Ἰδιαί Ἀρχαί: Disputes from the Beginning

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In any investigation of truth, one must begin with certain starting points. These starting points are not simply suppositions or hypotheses but rather first principles. The difference lies in the implication about the truth-value of the starting point. When Euclid or Kant defines the terms upon which they build their argument, they do not ask the reader to "imagine, for the sake of this example, that a point is that which has no part" or "entertain the possibility of space and time as forms of pure intuition". Instead, they assert that the premises of their argument affirm something about the reality of things.

Aristotle recognizes this characteristic of starting points in his investigation of the first causes and considers whether the first causes and the first principles of argument belong to the same science. In his examination, Aristotle distinguishes between starting points called axioms, which are unprovable, and other starting points which must be proven. Brushing over the latter, he states that the former are accepted across all sciences since they are true about all things that exist. From this, Aristotle concludes that starting points which are axiomatic are the business of metaphysics and are therefore of the same science as the first causes. (*Metaphysics* IV.3) In a commentary on Aristotle's *Metaphysics*, W. D. Ross points out that although Aristotle focuses on axioms (*koinai archai*)[1] in this particular investigation of first causes, the other starting points (*idiai archai*)[2], which he gives less attention to, are just as important for the investigation of truth. Ross states that "Each science must have principles dealing with the same genus with which its conclusions deal, but it also uses principles common to all the sciences i.e. the axioms" (*Aristotle's Metaphysics* 230). In other words, each science combines the kind of starting points that are applicable only within its realm of investigation with common notions applicable to all

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[1] κοιναὶ ἀρχαί
[2] ἰδιαὶ ἀρχαί

sciences in order to reach a conclusion. This distinction does not alter the truth-value that Aristotle places upon one starting point or another, but rather the universality or particularity of the starting point. The *koinai archai* are true of all things that are, whereas the *idiai archai* are only true for the things of a particular science. The former is not therefore "more true" than the latter, but one is simply universally true as opposed to true in a certain domain. This is why it would make sense for Aristotle to focus his attention towards *koinai archai* in *Metaphysics*. His investigation concerns the starting points of existence, and therefore being itself, so since Aristotle considers the *koinai archai* to be true of all beings, they are of greater interest to his investigation.

In order to understand the relationship between *idiai archai* and *koinai archai* more fully, let us use Euclid's *Elements* as an example. Euclid begins with definitions, postulates, and common notions which work together to serve as the foundation for his propositions. Applying Aristotle's language to Euclid's geometry, the *idiai archai* are the definitions and postulates, and the *koinai archai* (as the name suggests) are the common notions. The definitions clarify the key terms or things being dealt with, the postulates clarify what is necessary for constructing geometric figures, and the common notions clarify the possible quantitative relationships between two things. Considering the different purposes of each kind of starting point, and calling to mind a few examples of each of them, one can see why the *koinai archai* are common to all sciences whereas the *idiai archai* are unique to a particular science. A starting point such as the common notion "the whole is greater than the part" is a quantitative truth applicable to all things and across all sciences. A starting point such as the definition "a point is that which has no part" or the postulate "to draw a straight line from any point to any point", however, is concerned with

the construction of geometrical figures and would therefore be impossible to apply outside of the science of geometry. To attempt such an application in a different science, such as physics, would be absurd since one could never construct a physical object using geometrical points and lines. This demonstrates that the difference between the universality and particularity of a starting point does not affect its truth-value. The greater universality of "the whole is greater than the part" does not make it any more true than "a line is a breadthless length". The difference is simply that one only expects the latter to be true in the domain of geometry whereas the former is held to be true universally about all things that exist.

This language of 'truth in certain domains' may cause questions to arise in the reader's mind concerning how we might know the truth of any starting points at all. In Aristotle's distinction between *koinai archai* and *idiai archai*, he labels the former as unprovable but states that the latter must be proven. As starting points of argument, however, both kinds must be assumed to be true in order to move forward into the argument itself. Aristotle proposes that the *koinai archai* are so obvious that every common person would agree to their truth. This has been disputed by certain philosophers in modernity, but even if we agree to accept Aristotle's proposal that the truth of certain starting points can be indicated by common application, this would hold only in the case of the *koinai archai*. In the case of *idiai archai*, there is no such test of universal application to judge by. How, then, are we to determine their validity?

