

THE FOUR EQUALS: ANALYZING SPINOZA'S IDEA OF EQUALITY

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Spinoza's defense of political democracy has long been celebrated. And Spinoza's effort to apply the geometric method to philosophy is well known. But no one, to my knowledge, has examined Spinoza's treatment of equality, which cuts across both his metaphysics and political theory.¹

Analysis of Spinoza's use of equality² reveals that it plays four distinct roles in his philosophy. The sum of its four functions, however, is greater than the parts, for equality operates throughout by way of analogy to provide coherence to Spinoza's world view.

I. ELEMENTS OF EQUALITY

Spinoza characterized four sorts of things as equal. Measurements can be equal. Minds have an equal capacity for reasoning. Citizens or groups of citizens have equal political right. And all existing particular things have an equal internal power by which they exist.

1. **Equality of measurement** – Spinoza used equal most frequently to denote mathematic or geometric proportion. In characterizing ratios as equal³ Spinoza merely adopted the seventeenth-century way of expressing arithmetic equation ($n=n$). Similarly, he referred to angles as equal,⁴ and said a line-segment can be divided into equal parts.⁵

These passages do not present serious interpretive problems. But Spinoza also extended this idea of equality and applied it to substance. The analogical operation of this notion of equality is readily apparent in his early, unpublished *Short Treatise on God, Man, and Man's Well Being*, but a similar analogizing lies behind the adoption of key axioms and propositions in the *Ethics*.

In the *Short Treatise* Spinoza repeatedly asserted that there cannot be two equal infinite or unlimited substances (*gelyke onbe-paalde zelfstandigheeden*). Their existence would entail a contradiction, for they would necessarily limit each other.⁶ Thus, by

indirect proof, Spinoza established the unity of substance. This curious use of equality is further illuminated by his argument that one substance cannot be the cause of another, because they both would share attributes; and this would be impossible because then both would be equal.⁷ The hidden premise in both arguments is simply that substance cannot be equal to anything else.

This metaphysical argument is closely bound up with the cartesian conception of space as not just a matrix for measurement but as itself a sort of unlimited thing. It would be impossible – both conceptually and physically – to have two infinite spaces. Consequently, Spinoza's equality of measurement applies only to relations of *limitations* of space. This is consistent with his rejection of the real divisibility of substance,⁸ for if an area comprised infinite units, it (like unlimited substance) could not be equal to another.⁹

2. **Equality of reasoning minds** – Reasoning minds are equal in two possible ways. First, all people have an inherently equal capacity for reasoning. Spinoza expressed this equality or ratiocination mythologically by the equality of creation. Second, to the extent that people are rational, they will agree – their ideas will coincide and they will live in social harmony.¹⁰ However, Spinoza only referred to the equality of minds in the context of discussing their rational potential.

The rejection of election (of both individuals and nations) is central to the social ethic Spinoza developed in his political writings. And at the bottom of his project of scriptural criticism is the assumption that “the highest power of Scriptural interpretation belongs to every man . . .”¹¹ Although this is rooted in Spinoza's conception of reason itself, he defended it polemically by reference to scripture, which declares (according to Spinoza) that God created all people with equal intellects.¹² Spinoza also adduced scriptural authority for the equality of nations.¹³

But people and nations are equal for Spinoza only potentially. He sharply distinguished the actual psychological constitution of persons, which is inherently unequal, from their potential. He associated equality with reason and cognition, and associated inequality with the passions and imagination.¹⁴ Yet he characterized reasoning minds as equal only in contexts where reason is still confronted by the passions – in contexts where people are not actually equal. And he characterized minds that actually attain the highest level of rationality not as equal (nor as unequal) but as free or blessed.¹⁵

His treatment of the equality of ratiocination parallels the equal-

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ity of measurement, where equality was restricted to proportions of finitude. Minds are equal in their reasoning only so long as the reasoning is potential not actual. The actual free reasoning mind, like extension, can only be self-determined. The category of equality simply does not apply. Spinoza turns to religious metaphors.¹⁶

3. **Equality of right** – Spinoza characterized people in the state of nature as equals.¹⁷ He understood the state of nature to be a real historical moment.¹⁸ Prior to the formation of the state, each person had an equal natural right to exist and act according to his or her natural conditions. But in such a state people were determined by the passions not by reason.

