



CANTOR, THE KABBALIST SEFYROTIC SYSTEM, AND SPINOZISM

Prof. PhD. Jacques J. ROZENBERG¹

National Centre for Scientific Research (CNRS),
FRANCE

<https://cnrs.academia.edu/JacquesRozenberg>

ABSTRACT

This article explores the influence of Kabbalah on the philosophical systems of Spinoza, Leibniz, Bruno, and Cantor, with a focus on some structural and conceptual parallels. Scholars have noted that Spinoza's Ethics exhibits a framework akin to the Kabbalistic sefyrotic system. Their studies highlight some correspondences between Kabbalistic notions—such as sefirot (divine emanations), attributes, and parçuf (face)—and Spinozist concepts like attributes, modes, and state powers. The article discusses how Cantor, through his use of the symbol aleph (א) and his conception of the absolute infinite, reflects a Kabbalistic worldview. Then it will analyze the Spinozist interpretation that Adolphe Jellinek proposed of the kabbalist theory of R. Azriel of Gerona. I will then examine the abstract status of numbers in Jewish commentators such as R. Ibn Ezra and the Gaon of Wilna, who posited the equivalence between the notions of number and sefyrah. Finally, I will analyze the post-Cantorian theory of naming, showing that it agrees, on the one hand, with the negative theology of Maimonides, and on the other hand, with the semantics of Saul Kripke.

Keywords: R. Abraham Ibn Ezra; R. Azriel of Gerona; R. Mosheh Cordovero; R. Abraham Cohen Herrera; Eyn Sof; infinite; sefyrot, Spinoza; Leibniz; Cantor; naming; Kripke

INTRODUCTION

Several scholars have argued that Kabbalah provided Spinoza with the components of a theoretical and structural model that appear to have influenced the formation of his *Ethics*. More generally, it is possible to establish the historical relations between Giordano Bruno, Spinoza, Leibniz and Cantor as well as their relations to Kabbalah. Adolph Jellinek, as I will analyze in detail in this article, has suggested that the structure of *Ethics* is entirely similar to the *sefyrotic* system (*sefyrot*: divine emanations).² Alexandre Matheron described in terms of transformational structures of *sefyrot*, several Propositions of the *Ethics*, and the

¹ I would like to thank Avishai Bar-Asher, Sarah Glaz, Larry M. Lesser and Henri Volken for their helpful comments on previous versions of this article.

All the translations in English are mine, unless otherwise indicated. Regarding the transliteration of Hebrew, I have generally followed the system of Ch. L. Echols and Th. Legrand Transliteration of Hebrew Consonants, Vowels, and Accents, etc. Academia.edu.

https://www.academia.edu/5388085/Transliteration_of_Hebrew_Consonants_Vowels_and_Accents_etc

² A. Jellinek, *Beiträge zu Geschichte der Kabbalah*, Erstes Heft. Leipzig. 1852, pp.62-66



different types of powers of the Spinozist state.³ Finally, Alessandro Guetta has related the notion of *sefyrah* with the Spinozist notion of attribute, and the notion of *parçuf* (face) with that of mode.⁴

Concerning Leibniz, let us remember that he used the expression *cabbala vera* in connection with the universal characteristic (*De numeris Characteristicis ad linguam universalem constituendam*).⁵ Leibniz seems to have taken over from Bruno the notion of the monad. He explicitly referred this notion to the Kabbalah of the Hebrews and to their conception of the *sefyrot*, as expressions or attributes of the infinite.⁶ Like the *sefyrot*, the monads are "the true Atoms of Nature and, in a word, the Elements of things."⁷ The monad, like the simple substance, is a living mirror that reflects the universe in an infinite number of ways.⁸ Monadic perception is described on the model of the mirror where the global is reflected in the local.⁹ Concerning Cantor, it should be noted that the Leibnizian notions of reflection and monad were taken up by Cantor and by set theory.¹⁰ In addition, in positing the transcendence of the absolute infinite, Cantor was very close to the Jewish Kabbalah, as shown by his choice of the Hebrew letter *aleph* (א) to designate transfinite cardinal numbers.

1. THE CANTORIAN ALEPHS AND THE EYN SOF

In order to theorize transfinite sequences, Cantor first chose, in 1883, the Greek letter ω (*omega*), which designated the ordinal number of the sequence of natural numbers.¹¹ Louis Couturat emphasizes that the ω , as an ordinal number, is not "the *last* of all finite numbers, but it is the *first* after them, that is to say, the first of the infinite numbers." Since no number can represent the entire sequence of finite numbers, a transfinite number must be

³ A. Matheron, *Individu et communauté chez Spinoza*. Paris, Minuit, 1968, pp.616-622. Cf. G. G. Scholem, *Major trends in Jewish Mysticism*. p.214.

⁴ A. Guetta, Kabbalah and Rationalism in the Works of Mosheh Hayyim Luzzatto. In G. Veltri (Ed.), *Italian Jewry in the Early Modern Era: Essays in Intellectual History*. Boston, Academic Studies Press, 2014, pp.218-219.

⁵ Leibniz, Gerhardt, *Die philosophischen Schriften*, vol. VII, pp. 184-189.

⁶ G. Bruno, *De monade numero et figura liber consequens quinque de minimo magno & mensura: item: De innumerabilibus, immenso & infigurabili; seu De universo & mundis libri octo*. Francofurti, Apud Ioan. Vvechelum & Petrum Fischerum Consortes, 1591, pp.61-62 and p.134. A. P. Coudert reports the opinions of E. Thouverez and M. Bréhier, according to which Leibniz borrowed the term monad from G. Bruno. A.P. Coudert, *Leibniz and the Kabbalah*. Dordrecht, Kluwer Academic, 1995, p.185 note 234. However, M. R. Antognazza has suggested that Leibniz's adoption of the term monad seems to have preceded his reading of Bruno's work, but he may have borrowed it from authors influenced by Neoplatonism and Kabbalah, such as Ralph Cudworth, Henry More, Christian Knorr von Rosenroth, Anne Viscountess Conway, and Franciscus van Helmont. M. R. Antognazza, *Leibniz: An Intellectual Biography*. Cambridge: Cambridge University Press, 2009, p.352.

⁷ Leibniz, *Monadology*, § 3

⁸ Leibniz to Rémond, July 1714. *GP* III, 623

⁹ M. Serres, *Le système de Leibniz et ses modèles mathématiques : étoiles, schémas, points*. Paris, PUF, 1968, p.154 et p.180

¹⁰ Cf. A. Newstead, Cantor on Infinity in Nature, Number, and the Divine Mind. *American Catholic Philosophical Quarterly*. 83, 4, 2009, p.351; W. N. Reinhardt, Remarks on reflection principles, large cardinals, and elementary embeddings, *Axiomatic Set Theory*. In Thomas J. Jech (Ed.), *Proceedings of Symposia in Pure Mathematics*. Providence RI: American Mathematical Society, vol. 13, bk. II, 1974, pp. 189-205. On the importance of the Leibnizian notion of reflection in G. Cantor and K. Gödel, cf. M. van Atten, *Monads and Sets. On Gödel, Leibniz, and the Reflection Principle*. in G. Primiero and S. Rahman (Eds.) *Judgement and Knowledge. Papers in Honour of B.G. Sundholm*. London, College Publications, 2009, pp. 3-33.

¹¹ G. Cantor, Über unendliche lineare Punktmannigfaltigkeiten, 5. Grundlagen einer allgemeinen Mannigfaltigkeitslehre. Ein mathematisch-philosophischer Versuch in der Lehre des Unendlichen 1883, In *Gesammelte Abhandlungen mathematischen und philosophischen Inhalts*. Springer, Berlin, 1932, pp. 165-208.



created, which can be described as "transcendent."¹² In 1893, to designate the transfinite cardinals, Cantor adopted the Hebrew letter *aleph* ($\aleph$), and he named $\aleph_1$ the transfinite cardinal of the first class of natural numbers. However, in 1895, he decided to name this first class $\aleph_0$, $\aleph_1$ the cardinality of the second class of transfinite ordinal numbers, and $\aleph_2$ the cardinality of the third class of transfinite numbers, etc. Finally, Cantor names the set of all $\aleph$ by the last letter of the Hebrew alphabet *taw* (τ), while continuing to denote by ω the set of transfinite ordinal numbers.¹³ Cantor was then able to construct the increasing sequence of *alephs*, by extending that of the natural numbers: $\aleph_\omega$ in particular (ω is the ordinal of $\mathbb{N}$) constitutes the cardinal number immediately superior to all the $\aleph_v$.¹⁴ However, in his letter to Hilbert of October 2, 1897, Cantor had warned that while the totality of all *alephs* can be defined, it cannot be "completely defined (*fertig definiert*), inasmuch as the totality of all *alephs* cannot be comprehended as a definite well-defined and also finished set."¹⁵

The reason for the choice of the letter $\aleph$, to name infinite sets, has been explained by the Marrano origin of Cantor. Indeed, he wrote to Paul Tannery in 1896 that his paternal grandparents were part of the Portuguese Jewish Community of Copenhagen.¹⁶ Being of a Marrano, like Spinoza, Cantor devoted the second part of his habilitation thesis to this philosopher. and he shared with him, but for opposite reasons, a deep interest in Judaism. This interest can be seen in the privately published pamphlet, in 1905, in which he mentioned three first names, two of which were Hebrew: Georg Jacob Aaron.¹⁷ It seems that Cantor retained the letter $\aleph$, because it designates, in the Kabbalist tradition, the *Eyn Sof*, the divine infinity. He thus constructed a theoretical model in which $\aleph$ express the infinite sequence of worlds, as the Jewish kabbalists had described them.¹⁸ However, it should be stressed that the *sefyrot* are metaphysical and symbolic entities, while the transfinite are formal mathematical constructions. Their nature and objectives are then fundamentally different. Nevertheless, I propose to reveal the theoretical convergences between these two apparently heterogeneous notions and fields of research.