Throughout history there have been broad ranges of proposals for starting points in every field of science, but the particularly interesting cases are those in which the arguments proposed using different starting points all seem equally plausible. Unlike a puzzle or brain game in which the conclusions about the things concerned are arbitrary, the sciences in which disagreements

about *idiai archai* occur are attempting to determine the truth of actual[3] things. When disputes

occur over the definitions of space and time, or the relationship between the body and soul, or

anything else concerning the things which we experience in the world, there is something

significant at stake. The starting points we choose shape the lens through which we understand

our experiences in the world. Yet, the question remains: how is one to discern which *archai* to

accept?

In certain cases it is possible to escape this problem of choice by accepting a pluralistic

understanding of a science. This is true of the science of geometry in which mathematicians after

Euclid began proposing new or altered definitions or postulates. To give an example, consider

Lobachevsky, who believed that Euclid's Elements had certain imperfections such as "obscurity

in the fundamental concepts of the geometrical magnitudes and in the manner and method of

representing the measuring of these magnitudes and finally the momentus gap in the theory of

parallels" (*Geometrical Researches on The Theory of Parallels* 11). In order to solve these

problems, Lobachevsky proposes his own definitions and creates a system free from the

"imperfections" of Euclid. It may seem at first as though the acceptance of this alternative

system would necessitate the rejection of the formerly accepted system, but in this circumstance

such an action was unnecessary. Rather than picking sides, geometers realized that

Lobachevsky's work was self-consistent and dealt with a different geometrical space and

different kinds of geometrical objects. This meant that it was possible to accept a pluralistic view

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[3] The use of the term "actual" here is equivalent to existing. As noted in following sentence, the things we experience in the world are the things which are actual and existing. This does not speak to whether they exist as appearances within the mind (as Kant would have it) or as physical objects external to ourselves (as Newton might argue) but simply that they are things which have objective truth rather than being subjective to each person's mind.

of geometry in the sense that two systems could both be true since they concerned different kinds of geometrical things. Rather than throwing out the old in place of the new, there was a way to understand both by expanding our concept of geometry.

This solution is extremely satisfying to a reader who likes to avoid conflict and picking sides, but unfortunately this kind of solution does not work in every situation in which there is a conflict of *idiai archai*. In the example above, the key to a solution was the realization that Lobachevsky's system was true in regards to one kind of geometrical space and objects whereas Euclid's was true in regards to another. When disagreements occur over one particular thing however–assuming we are still in agreement with Aristotle that the *koinai archai* are true (and therefore the law of non-contradiction holds) and reject solipsism (in which case each person can have their own world and subjective truth about that world)–we inevitably run into situations where we must choose. This happens quite often in the science of metaphysics whose *idiai archai* have been debated by different schools of thought throughout history without coming to a clear resolution. In the *Critique of Pure Reason*, however, Kant proposes he has a solution to these debates.

Kant begins with an analogy of land and sea, explaining that much of the discussion of metaphysics during and leading up to his own time period took place within what he calls the sea of illusion. This sea surrounds the island of pure understanding also known as the island of truth. Kant seeks to start the discussion from scratch and attempts to ground metaphysics in the so-called land of truth. Here he hopes to find what he needs without venturing out into the sea. One of the ways Kant attempts to dispel the sea-fog that has crept over the land and obscured truth is by laying out a series of antinomies in which the thesis and antithesis are taken from

opposing philosophical schools of thought and set in an apparent contradiction. Kant then proposes that there is not in fact a contradiction but rather a mere dialectical opposition in which the apparent conflict is maintained by a false condition shared by the thesis and antithesis. By removing this false condition, Kant argues that he has resolved the conflict and at the same time has further supported his own theory of transcendental ideality stated earlier in the *Critique of Pure Reason*. This seems like a brilliant solution but, in order for it to be successful, Kant must accurately represent the different schools of thought without letting his own *idiai archai* creep into the argument. If this is not prevented, it would be unclear whether Kant's argument has any more truth to it than the theories proposed by his contemporaries since his conclusion would be reached on his own terms. This condition to Kant's logic gives rise to the suspicion that the antinomies are mere sophistry.