Moreover, for Spinoza the state of nature was marked by actual material inequality. Indeed, he explained the origin of political society as a response to this inequality, motivated by the benefits resulting from the division of labor – “for all men are not equally apt for work (*aeque apti*) . . .”²⁰

Equality of right continues after the establishment of the state, for the natural right of individuals continues after the creation of political society.²¹ But this equality remains inherently limited. Within society the passions (especially vanity) oppose the natural equality of persons.²² Spinoza described the history of the decline of the Hebrew state as the result of social inequality that resulted from the elevation of the Levites into a special caste.²³ And he designed many of the political mechanisms elaborated in the *Political Treatise* specifically to promote political, social and material equality and to counter the anti-egalitarian, socially dislocative forces engendered by the passions.²⁴

Nevertheless, though equality is in some sense an incident of good political organization, it is not, for Spinoza, the goal of politics. Rather Spinoza defined the best state in terms of conditions for freedom and reason. Within such a state people will live in harmony (*concorditer*).²⁵ He refrained from characterizing such a relationship as one of political equality (or inequality).

4. **Equality of internal power of existing** – Spinoza's treatment of equals in his mature writings is closely related to his theory of contingents. All individual things exist rather than not by an internal power of self-persistence or self-preservation. And all existing things are equal with respect to the internal force by which they endure.²⁶

This internal force represents a modification of what Spinoza had termed “special divine providence” in the *Short Treatise*.²⁷ In that essay Spinoza rejected the explanation of particulars through

generals and denied the existence of generals.²⁸ Instead he related the ultimate cause of the existence of things immediately to their comprehension by the totality (God or nature).²⁹ In this scheme, individuals derived existence only from participating in the totality, but the existence of the whole was itself a function of "divine providence" – the striving of all reality to persist in existence. This striving was manifest in individuals as the special divine providence.

In later writings Spinoza rejected this scheme and emphasized the source of existence as an internal power.³⁰ Though in the *Ethics* he continued to identify the power by which individuals exist with the power of God or nature, he stressed that this power operates not as the immediate manifestation of the infinite power but only as that power acting through the individual's own essence.³¹ The internalization of this force is accompanied by its limitation to the particular existing thing. And only after this theoretical shift did Spinoza characterize the power by which particular individuals exist as equal.

As with Spinoza's other uses of equality, the particulars are equal in one aspect at the same time that they are most profoundly unequal in others. Individual things differ from the absolute in their transience; and they are not equal in essence, location or length of duration. Equality, again, is a function of limitation.

II. PROPERTIES OF THE COMPOUND

Equality plays an important function in Spinoza's writings in two ways. First, he draws certain inferences from the equality of sets of things and transfers them to related sets of things. Thus he extends the equality of geometric proportions to arguments about the nature of substance. Substance, as cartesian extended stuff, is similar to Euclidean space. Likewise, from the idea of equal political right rooted in a descriptive theory of natural law, Spinoza draws specific institutional consequences. The continuity of political society with the state of nature supports this analogical transference.

Second, equality as a single type of relationship acts analogically to relate the diverse types of things that are characterized as equals throughout Spinoza's writings. In this way, the idea of equal provides thematic coherence to the system as a whole.

Geometric equality is the root analogy from which Spinoza draws immediate ontological consequences. The equality of ratiocination is the psychological complement of the equality of political right. The equality of political right is itself a sort of subset of the

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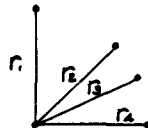
equality of the internal power by which particulars exist; it is the right of those particulars (people) who share the equality of ratiocination. The analogical square closes on itself, for the equal power by which particulars exist supports that existence of the limited parts which the equality of proportion measures in geometry.³²

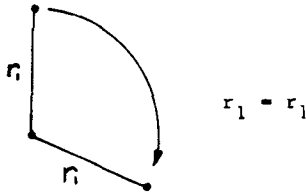
There are common features to all these relations and to the overarching analogical function that equality plays in Spinoza's thought. Above all, equality relates things or ideas that are limited. But there is pervasive ambiguity regarding the source of this limitation — whether the equals are themselves objectively limited, or whether the limitation itself is a function of the heuristic process of judging them to be equals. Conceptual instability of the compound of equality stems from an ambiguity in Spinoza's root concept of geometric equality, which is never resolved. The ambiguity becomes aggravated by the extension of equality to political relations. In establishing the reality of political right, the basic analogy threatens to dissolve. But at the same time Spinoza has generated a rich category for political theory.