2. INFINITY AND THE EYN SOF

It should be noted that before Cantor's distinction between the absolute infinite and the transfinite, the Jewish kabbalists had differentiated between the divine essence (‘*açmut*),

¹² L. Couturat, *De l'infini mathématique*. Reedition, Paris, Blanchard, 1973, pp.638-640

¹³ G. Cantor, Beiträge zur Begründung der transfiniten Mengenlehre (1895). *Gesammelte Abhandlungen mathematischen und philosophischen Inhalts*. Cantor, 1932, pp.282-351; Cantor explains this choice in his letter to Felix Klein of 30 April 1895, cf. J. W. Dauben, *Georg Cantor. His Mathematics and Philosophy of the infinite*. Princeton, Princeton University Press, 1990, pp.179-183.

¹⁴ H. G. W. Burchard, Georg Cantor's Ordinals, Absolute Infinity & Transparent Proof of the Well-Ordering Theorem. *Philosophy Study*. 9, 8, 2019, pp.441-442

¹⁵ H. Meschkowski, W. Nilson (Eds.) *Georg Cantor Briefe*. Berlin: Springer-Verlag, 1991, p.388; W. Purkert & H. J. Ilgauds, *Georg Cantor 1845–1918*, Birkhäuser, Basel et al. 1987, pp.226–227; D. E. Rowe, On the Origins of Cantor's Paradox: What Hilbert Left Unsaid at the 1900 ICM in Paris. *The Mathematical Intelligence*. 46, 2, 2023, p.107

¹⁶ P. Tannery, *Mémoires Scientifiques* 13. *Correspondance*. Paris, Gauthier-Villars, 1934, p.306

¹⁷ G. Cantor, *Ex oriente lux. Gespräche eines Meisters mit seinem Schiller über wesentliche Punkte des urkundlichen Christentums*. Berichtet von Schiller selbst Georg Jacob Aaron, cand. sacr. theol. Erstes Gespräch. Privately published by Georg Cantor. Halle, 1905, cf. Y. Rav, *Georg Cantor, 1845-1918*, par Walter Purkert et Hans-Joachim Ilgauds. *Revue d'histoire des sciences*. 43, 2-3, 1990, p.327.

¹⁸ A. D. Aczel, *The mystery of the aleph. Mathematics, the Kabbalah and the Search of the Infinity*. New York, Barnes and Noble, 2005, pp.145-148



expressed by the *Eyn Sof*, the absolute infinity of which is not accessible to man, and the infinity of the *sefyrot* in which the Absolute comes to manifest Itself.¹⁹

The term *unlimited* appears in the Kabbalist texts, especially in the *Sefer Yeçyrah*, in connection with the notion of *sefyrot*, which are themselves described as "devoid of any end ('*Eyn lahem sof*),"²⁰ as I will specify later. As Sandra S. Valabregue-Perry has shown, the *Sefer Yeçyrah* is at the origin of the Theosophical notion of infinity.²¹ According to Gershom Scholem, the utterance '*Eyn Sof* is a compression of '*ad 'Eyn Sof* (to infinity), in the form of the nominal form '*Eyn Sof* (infinite). It appears as such with R. Itshaq the Blind (*R. Sagy Nahor*, 1160-1235).²² Shalom Rosenberg clarified that the term '*Eyn Sof* is specific to Kabbalist language, whereas Medieval Jewish philosophers used the expression *bilty ba'al taklyt* (without end).²³ However, R. Abraham Cohen Herrera (1570-1635), both a kabbalist and a philosopher, used these two expressions as well.²⁴ Scholars generally agree on the probable influence on Spinoza of the works of R. Abraham Cohen Herrera, *Casa de la Divinidad* and *Puerta del Cielo*,²⁵ both written in Spanish. They were then translated into Hebrew, and published in Amsterdam in 1655, by R. Itshaq 'Abuav,²⁶ who participated, the following year, in Spinoza's *Herem* (exclusion) from the Portuguese Jewish Community. These works, while referring largely to the Neoplatonism of Pico, Ficino, and Leo the Hebrew,²⁷ present a certain parallel with the theological-mathematical approach of Nicholas of Cusa.²⁸ They constitute first of all a synthesis of the Lurianic Kabbalah, which R. Abraham Cohen Herrera knew in Dubrovnik, through the teaching of R. Israel Sarug (or Saruq), one of the students of R. Itshaq Luria Ashkenazi (1534-1572, designated by the

¹⁹ J. Golding, *Atzmut and Sefirot: a new approach*. In S. Lebens, D. Rabinowitz & A. Segal (Eds), *Jewish Philosophy in an Analytic Age*. Oxford, Oxford University Press, 2019, pp.243-244

²⁰ *Sefer Yeçyrah*, V. The expression '*Eyn ledavar sof* (a thing that has no end) is found in *Mishnah Yoma* I, 1. The *Midrash Tanhuma*, *Tazry'a*, XVI, uses the expression *mah she'Eyn sof* to refer to "innumerable ways." On the literature on the notion of *Eyn Sof*, cf. S. Valabregue-Perry, *The Concept of Infinity (Eyn-sof) and the Rise of Theosophical Kabbalah*. *The Jewish Quarterly Review*. 102, 3, 2012, p.410, notes 16-21.

²¹ S. Valabregue-Perry, *The Concept of Infinity (Eyn-sof) and the Rise of Theosophical Kabbalah*. *The Jewish Quarterly Review*. 102, 3, 2012, p. 405

²² G. Scholem, *The Origins of the Kabbalah*, Engl. transl. Princeton, N.J., Princeton University Press and the Jewish Publication Society, 1987, pp.266-267

²³ S. Rosenberg, *Mi-Anaximandros we'ad Levinas. LeToldot musag ha-'Eyn Sof*. *Daat*, 30, 1993, pp.90-91

²⁴ R. Abraham Cohen Herrera, *Sha'ar Ha-Shamaym*. Reprint, Warsaw, Kelter, Spoeki, 1864, I, 7, pp.4a-b; III, 8, 17a-18b. This author quotes a passage from the *Zohar* (Ytro, 7), specifying that the Divine Presence extends to the *Eyn Sof* ('*ad 'Eyn Sof*) in the higher worlds, and endless ('*ad 'Eyn Taklyt*) in the lower worlds. *Ibid.*, p.18a.

²⁵ M. Beltrán, *The Influence of Abraham Cohen de Herrera's Kabbalah on Spinoza's Metaphysics*. Leiden, Brill, 2016, pp.41-44

²⁶ It should be noted that these two works, written in Spanish, were not published in their original language at the time, and that their Hebrew translation, on which the Latin translation of C. Knorr von Rosenroth was based (in his work *Kabbala Denudata*, Sluzbach 1678, and Frankfurt 1684), is sometimes imprecise and not always complete. Cf. Y. Kaplan, *Fylosof lury'any miteqfat ha-B'aroq. Pe'amym*. 70, 1992, p.129.

²⁷ Cf. A. Altmann, *Lurianic Kabbala in a Platonic Key: Abraham Cohen Herrera's Puerta del Cielo*. *Hebrew Union College Annual*. 53, 1982, pp. 317-355; R. Pinto de Brito & G. Araújo Gomes, *Leo the Hebrew and a Kabbalistic Reading of Plato's Timaeus. Prometheus: Filosofia em Revista*. 40, 2022, pp.119-129

²⁸ G. Necker, *Circle, Point and Line. A Lurianic Myth in the Puerta del Cielo*. In R. Elior and P. Schäfer (Eds), *Creation and Re-Creation in Jewish Thought*. Tübingen, Mohr Siebeck, 2005, p.200. Konstantin Burmistrov reports that Reuchlin was referring to Nicholas of Cusa when he mentioned the question of the inscrutability of the *Eyn Sof*. K. Burmistrov, *Christian Orthodoxy and Jewish Kabbalah: Russian mystics in the search for perennial wisdom*. Leiden, Brill, 2007, p.53, note 26.



acronym: *Arizal*).²⁹ According to Saccaro Battisti Del Buffa, the Spinozist distinction, presented in *Ethics* I, Definition VI, Explanation, between absolute infinity of the substance and infinity in its kind of the attribute, would proceed from that proposed by R. Abraham Cohen Herrera, between the absolute Infinite and the infinity of the *sefyrot*.³⁰ Concerning this distinction, Harry A. Wolfson refers to the work of R. Yosef 'Albo (1380-1444), *Sefer ha-'Iyqarym*, which Spinoza had certainly read, expounding the notion of 'Eyn Sof as an expression of the infinity of divine perfection.³¹

The distinction between the two forms of infinity is already clearly made by several pre-Lurianic kabbalists, such as R. M'eyr Ibn Gabay (1480-1540). He stressed that creation took place by means of the ten *sefyrot* emanating from the *Eyn Sof*, always remains transcendent to the *sefyrot*.³² This precision seems to contradict the comparison of the distinction between, on the one hand, the *Eyn Sof* and the *sefyrot*, and, on the other hand, the Spinozist distinction between the absolute infinity of substance and the infinity in its kind of attribute. Indeed, the Spinozist attributes constitute the infinite substance (*Ethics*, I, Definition VI), while the *Eyn Sof* and the *sefyrot* remain entirely incommensurable. In fact, it is the theory of the contraction (*Tsimtsum*) of the light of the *Eyn Sof* that determines the radical incommensurability between the Infinity of the divine light and the finitude of its emanations. This theory, as I will explain later, had already been formulated by R. 'Azry'el of Girona (1160-1238), who speaks of abstention from influx (*himan'a ha-shef'a*),³³ by Nachmanides (1194-1270), using the expression "contracted the substance of Glory (*çymçem 'eçem ha-Kavod*)",³⁴ by R. Yosef K'aro (1488-1575),³⁵ and by R. Mosheh Cordovero (1522-

²⁹ The theory of R. Itshaq Luria Askenazi, interpreted by R. Israel Sarug, had been presented, among others, by R. Yosef Shlomo Delmedigo, *Maçref LaHokmah (Ta'alumot Hokmah)*, Basel 1629, a work that Spinoza possessed, and in the book by R. Naftaly Hyrc Bakrak, *'Emeq ha-Melek*, published in Amsterdam in 1648. It has been noted that through the work of C. Knorr von Rosenroth, *Kabbala denudate*, who had translated several texts by R. Abraham Cohen Herrera, it was finally the teaching of R. Israel Sarug that determined the influence of the Lurianic Kabbalah in Europe. P. Franks, *The Midrashic Background of the Doctrine of Divine Contraction: Against Gershom Scholem on Tsimtsum*. In A. Bielik-Robson, D. H. Weiss (Eds), *Tsimtsum and Modernity: Lurianic Heritage in Modern Philosophy and Theology. Perspectives on Jewish Texts and Contexts*. Berlin, De Gruyter, 2021, p.43.