In order to further investigate this possibility, let us turn to the first antinomy in which Kant considers whether the world is finite or infinite in time and space. In the beginning of the *Critique of Pure Reason*, Kant defines time as a necessary representation which grounds all intuitions. This representation is made up of a succession of parts, all of which are independent of particular experiences. In a similar way, space is defined as a necessary representation which grounds all outer intuitions. Like time, it is not an empirical concept but a condition for all appearances as the form through which they are able to be intuited. Space and time are both considered "forms" of pure intuition and together allow for the synthesis of all appearances. This synthesis of appearances is known as the world.

Moving into the antinomy itself, the thesis is stated thus: "The world has a beginning in time, and in space it is also enclosed in boundaries" (*Critique of Pure Reason* 470). The opposite

position, the antithesis, states: "The world has no beginning and no bounds in space, but is infinite with regard to both time and space" (*Critique of Pure Reason* 471). Simply looking at the opposing statements, it becomes immediately clear that it is impossible for both of them to be correct. Using this fact, Kant follows a reductio method and proves the thesis by disproving the antithesis and vice versa. In this way he leaves the reader with equal evidence on each side, making it impossible to ascertain which side is true.

Having brought forth the impasse at which the antinomy is held, Kant reminds the reader that "[i]f two mutually opposed judgements presuppose an inadmissible condition, then despite their conflict (which is, however, not a real contradiction) both of them collapse, because the condition collapses under which alone either of them would be valid" (*Critique of Pure Reason* 517). This means that if there appears to be a contradiction between two statements which are each able to be equally proven correct, then the condition which maintains that conflict must be false. To give an example of this, Kant recalls the antinomy saying:

> If I say that as regards space either the world is infinite or it is not infinite, then if the first proposition is false, its contradictory opposite, 'the world is not infinite,' must be true. Through it I would rule out only an infinite world, without positing an other one, namely a finite one. But if it is said that the world is either infinite or finite (not-infinite), then both propositions could be false (*Critique of Pure Reason* 517).

In other words, if "the world is infinite" is our "A" statement, then the opposite statement to "A" would be "not-A", or "the world is not infinite". To say that both "A" and "not-A" are true is impossible, but that does not rule out the possibility of them both being false. Kant uses the example of smell. If we ask whether something is either good-smelling or not good-smelling we

consider opposite possibilities which cannot both be true; a third option, however, is that it has no smell at all. (*Critique of Pure Reason* 517) The point that Kant is making here is that sometimes questioning the veracity of opposite conditioned statements can distract from asking about the truth or falsity of those statements' conditions. It is clear that the world cannot be both infinite and finite; however, according to Kant, it is possible that the world is neither infinite nor finite, since asking the question of whether the world is infinite or finite assumes certain conditions to be true of the world to begin with.

> Kant posits the possibility of a false condition by considering the antinomy, stating:
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> For then I regard the world as determined in itself regarding its magnitude, since in the opposition I not only rule out its infinitude, and with it the whole separate existence of the world, but I also add determination of the world, as a thing active in itself, which might likewise be false, if, namely, the world were **not** given **at all as a thing in itself**, and hence, as regards its magnitude, neither as infinite nor as finite (*Critique of Pure Reason* 517-518).

