Before Architecture: Archai, Architects and Architectonics in Plato and Aristotle

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Abstract

“The beginning (archē) seems to be more than half of the whole.” So claims Aristotle in the first book of *Nicomachean Ethics* (1098b8). Might this claim be as true for architecture as it is for philosophy? If so, what can the first philosophical statements concerning architects tell us about the aims, scope and limits of an architect’s role?

This study gathers and interprets the earliest extant references to architects in ancient Greek philosophy, as found in select works of Plato and Aristotle. Surprisingly, there has been little treatment of these passages. Aside from isolated citations, the question of how and why Plato and Aristotle chose to integrate “architects” (architektōn/αρχιτέκτων) and “architectonics” (architektonikē/αρχιτεκτονική) into their discursive inquires has not been asked. Thus, one of my basic aims is to disclose what these philosophical passages contribute to a critical and speculative discourse on architecture. Although the Greeks had no word for architecture per se (*architectura* being a Latin word first found in Cicero), Plato and Aristotle—in the midst of examining political, ethical and epistemological problems and potentialities (in the 4th c. BCE)—began loosely to define principled “architectonic” practices involving the knowing direction of individuals, arts and materials toward comprehensively beneficial aims. Whereas the earliest extant inscriptions naming “architects” (from the 440s and 430s BCE) yield only a few meaningful but
largely techno-bureaucratic details, and Herodotus’ *Histories* (from the same decades) merely credit select “architects” with a disparate assortment of “wonders” (*thaumata*), the philosophical sources introduced below open more precisely articulable questions concerning what architects ought to know, do and desire.

As I have shown elsewhere, philosophical thinking about architectural practice was prefigured by dramatizations of architectural acts, as shown by the inclusion of “architects” and “architecting” (αρχιτεκτόνειν) in select scripts of Athenian drama. Indeed, the earliest extant *architektōn* in Greek literature is found neither in inscriptions nor historical prose, but (arguably) in a fragmentary etiological drama by Aeschylus (staged in 476 BCE), wherein a personified Justice (daughter of Zeus) is presumed “to architect” proportionate order. About fifty years later, in the wake of Pericles’ ambitious building program and while Herodotus’ *Histories* were circulating in Athens, Euripides and Aristophanes featured more medial (and mortal) architect-protagonists. Amid grave dangers, these agents—called “architects” and called upon “to architect”—dared to initiate and lead collaborative schemes aimed at restoring social order, regional peace, levity, and even *theōria*. These dramatizations, together with the philosophical passages following them, represent substantial yet largely overlooked contributions to the beginnings of architectural theory.

Bearing these precedents in mind, the “architect” and “architectonic” terms of Plato and Aristotle will be our guide to renewed inquiry into the *archē* of architecture. While some may be eager to brush these old words aside, this study seeks to grasp them afresh, taking them up as clues to discursive contexts that open onto cultural problems and possibilities, still comparable and instructive to our own.

**Plato: Toward a Syncritical, Synthetic and True Technē**

The dialogues of Plato have been profoundly influential in shaping architectural theory, at least since the Renaissance. This is true particularly of dialogues concerning the constitution of the *polis*, such as the *Republic*, *Timeaus*, *Critias* and *Laws*, wherein Plato’s interlocutors provide seminal formulations of topics still pertinent to present-day architectural discourse. Such topics include: the desire for ideal cities; notions of ideal forms; the paradigmatic role of geometry; nuances of representation; mimetic correlations of body, city and world; the generative primacy of space; and the nature of the beautiful—a topic also central to the *Symposium*, *Phaedrus* and *Philebus*. However, as architecturally relevant as all this may be, not one of these dialogues mentions the Greek word *architektōn*. Even *Timaeus* is bereft of architects. The maker of the cosmos featured in this dialogue is not called architect; rather, he is a *dēmiürgos*, one who performs “work” (*ergos*) for the “people” (*dēmos*). This distinction should not be overdrawn, since a *dēmiürgos* was a general designation inclusive of architects, and the demiurge in *Timaeus* is also qualified with *tektōn* terminology. Nonetheless, an inquiry into the beginnings of architectural theory must tackle the two
dialogues where Plato actually does involve “architects”: the Statesman and the Gorgias. In doing so, we discover that these dialogues explore topics concerned less with the physical and geometrical premises of cities (and cosmos), and more with the words and deeds, the intentions and practices, of leading civic agents—those who ought to guide fellow citizens toward discerning and manifesting what is best for the common good. As Plato suggests, such civic agents (statesmen and orators) perform roles comparable to architects.

In two dialogues grappling with the interrelated arts of politics and rhetoric, the Statesman and Gorgias, Plato introduces the example of architects to help clarify the powers and problems of civic leadership. At the beginning of the Statesman (Politikos), having established that a statesman acts less by means of hands and body and more by means of “intelligence (synesis) and strength of soul” (259c), the principal speaker, a Stranger from Elea, begins elaborating this peculiar mode of intelligence with a comparison to architects:

Every architektōn, too, is not himself engaged in work but is a leader (archōn) of workmen (ergatōn)... he furnishes cognition (gnōsin) and not manual work (cheirourgian) (259e).7