1. The truth of equality — Spinoza seems to imply in one passage that geometric equality is a sort of what we might call an analytic judgment *a priori*. He says that the affirmation that the interior angles of a triangle equal two right angles is simply a function of the idea of a triangle. Conversely, the idea of the triangle is a function of the affirmation that its three interior angles equal two right angles. He calls this affirmation the "essence" of a triangle.³³ He does not elaborate, but he seems to be saying that the judgment is immediately derivable from the definitions of line and angle that make up the triangle.

But it is clear from another passage that by "essence" Spinoza means something other than geometric equality. For in discussing the circle, he criticizes the definition of it as a figure resulting from line-segments of equal length drawn from a central point. This definition, he says, fails to *explain* the circle and is really only one of its properties. Instead he defines a circle as a figure described by a line-segment one end of which is fixed and one end free.

$$r_1 = r_2 = r_3 = r_4, \text{ etc.}$$



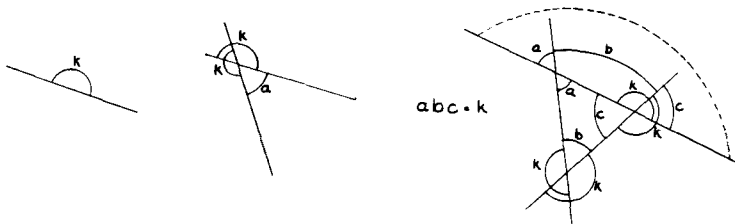


The second definition, he says, comprises the proximate cause, and all the properties of the circle can be derived from it.³⁴

The special status of the second definition is related to the fact that it describes the actual process by which a circle is drawn with a compass. But more important, it reveals the way in which Spinoza believes we can imagine the circle. Just as he avoids talking of areas as equal and rejects the possibility of equating infinities, he rejects the first definition. The first definition can only generate a continuous circumference if an infinite number of lines extend from the center. But Spinoza rejects this infinite divisibility of space – into either point or line.³⁵

Spinoza obviously does not consider the role of equality in the two definitions of the circle as identical. Although they relate purely geometric proportions, one is mere attribute, the other proximate cause (or essence). The attribute is derivable from the essence. But, in contrast to the definition of the triangle, the derivation is not symmetrical.

Spinoza's preference for the second definition of the circle incorporates assumptions about the psychology of imaginative thinking. Spinoza believes that geometric figures are produced by imaginative thought in terms the imagination can depict – finite line, motion, fixed point. The definition, like the idea, is synthetic. And, I think, turning again to Spinoza's discussion of the triangle, we can see that it, too, mirrors the process by which the imagination constructs the triangle from lines:



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Although the relations within each step of the retrospective analysis involve relations of equality, equality is only involved in the definition of the "essence" ($a + b + c$) because it is a reproduction of the original equality, as identity (k), which is posited in step one as the angle of a line ($abc = k$). Similarly, the equality of the radii of the circle is merely a function of the original definition of the "cause" of the circle — the single line segment is identical as it moves to create the circle. Retrospectively the distances it occupied at any moment are equal. But it is impermissible to conclude that there really are infinite radii of equal length from which the triangle is constructed. Equality is not a function of the synthetic and imaginative process by which geometric figures are formed; rather it is a judgment made retrospectively and analytically.

Moreover, the conclusion I am drawn to, that equality does not correspond to the process of geometric definition, is confirmed by Spinoza's discussion in another passage of the psychology of space. He says that all objects a certain distance from the observer (about 200 feet) appear equally distant.³⁶ Passing over whether this is true, or what it means for psychology, the interesting fact is that Spinoza selects equality as an example of confused ideas. Equality can (in Spinoza's parlance) be false.