By questioning the infinite or finite magnitude of the world in space, and therefore assuming it to be a given magnitude, there are presupposed limits to its infinitude as well as to the possibility of its whole separate existence. This assumption or condition of the world as a given magnitude is not necessarily a true condition, however, and if it is indeed false, then the obstacle of the antinomy collapses. "Thus two judgements dialectically opposed to one another could both be false, because one does not merely contradict the other, but says something more than is required for a contradiction" (*Critique of Pure Reason* 517-518). Kant considers this sort of opposition which is merely contradictory in appearance due to a false condition to be a "dialectical

opposition" whereas if it were to be an opposition of true contradiction, it would be considered an "analytical opposition". If the thesis and antithesis are regarded as analytical opposites, then one assumes that the world is a thing in itself. If that presupposition were dismissed, however, then the contradiction becomes a mere dialectical opposition. Applying this to the antinomy, if we dismiss the presupposition that the world must exist independently of the empirical regression of the series of appearances (as Kant defines our intuition of the world), then it exists neither as an in itself finite whole nor as an in itself infinite whole. This means that the world is not an unconditioned whole, for if it were unconditioned it would have to exist as a thing in itself. Instead, the world must be conditioned and so is never wholly given either with an infinite or finite magnitude. (*Critique of Pure Reason* 518)

> Kant takes this one step further as he states:

> The series of appearances is to be encountered only in the regressive synthesis itself, but is not encountered in itself in appearance, as a thing on its own given prior to every regress. Hence I will have to say: the multiplicity of parts in a given appearance is in itself neither finite nor infinite, because appearance is nothing existing in itself, and the parts are given for the very first time through the regress of the decomposing synthesis, and in this regress, which is never given absolutely **wholly** either as finite nor as infinite (*Critique of Pure Reason* 518).

Since the world is shown to be conditioned because of the synthesis of its parts, appearances (which also have a multiplicity of parts) must also be conditioned. This means that appearances are not things in themselves. Later in his argument, Kant further supports this, stating:

If appearances were things in themselves, and hence space and time were the forms of things in themselves, then the conditions would always belong to one and the same series as the conditioned, and from this there would also arise in the present case the antinomy common to all transcendental ideas, that this series must unavoidably turn out to be either too large or too small for the understanding (*Critique of Pure Reason* 534).

In other words, since time and space are the forms of appearances, they are also the conditions of appearances. This means that if appearances were things in themselves, and therefore unconditional, then their conditions, time and space, would have to be conditions of unconditioned things, which is impossible.

This conclusion is exactly what Kant laid out as the transcendental ideality of things earlier in the *Critique of Pure Reason*, which suggests that he created the antinomy precisely for the purpose of proving his own point. Kant himself admits that the resolution of the antinomies provides support for his theory, stating that it is possible to:

draw from this antinomy a true utility, namely that of thereby proving indirectly the transcendental ideality of appearances, if perhaps someone did not have enough in the direct proof in the Transcendental Aesthetic. The proof would consist in this dilemma. If the world is a whole thing existing in itself, then it is either finite or infinite. Now the first as well as the second alternative is false (according to the proof offered above for the antithesis on the one side and the thesis on the other). Thus it is also false that the world (the sum total of all appearances) is a whole existing in itself. From which it follows that appearances in general are nothing outside our representations, which is just what we mean by their transcendental ideality (*Critique of Pure Reason* 519).

This proof is indeed a true utility and effectively supports Kant's theory of the transcendental ideality of appearances. It does not, however, dispel doubts that his logic is masking truth.

It must be admitted that in the whole of Kant's argument, it is hard to pick out any one spot that has a flaw in logic. A logical argument, however, does not necessitate truth if the presuppositions are revealed to be false. In order for Kant to have been successful in his attempt to eliminate the stalemate that had existed concerning the *idiai archai* of metaphysics, he would have needed to demonstrate that the thesis and antithesis each represent one of the opposing philosophical schools of thought and can be demonstrated as equally legitimate arguments. Following this, Kant would have been able to support his proposition that there is not in fact a contradiction but rather a mere dialectical opposition in which the apparent conflict is maintained by a false condition shared by the thesis and antithesis. By examining the definitions of key terms within the first antinomy, it will be shown that a question of dialectical or analytical opposition becomes irrelevant since, even after attempts to give Kant the benefit of the doubt, it becomes clear that the antinomy collapses due to the use of Kant's own *idiai archai* to build the proofs in the antinomies rather than solely applying *idiai archai* which would have been used by those he means to represent.