In isolation, this statement seems merely to subordinate manual workers to (presumably) more knowing architects, while rationalizing Plato’s notoriously dogmatic divisions of labour. However, in discursive context, the passage opens onto broader and subtler elaborations. Immediately after separating “cognitive” (gnōstikēn) and “practical” (praktikēn) sciences, the Stranger suspects the division is not so clear-cut; for the example of architects reveals that the mode of intelligence under discussion is both cognitive and practical. Questioning and amending his provisional distinction, the Stranger realizes that the art (technē) of statesmen, like that of architects, involves leading others in dynamic situations (260a). Such a socially and practically involved agency demands not only a cognitive capacity to make critical judgments, discerning and deciding what is best on behalf of others, but also an ongoing interpretive, communicative and interactive capability to make best use of that knowledge by leading a variety other skilled individuals and arts toward mutually desired ends (260a). It would be insufficient, the Stranger contends, for those with civic obligations to judge from a distance, like a “spectator” (theatēn, 260c); rather, they must enact judgments by engaging an ensemble, leading others in their midst. Put another way, architects and statesmen translate decisive judgments into appropriate collaborative actions. Although their art may not be productive in isolation (in the same way that manual labourers produce artifacts), it is oriented toward external action, and thus cannot be purely cognitive. The remainder of the dialogue is devoted to elucidating this hybrid mode of practical intelligence, which the Stranger further subdivides as both discerning and directive, or critical (kritikos) and epitactic (epitatikos, 260b). Although Plato’s dialectical method proceeds by logical division, his ultimate philosophical aim, as well as that of statesmen (and architects), is to foster synthetic practices and understanding.
Architects are not mentioned again in the *Statesman*, aside from a subsequent observation that an architect’s art differs from a statesman’s in that a statesman directs only animate kinds of becoming, involving living “ensouled” citizens, whereas the “architectonic (art)” (*architektonikón*) extends also to inanimate kinds of becoming, including the transformation of “soulless” building materials (261c-d). Thus, ostensibly leaving architects behind, the Stranger proceeds to elucidate the political *technē* through a variety of other revealing paradigms: comparing statesmanship, comically, to the shepherding of herd animals (261d-267d); mythically, to the periodic taming of the unruly animal cosmos by a demiurge and divine helmsman (268-274e); and, more analogically, to the art of weaving. Like weaving, the political art harmonizes a web of heterogeneous elements into a complex whole, creating unity from multiplicity by intermeshing opposites, including people of opposing but mutually reinforcing dispositions (279a-283a). This prolonged excursus into weaving—one of the dialogue’s many “devices of indirection”⁸—draws criticism from the Stranger’s interlocutor for its excessive length (283b). The Stranger, in turn, defends his elaborately detailed paradigm with a lesson on measurement. In a way that recalls Socrates’ opposition to speeches “hurried on by the clock” (*Theaetetus*, 172d),⁹ and anticipates Aristotle’s arguments for flexible rules and different kinds of precision,¹⁰ the Stranger in the *Statesman* describes two modes of measuring. One involves calculating by numbers, quantifying large to small, long to short, etc.; the other, more qualitative and “difficult,” entails evaluating in relation to situational contexts, customs and contingencies, in accordance to what is moderate, appropriate, timely and obliging—or, as the Stranger puts it, measuring relative to “the mean (*to metrion*), the fitting (*to prepon*), the opportune (*to kairon*), and the needful (*to deon*)” (284e). Since cities and human situations are so complex and variable, a statesman “with *phronēsis*” (prudence, or practical wisdom) would be capable of acting through the latter, more pliant and comprehensively accommodating mode of reckoning (294a-b). With this finely woven argument the Stranger defends his elaborate excursus as fitting for the topic and times, while arguing that prudent statesmen and good legislators ought to exercise flexible decision-making, appropriately adjusting judgments (to be held more tightly here, more loosely there) in relation to particular and changing circumstances. To rigidly impose fixed laws without such practical accommodation would be to disassociate wisdom from action, separating those cognitive and practical activities that statesmen (and architects) were said in the beginning of the dialogue to integrate. Moreover, in divorcing thinking from doing, the imposition of fixed laws would risk destroying all the arts, making the city “altogether unlivable,” as the interlocutors fear (299e).¹¹ Thus, only an intelligently practical *technē*—also qualified as a combinatory “syncritical art” (283a) and “synthetic science” (308c)—would, the Stranger argues, lead a city toward “beautiful, just, and good things” (309c), enabling citizens to “turn out beautifully” and “become happy” (311b-c).

Although the Stranger often seems to be cutting the city to shreds with obsessive dichotomies, there is a gradual shift of emphasis as the dialogue proceeds toward weaving the city’s opposing complementarities back together again into a lively and variegated whole. The Stranger does not explicitly bring such restorative obligations back to bear on the discerning and directive capabilities of architects, but it is
productive for us to recognize their share in synthetically weaving the fabric of the _polis_; in collaboratively manifesting happy ends; and in practicing _phronēsis_—a mode of situational interpretation that, as we shall see, Aristotle associates with “architectonic intelligence.”

Whereas Plato’s _Statesman_ investigates the discerning, directive and synthetic capabilities of political agents in ways that illuminate architectural leadership, the _Gorgias_ initiates a related inquiry linking political, philosophical and pedagogical ends with the discursive potential of architectural intentions.

In _Gorgias_, Socrates engages the famed rhetorician after whom the dialogue is named, challenging him and his two pupils to explain the scope and power of their art—if indeed it is an art (_technē_), or, as Socrates quips, merely a “knack” (_empeiria_, 462c). Predictably, Socrates gains the upper hand, dismissing his interlocutors’ misuse of rhetoric while demonstrating how and why the art ought to be performed. Although Socrates’ mention of architects in this discussion may, at first, seem inconsequential, his repeated concern for improving the _polis_ and for transforming its topography with temperance (not decadence) suggests otherwise.

Near the beginning of the dialogue, Socrates urges Gorgias to acknowledge the limits of his rhetorical competence, saying:

> Whenever there is a gathering in the city to choose doctors or shipwrights or any other _dēmiurgic_ group, surely the rhetorician will not then give his advice, for it is obvious that in each such choice it is the real expert [one _most_ skilled, or artistic (_technikōtaton_)] who must be selected. And when it is a question about the building of walls or equipping of harbors or dockyards, we consult, not the rhetoricians, but the _architektones_ (455b).¹²

In response, Gorgias insists, to the contrary, that rhetoricians and statesmen, including Pericles, have indeed been successful in counseling the city on these matters, thus the advice of architects and other demiurges would be unnecessary, even unwelcome (455e-456e). As the discussion unfolds, however, it becomes clear that what’s most at stake in Socrates’ challenge is not simply the question of who ought to advise on matters as important as civic transformation, but the nature of the advice: to what end is the advice ultimately aiming; on what knowledge is it based; and is it fostering understanding of what is good for the city?

The long and heated debate advances through many arguments, rebuttals and digressions concerning the function of persuasion, the criterion of justice, the problem of power tending to corrupt, and the plausible bases for genuine discourse—Socrates suggests these ought to be _pathos, philia_ and _philosophia_ (common humanity, friendship and love of wisdom). In the end, Socrates, who speaks as if confronting his own unjust executioners, recounts a myth about the fair judgment of one’s soul in the afterlife (523a-527e). But before delving into the underworld, Socrates returns vigorously to his concern for the physical (and moral) fabric of the living city, and to the need for proper advice on its transformation. Recalling Gorgias’ dismissal of architects, Socrates agrees that the speeches of politically empowered rhetoricians, includ-
ing Pericles, had indeed persuaded the people to transform Athens, but they did so improperly: for they merely succeeded in filling the Athenian landscape “with harbors and dockyards and walls and revenues and similar rubbish” (519a). In paying no heed to “temperance and justice” and “true” persuasion these politicians failed to improve the polis. Instead, they made the city “swollen and festering” (518e)—a condition corresponding to the unhappy “festering” soul of an intemperate tyrant, which Socrates diagnosed earlier in the dialogue (480b).