³⁰ G. S. Battisti, Abraham Cohen Herrera et le jeune Spinoza, entre Kabbale et scolastique- à propos de la création ex nihilo. *Archives de Philosophie*, 51, 1988, pp.55-74; G. S. Battisti Del Buffa, *Alle origini del panteismo: genesi dell'Ethica di Spinoza e delle sue forme di argomentazione*. Milano, Franco Angeli, 2004, pp.370-379.

³¹ H. A. Wolfson, *The philosophy of Spinoza: Unfolding the latent processes of his reasoning*. Cambridge, Harvard University Press, 1934, I pp. 116-119; R. Y. 'Albo, *Sefer ha-'Iyqarym*, II, 25.

³² A. M'eyr ibn Gabay, *Derek 'Emunah*. Reed. Warsaw, 1890, p.12. On the theory of emanation in the Kabbalah of the thirteenth century, cf. M. Ehrenpreis. *Die Entwicklung der Emanationslehre in der Kabbala des XIII. Jahrhunderts*. Frankfurt am Main, Kauffmann, 1895.

³³ R. 'Azry'el Migyronah, *By'iur 'Eser Sefyrot*. Reed. Jerusalem, Makon Pithey Megadym, 1997, p.30

³⁴ Nahmanides, Commentary on the beginning of the *Sefer Yeçyrah*. This commentary is not found in the classical editions of this work, where the commentary generally attributed to Nachmanides was in fact written by R. 'Azry'el Migyronah, as noted by R. Shem Tov Ibn G'aon. Cf. G. Scholem, *Ha-perush ha-'amity shel ha-Ramban leSefer Yeçyrah we-drivrey qabalah ha-'aherym ha-mityyahasyim 'elayw*. In M. Idel - Y. ben Shomo (Eds.) *Mehqarey Qabalah*. Tel Aviv, 'Am 'Oved, 1998, p.74. M. Idel has underlined the impact of this comment on the revival of the notion of *Tsimtsum* by R. Itshaq Luria. M. Idel, 'al Toldot musag "ha-Tsimtsum" beQabalah u-bemehqar. *Mehqarey Yerushalayim beMahshevet Israel*. 10, 1992, p.60.

³⁵ This text is reported by R. Moshe Cordovero, *Pardes Rimonym*, V, 3, Reedition Koreç, 1780, and it has been extensively commented on by R. Shabtay Shaptal Horovyç (1566-1619), *Shef'a Tal*, V, 1, Reedition Jerusalem, Yaryd ha-Sefarym, 2005, pp.277-281.



1570)³⁶, to finally be presented, in a completed form, by R. Itsḥaq Luria Ashkenazi.³⁷ Since in Hebrew the term number (*myspar*) derives from the same root as that of *sefyrah* (the singular of *sefyrot*), it appears that *mutatis mutandis*, as Jorge Luis Borges has suggested, *mutatis mutandis*, the distinction between the infinity of the *sefyrot* and the Absolute Infinite is isomorphic to Cantor's distinction, between the mathematical infinite and the Absolute Infinite.³⁸

More precisely, the fact that each *sefyrah* includes itself ten *sefyrot* (*kelulah mi'esser*), and this *ad infinitum*,³⁹ anticipates Richard Dedekind's definition of an infinite system as being equivalent to one of its parts.⁴⁰ Cantor will then attest such an equivalence of an infinite set to one of its subsets.⁴¹ In 1877, in a letter to Richard Dedekind, Cantor proved that for any positive integer *n*, there exists a one-to-one correspondence between the points on the unit line segment and the points in an *N*-dimensional space. The proof involves presenting each point on a square with a pair of decimal coordinates.⁴² Let us recall that in this letter, regarding the subject of the power of sets, he wrote: "I see it, but I don't believe it!" thus showing, by this expression written in French,⁴³ that Cantor was surprised by the fact that sets of different dimension could have the same cardinality.⁴⁴ Although the *Sefer Yeçyrah* does not refer to *sefyrot* in strictly mathematical terms,⁴⁵ nevertheless, it can be shown that each *sefyrah*, itself containing ten *sefyrot*, each of which also includes ten *sefyrot*, and this *ad infinitum*, thus represents a subset equal to its parts. This is calling into question, as Cantor would do, Euclid's fifth Common Notion, according to which the whole is greater than its parts.⁴⁶ The idea of correlation between a set and its subsets, discovered by Cantor, is already present in the numerical interpretation of the *sefyrot* by R. Saadia Gaon: "establishing a correspondence (*muwazat*) between these Ten and Ten Things that have no end (*nihaya*), he intended (to show) thereby that, whereas from the human (point of view according to men) there is no end to what may be put together from the numbers by

³⁶ R. Mosheh Cordovero, *Pardes Rimonym*, XXIII, 13; cf. B. Zak, *Torat ha-Tsimtsum shel Raby Mosheh Cordovero. Tarbiz*, 58, 2, 1989, pp.207-238.

³⁷ A. Hayyim Wyt'al, *Sefer 'Eç Hayym*. Drush 'Igulyim we-yosher. Reedition Jerusalem, 1963, pp.11a-12a

³⁸ J. L. Borges, *El Aleph*. Republished Madrid, Penguin Random House Grupo Editorial España, 2011. Cf. G. Martínez, *Borges y la Matemática*. Editorial Universitaria de Buenos Aires, 2003, p.15; S. Mualem, *Borges and Kabbalistic Infinity: Ein Sof and the Holy Book*. In R. Walsh and J. Twomey (Eds). *Borges and the Bible*. Sheffield, Sheffield Phoenix Press, 2015, pp.81-98.

³⁹ R. Mosheh Cordovero, *Pardes Rimonym*, I, 5, p.3b

⁴⁰ R. Dedekind, *Essays on the Theory of Numbers*. English translation, Reedition, New York, Dover, 1963, p.105

⁴¹ P. E. Johnson, The early beginnings of set theory. *The Mathematics Teacher*, 63, 8, 1970, p.691

⁴² J. W. Dauben, Georg Cantor and the Origins of Transfinite Set Theory. *Scientific American*. 248, 6, 1983, p.126

⁴³ Cf. J. Cavaillès, *Avertissement à la Correspondance Cantor-Dedekind*. In *Philosophie Mathématique*. Paris, Hermann, 1962, p.179; J. W. Dauben, Georg Cantor and the Origins of Transfinite Set Theory. *Scientific American*. 248, 6, 1983, p.126; H. Volken, « Je le vois, mais je ne le crois pas... ». *Preuves et vérités dans les sciences formelles. Revue européenne des sciences sociales*. XLI-128, 2003, p.146-148.

⁴⁴ Cf. F. Q. Gouvêa, Was Cantor Surprised? *The American Mathematical Monthly*. 118, 3, 2011, pp.198-209

⁴⁵ Cf. Y. Liebes, *Torat ha-yeçyrah shel Sefer Yeçyrah*. Jerusalem, Tel Aviv, Shoken, 2011, p.13

⁴⁶ Cf. T. L. Heath, *The Thirteen Books of the Elements*. Dover Publications, Newburyport, 2012, I, p.155; K. Robering, The whole is greater than the part. Mereology in Euclid's Elements. *Logic and Logical Philosophy*. 25, 2016, pp. 371-409



themselves, they are finite (*tatanaha*) from the Creator's (point of view of the Creator)."⁴⁷ It can thus be shown that the system of ten *sefyrot* can be thought of as the abstract concept of enumeration that is incorporated into the concept of one-to-one correspondence.⁴⁸ Let G be the set of all the general *sefyrot* (*Keter*, *Hokmah*, *Binah* etc.), each of which includes itself ten *sefyrot*, it is then possible to form the subset P of the particular *sefyrot* (*Keter* of *Keter*, *Hokmah* of *Keter*, *Binah* of *Keter*... *Keter* of *Hokmah*, *Hokmah* of *Hokmah*, *Binah* of *Hokmah* etc...). And there is thus a bijective relationship, that is to say both injective and surjective, between each element of these two sets.⁴⁹ Indeed, this map is injective, since any element of its ending set P (the particular *sefyrot*) has at most one antecedent in the starting set G (the general *sefyrot*). This correspondence is also surjective, because every element of the end set P has at least one antecedent in the starting set G . Because of this bijective correspondence, the two sets have the same cardinality, i.e., they are equipotent.⁵⁰ In this sense, it has been suggested that, *mutatis mutandis*, the *sephyrotic* system rejoins the idea of Georg Cantor according to which there exists an infinite sequence of mathematical infinities: $\aleph_0 < \aleph_1 < \aleph_2 < \dots$ ⁵¹.