Taking the antithesis as our case study, let us begin with a brief recapitulation of the argument. The speaker begins by addressing time through a reductio: if the world has a beginning in time there must be a time in which the world did not exist, i.e. an empty time. For the world to come into being under such a circumstance is impossible, however, since there would be no condition for its existence rather than non-existence. It is only possible for things to come into being if they have a condition (such as is the case *within* the world), therefore the

world must not have a beginning; it must be infinite. (*Critique of Pure Reason* 471) Considering this a QED, Kant then addresses space in a similar manner: if the world is bounded and finite in space, then it exists in empty space which is not bounded. This would mean that there would be not only relationships of things in space, but of things (i.e. the world) to space as well. The world is an absolute whole which contains all intuitions, however, which would make it impossible to encounter any object of intuition outside of the world. This means that if the world were in empty space it would be in relation to no object and bounded by no thing–which is absurd, therefore the world is not bounded in space but is infinite. (*Critique of Pure Reason* 471)

Beginning our examination of *idiai archai*, we must find some person of whom the speaker of the antithesis could be an accurate representation. This would ensure that the antithesis argument does in fact represent the philosophical school of thought which Kant labels as "empiricism" (*Critique of Pure Reason* 498). As a first attempt, let us consider whether someone such as Newton (who would be grouped under Kant's category of empiricists) might be a candidate by taking the second part of the antithesis argument concerning space as a point of focus and comparing Newton's position to that of the antithesis speaker. What we find is that the two perspectives align in their definition of space as singular, infinite, and distinct from actual[4] bodies, as well as in regards to the necessary requirement for an empty space beyond a finite world. Beyond this, the two perspectives are revealed to be distinctly different. A particularly clear example of a point of difference concerns the idea of a finite world bounded by an infinite space. According to the antithesis speaker this is an absurdity, but according to Newton it makes perfect sense. Newton states,

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[4] See footnote 3

If anyone now objects that we cannot imagine extension [space] to be infinite, I agree.

But at the same time I contend that we can understand it. We can imagine a greater

extension, and then a greater one, but we understand that there exists a greater extension

than any we can imagine. And here, incidentally, the faculty of understanding is clearly

distinguished from imagination (*De Gravitatione* 23-24).

This shows a fundamental difference in beliefs about the faculty of understanding. According to

Newton, it is completely possible to reach beyond the imagination through our understanding to

perceive things outside of ourselves. By this reasoning, it is possible for space to exist outside of

ourselves, even if it is something that we are unable to perceive through our intuition. If this is

true, it is a distinct problem for the antithesis argument. Newton's stance on the topic therefore

reveals him to be ineligible to be considered as the speaker whom Kant is representing in the

antinomy.

Though it has turned out that we must reject Newton as a potential candidate for the

antithesis speaker, it must be noted that the exact point where Newton becomes ineligible reveals

that Kant's own *idiai archai* concerning space aligns with the position of the antithesis speaker.

Despite the fact that Kant clearly disagrees with the first principle maintained by both sides of

the antinomy, that the world is a thing in itself, the relationship between the world and space as

portrayed through the antithesis argument is hard to separate from Kant's own position that every

bounded space is conditioned by another space which bounds it (*Critique of Pure Reason* 463).

By the application of this idea, it would indeed be absurd for the world to be bounded by empty

space. According to Kant, if the world is in space then there must be some space outside of it

which bounds it. Since the world already contains all intuitions (and therefore we can't encounter

any other thing outside of it), however, we would then be saying that the space of the world is in relation to a space of no intuition, which would be nothing. Following from this conclusion (which one might rephrase as "the world is not bounded"), the application of Kant's definition of space to the argument of the antinomy reveals that the world must be infinite.

At this point, Kant seems to have fallen victim to the sea fog of illusion in his own work. In his defense, however, perhaps Newton may have been a bad example to use and there is some other person whose definitions might uphold the antithesis argument just as well as Kant's own definitions do. If so, how might we discover who this person is? Rather than attempting to compare and contrast every empiricist of Kant's time, let us consider the clues in the antithesis itself which might reveal some of the necessary characteristics of such a person.

