ideal city. For the Greek word translated as “form” is *eidos* and is itself derived from the verb “to see.” A city must be seeable as a whole. This is possible only if it has a form, and therefore is of limited size; if its borders extend only so far as the eye can see.

Back to the notion of self-sufficiency. On one level a village can achieve it. Without relying on other villages it can produce its own food, build its own housing, nourish its next generation, and even regulate itself on the basis of certain organizing principles. But for Aristotle this does not qualify as true self-sufficiency, for by itself a village, even though it is able to provide the conditions of survival for its members, is not able to supply the conditions that allow

its members to live a fully human and good life. It is too small. As he puts it, the proto-communities of family, household and village “come into being for the sake of living” while the city, the political community, “exists for the sake of living well” (1252b30). Only in a city can human beings lead a fully human life. This is, of course, because we are by nature political animals. And we can lead this sort of life without leaving our own cities.

In a parallel fashion, the city need not leave itself in order to be fully itself. In other words, it does not have to expand beyond its borders in order to succeed. As Aristotle puts it,

A single city, the one which governs in manifest fineness, could be happy with respect to itself (*kath' heautên*), if it is possible for a city to live by itself (*kath' heautên*) using decent laws. Its form of government (*politeia*) would not be directed towards war or domination of its enemies (1325a1-4).<sup>viii</sup>

Aristotle rests his defense of the local upon his definitions of the city, the citizen and the regime. But, as the next section will show, his defense goes much deeper than this. He defends the local on the political level because he conceives of the world as a whole that is divided into “places;” he conceives of the world itself “topologically,” as entirely localized.

### ***Part 3: The World is Localized***

Aristotle’s conception of place (*topos*) is a fundamental principle of his physics and cosmology. He begins his discussion of it (in *Physics* Book IV) by saying “everyone assumes that beings (*ta onta*) are somewhere. For what is not is nowhere. For where is the goat-stag or the sphinx?” (208a29-31).<sup>ix</sup> We regularly, perhaps even naturally, ask where something is, for if something is it must be somewhere. To illustrate, Aristotle cites the poet Hesiod, whose *Theogony* is the story of how the world and all its objects came into being.

That there is place, and that it is independent of bodies, and that every body is perceptible as being in a place is a reasonable belief. Thus it would seem that Hesiod spoke correctly when he made ‘the chasm’ the first of all things. For he wrote, at any rate, that ‘first of all the chasm came to be, and then next broad bosomed earth.’ He did so because he understood that it was necessary first of all for there to be room for things. Just like most people, he understood that every thing has to be somewhere and in a place (*Physics* 208b27-33).<sup>x</sup>

First, says Hesiod, there was *chaos*, which is best translated as “chasm” or even “emptiness.” But immediately afterwards there came earth. This line, Aristotle suggests, reveals that Hesiod understood that there must be a place for all the many beings—trees, mountains, people, rivers, nymphs—whose coming-into-being his poem describes. The earth must be there for beings cannot exist nowhere or in the empty chasm.

The goal of Aristotle’s analysis in *Physics* Book IV is thus to provide an answer to the question, “what is the where of things?” (Lang, p. 68).<sup>xi</sup> There are, he thinks, two reasonable answers: in a place or in the void. He rejects the latter because for him it is no more than “a special case of place, i.e., a place with nothing in it” (Lang, p. 68). He therefore opts for the former.

It is important to note at the outset that Aristotle’s void is similar to the neutral or indeterminate space through which all bodies move by following the same laws of motion that is employed by modern physics. Such space “is internally undifferentiated—two spaces are identical, if they are of equal dimensions” (Lang, p. 69). With this in mind as a contrast, the salient feature of Aristotelian place comes into focus. Unlike modern space, it has a kind of “power” (208b11), which in turn is manifested in directionality. There are, Aristotle argues, six “divisions” or “directions” of place: up, down, left, right, front, back (*Physics*. 208b12). The striking feature of his theory here is that, unlike us—that is, we who dwell in the unbounded and

homogeneous space of modern physics—Aristotle thinks that these distinct directions are objective features of the world.