3. SPINOZA AND THE NOTION OF SEFYRAH

Christian Ginsburg has translated into English the Spinozist interpretation that Adolphe Jellinek proposed of the work *By'iur 'Eser Sefyrot* by R. Azariel ben Menachem de Girona (1160-1238). He began by affirming that, according to the Kabbalah, the universe constitutes the garment of God. Such a garment would be woven from the divine substance itself, and this is how Spinoza was able to affirm the immanence of God in the world.⁵² It should be noted, however, that the Kabbalist notion of garment (*lebush*) does not designate a part of the divine substance. Indeed, as R. Abraham Cohen Herrera points out, it is the *sefyrot* that are the garments of the *Eyn Sof* (*malbushey Eyn Sof*). Just as the clothes cover the body, but are entirely distinct from it, so the *sefyrot* are not to be confused with the real essence (*'eçem ha-'açmut*) of the *Eyn Sof*. Although the *sefyrot* are not separated from it, they are of a different nature (*mitev 'a 'aher*).⁵³ If the notion of emanation (*'açylut*) applies to the *sefyrah*, it should also be emphasized that the *sefyrot* exist uniquely after the *Tsimsum* (contraction),

⁴⁷ I am using here the English translation, from the Arabic text, by Shlomo Pines. Points of Similarity between the Exposition of the Doctrine of the 'Sefirot' in the 'Sefer Yetzira' and a Text of the Pseudo-Clementine 'Homilies'. *Israel Academy of Sciences and Humanities*, Jerusalem, 1989, pp.116-117.

⁴⁸ S. Glaz, Mathematics in the Poetry of Sefer Yetzira. *Bridges Conference Proceedings*, 2021, p.43

⁴⁹ P. J. Eccles, An Introduction to Mathematical Reasoning. Numbers, Sets and Functions. Manchester, University of Manchester Press, 1998, p.103

⁵⁰ In correspondence, Sarah Glaz underlined that G , being the general *sefyrot* set, seems to be the collection of the ten *sefyrot* with each *sefyrah* including ten *sefyrot*, and the process continuing *ad infimum*. This is a description of the natural numbers. At every stage we can increase the number of *sefyrot* by a power of 10, and the most we could get is the entire natural numbers (all the numbers at every stage are a finite set of whole and positive numbers). Therefore, the cardinality of G is *aleph* 0, and there will be subsets of the same cardinality, for example the even numbers, but no other form of infinity is involved.

⁵¹ L. M. Lesser, Book of Numbers: Exploring Jewish Mathematics and Culture at a Jewish High School. *The Journal of Mathematics and Culture*. 2006, VI, 1, 2006, p.18

⁵² Christian Ginsburg, *The Kabbalah, Its Doctrines, Development, and Literature*. London, Routledge, 1920, p.108, p.178. On Adolf Jellinek and Kabbalah, cf. M. Idel, Aharon Jellinek we-ha-Kabbalah. *Pe'amim*. 100, 2007, pp.15-22

⁵³ R. Abraham Cohen Herrera, *Sha'ar Ha-Shamaym*. Reedition, Warsaw, Kelter, Spoeki, 1864, VII, 9, p.65



which was applied only to a glimmer of the *Eyn Sof* (*ha-'erat Eyn Sof*), and not to the *Eyn Sof Itself*.⁵⁴

It should be remembered that R. 'Azary'el Girona, who was a pupil of R. Isaac the Blind (1160-1235), and the master R. Moses Nachmanides (1194-1270), wrote, in the form of questions and answers, *The Commentary on the Ten Sefyrot*.⁵⁵ I will now examine the six propositions that Adolf Jellinek has reformulated in a *more geometrico* way, on the model of *Ethics*, trying then to assess the relevance of such a comparison. I will retain only the essential elements of this analysis, trying to confront them with the Kabbalist theses in general, and with those of R. 'Azary'el in particular. I will thus emphasize the fundamental differences between these theses and the essential notions of *De Deo*.

Definition I, presenting God as Governor (*manhyg*), is thus supposed to be parallel to the first definition of the *De Deo*. However, R. 'Azry'el's text does not first introduce the notion of cause, and even less that of *causa sui* (*Ethics* I, 1), but that of Ruler of all things, presented according to a historical perspective that is totally absent from the *Ethics*. It is only then that R. 'Azry'el clarifies, from a point of view that has been described as *super-Esse*, according to Erigena's expression,⁵⁶ or meta-ontological.⁵⁷ Indeed, the Infinite Being is the source of all that exists, because it is the reason of all reasons (*'ylah ha-'yloṭ*) and the cause of all causes (*sybah ha-sybot*).⁵⁸ As R. Yosef 'Ang'let (14th century) points out, the Infinite Being always remains transcendent to the *sefyrot* it produces (*'eyn ha-ma'a'cyḥ ... beklāl 'eser sefyrot*), and therefore it does not belong to their immanent series.⁵⁹ Thus, the first principle laid down by R. 'Azry'el is opposed in advance to the Spinozist conception of God, as a purely natural and immanent cause of beings, who in no way directs the world in a providential way.⁶⁰ Let us recall that, in the *Short Treatise*, V, 2, Spinoza has preserved the notions of Providence (*Voorzienigheid*), both general and particular, but that he has emptied them of all religious content. The first concerns only the laws of nature, and the second the effort (*conatus*) of each individual to maintain its own being. For Spinoza, God remains indifferent to human actions: "God, strictly speaking, loves no one and hates no one (*Deus proprie loquendo neminem amat neque odio habet*)."⁶¹ It is only indirectly that "God, in so far as He loves Himself, loves men (*quod Deus quatenus seipsum amat, homines amat*)."⁶² However, R. 'Azry'el underlines that anyone who says that the world has no governor is called a heretic (*kofer*).⁶³

Definition II introduced by Jellinek concerns the notion of *sefyra*, while Definition II of *De Deo* deals with the finite thing in its kind (*in suo genere finita*). The *sefyrot* refer to the

⁵⁴ R. Walkovsky, *Torat Ma'asey B'ereshyt*. Kedahnen, 1934, I, p.36

⁵⁵ R. 'Azry'el MiGyronah, *By'ur 'Eser Sefyrot*. I refer to the edition by R. M. Shatz, Jerusalem, M. Pithey Megadym, 1997. This edition also includes R. Meyr Gab'ay's work detailing the ten sefyrot, *Derek 'Emunah*.

⁵⁶ G. Scholem, *The Origins of Kabbala*. English translation, Princeton, Princeton University Press, 1987, p.423

⁵⁷ E. R. Wolfson, *Mystery of Infinity*, Malxut deAdam Qadmon, and the Myth of Šimšum: Engendering Alterity in the Theosophy of Nehemiah Hiyya Hayyon. *El Prezente*. 16-17, 2022-2023, p.24

⁵⁸ R. 'Azry'el MiGyronah, *By'ur 'Eser Sefyrot*. First answer, pp.29

⁵⁹ R. Yosef 'Ang'let, *Livnat ha-Sapyr*. Jerusalem, 1913, p.40a

⁶⁰ R. Moshe Hayyim Luzzatto (1707-1746) specifies that the *Eyn Sof* rules the worlds by means of the *sefyrot*, each of which represents a particular dimension (*'ehat min ha-midot*) among all the dimensions of the *Eyn Sof*, each in a given time (*bezman ha-hu'*). R. Moshe Hayyim Luzzatto, *Qla"ḥ Pithey Hokmah*. Reedition, Bney Braq, R. H. Friedlander (Ed.), 1992, VI, p.18

⁶¹ Spinoza, *Ethics* V, 17, Corollary

⁶² Spinoza, *Ethics* V, 36, Corollary

⁶³ R. 'Azry'el, *Derek ha-'Emunah we-derek ha-kfyr*. In G. Scholem (Ed.), *Srydym hadashym miKitvey R. 'Azry'el MiGyronah*, In *Sefer Zikaron le-A.Golaq we-le-S. Klein*, Jerusalem, 1942, p.207



divine powers that Gershom Scholem describes as "living numerical beings."⁶⁴ R. 'Azry'el clarified that God is the Infinite (*Eyn Sof*), and that His completeness is free from all lack (*Shlemut bly hysaron*). However, because of this completeness, He does not lack the capacity for limitation, which itself remains unlimited (*yesh lo koah begevul mibly gevul*). Without such an ability, then His perfection would be defective. This paradox can be explained by the fact that the first production of the *Eyn Sof* concerns the *sefyrot* which are the receptacles (*kelym*) of His influx. They constitute the forces that are both complete and incomplete (*koah ha-shalem we-koah ha-haser*) and this, depending on the nature of the actions that the *sefyrot* must perform. They are constantly modulated by antagonistic determinations, which themselves express the reception of the divine influx (*kash-hem meqablym min ha-shef'a*) and the restriction of this influx (*himan'a ha-shef'a*). But such a differentiation concerns only the *sefyrot* and not the *Eyn Sof* Who is perfect (*shalem*).⁶⁵ R. 'Azry'el calls this power: "limiting force" (*koah ha-gevul*), and R. Itshaq Luria Ashkenazi will formulate such power in terms of *Tsimtsum* (concentration). The essence of the *sefyrah* concerns the synthesis of everything and its opposite (*mahut ha-sefyrah shaveh lekol davar u-lekol temurah*).⁶⁶ It should be noted that the *sefyrot*, while endowed with a restricting force, are themselves limitless (*ha-gvul mibly gvul*).⁶⁷ They constitute a numerical infinite power, in which the absolute infinity of the *Eyn Sof* is expressed.⁶⁸ As Elliot R. Wolfson remarks, given that all things that can be measured should be regarded as being corporeal, it is possible and necessary to talk about the *sefyrot* as the spiritual body that represents the immeasurable infinite beyond all representation.⁶⁹ R. Mosheh Cordovero emphasizes that the *sefyrot* as emanated are infinite, but the actions they produce are limited (*hen po 'alym pe'ulah taklytyt*), because they relate to singular objects and to particular situations.⁷⁰ While proceeding from the unity of the *Eyn Sof*, the multiplicity of *sefyrot* expresses only His actions and never His essence.⁷¹