Spinoza characterizes the objects of geometry (quantity and measure) as modes of imagination, which result from the abstraction of substance into extension and duration.³⁷ It is possible to delimit and quantify this extension, once it is thinkable, but equality, too, clearly remains a product of imaginative thinking. From the higher consideration of substance by means of the intellect, substance is "infinite, indivisible and unique."³⁸ The intellect — the generative source of philosophical knowledge — cannot comprehend by means of the use of equality.³⁹

2. The reality of equality — The status of the relationship of equality even within the imaginative or phenomenal world is ambiguous. The ambiguity stems from Spinoza's theory of relations.

In the *Improvement of the Understanding* Spinoza did not get past a preliminary classification of knowledge in terms of types of ideas and their corresponding definitions. But he did announce there the goal of ordering all ideas so that they correspond to the order of nature. And he suggested two different ways that this subjective coherence could be achieved. On the one hand, he proposed the investigation of the essence of the unitary cause of all ideas: "then our mind will to the utmost extent relect nature."⁴⁰ This project corresponds to the faculty of intellection. On the other hand,

Spinoza insists that only by conceiving of existing objects as particulars and purging the mind of abstractions can the objects be understood clearly.⁴¹ This corresponds to the corrective task of philosophy in purifying the imagination of false and confused ideas.

For both methods of achieving the coherence of ideas Spinoza assumes that relations within nature can be comprehended by clear ideas of objects. There is no separate need to form ideas of relations, and relations apparently have no objective correlate in nature. Thus in the *Ethics* Spinoza divided the world into substance, attribute and mode. Relations among ideas and objects – the ordering which was itself the philosophical task of the *Ethics* – falls outside of this classification. The doctrine of internal relations (which is suggested by Spinoza's treatment but never stated expressly) makes the reality of judgments of equality inherently problematic. Their truth lies only in the coherence of the thoughts compared and is a result of the process of comparison – but comparison is heuristically suspect because of the denial of reality of relations.⁴²

However, there is some evidence that in later years Spinoza became dissatisfied with his earlier theory of relations. In his later study of Hebrew linguistics, Spinoza established relations as a separate epistemological category alongside things, attributes and modes.⁴³ Relations as well as modes can be expressed with a substantive: they can be understood. Moreover, it is also only in Spinoza's last writing that he adopts the use of the substantive equality (*aequalitas*).⁴⁴ He uses the substantive only in the context of discussing political equality among individuals and groups or classes of individuals.

3. The instability of equality – Recognition of a substantive equality in politics threatens the analogical operation of the four equals. For substantive equality elaborated as an end of political institutions has no conceptual parallel in the root analogy of geometric equality. Indeed the hypostatization of the relationship as a substantive conflicts radically with the treatment of equality in the root analogy where the relation was ultimately dissolved as a sort of illusion wrought by imaginative thought.

The substantiation of political equality as a central feature of political theory introduces instability into the overarching analogical function of equals in Spinoza's theory. We can attempt to resolve the instability by means of biographical bifurcations of earlier and later writings and by means of dissociating writings on political theory and metaphysics. But these external resolutions of the con-

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flict also serve to obscure the close genetic relation of the writings and the analogical function that the equals play even as they threaten to come apart.

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NOTES

- * I want to thank Dr. Robert C. Stoddart for help with Latin.
- ¹ The literature on Spinoza's metaphysics is endless, though philosophical interest in his writings seems to have decreased in recent decades. There are many excellent general discussions of Spinoza's political ideas. Yet one reason why his treatment of equality has not been previously investigated is related to the tendency of most writers to dissociate Spinoza's metaphysics and his political theory – or else to subordinate one to the other. For example, McShea finds Spinoza's real political philosophy to lie in his ethics. Robert J. McShea, *The Political Philosophy of Spinoza* (New York: Columbia University Press, 1968), p. 204. And Zac, on the contrary, characterizes the *Ethics* as a polemical work. Sylvain Zac, *Philosophie, théologie, politique dans l'oeuvre de Spinoza* (Paris: J. Vrin, 1979), p. 117.
- Moreover, interpretations of Spinoza's political theory have tended to exaggerate certain individualist and mystical aspects and to ignore the pervasive theme of political egalitarianism. I hope to challenge this prevailing view of Spinoza's politics in another essay. Here I only observe its contribution to the neglect of Spinoza's treatment of equality. The historical roots of this view lie in nineteenth-century interpretations of Spinoza's metaphysics. See, for example, Frederick Pollock, *Spinoza: His Life and Philosophy* (London: Kegan Paul, 1880), p. 368. This interpretation was reinforced this century by Strauss, who sought and found incongruities in Spinoza's idea of natural right. Leo Strauss, *Spinoza's Critique of Religion*, trans. E. Sinclair (New York: Schocken, 1965), pp. 230, 243–44.
- ² Although I use the substantive throughout, Spinoza rarely used "equal" other than adjectivally. He used *gelykmatigheid* once in the *Short Treatise* to refer to a relation of equality between ratios. See Carl Gebhardt ed., *Spinoza Opera*, 4 vols. (Heidelberg: Carl Winter, 1925), 1:54. He used *aequalitas*, the abstract of *aequalis*, only in his last work, *The Political Treatise*. See *infra* n. 44. Location of terms can be verified by Emilia Giancotti Boscherini, *Lexicon Spinozanum*, 2 vols. (The Hague: Martinus Nijhoff, 1970), 1:24.
- As I will suggest in part II, Spinoza's avoidance of the substantive is not accidental; it reflects important epistemological assumptions. However, I do not follow his usage in my discussion.