As Eric Voegelin has emphasized, the Gorgias is Plato’s declaration of war against corruption in Athenian society. His enemy being the corrupting influence of false public representatives who cater inappropriately to the masses through flattery and manipulation, appealing to their self-serving and shortsighted prejudices and passions instead of attempting the more difficult task of discursively building a better society. But, even though Plato (via Socrates) reveals his disgust for corrupt imitations of political and rhetorical arts as practiced in his day, Socrates’ dialogical manner of speaking demonstrates the possibility of restoring these arts to proper aims. For Socrates does not ultimately reject politics and rhetoric, rather he attempts to recalibrate them, in part, through his own example, turning them toward genuine inquiry of what constitutes true persuasion and the common good. For instance, early in the dialogue, Socrates excludes himself from the tribe of demagogues he opposes, emphatically decrying, “I am no politician” (473e6). But, toward the dialogue’s close, having refuted Gorgias and his unscrupulous followers, Socrates professes to be among the few Athenians who “attempt the political art truly (alēthōs)” (521d).

Similarly, Socrates initially denies that rhetoric is an “art” (technē, 462b); but, in the end, he argues for a “true rhetoric” (517a), insisting that a properly “artistic” (technikos) rhetorician would strive to engender in others justice, temperance and goodness (504d-e). And this is exactly what Socrates attempts throughout the dialogue. Thus, with the force of dramatic irony, Socrates opposes a narrowly and naïvely construed technē by practicing a more exemplary technē, one that, like politicians and rhetoricians, acts through persuasive speech, but persuades toward wiser, more comprehensive, and self-questioning ends. Whereas his sophistic interlocutors admit to pursuing gratifying popularity, power and personal pleasure, Socrates strives to awaken in others a desire to pursue what is good for the city. Whereas the teachings of Gorgias impart opinion (doxa), or belief without knowledge, Socrates aims to cultivate awareness of one’s own (and others’) ignorance in ways that enkindle a courageous yearning for genuine knowledge via discourse. Thus, Socrates attempts to “lead the logos” toward both self-questioning and questioning of what is just and good for the city (461c2-3). And what is good for the city is also good for one’s soul (the ordering of soul, city and cosmos being always reciprocally mimetic of one another for Plato). In this discursively inquisitive way, Socrates demonstrates not only the ethical and philosophical potential of rhetoric, but also what has been called Plato’s “pedagogical definition of politics,” since political competence both presupposes and produces knowledge, and because leading entails learning, and learning leading.

Aside from fostering genuine dialogue, the particulars of what Socrates deems good for the city are not disclosed. Nevertheless, the gist of his counsel is clear: transforming the polis ought to entail true
persuasion—self-doubt, self-questioning, desire for self-improvement, and probing discussion with others on the most relevant and difficult questions. Through such discursive means, edifying advice concerning what is good for a city may be discerned. Whether or not the “architects” Gorgias had dismissed would have attempted such syncritical and synthetic inquiry if called upon to speak in public assembly is a question. What is important is that Socrates suggests they had an opportunity to do so. Thus, we may take Socrates’ counter arguments and discursive manners in the *Gorgias* as a provocation that architects ought to attempt their own political-pedagogical technē truly.

With these teachings of Socrates and Plato in mind, we turn now to consider how Plato’s student Aristotle continues to practice habits of thinking in ways that implicate (and incidentally clarify) knowledge, agencies and responsibilities of architects. Yet, whereas Plato’s manner of persuasive inquiry is dramatized by multiple contending voices and symbolically enriched with interrelated mythic and metaphoric digressions, Aristotle’s investigations proceed in more directly assertive, iterative and abstract manners. These differences, combined with the fact that Aristotle refers to architects much more frequently and diversely, calls for a less narrative and more topical approach in the following review.

**Aristotle: Pursuing Architectonic Beginnings, Middles, Means and Ends**

In his historical work on the *Constitution of Athens*, Aristotle makes a relatively simple statement about architects. Reviewing the functions of different institutions in his day, he notes that the Athenian Council is responsible for inspecting public buildings and superintending ships, whereas “the Assembly appoints architects for the ships by vote” (46). While attesting to architects’ competence extending to ship design and their obligations to democratic processes, these facts (consistent with the sort of contractual details found in ancient inscriptions) suggest little else about an architect’s role. The remaining sixteen references to architects in Aristotle’s extant corpus are more revealing—and complex. In seven of his philosophical works, Aristotle repeatedly draws on the example of architects, and what he calls “architectonic” arts, to qualify variously interrelated kinds of knowledge and action. Although there are instances where Aristotle discusses actualities and potentialities associated with “house-building” (*oikodomikē*), as in book theta of *Metaphysics*, and describes optimum configurations of a *polis*, as in book seven of *Politics*, these are not the thematic contexts where architects arise. Rather, like Plato, Aristotle involves architects in epistemological, ethical and political inquiries to qualify and vivify capabilities and aims associated with synthetic knowledge, practical reasoning and civic leadership.

The following review of relevant passages culminates with *Nicomachean Ethics*, where Aristotle posits politics as the most “architectonic” art and identifies the political philosopher as “architect of the end (*telos)*,” i.e., of the common “good” (*agathon*) to which politics at its best aims. To understand how
and why Aristotle draws architects into a political and philosophical quest for the good, we must consider the use of “architects” in his other works, beginning from a simple starting point.