Even if, according to Miquel Beltrán, the notion of *sefyrah*, as developed by R. 'Azry'el, would have influenced the Spinozist theory of attributes,⁷² Spinoza could not accept the notion of *Tsimtsum*, introduced by R. Azriel. Indeed, he rejected the idea that infinite substance could generate any lack, such as the *Tzimtsum* produces in the form of an empty

⁶⁴ G. Scholem, *The origins of Kabbalah*, p.28

⁶⁵ C. Third answer, p.30

⁶⁶ R. 'Azry'el MiGyronah, *By'ur 'Eser Sefyrot*. Ninth answer, p.33. I reproduce here the English translation by Joseph Dan, *The Early Kabbalah*. English transl. Mahwah, Paulist Press International, 1986, p.94

⁶⁷ R. Meyr Ibn Gabay, *Mar'ot 'Elohim*. Venice, 1567, Heleq ha-Yhud, VIII, p.13a

⁶⁸ S. Valabregue-Perry, The Concept of Infinity (Eyn-sof) and the Rise of Theosophical Kabbalah. *The Jewish Quarterly Review*. 102, 3, 2012, pp.412-413

⁶⁹ E. R. Wolfson, *Language, Eros, Being: Kabbalistic Hermeneutics and Poetic Imagination*. New York, Fordham University Press, 2005, p.200

⁷⁰ R. Mosheh Cordovero, *Pardes Rimonym*, II, 7, p.9b; R. Moshe Cordovero, *Sefer Shy'ur Qomah*. Reprint, Warsaw, 1883 p.49b.

⁷¹ R. D. Messser Leon, *Magen David*. This work has not been published. Hirschfeld (ms. no. 290); Ephraim Gottlieb has reproduced some excerpts from the manuscript: E. Gottlieb, *Mehqarym besifrut ha-Qabalah*. Tel Aviv University, 1976, pp. 403-422; H. Tirosh-Rothschild, *Sefyrot as the Essence of God in the Writings of David Messer Leon*. *AJS Review*, 7/8, 1982/1983, p.421.

⁷² M. Beltrán, *The Influence of Abraham Cohen de Herrera's Kabbalah on Spinoza's Metaphysics*. Leiden, Brill, 2016, p.24. Joseph Dan has specified that if the notion of *sefyrah* has been compared to the philosophical notion of divine attribute, however, as shown in the *Sefer Ha-Bahyr*, the system of *sefyrot* is historically prior to the philosophical formulation of attributes. J. Dan, Gershom Scholem's Reconstruction of Early Kabbalah. *Modern Judaism*. 5, 1, 1985, p.45.



space. According to the Explanation of Definition VI of *De Deo*, the essence of that which is absolutely infinite "does not envelop any negation" (*negationem nullam involvit*),⁷³ and this is the reason of Spinoza's inability to deduce the finite from the infinite.⁷⁴

In Proposition III, A. Jellinek specifies that there are ten *sefyr*ot. The number ten, which implies multiplicity, does not contradict the absolute unity of the *Eyn Sof* from which the *sefyr*ot emanate. Indeed, the One (*'Ehad*) is the foundation (*yesod*) of all numbers, as I will specify later, and therefore the plurality always proceeds from unity. Before the One, which is of a divine nature (*yesh bo 'Elohut*) there is no number (*'eyn mispar lifney 'ehad*).⁷⁵ The One is not itself a number, but constitutes the premises of all numbers (*r'eshyt kol ha-misparym*).⁷⁶ As R. Itshaq ben Shmu'el Mi'Ako (13th–14th century) puts it, the origin of all realizations does not himself belong to the realm of his realizations (*'eyn ha-mamcy' beklall ha-nimç'aym*).⁷⁷ The One is not included in the digital series, but it is at the origin of this series since the origin always remains transcendent to its products.

On the contrary, for Spinoza, the one cannot be the premises of all numbers. In *Letter 50* to Jarig Jellesz, he emphasizes: "I establish that God can only be very improperly called one and unique (*Deum non, nisi valde improprie, unum, vel unicum dici posse*) with regard to essence, but it can be said with all rigor with regard to existence." For Spinoza, the one does not differ from the numbers that follow it, for generally speaking, it is only by referring to the common genus (*commune genus*), which is of an imaginary nature, that we arrive at the idea of exemplars of an existing thing, and thereby acquire the idea of number. This is why, "one thing cannot be said to be one and unique before another thing has been conceived having the same definition (as they say) as the first" (*nullam rem unam, aut unicam nominari, nisi postquam alia res concepta fuit, quae (ut dictum est) ea convenit*).⁷⁸ Thus, holding together a penny and a shield allows the number two to be used, provided that they are classified under the same denomination, namely a coin.⁷⁹

From a metaphysical point of view, by grouping things together for the purpose of counting, we remove the modes from their original order within the substance.⁸⁰ By making number an auxiliary of the imagination, Spinoza is in fact opposed to the Kabbalists, for whom number is a divine production.⁸¹ In the *Ethics*, Spinoza posits that there is a single substance (*unicam substantiam existere*),⁸² and Martial Gueroult concludes that finally Spinoza grants substance the uniqueness of the "metaphysical one, which has nothing to do with numerical unity."⁸³ I do not think that conclusion is correct. In fact, in *Letter 50* to

⁷³ Spinoza, *Ethics* I, Definition VI, Explanation

⁷⁴ Cf. J. J. Rozenberg, *Spinoza, le Spinozisme et les fondements de la sécularisation*. Amazon, 2023, pp.221-224

⁷⁵ R. 'Azry'el, *Perush leSefer Yeçyrah* (commentary attributed to Nachmanides), I, 7, p.28b. According to G. Scholem, this commentary was written by R. 'Azr'el or by his brother R. 'Ezr'a. G. Scholem, *Perush ha-'amity shel ha-Ramban leSefer Yeçyrah we-divrey Qabalah 'aherym ha-mityyahesym 'elav*. In Y. Ben Shlomo, M. Idel (Eds), *Mehqarey Qabalah*. I, 1998, p.67. On the different opinions concerning the author of this commentary, cf. J. Weiss, *Perush Sefer Yeçyrah ha-meyuhas le-Itshaq Sagy Nahor*. R'ayot le'iyshush qadmuto, m'amado beqerev ha-maqubalym beme'ah ha-13 u-le-mehymanut yyhuso le-Itshaq Sagy Nahor. *Tarbiz*, 88, 4, 2022, p.625 note 50.

⁷⁶ R. Abraham Abulafya, *Gan 'Eden Ganuz*. Jerusalem, 2000, p.42

⁷⁷ R. Itshaq ben Shmu'el Mi'Ako, R. H. A. Erlanger (Ed.) *Me'iyrat 'Eynaym*. Jerusalem, 1993, p.93

⁷⁸ Spinoza, *Letter 50* to Jarig Jellesz, G. IV, 239

⁷⁹ M. Gueroult, *Spinoza*. I, Dieu. Paris, Aubier Montaigne, 1968, p.198, p.221 note 1 and p.581.

⁸⁰ Y. Y. Melamed, The Exact Science of Non-Beings: Spinoza's View of Mathematics'. *Iyyun*, 47, 2000, p.10

⁸¹ R. M. Kasher, *Ha-tequfah ha-gedolah*. II, Jerusalem, 2001, p.598

⁸² Spinoza, *Ethics* I, 8, scholium; *Ethics* I, 10, scholium.

⁸³ M. Gueroult, *Spinoza*. I, p.158



Jellesz, Spinoza had made it clear that it is only from the point of view of existence that God can be said to be One and Unique, whereas according to essence, substance can only be said to be one in an improper way. Now, in the *Ethics*, the demonstration relates only to the unique existence of substance (*unicam substantiam existere*), and not to its essence.⁸⁴ This suggests that Spinoza here refers to the numerical unity, and not to the metaphysical unity, which he never mentions in the *Ethics*. Proposition IV states that the *sefyrot* emanate (*ne'eçelot*) from the *Eyn Sof*, and they are not created (*l'o nivr'aot*), because all creatures being limited, they are always subject to change (*kol mugbal mishtaneh*).⁸⁵ On the contrary, the *sefyrot* are emanated and therefore are immaterial and perfect. They constitute the first manifestations of the '*Eyn Sof* (*lehimaç'a mi-'Eyn Sof*), which make it possible to organize (*mashpy'iym*) the created worlds according to some specific determinations. This is why *Sefyrotic* productions can be both complete and defective (*be-hashlamah u-behysaron*), depending on their material realizations (*gashmut*) which are always differentiated. Against this perspective, which accounts for the forms of production of real, Spinoza tried to deduce the production of finite modes from infinite modes. However, unlike the *sefyrot* that are emanated, the infinite modes, both immediate and mediate, belong to the natured nature and not to the naturing nature,⁸⁶ thus leaving open the question of their infinite divine origin. In this sense, Alain Badiou qualifies as "enigmatic" the fact that, on the one hand, the infinite produces the infinite, and on the other hand, that the finite produces the finite, without any intersection between them.⁸⁷