Up and down, right and left [front and back] are not only relative to us. For they are not always the same in relation to us, but instead depend on our position so that when we turn they change...In nature, however, each is distinct and exists independently of the others. For that which is up is not a matter of chance, but instead is to where fire or a light body moves. Similarly, what is down is not a matter of chance, but is to where heavy or earthy bodies move. They differ not only in position, but also in power (*Physics* 208b14-22).

As indicated in this passage, Aristotle's notion of place is closely tied to his account of the natural motion of the four elements; earth, fire, water, and air. Each has its natural place towards which it will move unless otherwise impeded. Fire and air, which are light, naturally moves upwards, towards the heavens, which are above the earth. An earthy or watery body, one that is heavy, naturally moves downward, towards the earth. To say it again: up and down are objective features of the world. So too are left and right. In *On the Heavens*, for example, Aristotle argues that "the beginning of the heaven's revolution is the side from which the stars rise, so that must be its right, and where they set must be its left" (285b20).

The objectivity of direction is, to put it mildly, a hard pill for us to swallow. We are vastly more comfortable with the belief that directionality is relative and can easily offer an account such as the following. Like other animals, human beings are bilaterally symmetrical, and vision is thus bifocal. We have left and right eyes, as well as hands, legs, and so on, and as a result we divide our visual field directionally. Left and right are defined by means of a center. There is that which is to the left of the center—that is, to me—and that which is to the right, and so the horizontal directionality of the visual field is triangulated. So too is it divided vertically. There is the above-me, accessible visually when I tilt my head and look upwards, the below-me, and the place I occupy right here. Because I look forward, but remember and thus am aware that

there is something behind, so too are these directions bifurcated. But none of this reflects objective features of reality. For the universe has no up or down, left or right, but allows only for relative position on an indeterminate grid.

Aristotle sees things otherwise. For him, direction is an objective feature of the world. As we shall gradually see, he thinks this because he takes his bearings from a specifically human, earth-based, naked-eye perspective.

Aristotle defines place (*topos*) as the limit “of the containing body” (211b14). As such, it is neither a material thing nor a part of one. Instead it is more like the form or the shape of a thing. My computer has three dimensions and is sitting on my desk. It is made of stuff like plastic and silicon; in Aristotle’s lingo, some bits of earth, air, water or fire. The stuff has been molded into a shape or form by the computer-maker. Its shape is visible, which is why the Greek word for “form,” *eidos*, derived from the verb “to see,” could also be translated as “the look” of a thing. Rather than being a separate part, the form is the entirety of the way the computer, shaped by its outermost edge or limit, looks.

Even though it too is a limit—and for the purpose of this paper this will prove to be its decisive feature—a place is not a form. A form “is the limit of the thing contained whereas place is the limit of the containing body” (Lang, p. 86). A place is thus like a “vessel” (210a24). Like a bottle it is that which things are *in*. Like an immovable vessel a place “holds” change.

This is hard to understand. For example, place seems close to being a body because it is three-dimensional, but the phenomenon of “replacement” shows that it is not. There may now be water in a bottle. When the water is poured out it is replaced by air. Where there was water now there is air. And the air also could be replaced by another body. Because the same place can be

occupied by different bodies, place is not body. (See *Physics* 208b1-7.) Nor, as argued above, is it a form. Instead, place “is the first unmoved limit of that which contains” (212a20).