Beginning with the basics, the world in the antinomies is a thing in itself. This means that for the antithesis speaker, space cannot simply be a form of intuition. Neither, however, is it required to be a thing outside of ourselves as Newton supposes, since in the antithesis, the reductio demonstrates that to 'understand' space to extend infinitely beyond a finite world is an unsatisfactory argument to the speaker. It would seem therefore that the definition we are looking for must be somewhere in between the two. One proposition for the definition of such a space is "the form of possible objects". This language is actually used by Kant in his remark on the antithesis (*Critique of Pure Reason* 473), but if we shift the referent of "possible objects" from Kant's understanding of it, 'appearances that may or may not point to an external reality', to 'objects that might come to be through and in space' (since the antithesis maintains an actual external world), then space is no longer defined as an intuition bounding a world of appearances

but rather as something internal to ourselves which allows our minds the possibility to perceive actual objects.

To test this definition, let us consider the point where our application of Newton ran into a problem. What made the difference in Newton's case was the relationship between space and the world since in the antinomy there is a necessary conditional relationship between the two. In the reductio, we discover that it is absurd to think an empty space could bound the world. The thing which limits cannot be nothing, but must have enough reality to limit another reality. For Newton, since he believed the world and space to actually exist external to himself and separate from each other, the ability of the one to condition the other was not a logical impossibility. It is only if they did not exist separately in the sense that the one was a condition for the other that we would run into the absurdity described in the reductio.

As it turns out, our new definition of space proposed as appropriate for the antithesis speaker does not meet this conditional relationship either; the disconnect between the world and space is still present. If we apply our proposal of space as a "form of potential objects" existing within the mind to the antithesis argument, we necessarily suggest that a form in our mind could condition the objects which exist external to us. This would could never be possible since the world and space have two different senses of actuality; the finitude (or infinitude) of the former does not (and cannot) affect the finitude (or infinitude) of the latter. The only *idiai archai* therefore, that seem to satisfy this conditionality between space and the world are Kant's own *idiai archai*. If Kant were to imagine that the world were given as a thing in itself (which is ultimately an impossibility for him), the finitude (or infinitude) of space and the world would have to be the same because of the transcendental cognitive relationship space has to the only

world we can experience. In other words, according to Kant's definitions of space and the world, if space is infinite then the world is infinite and if space is finite then the world is finite.

At this point, it does not seem as if there is much we can do to save Kant's first antinomy. As was stated earlier, Kant needed to demonstrate that the thesis and antithesis each represent one of the opposing philosophical schools of thought and can be demonstrated as equally legitimate arguments in order to eliminate the stalemate that had existed concerning the *idiai archai* of metaphysics. It has been shown through our investigation, however, that Kant has failed at establishing the antinomy in this way. We have attempted both an application and a construction of possible definitions and have come back to the conclusion each time that Kant's own language is bleeding through. This is evidence that Kant was unsuccessful in representing the two opposing arguments well.

A reader who has a particular affection for Kant might argue here that we have only provided a couple attempts and perhaps there could be another definition found that might work. To such a reader it must be admitted that one could potentially try to imagine another possible definition of space, but it seems that it would be extremely difficult to create one that maintains a conditional relationship between space and the world that is not Kant's own. This same principle is true of the thesis argument of the antinomy. Another option could be to attempt a separate discussion of the thesis argument–for perhaps Kant was successful in presenting an accurate representation and maintaining a logical argument there–but even if such a definition could be produced the antinomy would still have a problem since both sides of the antinomy must meet the requirements in order for Kant to succeed in his attempt.

Having come to the conclusion that Kant's first antinomy was unsuccessful in answering the question of which *idiai archai* to choose, it seems as though we are back to square one. There are, however, several things that can be learned from this examination. The first is the significance of Kant's attempt to set up an antinomy in the first place. In Book IV.4 of *Physics*, Aristotle highlights the importance of moving beyond a demonstration after he suggests a definition of place and, immediately following, states that

> having laid these foundations, we must complete the theory. We ought to try to conduct
> our inquiry into what place is in such a way as not only to solve the difficulties connected
> with it, but also show that the attributes supposed to belong to it do really belong to it,
> and further, to make clear the cause of the trouble and of the difficulties about it. In that
> way, each point will be proved in the most satisfactory manner (*Physics* IV.4 211ª6-12).