“All men by nature desire to know.” These are the generous opening words of Aristotle’s *Metaphysics*. He then proceeds to outline four interrelated ways of knowing: sense perception (*aisthēsis*), experience (*empeiria*), art (*technē*), and science (*epistēmē*). It is in striving to distinguish what each mode of knowing entails that Aristotle involves architects. As he explains, perception gives rise to memory and experience, and experience underpins art and science; yet, while experience gains knowledge of particulars, art and science discern universals. In realms of production and practice, experience is invaluable, for those with experience are capable of producing well-made artifacts and performing advantageous deeds. However, arts and sciences reach for more comprehensive understanding. Put differently, whereas those with experience know “that,” the others know “why,” and are thus capable of explaining and teaching their art. Hence, Aristotle claims:

the architects (architektonas) in each technē are more honourable and know in a truer sense and are wiser (sophōteros) than the manual artisans (cheirotechnōn), because they know the causes of the things that are done (981a30-b2).²⁰

Aristotle elaborates this distinction a few lines later, emphasizing it is knowledge of “first causes and the principles of things” that make the architektōn “wiser”—having more sophia (981b26-982a3).²¹

Underlying these opening arguments of *Metaphysics* are Plato’s distinctions between the focused skills of laborers and synthetic concerns of architects, as well as Aristotle’s own recurring distinctions between productive, practical and theoretical knowledge. It must be noted, however, that Aristotle, throughout his various writings, does not consistently hold these distinctions, and shows architects operating in and across all three domains. Nevertheless, in *Metaphysics*, it is in articulating limits and kinds of knowledge that Aristotle divulges key aspects of what he means by “architects.” Surprisingly, he refers to architects “in each” technē, implying each art or sphere of action has its own leading agents defined more by what they know and do than what they make; and, significantly, he asserts that their more comprehensive wisdom entails knowledge of first causes and principles.

For Aristotle, “causes” (*aitia*) and “principles” (*archai*)—better translated as “beginnings”—account for how and why actions and things come into being and become knowable. Book delta (5) of *Metaphysics* reviews the many senses of these key terms, including the material, formal, efficient and final causes, or teloi (1013a24-b3); and the varieties of archai, ranging from tangible starting points and foundations, to elemental matter from which life originates, to basic premises and best hypotheses from which topics become comprehensible (1012b33-1013a23). Archai also encompass willful “choices” that initiate change, including the decisive directives and advice of civic authorities, as well as those “arts” (*technai*) that bring about transformation. In this regard, Aristotle emphasizes that “the arts, and of these especially the archi-
tectonic arts (architektonikai),” are called archai (1013a13-14). He also clarifies that “all causes are archai” (1013a16), and archai include ends: for, as he explains elsewhere, “the end aimed at is the starting-point of our thought, the end of our thought the starting-point of action.”

Aristotle culminates his definition of beginnings with reference to ultimate ethical ends: “the good and the beautiful are the archē both of the knowledge and the movement of many things” (1013a22-3). So, to summarize, for Aristotle, architects and architectonic arts ought to have knowledge of archai, and these material, cultural and intellectual archai appear to include all manner of pertinent beginnings, means and ends. As we shall see, this philosophy of archai outlined in Metaphysics helps us comprehend the manifold and reciprocal agencies embedded in the “architect of the end” in Nicomachean Ethics. But, what are we to make of Aristotle’s surprising plurality of architects and architectonic arts?

Much as the Stranger in Plato’s Statesman recognizes that statesmen act like architects insofar as they lead dedicated arts toward broader civic aims, Aristotle realizes that certain arts guide others. But Aristotle goes further in naming the general class of such guiding arts architectonic. In other words, “architectonic” does not solely concern the art of architects, but rather qualifies any individual or art capable of knowingly leading others to more encompassing ends. Although Aristotle comes to cast politics as the most definitive architectonic art, several revealing variations may be found in his work. For instance, ship design and navigation are architectonic arts compared to shipbuilding; on the topic of diction, elocution and rhetoric are architectonic arts compared to poetics; and an architectonic physician would be involved in judging matters concerning the art of medicine. Each of these examples warrants brief review.

In a discussion of matter and form in the Physics, Aristotle notes that while productive arts make material objects (such as a ship), other arts govern their ends by directing production (as would a ship’s architect), and/or by understanding use (as would a ship’s helmsman). Both of these directive and using arts are “architectonic” (194b2-4). Aristotle’s example of an architectonic end user is worth elaborating: a helmsman—by knowing the sea, the weather, the stars, the destinations, the arts of steering and navigation, and the benefits and detriments of differently shaped hulls—would know a ship’s overall performance and, thus, have a significant share in directing its making toward the best results. Such a user is architectonic not for knowing techniques of material construction, but for knowing the best form of use—“form” (eidōs) entailing not merely shape, but performativity. These architectonic arts are not mutually exclusive. In the same passage Aristotle grants that some arts, like that of the “house-builder” (oikodomos), entail knowledge of both making and use (194a25-27). Thus, Aristotle implies that architects would know the best beginnings and ends of both production and performance—how and why what is made performs well in use. In his Poetics and Politics, he extends the architectonic qualification to arts more socially constructive.

Toward the end of his Poetics, having treated dramatic plot and character, Aristotle turns to the topic of “diction” (lexis). However, he claims the theory of diction belongs not to poetry but to the actor’s art of elocution, and the “architectonic” art, by which he implies rhetoric, or possibly the art of dramatic direction (1456b11). Whereas poetry is responsible for poetic composition, and elocution concerns
dramatic delivery, the architectonic art would analyze, interpret and judge the composition’s performance and reception, evaluating its inflections, turns of phrase, effects and pertinence to occasion.

A digression in Politics brings architectonic to the art of medicine, then back to the political electorate. Questioning the capability of the populace to choose the best political leaders, Aristotle raises the parallel example of evaluating physicians. The best judges of a physician’s work, he claims, are not laymen, but medical practitioners, together with “architektonikos” physicians, and those who either study or teach medicine (1282a3-5). However, he admits, experts are not always the best judges. In some arts, the better judges are all those involved in an art’s benefits and use—the end users (as argued above). For instance, “knowledge of the house is not limited to the builder only,” but extends to its inhabitants, just as the best judges of a feast are its guests, not its cook (1282a20-23). Bringing these observations back to bear on the public electoral process, Aristotle wisely concludes that, although some specialized figures (like treasurers and generals) may be best appointed by political experts, the collective populace would (in healthy regimes) best judge public representatives, since “each individual among the many has a share of excellence (aretē) and practical wisdom (phronēsis)” (1281b3-4).24 And, so, in this digression, the architectonic qualification tacitly shifts from experts (who are vulnerable to self-interest) to the knowing polis as a whole—to the heterogeneous community constituting the city and living with the political results.