Both Dutch and Latin were foreign languages to Spinoza. As far as I can tell, he uses both *gelijk* (or *gelyk*) and *aequalis* to mean the same thing. Both are close analogues to the Portuguese *igual*. The Portuguese substantive would be *igualdad(e)*.

- ³ See, e.g., *Short Treatise*, *Spinoza Opera* 1:54; Reeckening van Kanssen, *Spinoza Opera* 4:362; *Improvement of the Understanding*, *Spinoza Opera* 2:12; *Principles of Descartes's Philosophy*, *Spinoza Opera* 1:185.
- ⁴ See, e.g., *Calculation of the Rainbow*, *Spinoza Opera* 4:354, 356; *Improvement of the Understanding*, *Spinoza Opera* 2:35; *Principles of Descartes's Philosophy*, *Spinoza Opera* 1:158, 204, 266; *Ethics*, *Spinoza Opera* 2:61, 130, 136; *Theological-Political Treatise*, *Spinoza Opera* 3:252 note.
- ⁵ See, e.g., *Calculation of the Rainbow*, *Spinoza Opera* 4:358. Similarly, lines from the center to the radius of a circle are equal. *Improvement of the Understanding*, *Spinoza Opera* 2:35; *Principles of Descartes's Philosophy*, *Spinoza Opera* 1:158, 162. See discussion in part II.
- ⁶ *Short Treatise*, *Spinoza Opera* 1:19 n. 2.
- ⁷ *Ibid.*
- ⁸ *Ethics* Part I props. XII, XIII.
- ⁹ See letter of April 1663 to Meyer in A. Wolf ed., *The Correspondence of Spinoza* (London: Allen & Unwin, 1928), p. 121. See also letter of May 1676 to Tschirnaus, *ibid.*, pp. 362–63, where Spinoza reaffirmed his earlier views and clearly related his argument regarding extension to the nature of substance.
- ¹⁰ *Ethics* Part IV prop. XXV.
- ¹¹ *Theological-Political Treatise*, in *The Chief Works of Benedict de Spinoza*, trans. R.M. Elwes, 2 vols. (New York: Dover, 1950–55) 1:119; *Spinoza Opera* 3:117.
- ¹² *Chief Works* 1:49; *Spinoza Opera* 3:50.
- ¹³ Equality of creation extends to all nations: “in regard to intellect and true virtue, every nation is on a par with the rest. . .” *Theological-Political Treatise*, *Chief Works* 1:56; *Spinoza Opera* 3:57. The history of the Jews is not marked by a unique relation to God; other nations had prophets. *Chief Works* 1:49, 50, 52; *Spinoza Opera* 3:50, 51, 53. See also letter to Ostens of February 1671: “As regards the Turks and the other Gentiles, if they worship God by the exercise of justice and charity towards their neighbor, I believe that they have the Spirit of Christ and are saved, whatever convictions they may in their ignorance hold. . .” *Correspondence*, p. 259. Spinoza also maintained that Christ was sent to all nations. *Theological-Political Treatise*, *Chief Works* 1:53, 64; *Spinoza Opera* 3:54, 64. Christ plays a signal rôle in Spinoza’s theory as the exemplar of the intuitive understanding of the simple moral principles.
- ¹⁴ People are differently affected by the passions, and the same person can be differently affected at different times. *Ethics* Part III prop. LI. And so far as they are assailed by the passions, men “differ in nature.” *Ethics* Part IV prop. XXXIII proof, *Chief Works* 2:208; *Spinoza Opera* 2:231. To the

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extent they so differ, people are not in natural harmony. *Ethics* Part IV prop. XXXII.