In other words, in addition to a proposal of one's own thoughts, one ought to be able to make clear the cause of the difficulties others have had in reaching that same conclusion. This seems to be exactly what Kant was attempting to do through the antinomy. If it was successful, Kant would not only have presented his argument for transcendental ideality, but would also have shown how the other dominant philosophies at his time were wrong, given a plausible account of why the dispute was there in the first place (namely, because of a false condition of argument), and provided a solution to the problems they ran into (namely, an alternative condition which results in a new understanding of the world). This idea of expanding one's argument to include a consideration of other positions which may contradict or conflict with one's own reveals a necessary condition in the search for true *archai*. The *koinai archai* are common because of the fact that any person, taking as given that they have a healthy capacity to reason, would agree that

they are true. This applies to reaching agreements concerning *idiai archai* as well; more than one person must be able to understand the reason for accepting it as a truth. The condition for reaching such an agreement about truth is an understanding of a common rationality amongst human persons. Without this understanding, there is no reason to compare one argument to another. One must assume that others have an equal ability to reason towards truth if they are to be given a chance to pose their argument and potentially convince their audience. The kind of person who would reject this condition would find themselves in the position of G. K. Chesterton's madman.

In his book, Orthodoxy, Chesterton speaks of a madman who is concerned only with believing in himself. He remarks, most sincerely, that "the men who really believe in themselves are all in lunatic asylums" (*Orthodoxy* 7). He gives many examples of such men such as one who believes there is a conspiracy against him, another who believes he is the rightful King of England, and yet another who believes he is Jesus Christ. To any other person these assertions would be obviously false, but to the person who believes in themself, nothing else could be more true. What is so interesting about the madman is that though they are clearly insane, they are not by any means irrational. In fact, as Chesterton shows, the problem is precisely in their logicality.

> The general fact is simple. Poetry is sane because it floats easily in in an infinite sea; reason seeks to cross the infinite sea, and so make it finite. The result is mental exhaustion...to accept everything is an exercise, to understand everything a strain. The poet only desires exaltation and expansion, a world to stretch himself in. The poet only asks to get his head into the heavens. It is the logician who seeks to get the heavens into his head. And it is his head that splits (*Orthodoxy* 11).

It is often the poets, musicians, and artists of other sorts that are stereotyped as insane because of their curiosity about the wonders of the world, but Chesterton points out that it is much more insane to think that those wonders can be explained by putting everything into a singular box. Chesterton states that

> if we attempt to trace [the madman's] error in exact terms, we shall not find it quite so easy as we had supposed. Perhaps the nearest we can get to expressing it is to say this: that his mind moves in a perfect but narrow circle. A small circle is quite as infinite as a large circle; but, though it is quite as infinite, it is not so large. In the same way the insane explanation is quite as complete as the sane one, but not so large (Orthodoxy 13).

Again, the madman is not insane because he is unable to reason; rather, he is insane because he restricts the reality of the world within a circular logic that is too small to contain it. In the first example given above of a madman who believes there is a conspiracy against him, Chesterton states that

> if we could express our deepest feelings of protest and appeal against this obsession, I suppose we should say something like this: 'Oh, I admit that you have your case and have it by heart, and that many things do fit into other things as you say. I admit that your explanation explains a great deal; but what a great deal it leaves out! Are there not other stories in the world except yours; and are all men busy with your business? Suppose we grant the details; perhaps when the man in the street did not seem to see you it was only his cunning; perhaps when the policeman asked you your name it was only because he knew it already. But how much happier would you be if you only knew that these people cared nothing about you! How much larger your life would be if your self could become

smaller in it; if you could really look at other men with common curiosity and pleasure; if you could see them walking as they are in their sunny selfishness and their virile indifference! You would begin to be interested in them, because they are not interested in you. You would break out of this tiny and tawdry theater in which your own little plot is being played, and you would find yourself under a freer sky, in a street full of splendid strangers' (*Orthodoxy* 14).