Proposition V describes the actions (*pe'ulot*) of the *sefyrot* that determine the different realms of reality, from the mineral to the human, leading to the psychic and spiritual world. This is made possible by the fact that the *sefyrot* are both active and passive (*maqbyl u-mitqabel*), that is to say, everything, proceeding from the unity of the *Eyn Sof*, is in charge of receiving from their predecessor and giving to their successor. The *sefyrah* which is of a higher level encompasses and surrounds (*maqyf we-sovev*), that which is inferior to it.⁸⁸ As R. Menachem 'Azaryah MiPanu (1548-1620) points out, the first three *sefyrot* correspond to the intellectual domain (*muskal*); the three intermediate *sefyrot* determine the sensory domain (*murgash*); and the last four constitute the natural domain that comes to actualize the content of all previous *sefyrot*. The latter *sefyrot* then unveils all the actions (*legalot ha-pe'ulot*) carried out in the previous areas in order to concretize them.⁸⁹ The *sefyrot* thus ensure the ontological unity of reality, through a progressive realization from the intellectual to the material domain. The Kabbalists have given a primordial role to the *Keter* (Crown), identified with the thought of divine origin (*mahshavah 'Elohyt*),⁹⁰ which remains inaccessible to human thought (*'eyn ha-mahshavah tofeset bah*).⁹¹ Indeed, the *Keter*, often identified with the *Eyn Sof* (*ha-Keter hu' ha-'Eyn Sof*),⁹² has its root in the *Eyn Sof*, which

⁸⁴ Spinoza, *Ethics* I, 10, scholium

⁸⁵ R. 'Azry'el Migyronah, *By'iur 'Eser Sefyrot*, p.36

⁸⁶ Spinoza, *Ethics* I, 29, scholium

⁸⁷ A. Badiou, *L'infini, Aristote, Spinoza, Hegel. Le Séminaire 1984-1985*. Paris, Fayard, 2016, p.170

⁸⁸ R. 'Azry'el Migyronah, *By'iur 'Eser Sefyrot*, p.35 and note 1

⁸⁹ R. Menachem 'Azariah MiPanu, *Pelah ha-Rimon*. Koreç, 1786, VIII, 2, p.21a

⁹⁰ A. Bar-Asher, Dimyon we-meç'yut beheqer r'eshyt ha-qabalah: Perush "Sefer Yeçyrah" ha-meyuhas le-R.Ytshaq Sagey Nahor we-toldotayv beqabalah u-bemehqar. *Tarbiz*, 86, 2-3, 2019, pp.233-234

⁹¹ R. Shem Tov Even Shem Tov (I) (1390-1430), *Sefer 'Emunot*. Ferrera, 1557, p.33a

⁹² R. Mosheh Cordovero, *Pardes Rimonym*, VI, 8, p.29a, Adolf Jellinek, p.19, note 6, showed that R. Abraham Abulafia already identifies the *Keter* with the *Eyn Sof*. A. Jellinek, *Ginzey hokmat ha-qabalah*. Reedition, Jerusalem, Maqor, 1969, p.19, note 6.



designates the reason of all reasons ('ylat ha-'ylot).⁹³ On the contrary, the Spinozist notion of parallelism between thought and extension, the mental and the physical, which are supposed to be identical, remains problematic. For if the order and connection of ideas are the same as the order and connection of things (*Ordo et connexio idearum idem est ac ordo et connexio rerum*),⁹⁴ yet such an equivalence is no longer valid with regard to the relation between the idea and the idea of the idea (both of which are modes of the attribute of thought), for the idea of a thing and the idea of the idea of that thing possess different ideata.⁹⁵ Thus, on a reflexive level, the modes of thought no longer correspond to the modes of extension: the "idea of the idea" cannot correspond to "a thing of a thing."⁹⁶ Moreover, the modes of extension are temporally connected, while the ideas proper to the intellect—itsself the infinite mode of thought—are ordered according to an eternal order.⁹⁷

Proposition VI gives the list of the ten sefirot. The first sephirah is called *Inscrutable Height* (Rom M'alah), generally referred to by the *Crown* (Keter); the second, *Wisdom* (Hokmah); the third, *Intellect* Binah); the fourth, *Generosity* (Hesed); the fifth, *Strength* (Pahad or Gevurah); the sixth, *Beauty* (Tif'eret), the seventh, *Victory* (Neçah); the eighth, *Splendor* (Hod); the ninth, *Foundation of the World* (Yesod); and the tenth, called *Righteousness* (çedeq) by R. 'Azry'el,⁹⁸ and was later named *Kingship* (Malkut).⁹⁹

4. INFINITY AND THE NOTION OF UNITY

The *Eyn Sof* is expressed only through the *sefirot*, the first of which, *Keter* (Crown), constitutes the primordial thought (*maḥshavah qedumah*) in which all subsequent determinations are anchored since thought is the root (*ky ha-maḥshavah hy' shoresh*).¹⁰⁰ R. Mosheh Cordovero emphasizes that the Emanator (*Ha-Ma'açyl*) thus gives vitality to all existing beings (*mehayeh kol ha-nimç'aot*).¹⁰¹ He states as follows:

"The chain (*hishtalshelut*) from existing to existent, from the *Eyn Sof* to the *Sefyrah Keter* (Crown) is not to be found in the *Eyn Sof* Himself, God forbid, since He is not subject to any chaining. The chain is found only in (from) the existence of the *Keter*."¹⁰² This *sefiyah* constitutes the first effect of the process of chaining or emanation, of which the *Eyn Sof* is indeed the origin, but the *Eyn Sof* is by no means reduced to this *sefiyah*. This one mediates between the infinity of the *Eyn Sof* and the finite worlds, and all this is made possible because the *Keter* is both infinite, like the *Eyn Sof*, thus being qualified as "nothingness" ('*Eyn*),¹⁰³ but it is also subject to finite determinations. As Rolland Goetschel points out, if the *Keter* is co-eternal with the *Eyn Sof*, this does not mean that they are identical.¹⁰⁴ This conceptuality

⁹³ R. Abraham ben Aleksander mi-Cologne (XIII th century), *Keter Shem Tov*. Reedition, Amsterdam, 1816, p.6a

⁹⁴ Spinoza, *Ethics*, II, 7

⁹⁵ A. Matheron, *Idée, idée d'idée et certitude dans le Tractatus de intellectus emendatione et dans l'Ethique*. In *Etudes sur Spinoza et les philosophies de l'âge classique*. Lyon, ENS Editions, 2022, pp.532-533

⁹⁶ C. R. Bowman, Spinoza's Idea of the Body. *Idealistic Studies*. 1, 3, 1971, p.263. This author (p. 264) also refers to Stuart Hampshire, remarking that the passage from an illogical association of ideas to a coherent form has no equivalent in the world of extension. S. Hampshire, *Spinoza*. Baltimore, Penguin Books, 1965, p.126.

⁹⁷ L. C. Rice, Paradoxes of Parallelism in Spinoza. *Iyyun*, 48, 1999, pp.48-49

⁹⁸ R. 'Azry'el Migyronah, *By'ur 'Eser Sefyrot*, pp.40-43

⁹⁹ Cf. R. Yosef Gikatilla, *Sefer Sha'arey 'Orah*, Sha'ar II. Reedition Warsaw, 1842, p.46

¹⁰⁰ R. 'Azry'el, Y. Tishby (Ed.), *Perush 'Agadot*, Jerusalem, 1945 p.82

¹⁰¹ R. Mosheh Cordovero, *Sefer Shy'iur Qomah*. Reedition, Warsaw, 1883, p.49b

¹⁰² R. Moshe Cordovero, *'Eylymah Rabaty*. Reedition, Jerusalem, 1974, p.52b

¹⁰³ Ha-Gra, Yahel 'Or. Wilna, 1882, p.12

¹⁰⁴ R. Goetschel, *Meir Ibn Gabbay, Le discours de la Kabbale Espagnole*. Louvain, Peeters, 1981 p.125



allows to establish the genetic links, original and persistent, between the divine Infinite, which always remains transcendent, and the finite worlds. It shows how the manifestation of the *Eyn Sof* in the *sefyrot* answers the question of how the infinite can produce the finite.¹⁰⁵ As I pointed out earlier, Spinoza was never able to deduce the finite from infinity. He posited that finite modes are produced by infinite substance, but he did not explain how it produces them.¹⁰⁶

In fact, in line with Emmanuel Levinas' distinction between infinity and totality,¹⁰⁷ Gilah Kletenik has shown that it is the assimilation of the infinite to the totality that allows Spinoza to establish immanence and consequently to forbid all transcendence. Contrary to the traditional conception of God, which derives the infinite from the One, Spinoza's immanence maintains that the divine substance being infinite, it cannot then be one. Although Spinozism is generally referred to as monism,¹⁰⁸ unity for Spinoza is always contingent. In the *Cogitata Metaphysica* VI, Spinoza criticizes the so-called transcendental terms, which are taken by almost all metaphysicians as the "most general affections of the being" (*generalissimis Entis Affectionibus*).¹⁰⁹ The first of these expressions is the "One" (*Uno*) and the "Unity" (*Unitatem*) which designate nothing real outside the intellect. They are only "modes of thinking" (*modum cogitanti*), allowing one thing to be separated from other similar things.¹¹⁰ As I mentioned earlier, according to Spinoza, God cannot be called One insofar as by such a numbering we posit Him as similar to other beings. And it is only to avoid thinking that "there can be more than one being of the same nature, that God is then called unique" (*concipimus ejusdem naturae plures esse non posse, unicum vocari*).¹¹¹ In fact, this devaluation of the One and the Unity is a consequence of Spinozist immanentism. If reality is conceived as the product of a Being who is One, and posited as being separated, then this Being is absolutely above the totality of other beings. This conception necessarily establishes a hierarchical relationship, which then implies the transcendence of God.¹¹²