This diversity of natural dispositions can play a positive historical function because it prevents the successful manipulation of all persons by a tyrannical regime that seeks to subordinate reason by appealing to the passions. Not all people respond equally to the same external, authoritative incentives or threats: "brains are as diverse as palates." *Theological-Political Treatise, Chief Works* 1:257; *Spinoza Opera* 3:239. The natural diversity of people is clearly associated with their passions and imaginative thinking. As regards reasoning, they are "equal."

¹⁵ See, e.g., *Short Treatise, Spinoza Opera* 1:109–10. Cf. *Ethics* Part V prop. XLII.

¹⁶ Indeed, in earlier writings, Spinoza characterized reason itself as merely a staircase by which we ascend to supreme happiness in union with God. *Short Treatise, Spinoza Opera* 1:109–10. A related epistemological problem, which continues in Spinoza's later writings, arises from Spinoza's idea of the self-determined mind. As Saisset suggested, Spinoza's analysis of the ego threatens to undermine the unity of the ego. In contrast to the individual ego that is the starting-point of Descartes's speculations, Spinoza's ego is ultimately dissolved into a multiplicity of ideas. Émile Saisset, *Précurseurs et disciples de Descartes* (Paris: Didier, 1862), pp. 338–39.

¹⁷ *Theological-Political Treatise, Spinoza Opera* 3:195.

¹⁸ The Jews were in a state of nature (*statu naturali*) after the Exodus, before receiving the Law. *Ibid.* 3:195. My reading clearly conflicts with Zac's assertion that for Spinoza the state of nature and social pact had no historical referents. See Sylvain Zac, *Philosophie, théologie, politique dans l'oeuvre de Spinoza*, p. 133.

¹⁹ *Theological-Political Treatise, Spinoza Opera* 3:189–90; *Political Treatise, Spinoza Opera* 3:277.

²⁰ *Theological-Political Treatise, Chief Works* 1:73; *Spinoza Opera* 3:73.

²¹ In this Spinoza diverges sharply from Hobbes. See e.g., his letter to Jellis of 1674, *Correspondence*, p. 269. For a recent discussion, see Kudo Kisaku, "über die Staatslehre Spinozas," in Siegfried Hessing ed., *Speculum Spinozanum 1677–1977* (London: Routledge & Kegan Paul, 1977), p. 355.

²² *Theological-Political Treatise, Spinoza Opera* 3:203. In the *Ethics* Spinoza observed that people naturally envy their equals. *Ethics* Part III prop. LV scholium. And he derived from this the corollary that "No one envies the virtue of anyone who is not his equal." *Ethics, Chief Works* 2:167; *Spinoza Opera* 2:183.

²³ *Theological-Political Treatise, Spinoza Opera* 3:218–20.

²⁴ For example, he proposed the abolition of all nobility in a monarchy (except for the king's immediate family) "in order that the citizens may be as far as possible equal. . ." *Chief Works* 1:336; *Spinoza Opera* 3:315. Equal-

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ty in property relationships is ensured by prohibition of land ownership. *Chief Works* 1:336, 331; *Spinoza Opera* 3:311, 315. For aristocracy Spinoza proposed various institutional limitations on the central council in order to promote “the greatest possible equality (*aequalitas*)” among the patricians. *Chief Works* 1:354; *Spinoza Opera* 3:331.

²⁵ *Spinoza Opera* 3:296.

²⁶ *Ethics, Spinoza Opera* 2:209.

²⁷ *Short Treatise, Spinoza Opera* 1:40.