To do justice to this complicated issue would require a book of the sort Helen Lang has written. Fortunately, the key point for the purpose of the present paper is only this: place has “power.” Lang explains: “place is the formal constitutive principle that renders the cosmos directional...and so constitutes all place within the cosmos as ‘up,’ ‘down,’ and so forth” (Lang, p. 69). In turn, it is precisely such directionality that renders the world orderly and is responsible for it being a “cosmos.” Koyré defines a cosmos as “a conception of the world as a finite, closed, and hierarchically ordered whole.”<sup>xii</sup> This means that within the cosmos everything has its place in which it naturally belongs. Stars are above us, earth below, and animals like us are in-between. By contrast, in a universe of indefinite space nothing belongs anywhere or is objectively above or below, to the right or the left. Such directions are relative, for there is no fixed and immobile center.

Another fundamental, and to us jarring, point is expressed in Koyré’s comment. Aristotle’s world is “finite.” The uppermost heavenly sphere, which is as far as the eyes can see, is its outer limit. This cosmological fact has, for Aristotle, far-reaching significance. Consider, for example, his embrace of the Pythagorean “table of opposites” (in *Metaphysics* I.5). It asserts that the finite is to the infinite as the one is to the many, as rest is to motion, as right is to left, and finally as good is to bad. Such an evaluation sounds preposterous, for finite and infinite seem to be no more than quantitative designators and thus to be indifferent to questions of value. Nonetheless, this evaluative hierarchy—the finite is superior to the infinite—is central to Aristotle’s thought for, again like the Pythagoreans, he counts the finite as responsible for intelligibility. If intelligibility is then taken to be a good, as Aristotle takes it to be, then so too

should the finite. As he puts it, “insofar as something is infinite it is unknowable” (*Physics* 207a26).

In *On the Heavens* I.5, Aristotle asks “whether there is an infinite body?” and he pleads for the urgency of this question: “for whether there is or isn’t does not make a small difference, but all the difference in respect to the study (*theoria*) of truth” (271b5-6). Everything hinges on the answer to this question, which for Aristotle is emphatically negative, for were the magnitude of the world to be infinite it would be unknowable.<sup>xiii</sup> And no feature of the world is more apparent and impressive to Aristotle than its knowability.

Recall that the notions of place and natural direction are tightly connected. Unless forced to do otherwise, fire naturally moves upward to its place in the heavens. The natural motion of earth is downward. The sun rises in the East, to the right, and sets in the West, to the left. If there were an infinite body these notions would become meaningless. Aristotle explains:

Every sensible body is in a place, and the forms and differences of place are the up and the down and before and the front and the back and the right and left. And these are not relative to us nor a matter of convention, but have been distinguished in the cosmos itself. And they could not possibly be in the infinite. Simply put, if an infinite place is impossible, and every body is in a place, an infinite body is impossible. Indeed, whatever is somewhere is in a place, and what is in a place is somewhere (*Physics* 205b31-206a2).

To sum up: directionality—up, down, left, right, front, back—is an objective feature of the world<sup>1</sup> and renders it orderly and intelligible (and beautiful). The moon simply is above the earth; fire goes up towards its natural place, water down. The world makes sense and as a consequence must be finite.

Having eliminated the possibility of an infinite body or entity, Aristotle is not yet done with the infinite. For “if there simply were no infinite at all, many impossibilities would ensue”

(*Physics* 206a10). For example, if there were no infinite we would be required to say that time has a beginning and an end, and that continuous magnitudes are not divisible into further magnitudes, two notions that are absurd. We would have to say that numbers are not infinite, which again is obviously false since there is no highest number.

What, then, remains of the infinite? It is, but only in potentiality (206a18). A line segment can be divided into infinitely many smaller segments. Each segment subtracted from the original line is limited, but the procedure of subtraction cannot be completed. The infinite, Aristotle tells us, is “that which is always beyond” (207a1). It is the potential of there always being more.<sup>xiv</sup> Differently stated, the being of the infinite is “in thinking” (*en noesei*: 203b24).<sup>xv</sup> We can always think of a higher number and in our minds sub-divide a line segment to infinity. We can always imagine a point beyond. But Aristotle cautions against “trusting in thinking alone” (208a15). Clever people can cook up puzzles and argue on behalf of paradoxical positions. But the goal of theoretical thinking is not just being clever, or doing elegant mathematics, but remaining faithful to (or saving) the phenomena, including sensible, naked-eye, ordinary phenomena. The fundamental requirement of Aristotelian theory is to make sense of the world as human beings here on earth actually experience it.