Spinoza has often been considered an intransigent supporter of unity and therefore close to the Kabbalah. Thus, according to Friedrich Heinrich Jacobi (1743-1819), Spinoza replaced the emanating notion of *Eyn Sof* (infinite) with the immanent notion of *causa sui*,¹¹³ by describing Kabbalah as "undeveloped or newly confused Spinozism."¹¹⁴ Solomon Maimon (1743-1800) corrected this qualification, specifying that Kabbalah is in fact "nothing other than an extension of Spinozism."¹¹⁵ Spinoza seems to have known the theory of the *sefyrot* from the commentary on the Torah by R. Menachem Recanati (1223-1290) that he

¹⁰⁵ T. Lévy, *Figures de l'infini. Les mathématiques au miroir des cultures*. Paris, Seuil, 1987, pp.184-185

¹⁰⁶ M. Gueroult, *Spinoza I*, p.327

¹⁰⁷ E. Levinas, *Totality and Infinity: An Essay on Exteriority*, Alphonso Lingis, Pittsburgh: Duquesne University Press, 1969, pp.21-22

¹⁰⁸ Cf. P. Goff (Ed.), *Spinoza on Monism*. Houndmills, Basingstoke, Hampshire, Palgrave-Macmillan, 2011

¹⁰⁹ Spinoza, *Cogitata Metaphysica*, VI, G. I. 245

¹¹⁰ Spinoza, *Cogitata Metaphysica*, VI, G. I. 245

¹¹¹ Spinoza, *Cogitata Metaphysica*, VI, G. I. 246

¹¹² Gilah Kletenik, *To Infinity, Not Beyond: Spinoza's Ontology of the Not One*. In G. Dynner, S. Heschel, and S. Magid (Eds), *New paths in Jewish and religious studies: essays in honor of Professor Elliot R. Wolfson*. West Lafayette, Indiana: Purdue University Press, 2024, pp. 419-440.

¹¹³ F. H. Jacobi, *The Main Philosophical Writings and the Novel Allwill*, G. di Giovanni (Ed. and trans.), Montreal and Kingston, McGill-Queen's University Press, 1994, p.188

¹¹⁴ F. H. Jacobi, *The Main Philosophical Writing and the Novel Allwill*, p.234

¹¹⁵ S. Maimon, *Autobiography*. Y. Y. Melamed and A. Socher (Eds) translated by Paul Reitter. Princeton, Princeton University Press, 2018, p.58



owned,¹¹⁶ as well as from the work of R. Yosef Shlomo Delmedigo, *Maṣref Lahokmah*,¹¹⁷ which he also owned. However, against the tradition that links the infinite to the One, Spinoza maintains that it is precisely because substance is infinite that it is not one. This devaluation of uniqueness extends to the realm of finite modes, so that not only naturing nature not one, but natured nature remains multiple.¹¹⁸ In fact, Spinoza's inability to deduce the finite from infinity stems from the identification of naturing nature with natured nature, although he sought to distinguish between them. As Martial Guérout maintains, it is the same nature which is qualified as "naturing" and "natured," according to the active and passive forms of the verb *naturare*. The modes, which cannot be conceived without God, are ultimately God Himself, for all that is in God, which are the modes, is God.¹¹⁹ This is why these two natures are the two sides of the same coin,¹²⁰ and according to Marx W. Wartofsky, substance is ultimately identical with the infinity of its modes, because this infinity remains dependent on its finite modes.¹²¹

5. SEFYROT AND NUMBERS

The *Sefer Yeṣyrah* posits that the world was created through three *sefarym*: *sefer* (book), *sfar* (number) and *sypur* (word).¹²² It specifies that the *sefyrot* are ten, in relation to man's ten fingers, five regarding five (*ḥamesh keneged ḥamesh*).¹²³ Finally, it indicates that the ten *sefyrot* are meaningless (*bly mah*), and that they are infinite (*'eyn lahem sof*).¹²⁴ The *Sefer Yeṣyrah* associates the ten *sefyrot* with the twenty-two letters of the Hebrew alphabet, in order to present the thirty-two wonderful paths of Wisdom (*shloshym we-shtaym netyvot pely'ot ḥokmah*).¹²⁵ The twenty-two letters will admit an almost infinite number of combinations and arrangements, thus representing all possible conceptions of the mind, and of the words.¹²⁶ The numerological interpretation of the notion of *sefyrah* has been adopted by many commentators.¹²⁷ As Ithamar Gruenwald points out, the term *sefyrot* is only a variant of the term *sefirot*, (those counted).¹²⁸ This is why the ten *sefyrot* constitute the "fundamental numbers" (*ha-misparim ha-yesodiyim*),¹²⁹ and the term *sefyrot* can then be

¹¹⁶ R. Menachem Recanati, *Bi'yur 'al ha-Torah*. Second Edition, Venice 1545, p.172b

¹¹⁷ R. Yosef Shlomo Delmedigo, *Maṣref Lahokmah*. In *Ta'alumot Hokmah*, Basel, 1629, p.6a

¹¹⁸ G. Kletenik, To Infinity, Not Beyond: Spinoza's Ontology of the Not One. In G. Dynner, S. Heschel, and S. Magid (Eds), *New paths in Jewish and religious studies: essays in honor of Professor Elliot R. Wolfson*, p.434

¹¹⁹ M. Guerout, *Spinoza I*, p.345

¹²⁰ M. Guerout, *Spinoza I*, p.267

¹²¹ M. W. Wartofsky, Nature, number and individuals: Motive and method in Spinoza's philosophy, *Inquiry*. 20, 1-4, 1977, p.460

¹²² *Sefer Yeṣyrah I*, 1

¹²³ *Sefer Yeṣyrah I*, 3

¹²⁴ *Sefer Yeṣyrah I*, 5

¹²⁵ *Sefer Yeṣyrah I*, 1

¹²⁶ P. Mordell, *The origin of letters and numerals according to the Sefer Yetzirah*. Philadelphia, P. Mordell, H. Fleischmann, 1914, p.12

¹²⁷ Giulio Busi refers to Lazarus Goldschmidt, Philipp Bloch, Leo Baeck, Philip Merlan, Ithamar Gruenwald and Shlomo Pines, among others. However, Giulio Busi proposes to interpret the notion of *sefyrah* as an "act of writing". G. Busi, Engraved, Hewed, Sealed. Sefirot and Divine Writing in the Sefer Yetzirah. In *Mehqarey Yerushalayim beMahshevet Israel*, 21, 2007, pp.3-4.

¹²⁸ I. Gruenwald, Some Critical Notes on the First Part of Sēfer Yezirā. *Revue des Etudes Juives*, 132, 4, 1973, p/484

¹²⁹ Y. Liebes, Sefer Yeṣyrah 'eṣel R. Shlomo 'Eben Gabyrol u-perush ha-shyr "'ahavatyk". *Mehqarey Yerushalayim Bemahshevet Israel*. I, 3-4, 1983, p.95



translated as numbers.¹³⁰ From an arithmetic point of view, Jewish thinkers have given the number One, represented by the letter *aleph* (א), a special status. According to R. Abraham Ibn Ezra (1089-1167), the One is the cause of all numbers and that is why it is not itself a number (*hyot ha-'ehad sibat kol ha-mispar we-'eynneno mispar*). Therefore, referring to the *Sefer Yeçyrah*, R. Abraham Ibn Ezra adds that the number ten, which is the equivalent of the One for decimals, is also not a number. While initiating the series of decimals, the number ten is called "*bly mah*," that is what it is devoid of numerical determination, but it always implies the numbers that follow it (*raq 'aher 'imo*).¹³¹ In this sense, the One, and therefore also the ten, counts itself and no other number can count it (*ha-'ehad sofer 'açmo we-'eyn 'aher sofro*).¹³² Therefore the One resembles substance (*ha-'ehad domeh la-'eçem*),¹³³ and R. Abraham ibn Ezra has given it an absolute character.¹³⁴

The Gaon of Wilna (*Ha-Gaon Rabeynu 'Elyahu*, 1720-1797), who wrote a treatise on trigonometry,¹³⁵ emphasizes that the One does not belong to numeration (*hu' had we-l'o behushban'a*),¹³⁶ because it is the root of number (*shoresch ha-mispar*).¹³⁷ Contrary to Spinoza, and before Frege, the Gaon of Wilna emphasizes the purely abstract characteristic of number: "apart from number there is no other thing found solely in thought" (*'eyn davar ba 'olam she yhye bemahshavah levad raq ha-mispar*). He specifies, as R. Abraham Ibn Ezra did, and as I have reported above, that the One, designated by the letter aleph (א), is not a number. Indeed, all numeration begins with the number two, while the א is numbered only after it has been included in the two. He also notes that, on the one hand, numeration concerns only the sequence of numbers beginning with the number two (*kehaknys bemispar raq davar sheyesh lo sheny*). But on the other hand, he explains the question of the *Sefer Yecyrah*: "Before the One, what can you count?" (*Lifney 'ehad mah 'atah sofer?*), by the fact that the One, while not itself a number, nevertheless associates itself (*shituf*) with the number two. The antecedent of the One refers to the purely spiritual world called Primordial Adam (*'Adam qadmon*), which is entirely transcendent to any process of numeration.¹³⁸ The One remains insensitive to multiplication and division (*'eyno mitrabeh we'eyno mithaleq*). Number is purely conceptual and knows no end (*queç*) or limit (*taklyt*), but it is endowed with a differentiating power. It is through it that it is possible to distinguish one thing from another thing (*devar ha-nispar nivdal 'ehad mi'havero*), and numerical differentiation exists only in thought (*ha-mispar 'eyn hevdel nykar 'el'a bemahshavah*). The number is totally infinite (*ha-mispar 'eyn lo qeç we-taklyt le 'olam*).