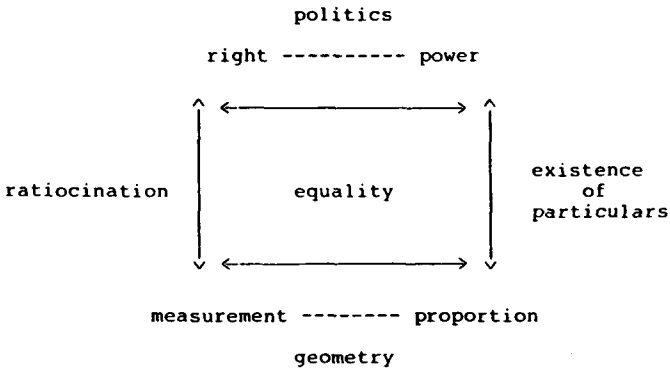
²⁸ *Ibid.* 1:40.

²⁹ See especially the discussion of God in the *Short Treatise, Spinoza Opera* 1:22, and chapt. 3 (God as Cause of All Things).

³⁰ Divine providence is partly retained in the *Ethics* Part I prop. XXIX: “Nothing in the universe is contingent, but all things are conditioned to exist in a particular manner by the necessity of the divine nature.” *Chief Works* 2:68; *Spinoza Opera* 2:70. But Spinoza immediately qualified this by introducing the distinction between *natura naturata* and *natura naturans*.

³¹ *Ethics* Part IV prop. IV proof.

³² A schematic diagram might illustrate some of the interactions of Spinoza’s analogical use of equality, though I believe the analogy is actually richer than the connections suggested by the schema:



³³ *Ethics* Part II prop. XLIX proof, *Spinoza Opera* 2:130.

³⁴ *Improvement of the Understanding, Spinoza Opera* 2:35.

³⁵ For Spinoza the first definition exposes the absurdity of taking Euclidean definitions to correspond to real things in space. For if an infinity of points establishes the continuity of circumference, the infinitely narrow line that intersects the circumference must be still more infinitely narrow as it approaches the center.

Another way to sympathize with Spinoza’s dislike of the first definition is to try to imagine a circle as a limit of a planar figure composed of the largest infinity of points the total distance of which from a common point

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is the smallest possible infinity. It is, Spinoza would think, impossible to construct such a figure in the imagination.

³⁶ *Ethics* Part IV definition VI, *Spinoza Opera* 2:210.

³⁷ Letter of April 1663 to Meyer, *Correspondence*, p. 118.

³⁸ *Ibid.*

³⁹ This suggests, of course, that for Spinoza the geometric method itself is in some sense propaedeutic and not adequate for genuine philosophical understanding. I disagree with Stirling's interpretation of the "secret of Spinoza" as a mathematical-geometric conception of the world. See Albert Schwegler, *Handbook of the History of Philosophy*, trans. and annotated by James Hutchison Stirling, 2d ed. (Edinburgh: Edmonston & Douglas, 1868), pp. 408–11. Though that interpretation has continued to influence twentieth-century analytic philosophical attitudes of Spinoza, nonacademic philosophers, like Einstein and Oliver Wendell Holmes, Jr., have viewed the geometric method as related only to Spinoza's formal argument.

⁴⁰ *Improvement of the Understanding*, *Chief Works* 2:36; *Spinoza Opera* 2:35.

⁴¹ *Ibid.*, *Spinoza Opera* 2:20–21.

⁴² The denial of the reality of external relations has broader ontological consequences. Unable to relate the operations of mind and body, as Mendelssohn rightly points out, Spinoza (not Leibniz) originated the doctrine of preestablished harmony. See Moses Mendelssohn, *Philosophische Gespräche*, in *Gesammelte Schriften Jubiläumsausgabe* (Stuttgart: Frommann, 1971–), 1:8ff.

⁴³ *Grammar of Hebrew Language*, *Spinoza Opera* 1:303. The editors of Spinoza's works conclude that this work was written around the time Spinoza wrote the *Theological-Political Treatise*. See *ibid.*, p. 626.

⁴⁴ *Political Treatise*, *Spinoza Opera* 3:303, 315, 327, 329, 331, 347, 357. Spinoza was very deliberate in his usage of substantives. Cf. *improvement of the Understanding*, *Spinoza Opera* 2:35; *Grammar of the Hebrew Language*, *Spinoza Opera* 1:303.