Regardless of field, what unifies the architectonic arts in the above set of examples is knowledge of the worlds within which particular works and practices would interact. Such knowledge of relevant cultural contexts—the world of the sea, of language arts, medicine, or city life—enables the direction of related arts toward the best ends. Individuals with such knowledge would be capable of deliberating well and deciding wisely, making the best possible decisions in view of their appropriately comprehensive understanding and experience. The protagonists of architectonic arts do not necessarily have all the technical skills to produce the work in question (the helmsman does not build the ship, the rhetorician does not compose the dramatic poem). Rather, by involvement in the use and performance of what others make, architectonic agents have the requisite capabilities and foresight to judge whether the work might be, in the end, good.

The next set of examples makes the processes inherent to architectonic judgment more explicit. Here architects are tied to a trio of intellectual capabilities governing decision-making: reasoning (logos); deliberating in view of practical action (phronēsis); and thorough thinking (dianoia)—literally, using the mind (nous) all the way through, across, or from side-to-side (dia). These are powers not simply to reason and think, but to reason and think in ways that are both pertinent to particular situations and comprehensive in their considerations and implications. In an aside of Eudemian Ethics, Aristotle calls such full and cogent thinking “practical and architectonic intelligence (dianoia)” (1217a6-7). The ensuing passages from Aristotle’s political and ethical inquiries expand on these cognitive capabilities.

In the opening book of Politics, as a prelude to examining political structures of cities, Aristotle reviews the governance of those communities of which a polis is composed: domestic households. His purpose is to critically identify and understand different kinds of leadership. In this context, he uses the
example of architects to help describe the directive agency of household managers. Initially, in a way that is simultaneously poetic and offensive (to modern ears), he explains that household managers require slaves as “ministers of action” to operate the tools and instruments of production. For, he says, such instruments do not move of their own accord, “obeying or anticipating the will of others like the statues of Daedalus or the tripods of Hephaestus,” for if they did, then “architects would not need assistants, nor masters slaves” (1253b35). While rejecting Aristotle’s views on slavery, we may learn from his portrayal of the dynamic between leading and assisting agents, which he euphemistically suggests can resemble that magically anticipatory dynamic between mythic artisans and obeisant automata. Yet whereas Daedalus and Hephaestus initiate wondrous works through ineffable cunning, domestic and civic leaders need both skilled collaborators and skill in leading them, since mortal leaders bring about transformation not by magic, but through social interaction, persuasive communication, and, most importantly for Aristotle, deliberative reasoning, or logos. Thus, ultimately rejecting house-masters (and slave-masters) as models for statesmen (1255b16-39), Aristotle identifies logos (not familial blood ties) as the primary agent responsible for fostering common bonds, equity and order in society. In the Politics, logos is defined, foremost, as that discursive power which discloses what is helpful and harmful, just and unjust (1253a14-16). A few chapters later, Aristotle personifies this justly and socially constructive power of logos as architect. While every free member of a household and city would have some share in this intellectual capacity, leading agents must have deliberative reasoning power “in its fullness” (telios), as they are obliged to discover and choose (with and on behalf of others) the best means for best ends. This deliberative work, Aristotle claims, “demands an architect, and logos is architect” (1260a18-19).

In a similar passage of Magna Moralia, phronēsis is architect. The personification arises in this way: following an inventory of moral excellences (courage, moderation, wittiness, and so forth), Aristotle describes the intellectual excellences (aretai), especially phronēsis, the “capacity for deliberation” by which one strives to choose, judge and see things “rightly” (1197b13-14). To portray the peculiar way in which phronēsis is active and practical, Aristotle gives the example of architects, who possess the power of making by virtue of their deliberations, decisions and directions. Thus, an architect is said to have made a building as much as its builder (oikodomos). Extending this analysis to all excellences, Aristotle concludes, “all the excellences are practical, and phronēsis is a kind of architektōn of them; for as she directs, so the excellences and good men act” (1198b6-7). The subsequent passage tempers this authority by re-qualifying phronēsis as a good housekeeper, or steward, appropriately dispensing work to others so that the head of the house (sophia) may leisurely pursue philosophical study (1198b10-16). This governing yet medial (even servile) role of phronēsis recurs in Nicomachean Ethics, when Aristotle admits it strange that “phronēsis, though inferior to sophia, will exercise greater authority” (1143b33-4). But, as he clarifies, this is because phronēsis issues orders not to sophia but for its sake, providing for sophia’s “coming into being” (1145a8). Thus, by implication, these passages cast architects, acting with phronēsis, as both serving wisdom and generating preconditions for its flourishing.
Aristotle argues for the activity of intellectual excellences also in book seven of Politics. Just prior to presenting his celebrated description of an imagined best polis, Aristotle defends the practical value of philosophical speculation. Against those who would value political life but dismiss a life of contemplation (bios theōrētikos) as inactive, impractical and unproductive, Aristotle argues that theory is indeed an excellent form of praxis:

the thoughts (dianoēseis) and contemplations (theōrias) which are independent and complete in themselves [are practical]; since acting well (eupraxia), and therefore a certain kind of action, is an end, and even in the case of external actions, [the architects (tous architektonas), through their thinking (tais dianoiais), are] most truly said to act (1325b20-24).27

This passage makes clear what has been intrinsic in the above series of examples: that thinking oriented toward action is more (not less) active than overtly productive arts; and that theoretical contemplation, if practiced well, is an end in itself. In Aristotle’s Nicomachean Ethics (as in Magna Moralia) such cognitive capabilities are discussed under the heading of intellectual, or dianoetic, excellences (aretai dianoetikai). These thinking powers guide ethical and theoretical action toward manifesting and contemplating what is “good.” With this we turn to a final set of corroborating examples and to Aristotle’s most comprehensive provocation that architects have political and philosophical obligations to contemplate, choose and manifestly pursue such an end.

In Nicomachean Ethics Aristotle involves architects in three interrelated ways: to define politics as an “architectonic” art, one that leads and supports other arts in striving toward ends that are good for the city; to distinguish (within this political art) an “architectonic” phronēsis, the scope of which entails not personal choices made in isolation but representative decisions concerning civic affairs; and to identify the political philosopher as an “architect of the end,” one capable of discerning the comprehensive “good” at which a city ought to aim and making this target conspicuous for others. Since aspects of these points have been sketched above, the following review of passages will also serve as a summary of the multifaceted practical, ethical and theoretical role Aristotle projects for architects and architectonic arts. Because architectonic terminology is integral to pivotal arguments of his ethical inquiry, it is best to consider the passages in relation to the philosophical work as a whole.