That the finite is prior and superior to the infinite is also reflected in one of Aristotle’s basic metaphysical principles: “For one man and a man are the same, and being a man and a man are the same” (*Metaph.* 1003b22). To be is to be this or that; it is to be determinate or singular. To be, in the fullest sense—that is, in actuality—is to be finite. Differently stated, the concept of the finite is intimately connected to that of the “whole.” As mentioned above, a “whole” is “that from which nothing is absent; for example, a whole man” (*Physics* 207a10). A whole is a

complete (*teleion*) unity of parts. This description leads directly to the concept of the finite: “The whole and the complete (*teleion*) are either entirely the same or their natures are akin. For nothing is complete unless it has a *telos*. And a *telos* is a limit” (207a15).

A man is whole because he is a complete (*teleion*) set of parts; the list of his parts comes to an end, and each contributes to the functioning of the man. It’s important to note that *teleion* can also be translated as “perfect,” which derives from the Latin, *perficere*, “to go through.” Something that has been gone through entirely is complete and thus “perfect.” The infinite is that which cannot be gone through. Furthermore the words “perfect” and *teleion* also have evaluative connotations. What is “perfect” is not only complete or “that from which nothing is absent,” but it is also maximally good and “cannot be exceeded in its kind. For example, a perfect doctor or flutist is one who, according to the form of the excellence that belongs to them, lack nothing.”

In an infinite universe, nothing, at least nothing physical, is perfect. Teleology is literally impossible.

A last argument: “the causes of beings are not infinite, either as a linear sequence or a form.” Instead, there must be an *archê*, a “beginning,” “origin” or “first-cause” (*Metaph.* 994a1). To borrow a modern example (that parallels Aristotle’s own), “water comes from water molecules, a water molecule from hydrogen and oxygen, hydrogen from electrons, protons, etc. Is there an end, or, are there ultimate particles or ultimate matter? For Aristotle, there is an end.”<sup>xvi</sup> One thing cannot come from another and then from another, and so on to infinity. There must instead be a termination point, a first cause, for if there were not and the sequence were infinite, then no real cause would ever emerge. For “if there is no first, in general there is no

cause” (994a18-19). If every answer to a “why question” simply generated another question, and did so infinitely, then no proximate answer would ever bring us any closer to the truth and it would be impossible to make sense of the world. After all, compared to or divided by infinity, all finite steps add up to zero.

This same prohibition against an infinite causal sequence applies to the final cause. If I walk for the sake of health, and seek health for the sake of happiness, and this sequence of means-and-ends proceeds forever, then no individual end I might achieve, and so no action that I might take, can ever bring me closer to my ultimate goal. As Aristotle puts it, “the ones who make the sequence infinite are not aware that they are destroying the nature of the good. And yet no one would undertake to do anything if he were not going to reach some limit” (*Metaph.* 994b12-14).

To approach to the same point from a different angle: Aristotle insists that possessions like money, power, or fame—all of which are quantitatively measurable and hence potentially unlimited—cannot be the best of things, nor can their possession constitute genuine human happiness. No amount of money can be highest or ultimately satisfying because there is always more money to be had. No amount of power or fame can be maximum, for even if one were to rule or be admired by all humanity, there would still be the gods left to conquer. Therefore, these sorts of external, quantifiable and thus unlimited goods cannot be the cause of the best life.

To sum up again: Aristotle’s physics and cosmology are structured around the concept of place. His topologically divided world is limited, intelligible and orderly. But the concept of place is essential to the practical world as well as the one studied by cosmology, for as argued in Part 2 above, Aristotle’s politics is essentially topological. The city, which is limited and has an

intelligible form or *politeia* that orders it, the city which is a whole and hence in principle is perfectible, is the basic political unit. Therefore, if a city is to be counted as a truly good one, it must be synoptically apprehensible. It must be localized; it must be in a determinate place and its borders, as well as the citizens within those borders, must be identifiable or intelligible. Recall that Babylon is not a real city because its borders cannot be apprehended even by the putative citizens themselves.