This long speech towards the madman shows that what he is unable to realize is the bigger picture in which each person has their own worries and concerns directed far away from what is happening in the madman's own life. This error of logicallity occurs precisely because the madman is so focused on one particular *idiai archai*: that everyone around him is conspiring against him. As Chesterton describes it, "He is in the clean and well-lit prison of one idea: he is sharpened to one painful point. He is without healthy hesitation and healthy complexity" (*Orthodoxy* 16).

Considering this in light of Aristotle's demand for a complete proof, it is clear that the madman's argument contains no assumption of a common rationality. Instead, everything is interpreted in relation to himself and if anyone were to disagree with him they would be considered not only wrong but unable to be reasoned with. As a result of this, the madman is unable to be convinced by any other perspective nor to convince anyone else that what he says is true. This reveals that it is not only necessary for those who are building proofs to examine other people's perspectives, but it is just as important for those who are considering whether to accept a proof or not. If we are not Chesterton's madman, each of us must examine our *idiai archai* and

consider alternate proposals which may conflict with, or even contradict, our own. We must continually consider the need for an expansion of our circle.

As was stated before, Kant seems to realize the importance of completing his theorem as Aristotle outlines in order ensure that he has avoided the narrow logic of the madman, or as Kant puts it, to stay rooted on land without venturing into the sea of illusion. If his antinomy had been successful, Kant's theory of transcendental ideality would have been shown to be something not merely self-contained (thereby possessing only a narrow logic) but would have been placed in the context of other arguments and at the same time shown to be the reasonable choice out of the options. It would have reinforced that Kant is not simply a madman who holds firmly to what he believes but that he is an intelligent, sane person who is open to alternative arguments, has considered them, and has concluded that his own is most correct. Along with this thought, it must be noted that Kant's failure in the first antinomy does not mean that an antinomy structure would never work to solve the problem of an impasse of *idiai archai*. Perhaps the antinomy method was bound to fail for this particular topic but would work for another; or perhaps it would have worked even in this case if Kant had simply chosen a different structure of argument. As was shown in our exploration of the first antinomy, the problem point of the antithesis argument is the reductio in which the world is shown to necessarily be infinite. According to the antithesis, if the world were not infinite then it would be bounded by an infinite empty space–which is absurd. The reason for this absurdity is rooted in Kant's own understanding of boundedness and his beliefs about the cognitive capacity of human persons. It is because Kant was not fully aware of the *idiai archai* which he had accepted in formation of the antithesis argument that the antinomy failed. This does not mean that we must label Kant as a madman,

since this problem came about because of a lack of careful self-assessment rather than an actively stubborn attachment to a particular idea, but it does raise questions concerning whether it is ever truly possible to step completely away from the *idiai archai* which one holds to be true with a deep conviction. Can we ever fully step outside of our own perspective in order to reach a neutral standpoint? Or are there limits to the degree of disagreement within which we can understand another's perspective fully?

Regardless of the answer, it is as least clear that it would be extremely difficult to write down every *idiai archai* which influences us. This shows even more clearly, however, the importance of doing so as often as possible. In demonstrative arguments, such as those put forth by Euclid or Kant, there is special care taken to define the terms they are using and things they believe to be possible, and as a result it becomes easier to gather a more full picture of their arguments and to pinpoint certain points at which we either agree or disagree. These are more formal cases, since definitions can be thought through and laid out clearly, but even in the case of a less formal argument such as occurs during a conversation with another person, it may be necessary to pause and clarify the *idiai archai* one has accepted to be true or to consider those which another person has accepted.

The decisions we make about which *idiai archai* to accept ultimately shape the lens through which we understand our experiences in the world, and it is only through an active consideration of different proposals that we will ever get closer to the truth. If, instead, we choose to remain close minded and prideful about one particular *archai* over anything else, we will find ourselves in the place of the madman. May each of us therefore begin our arguments carefully, seek awareness of the idiai archai we accept, and continue to search for the truth.

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