At the start of Nicomachean Ethics, Aristotle optimistically claims that every art, inquiry, action, and choice aims at some good as its end. However, he acknowledges, such ends vary: “of medicine, the end is health; of shipbuilding, a ship; of generalship, victory; of household management, wealth” (1094a8-9). Aside from varying in outcome, such ends vary in scope and significance. Some are narrowly focused, others more encompassing. He gives an example: “just as bridle making and such other arts... fall under horsemanship, while this art and every action related to warfare fall under generalship, so in the same manner, some arts fall under one capacity, others under another” (1094a10-15). Honing in on his subject, he then explains:
in all of them [sc. sciences, arts, and capacities], the ends of the architectonic ones (architektonikôn) are more choiceworthy than all those that fall under them, for these latter are pursued for the sake of the former...

If, therefore, there is some end (telos) of our actions that we wish for on account of itself, the rest being things we wish for on account of this end... clearly this would be the good (agathon), that is, the best (ariston). And with a view to our life, then, is not the knowledge of this good of great weight, and [if we discern it] would we not, like archers in possession of a target, better hit on what is needed? If this is so, then one must try to grasp, in outline at least, whatever it is and to which of the sciences or capacities it belongs.

But it might be held to belong to the most authoritative and most architectonic one (architektonikēs), and such appears to be the political art (politikē). (1094a15-28).28

With these opening arguments, Aristotle establishes interrelated hierarchies of arts, ends, and goods. But hierarchy itself is not the goal. His purpose is best understood not simply as vertical evaluation (ranking certain arts higher or lower than others), but more as practical orchestration for the sake of mutually beneficial results. The architectonic art would deploy and direct a plurality of civic arts (which, in turn, direct others), deciding which ought to be performed and learned (and to what degree), with the aim of securing and preserving what is good for the polis as a whole (1094b1-11). Employing a spatial metaphor, Aristotle explains (in the passage immediately following) that the architectonic end “would encompass those of the others” (1094b6), “encompassing” (periechein) meaning, literally, “to hold” (echein) “around” (peri-). This implies the architectonic art would actively encircle, delimit and support multifarious goods within its protective and edifying embrace—as a city would hold its citizens, and ether the earth.29 This embracing gesture presents the architectonic art less as an upper rung on a hierarchal ladder and more as a surrounding horizon, palpable yet ambient. The image is more inclusive than divisive. This embracing-encompassing function is also a feature definitive of “place” (topos), as Aristotle describes it in the fourth book of his Physics.30 Thus, we could say that the architectonic art of politics, at its best, creates a bounded place—a supportive delimited situation—for many good things to come into being.

Together with supporting a city’s myriad goods, Aristotle posits the architectonic art as possessing knowledge of a single comprehensive “good”—the best “end” (telos) and “target” (skopos, root of the English word “scope”) at which a whole polis ought to aim. According to Aristotle, everyone agrees that this target’s name is eudaimonia (conventionally translated as “happiness”), but they disagree on what it actually is (1095a18-21). Working toward his promised “outline” of this ultimate good—a “sketch” he hopes others will later fill in—31—he comes to define eudaimonia as an activity of “living well” and “acting well,” consisting of eupraxia, “good-practice” or “good conduct” (1095a18-20; 1098b21-2). In his discussion of magnificence, Aristotle offers some examples of eupraxia at the scale of the city: hosting foreign guests; leading diplomatic embassies; participating in gift exchanges; equipping ships; ornamenting one’s house in ways that ennoble the polis; and supporting great (mega), beautiful (kalos) and wondrous (thaumaston)
works, including sacred buildings, public offerings, choral performances, and civic feasts (1122b16-1123a19). However, since the good of a city depends on good actions of citizens, Aristotle’s primary concern (the core of his treatise) is to describe varieties of good conduct.

Books three to five of Nicomachean Ethics outline eleven such “ethical excellences” (aretai ἔθικαι), each defined as the middle, or mean (meson), between extremes. For instance, courage is the mean between cowardliness and recklessness; and friendliness is a middle disposition between being unfriendly (quarrelsomeness) and overly friendly (flattery). Such excellences (even magnificence) are, thus, in-between, not on top. This is neither a valorization of mediocrity, nor a pacification of individuality, but rather an agitation for appropriately empowering agency—even anger is praiseworthy in some situations (1125b33). Excellent conduct entails both feeling and acting with apt moderation, “when one ought and at the things one ought, in relation to those people whom one ought, for the sake of what and as one ought—all these constitute the middle as well as what is best” (1106b21-23). However, discerning the exemplary middle way in the variegated flux of life situations is difficult. It is not simply a matter of calculating a half-way mark, as on a ruler; but more, as the Stranger in Plato’s Statesman suggested, reckoning with an array of dynamic contingencies to discover and choose what is most moderate, appropriate, timely and obliging in particular circumstances. Drawing on another spatial analogy, Aristotle clarifies that, in practice, the middle is not a point, but a region: “there is a certain defining boundary (horos) of the middles” (1138b23). Horoi (plural of horos) were common boundary stones in ancient Greece, permanently marking perimeters and thresholds of properties, such as the open public area of a temple precinct (temenos), a marketplace (agora), or, more regionally, the frontiers of a city-state (polis). Just as multiple boundary stones would delimit spaces of proper sacred and civic action in a polis, Aristotle proposes ethical horoi to delimit and orient conduct in daily life. Thus, while looking to an excellent “target” one “tightens and loosens” the sinews of conduct within a bounded region of appropriateness—between excesses and deficiencies (1138b22-3). Aristotle’s treatise discursively demarcates these boundaries, establishing an ethical frame of reference—a horizon (of which horos is root)—in relation to which various manifestations of good action (eupraxia) and eudaimonia might play out.