In short, Aristotle's cosmology is a comprehensive background theory that warrants his political defense of the local. It renders his account of the city, which is a being in the world, coherent with his account of the world as a whole.

It is arguable that in a parallel fashion modern political theory, first articulated by thinkers like Hobbes and Locke, also coheres with, or even emerges from, a background cosmology that is as comprehensive as Aristotle's. As mentioned above, in a universe of indeterminate or infinite space—in other words, in the universe as we know it today—nothing has a place, nothing belongs anywhere in particular, teleology is senseless and there is no possibility of perfection (at least here on earth). The fundamental consequence of this theory when applied to political life is that human beings are not bounded, not determined to exist in one place or another. In other words, we are free...free to choose our place.

For Aristotle, a woman's place is in the home where she naturally belongs and where she is, and should be, subordinated to the man. Nonsense, we reply. A woman should have the right to occupy any leadership position in the community to which she aspires and for which she is qualified. She should pursue the path, occupy the place, that she wishes. For Aristotle, a slave's

place is under the thumb of a master, a principle that we find repugnant. In general, for us what is of fundamental practical importance is the freedom to move. In an infinite universe we are indeterminate, placeless beings who belong nowhere in particular. At the least, this is a theoretical or cosmological principle compatible with the practical or political one—let’s call it “liberalism”—that elevates freedom above all other values.

I am not asserting that modern physics is responsible for modern political theory. Instead, I’m re-asking the question of this paper. How deep must a normative political theory go? Must it go all the way down (or up), namely to the nature of the world itself?

#### *Part 4: The Relevance of Aristotelian Place*

Unfortunately, if we who lament the passing of the local are required to appeal to some sort of topological cosmology like Aristotle’s in order to solidify our political recommendations, then we’re finished before we start. For when it comes to physics Aristotle is dead as a doornail, and to bring him into competition with Newton and Einstein is patently absurd. No one can seriously maintain that the earth is the center of the world, or that the visible stars are the uppermost limit of the heavens.

And yet....

There *is* one sense in which Aristotle can still teach us something. His entire philosophical project, from his cosmological theorizing to his ethics, operates from a thoroughly

human, earth bound, naked-eye perspective. No thinker in the West has done a better job at articulating the way the world looks to normal human beings in their ordinary experience of life. As Martha Nussbaum memorably put it, Aristotle is a “professional human being.”<sup>xvii</sup> And to a human being the sun surely does look like it’s moving across the sky, from East to West.

For the revolutionaries of the 17<sup>th</sup> century, it was precisely this “anthropocentrism” of Aristotelian science that was objectionable. Consider what Francis Bacon, borrowing the Biblical injunction against worshipping false idols, had to say. An idol for Bacon is a false notion that “so besets men’s minds that truth can hardly find entrance.”<sup>xviii</sup> The first of his four idols, which lays the groundwork for the rest, is “of the tribe.” It has its “foundation in human nature itself. For it is a false assertion that the sense of man is the measure of things.” Instead, Bacon claims, “the human understanding is like a false mirror which...distorts and discolors the nature of things by mingling its own nature with it.” As he later puts it, “the human understanding is of its own nature prone to suppose the existence of more order and regularity in the world than it finds.” Our daily lives seem to make sense to us. We divide our world into patterns, kinds, strata of reality. Trees are trees and not dogs, dogs are not cats. Humans are more worthy than ants, which is why we feel no guilt in crushing them with our feet, and living beings are essentially different from inanimate ones. The sky is above, the earth below. But on Baconian grounds all this is no more than anthropomorphic claptrap. What is required for a real understanding of the universe—as opposed to the cosmos or world—is the employment of a rigorous method that cleanses the scientist of all human prejudice or perspective. To succeed a scientist must check her humanity at the door when she enters the laboratory.