Having established regions of ethical action, Aristotle, in book six, seeks to clarify the correct mode of reasoning (orthos logos) by which one would become skilled in aiming at the excellent middles. Considering each of the various ways of apprehending truth, he predictably emphasizes phronēsis, which, like an architect (as mentioned above), enacts flexible decision-making in the midst of difficult situations. Aristotle then elaborates the deliberative, decisive and directive capacities of phronēsis, many of which have been sketched above. However, he introduces a new distinction: “a certain architectonic”—within the scope of political phronēsis—oriented toward framing those general limiting conditions that might encourage good actions in particular circumstances (1141b22). He clarifies, somewhat, a few lines later:
Of *phronēsis* that is concerned with a city, one part is an *architektonikē phronēsis*, namely, the legislative art (*nomothetikē*); the other, concerned with particulars, bears the name that is common to them, ‘the political art,’ and is bound up with action and deliberation. For a specific decree is a matter of action, as it is the last thing (in the process of deliberation). Thus people say that only those (who issue decrees) are engaged in political life, for they alone act, just as cheirotechnai [manual artisans] do (1141b25-28).

Within the encompassing architectonic art of politics, Aristotle identifies an architectonic art of establishing general laws, and this legislative practice is architectonic because it, in turn, encompasses and guides the more particularized art of negotiating specific decrees with a view to the good. In spite of what “people say,” each of these domains is political and practical, and each is architectonic in its own way. Whereas lawmakers (and city founders) framed general laws, any advocate in the Assembly could negotiate particular decrees—ultimately decided by popular vote. Both kinds of political agents would (ideally) act with *phronēsis*; however, they performed differently. Fashioning decrees involved hands-on politicking amid the people, deliberating and adjusting laws in accommodation of specific circumstances to ensure equity. Aristotle compares this task to that of a mason working with a malleable leaden rule to fit each irregular stone into a cohesive whole (1137b26-32)—thus, his apt comparison to manual artisans. Alternatively, the preliminary work of founding more general constitutional laws (conceived with appropriate looseness so as to be adaptable) demanded more synthetic consideration of local and global *archai*: knowing the best starting points to help bring a city’s good into being, and understanding this city in relation to others—past, foreign and future. Those performing with “architectonic *phronēsis*” would make decisions in consideration of an appropriate mix of particulars and universals, including remembered and imagined particulars of cities—not only as they were and are, but as they might and ought to be.

This example again demonstrates the plasticity, inclusivity, and mobility of Aristotle’s architectonic qualification. Its scope and capabilities are general and loose enough so as to be adapted—like a malleable rule—to diverse arenas of action, without losing sight of any architectonic art’s fundamental target: obligations to the common good. In the final example, Aristotle bends and extends the architect qualification to himself.

In book seven, Aristotle finds that to advance his inquiry he “must make another beginning (*archē*)” (1145a15). He proceeds to describe kinds of conduct falling outside the bounds of appropriateness, ultimately advocating for self-restraint and perseverance. He then returns to his sketch of the good. Seeking to correct received opinion that *eudaimonia* can be reduced to the pursuit of pleasure and avoidance of pain (criteria challenged in Plato’s *Gorgias*), Aristotle suggests that this exemplary mode of well-being entails a middle disposition mingling the two. For he admits there are certain “wondrous” pleasures “intermixed” with *eudaimonia* (1177a22-27), just as there are certain pains accompanying noble deeds (1104b11). But, more importantly, Aristotle argues that this ultimate good is found not by pleasure-seeking in itself but by careful thought and correct choice, guided by consideration of all aspects of the good:
Contemplating *(theōrēsai)* what concerns pleasure and pain belongs to him who philosophizes about the political art. For he is the architect of the end *(tou telous architekôn)* with a view to which we speak of each thing as being bad or good in an unqualified sense *(1152b1-4).*

While an experienced politician may bring about what is good in particular situations, the political philosopher—in fully contemplating both particulars and universals—would, like an architect, be capable of critically discerning and making manifest for others the ultimate common good at which a city ought to aim. This optimistic pursuit should not be mistaken for suggesting that architects *are* good. There is nothing inherently good about architects. Indeed, Demosthenes, the great Athenian orator and exact contemporary of Aristotle twice refers to “architects” of deceitful and malicious schemes. However, Aristotle presents architects not at their worst, but at their best—projecting architects as they ought and might yet be. In effect, with these lines and throughout the subsequent passages, Aristotle posits the political philosopher, the “architect of the end,” as a teacher of potential lawgivers, but also of any receptive citizen willing to take pains to pursue and produce a shared *ethos* of *eudaimonia.*

**Conclusion: Beginning Again**

Aristotle closes *Nicomachean Ethics* with two books describing various forms of friendship, especially the rare community of “complete friendship” *(teleia philia)* among those sharing in a pursuit of wisdom. Correspondingly, in the tenth and final book he posits “complete *eudaimonia*” as an activity “coextensive with *theōria.*” Yet, in spite of these efforts toward completion, Aristotle admits, in conclusion, that he has not yet reached his “end” *(telos)*, for his primary purpose has been to cultivate good actions not only of individuals but of cities *(1179a35-b2).* Thus, *Ethics* becomes the *archai* for civic transformation. As is well known, his closing chapters open an inquiry on political constitutions, anticipating his treatise on *Politics.* And *Politics,* arguably, ends with a call for architecture, for establishing appropriate public buildings, monuments and festivals with a view to sustaining social harmony and participation in practices of democracy *(1321a35-1321b4).*

What, then, of architects? Throughout this review, Plato and Aristotle have been shown to consistently present architectonic agents as exemplary civic and intellectual leaders acting in awareness of their own (and others’) limits, with knowledge of the most appropriate *archē,* and with a view to the most comprehensive aims—the common good. This discloses an alternative and more accurate etymology of architects: not as master-builders but as leaders and makers of beginnings *(archai).*

The aim of this essay has been not only to rediscover the discursive beginnings for a renewed philosophy of architecture, but to suggest how these philosophical *archai* might help present-day archi-
tects reimagine the full relevance of their still contested role. Plato and Aristotle give us no incontestable answers to our predicaments, but their inquiries can assist us in arriving at the best questions concerning what is good. As the scholar and teacher Christopher Long writes,

> The good is thus at once elusive and alluring. Its transformative political power comes not to those who pretend to possess it but rather only to those who recognize that the source of its power lies in the way it requires each new generation to take it up as a question and work it out in living dialogue together.40

The closing line of *Nicomachean Ethics* looks forward to this subsequent task, which at the close of this essay we must each take up as our own: “With this as our beginning, then, let us speak” (1181b23).