The triumphs of modern science are inescapable. Having comprehended something of the real forces at work in the universe, the modern scientist has fulfilled the Baconian dream of transforming knowledge into power. This is called technology, the application of scientific principles to the manipulation of the sensible world. So, for example, the physicists study the internal structure of the atom, and then the engineers design the machine to unleash its energy. The properties of petroleum become well understood, the geologists learn how to locate it underground, and the internal combustion engine gets its fuel. The geneticists determine the structure of the genome, and the pharmaceutical companies line up to manufacture drugs that can alter the workings of the human body. The science informing our technology is thoroughly non-Aristotelian—its object is the universe rather than just the world in which we live—and this is the reason for its spectacular success.

But this is also where the problems start. For the scientific knowledge of how things in the universe really work has unleashed forces that can overwhelm the world in which we live. Nuclear power is the clearest example. Understanding the structure of the sub-atomic, we know how to tap into the unlimited energy it contains. The problem is that there may not be enough room down here on earth to use it safely.

In this context recall an essay written in 1935. In “Philosophy and the Crisis of European Humanity,” Edmund Husserl wrote, “the European nations are sick. Europe itself, it is said, is in crisis.” He offered a concise diagnosis: “I am certain that the European crisis has its roots in a misguided rationalism” that gave rise, beginning around 1600 in the work of Galileo, to mathematical physics and the technology it spawned. Commenting on a later scientific achievement, namely Einstein’s theory of relativity, Husserl pinpointed what is misguided about European rationalism.

Einstein's revolutionary innovations concern the formulae through which the idealized and naively objectified *physis* [nature] is dealt with. But how formulae in general, how mathematical objectification in general, receive meaning on the foundation of life and the intuitively given surrounding world—of this we learn nothing; and thus Einstein does not reform the space and time in which our vital life runs its course.<sup>xix</sup>

The universe studied by mathematical physics tells us nothing about the “meaning” of our lives, about the space and time, the world, in which we live. It grants no privileged status to ordinary human experience, for it is a science thoroughly purged of anthropomorphism. To reiterate, liberation from the idols of the tribe, from a merely human perspective, is the source of modern science's titanic success. But it must not be forgotten that it is we *anthropoi* who will use and suffer from its technological applications down here on earth, which for better or worse is where we live.

In radical contrast to the moderns, Aristotle stays focused on the “the space and time in which our vital life runs its course.” No wonder his political theory, backed by a cosmological one, is far more suited to the needs of the local.

But so what? His physics is still dead as a doornail. Perhaps, however, even at this late date we can benefit from studying it. The best I can do to make this plausible is the following.

In his second *Meditation* Descartes engages in what today would be called a “thought experiment.” He imagined an “evil genius,” a being with all the powers of the Biblical god but devoted to misleading human beings. Gripped by this fantasy, Descartes regarded all ordinary sense-perceptions as illusions, as “nothing but the deceptive games of my dreams” with which the evil genius laid “snares for my credulity.” He regarded himself “as having no hands, no eyes,

no flesh, no blood, no senses, but as nevertheless falsely believing that I possess all these things.<sup>xx</sup>

Descartes used this thought experiment as a conceptual tool, for his goal was to discover an indubitable truth-claim that could withstand all skeptical doubts and any machination of the imaginary “evil genius.” He famously believed that he had found such a first-principle, for as hard as the evil genius might work to trick him, “he can never bring it about that I am nothing so long as I shall think that I am something. Thus it must be granted that, after weighing everything carefully and sufficiently, one must come to the considered judgment that the statement ‘I am, I exist’ is necessarily true every time it is uttered by me or conceived in my mind.”

Such thought experiments are now familiar. Philosophers have imagined a “twin-earth,” which is exactly like our own with the one exception of having no water, and a universe that contains only two iron spheres each with a diameter of a mile.<sup>xxi</sup> If they are allowed to do this then surely it is fair to indulge in the following scenario.

Suppose that there is an entirely humane “genius” as powerful as the Biblical God. He directs all his energy to assuring the veracity of our ordinary perceptions. So, for example, when we see (and say) that the sun rises in the East and sets in the West, we can be confident that it actually does traverse the sky. When we feel the air cooling our skin, it will be reasonable to infer that the air itself is cool. Because we regularly observe that the fires we light move upwards, which is why we always place the match under the cigarette, we are justified in asserting that it is in the nature of fire to move upwards. We look down to see the earth and up to gaze at the stars, and that’s exactly where they actually are: for the earth is the center of the world. In the grip of this fantasy, all the external things of the world are explicable by us in the same terms in which we ordinarily encounter them. And so what the “genius” of this thought

experiment does is instill us with the confidence to trust our ordinary perceptions and the language we use to describe and understand them. In the grip of this fantasy, the world, from top to bottom, becomes comprehensible in human terms, and in it we would be at home.

This is Aristotle's world. But let me be clear: he himself does not endorse this fantasy or take himself to be performing a thought experiment. Instead, Aristotle thinks of himself as a scientist who straightforwardly studies and articulates the world. We, however, might not have this luxury, for we have lived too long in the grip of the Copernican revolution, the Lockean distinction between primary and secondary qualities, the rejection of teleological biology and its replacement by Darwin's theory of natural selection, the discovery that stars have histories and that the universe extends infinitely beyond what we can see with our naked eye. For us, it is perhaps only as a thought experiment that the Aristotelian worldview can gain any traction. But if we let it sink in, and especially if we compare it to the thoroughly de-humanized universe of quarks and quasars, of big bangs and black holes, of geological time, neurons firing and selfish genes hard at work—and to those many contemporary philosophers who feel sure that the scientists working in the laboratories know far more than they—we may come to better understand the nature of the technological culture in which we today find ourselves. It is based, quite literally, upon a thoroughly de-humanized conception of the universe.

In turn, this understanding may help us better understand the nature of our political experience. Buying tomatoes at the farmers' market is a gesture, a plea, a response to and a protest against a globalized culture. The very act of paying more for these tomatoes expresses a desire...a desire for place. Aristotle helps us understand that desire. He thereby helps us to

understand ourselves. And we need this kind of self-knowledge in order to make a better claim for the priority of the local in our lives.

Why should the local, should place, be fundamental in a political program? Aristotle has an answer: because it is intrinsic to the human experience of the world.

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<sup>i</sup> both of course esp Mac understand themselves to be neo-Aristotelians.

<sup>ii</sup> Aristotle's Politics

<sup>iii</sup> Aristotle assumes that the poor will always be many: "the rich are everywhere few and the poor many" (1279b37-38).

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<sup>iv</sup> An old thought; (Rousseau said something about Geneva. Montesquieu 170)

<sup>v</sup> As a consequence Aristotle recommends a political program of population control. “A limit should be imposed on procreation” 35b20), he says, one in which abortions are permissible in order to maintain the number of children in the city. (although before “quickenings”—35b20).

<sup>vi</sup> “in leisure and freely and with moderation” (1326b31).

<sup>vii</sup> It is striking that the same definition of the “whole” is found in the *Poetics* and *On the Heavens*.

<sup>viii</sup> Metaphysical language

<sup>ix</sup> It is difficult to render forms of the Greek participle, *on*, into English. Literally, it means “being” and so *ta onta*, the neuter plural used as a substantive, means “beings” or “things that are.” The too familiar English word “thing” can also be used, but when it is its relationship to “being” (*to on*), which becomes the subject of metaphysics or “ontology,” the *logos* of being (>III.1), is occluded

<sup>x</sup> Lang (1998), p. 71 describe the quotation from Hesiod as a “punctuation mark” that ends the argument.