**Notes**


2. In these early inscriptions, which are more contractual than commemorative, an “architect,” often called out by name, is made responsible for specific tasks: namely, preparing overall specifications (*syngraphai*) for designated works and, sometimes, detailed measures (*metra*), models (*paradeigmata*), and templates (*anagrapheus*); presenting specifications to Council (the *Boulê*); providing on-site direction; supervising ongoing construction together with appointed treasurers and sacred officials; and reporting back to the people in the Athenian Assembly (the *Ekolêsia*). See especially, *IG I*³ 35; *IG I*² 64; *IG I*³ 52; *IG I*³ 72; *IG I*³ 79; *IG I*³ 78; *IG I*³ 474; *IG II*² 1685; and *IG II*² 1666. *IG = Inscriptiones Graecae* (Berlin, 1873-), digitally available at http://epigraphy.packhum.org/inscriptions/. For a translation and discussion of one of the most intact inscriptions concerning Philon’s Arsenal at Piraeus (*IG II*² 1685), see J.A. Bundgaard, Mnésicles. *A Greek Architect at Work*, Trans. Ingeborg Nixon. (Copenhagen: Gyldendal, 1957), 117-21.

3. Herodotus, *Histories* 2.175.5; 3.60.3-4; 4.87.1-88.1; 7.36.1.


6. The demiurge is twice called a carpenter, builder, or “framer” (*tektainomenos*, 28c6, 68e5), and is repeatedly said to engage in “framing” (*tektainomai*, a verb form of *tektōn*, 30b, 33b, 36e, 45b, 70e, 91a).


Nicomachean Ethics 1094b12-26; 1137b26-32.

On these consequences, see Voegelin, *Plato and Aristotle*, 219-20.


“Revenues,” or “tributes” (phoros) were obligatory monetary payments made to Athens by its allies. The pooled fund was intended for collective defense, but Pericles was accused of redirecting surplus money to building monuments on the Acropolis.


This translation by Christopher Long, *Socratic and Platonic Political Philosophy: Practicing a Politics of Reading* (New York: Cambridge University Press, 2014), 45, with discussion.

Plato frequently involves technē terminology as a foil against which to qualify a technē of ethical knowledge, which is not exactly technē in any instrumental sense. On these two types of technē in Plato’s moral philosophy, see David Roochnik, *Of Art and Wisdom. Plato’s Understanding of Techne* (University Park, PA: The Pennsylvania State University Press, 1996).


In this passage, Aristotle sets up a series of overlapping and nested relationships of which the architect is a part: “the point of our present discussion is this, that all men suppose what is called wisdom (sophia) to deal with the first causes (aitia) and the beginnings (archai) of things. This is why, as has been said before, the man of experience is thought to be wiser than the possessors of any perception whatever, the artist (technitēs) wiser than the men of experience, the architekton than the cheirotechnou, and the theoretical (theōrētikai) kinds of knowledge to be more of the nature of wisdom than the productive (poïētikōn). Clearly then wisdom (sophia) is knowledge about certain causes (aitia) and principles (archai)” *Metaphysics* 981b26-982a3.

Physics 194b2-4, “The arts (technai), therefore, which govern the matter and have knowledge are two, namely the art which uses the product and the architektonikē art which directs the production of it (poïētikēs). That is why the using art also is in a sense architektonikē; but it differs in that it knows the form (eidous), whereas the architektonikē art which is directive (diapherei) as being concerned with production knows the matter (hulēs).” Trans. R.P. Hardie and R.K. Gaye, Complete Works.


Aristotle, Magna Moralia, trans. St.G. Stock, Complete Works. The Athenian statesman Demades, a contemporary of Aristotle, similarly personified Nous as architect. In the midst of a lengthy self-defense of his own skills as a counselor, Demades argues, “Force does not enable a man to master even the smallest things. It was inventiveness (epīnoia) and system (methodō) that made him yoke the ox to the plough for the tilling of the land, bridle the horse, set a rider on the elephant, and cross the boundless sea in boats of wood. The architektōn and dēmiourgos of all these things is Mind (Nous).” On the Twelve Years, 42, J. O. Burtt, trans., Minor Attic Orators, vol. II. Loeb Classical Library, No. 395 (Cambridge, MA: Harvard University Press, 1954).


In the opening lines of Politics, Aristotle presents the polis as the best kind of political community since it “encompasses (periechousa) all the rest” (1252a6). The notion of ether “encompassing” the earth is found in Plato (Timaeus 31a), Euripides (Frag. 919), and the fragments of Anaximander. Elsewhere, periechein qualifies human embraces—both protective and affectionate.

Physics 212a28-28, “Place (topos) is thought to be some surface and like a vessel and surroundor (periechon).” For an important interpretation of Aristotle’s notion of topos, see Edward S. Casey, Fate of Place: A Philosophical History (Berkeley: University of California Press, 1997), 53-6, 89.

Aristotle’s word for “outline” is tupos, an impression like that made by a stamp on a metal coin, a seal in wax, or a footprint in sand. Later he refers to his “sketch” of the good: “for perhaps one ought to outline it first and then fill it in later. It might seem to belong to everyone to advance and fully articulate things whose sketch (perigraphē) is in a noble [or beautiful (kalōs)] condition, and time is a good discoverer of or contributor to such things... for it belongs to everyone to add what is lacking” (1098a20-26).


33 Aristotle introduces five ways of apprehending truth: art (*techne*), science (*episteme*), practical wisdom (*phronesis*), theoretical wisdom (*sophia*), and understanding (*nous*). Honing in on *phronesis*, he provisionally sidelines *episteme* and *techne*, because *episteme* is concerned more with universal and timeless matters, whereas human affairs are particular and changeable, and *techne* is concerned more with things made than actions performed. He further deems *sophia* to belong especially to *episteme*, the most theoretical kind of intelligence; whereas *nous* (like *logos*), being a fundamental power of thinking and intuiting required to grasp *archai* and make decisions, suffuses all.


35 Demosthenes, *Speeches*, Against Boeotus, II (40.32); Against Dionysodorus (56.11).


37 1156b7, 1157a29-32, and in general all of books 8 and 9.

38 1177a11-17, 1178b30, and in general book 10, chapters 7 through 9.

39 Scholars have long debated the proper sequence of the eight books of *Politics*. For an argument that places this sixth book as the last, see Peter L. Phillips Simpson, *A Philosophical Commentary on the Politics of Aristotle* (Chapel Hill and London: University of North Carolina Press, 1998).

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