<sup>xi</sup> In other words, “where” is one of the questions the answer to which is a category. See, for examples, *Categories* 1b26 and 2a1, as well as *Metaphysics* 1017a26. Helen Lang’s book cited only in parentheses.

<sup>xii</sup> Koyre page ?

<sup>xiii</sup> What follows is a sampling of his arguments.

Despite the fact that they are divine and eternal, it is impossible for the heavenly bodies to be infinite in magnitude. A body that revolves in a circle cannot be infinite, for if it were, then the straight lines radiating from the center of its circular path would also be infinite. But if they

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were, so too would be the area encompassed by two of these lines. The body moving in the circular path would then be required to traverse this infinite area. It is, however, impossible to traverse an infinite distance. Therefore, the heavenly bodies that orbit the earth in a circular motion—a fact confirmable, Aristotle thinks, by both observation and argument—are not infinite. As he puts it, “we see that the heaven revolves in a circle, and we have determined by argument that this circular motion belongs to a body” (*On the Heaven* 272a5); a body which must be finite.

To make the same point: we see that the heavenly bodies complete their orbit in a finite time span. Therefore, if the heaven were infinite, an infinite distance would have been traversed in a finite time, which is impossible. (See 272b30.)

That these two arguments rely on what “we see” of course reveals their limitation. We can only see finite objects, but by itself this fact hardly implies that there is nothing infinite in the universe. It would have this implication only if knowledge was required to conform to the sensible phenomena. It is not unreasonable to propose, however, that reality is best accessible and knowable not through perception, but through some form of abstract thinking, such as geometry, which can put the infinite to good use. Bruno was an early champion of this line of thought. “No corporeal sense can perceive the infinite,” he said, “for the infinite cannot be the object of sense-perception.” He then generalized: “truth is in but a very small degree derived from the senses as from a frail origin.” Real epistemic action resides “in the intellect...in the mind, in its proper and vital form.”<sup>xiii</sup> As Koyré describes Bruno’s position, “for sense perception and imagination infinity is inaccessible and unrepresentable; for the intellect, on the contrary, it is its primary and most certain concept...Accordingly, from Bruno’s point of view,

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the Aristotelian conception of a closed innerworldly space is not only false, it is absurd.”<sup>xiii</sup> I mention this contrast for reasons to be developed below.

Another argument: there can be no infinite body, Aristotle claims, because “every sensible body is somewhere by nature and there is some place for each” (205a10). Recall that Aristotle defines “place” as “the limit of the surrounding body” (211b1). With this definition assumed, however, the argument becomes a tautology: there can be no infinite body because all bodies have a place. This is equivalent to saying that because all bodies are limited, there is no infinite body.

<sup>xiv</sup> It is, however, actual in the sense that “the infinite is in actuality (*entelecheia*) as we say the day is actual or the contest is actual.” A day is composed of many hours. To say that “today is Thursday” is thus to speak somewhat ambiguously. It may be Thursday, but more accurately it is 11:17 a.m.. In other words, only a limited chunk of time can be actual, not a full day. Today will include 4 p.m., but it is not 4 p.m. right now. It will be 4 p.m. later and so it is potentially 4 p.m. now. To reiterate, the infinite is in potentiality.

<sup>xv</sup> Contrast with: insofar as something is infinite it is unknowable” (*Physics* 207a26).

<sup>xvi</sup> Apostle (1979), p. 269.

<sup>xvii</sup> Nussbaum, p.

<sup>xviii</sup> Quotations are from the *New Organon* as found in the *Works of Francis Bacon*, ed. J. M.

Robertson (London: Routledge, 1905).

<sup>xix</sup> Husserl (1970), p. 270, p. 290, p. 295.

<sup>xx</sup> The translation is by D. Cress (1980).

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<sup>xxi</sup> The twin-earth was imagined by Hilary Putnam, the two spheres by Max Black.