¹³⁰ I. Kalisch, *Sefer Yetzirah. A book of Creation. The Jewish metaphysics of remote antiquity*. New York, I. H. Frank & Co., 1877, p.6

¹³¹ R. Abraham Ibn Ezra, *Sefer Ha-shem*. Fürth, D. I. Zürndorff, 1834, pp.5a-5b. *Sefer Yeçyrah*, I, 2. In his mathematical work, *Sefer ha-mispar*, R. Abraham Ibn Ezra also refers to the ten *sefyrot* of the *Sefer Yecyrah*. R. Abraham Eben Ezra, *Sefer ha-mispar*. Berlin, M. Zilberberg, 1895, p.1.

¹³² R. Abraham Ibn Ezra, *Sefer ha-'ehad*. Odessa, S. Pinsker (Ed.), 1867, p.1; Y. T. Langermann and S. Simonson, *The Hebrew Mathematical Tradition*. In H. Selin (Ed.), *Mathematics Across Cultures The History of Non-Western Mathematics*. Vol. 2, Dordrecht, Kluwer, 2000, p.168.

¹³³ R. Abraham Ibn Ezra, *Sefer ha-'ehad*. p.5, note 7

¹³⁴ M. Olitzki, *Die Zahlen Symbolik des Abraham ibn Ezra*. In E. Hildesheimer and D. Hoffman (Eds.). *Jubelschrift zum siebzigsten Geburtstag des Dr. Israel Hildesheimer*. Berlin 1890 p.102

¹³⁵ Ha-Gr'a miWilna, *Sefer 'Ayl meshulash*. Wilna, 1833

¹³⁶ By'ur Ha-Gr'a 'al Tyquney Ha-Zohar. Wilna, 1867, p.138a

¹³⁷ By'ur Ha-Gr'a 'al Tyquney Ha-Zohar, p.3b

¹³⁸ Perush Ha-Gra 'al *Sefer Yecyrah*, VII, 8, and Perush Pery Itshaq *ad locum*. Reedition, Jerusalem, 1965, p 10a



In the same way, the *sefyrot* are called numbers (*lashon mispar*), and they belong only to thought (*raq bemahshavah*).¹³⁹ As I mentioned, the *sefyrot* remain meaningless (*bly mah*),¹⁴⁰ that is, they are properly indeterminate, because the meaning or nature (*mahut*) of a thing always implies a differential and determinate relation to other things (*ky ha-mahut nivdal 'ehad mi'havero*). Numbers and *sefyrot* do not differ in their essence (*'eynam nivdalym be'echem*), but only by the objects and situations to which they refer. Regarding specifically the number, the Gaon of Wilna stressed that it should not be confused with the numbered things. When the number and the thing numbered become separated, the number assigned to them at the time of the numbering is no longer identifiable as such (*kash-ytpardu 'eyno nykar my hu*). The number is itself unlimited because it is always possible to count to infinity (*lispor 'ad 'eyn sof*), and the infinite itself does not have any part (*heleq*) since the part is finite.¹⁴¹ The *sefyrot* are also devoid of end and limit (*'eyn lahem sof we-taklyt*), since they also exist only in thought.¹⁴² According to Phineas Mordell, the expression characterizing the *sefyrot* as "nothing" (*bly mah*), implies that originally the text must have had *'Eser sefyrot ubly mah*: ten digits and zero, which explains the fact that the ten *sefyrot* are capable of expressing all numbers.¹⁴³ This enables to identify the different levels of infinite spiritual worlds, in a stratified way, which allows a continuity between the infinite origin and its finite productions.

It is only through the notion of *Tsimtsum* that it is possible to distinguish God from the universe.¹⁴⁴ In Cantorian terms, the *Tsimtsum* enables to differentiate between the absolute Infinite and the transfinite, distinguishing between the realms of infinity that are humanly accessible, and those that are not.¹⁴⁵ Therefore, no inquiry can be made into the essence of *Eyn Sof*,¹⁴⁶ and no thought can relate to it (*'eyn lahshov bo klal*), for the divine unity cannot be the object of any qualification (*'asur lekanot bo*).¹⁴⁷ Thus, the *Zohar* states: "You are One but outside of all account (*'ant had we-l'o behushban*)."¹⁴⁸ Similarly, for Maimonides, the divine Unity, expressed by the term One (*'Ehad*), does not in any way denote a species that would contain many individuals (*ke myn sheu' kolel 'ahadym harbeh*), nor the unity of an organism (*guf*) that would bring together a multiplicity of parts, but it refers to a unification (*'iyhud*), which remains ontologically heterogeneous to any created unity.¹⁴⁹ R. Yosef 'Albo notes that complete Unity (*ha-'ahdut ha-gmurah*) concerns only God, the type of unity of which is entirely different from that of number, for nothing can be associated with God, or compared to Him.¹⁵⁰ This is why R. Mosheh Cordovero and the

¹³⁹ Ha-Gr'a miWilna, *Yahel 'Or*, 6b

¹⁴⁰ *Sefer Yetzirah*, I, 2, p.5a

¹⁴¹ Ha-Gr'a miWilna, *Liqutey Ha-Gr'a*. In *Sifr'a Diçny'ut'a*. Wilna, 1912, p.38 a,

¹⁴² Ha-Gr'a miWilna, *Yahel 'Or*, 6b

¹⁴³ P. Mordell, *The origin of letters and numerals according to the Sefer Yetzirah*. p.21

¹⁴⁴ J. J. Rozenberg, *Spinoza and Kabbalah: convergences, Divergences, and their Theoretical Implications*. *Journal of Religion and Theology*, 6. II. 2024, pp.59-80

¹⁴⁵ N. Horwitz, *Reality in the Name of God*. Scotts Valley, CreateSpace, 2012 pp.102-104 and p.106; S. Glaz, *Mathematics in the Poetry of Sefer Yetzirah*. *Bridges Conference Proceedings*, 2021, p.40.

¹⁴⁶ R. 'Azry'el, *Derek ha-'Emunah we-derek ha-kfyr*. In G. Scholem (Ed.), *Srydym hadashym miKitvey R. 'Azy'el MiGyronah*, p.207

¹⁴⁷ Ha-Gr'a miWilna, *Liqutey Ha-Gr'a*. In *Sifr'a Diçny'ut'a*. p.38 b

¹⁴⁸ *Petah 'Elyahu, ha-mevo'ar*. Beyt Shemesh, Mif'al ha-Zohar ha-'olamy, 2011, p.3

¹⁴⁹ Maimonides, *Hilhot Yesodey Ha-Torah*, I, 7. Leibniz took up Maimonides' thesis of the non-numerical unity of God. *AK*, VI, III, 477. Cf. O. Nachtomy & T. Levanon, *On Oneness and Substance in Leibniz's Middle Years*. *The Leibniz Review*. 24, 2014, pp.69-91.

¹⁵⁰ R. Yosef 'Albo, *Sefer ha-'iyqarym*, II, 10



Maharal of Prague have both specified that the divine unity is in no way like the cardinal one (*ke'ehad ha-manuy*), which would necessarily imply a numerical sequence: "He is One and has no second (*hu' 'Ehad we 'eyn sheny lo*).\" The divine unity is purely spiritual because it belongs to the higher world (*'olam ha-'elyon*), whereas the number concerns only the world of the multiple and of separation (*'olam ha-pyru*).¹⁵¹ Unlike Spinoza, who posited the divine attributes as being \"really distinct (*realiter distincta*)\",¹⁵² Maimonides opposed the real distinction of attributes, as being properly incompatible with the notion of divine simplicity: the person who would believe that that He is One (*'Ehad*), but at the same time possesses many attributes (*ba'al te'arym mispar*), would express by his word that He is One, but in thought he would believe Him to be multiple.¹⁵³ As R. Itshaq Abrabanel's commentary on this passage from Maimonides points out, the idea of multiplicity of attributes necessarily implies the notions of materiality and corporeality, which are incompatible with the notion of divine Unity.¹⁵⁴ This is the reason why, Spinoza admits that he does not \"understand why matter would be unworthy of the divine nature (*cur [materia] divina natura indigna esset*)\", since it is granted eternity and infinity.¹⁵⁵ That is why he posits: *Deus est res extensa*.¹⁵⁶ Such a determination, which in fact constitutes the only alternative to the idea of creation, and to that of *Tsimtsum* (contraction) that it implies, makes necessary, within the framework of Spinozism, the corporeality of God, as being in conformity with the pantheistic affirmation: *quicquid est, in Deo est*.¹⁵⁷

It should also be noted that the *Tsimtsum*, by allowing the emergence of the finite, also determines the relationship of otherness that is expressed in the ontological difference between the transcendent Creator and His creatures, which Spinoza's immanentism had sought to suppress. This distance of otherness, which makes language itself possible, according to Lacan,¹⁵⁸ also initiates the process of naming the divine.¹⁵⁹

6. THE NAMING OF THE EYN SOF

If the name *Eyn Sof* may evoke the idea of infinity, its real reference remains unassignable, although this name aims to make it accessible to man.¹⁶⁰ As R. Me'yr Ibn Gabay quotes, the \"root of all roots\" does not itself have a name (*shores kol ha-shorashym 'eyn lo shum shem*).¹⁶¹ In this sense, R. Mosheh Cordovero specified that the term infinite

¹⁵¹ R. Moshe Cordovero, *Sefer Pardes Rimonym*, IV, 5; Maharal, *Hydushey 'agadot*, *Sotah* 7b. As Louis Couturat points out, cardinal numbers derive from ordinal numbers; they likewise imply the idea of relativity between sets. L. Couturat, *Sur une définition logique du nombre*. *Revue de Métaphysique et de Morale*. 8, 1, 1900, pp.26-27.

¹⁵² Spinoza, *Ethics* I, 10, scholium

¹⁵³ Maimonides, *Guide*, I, 50, *Hilkot Yesodey ha-Torah*, I, 12

¹⁵⁴ R. Itshaq Abrabanel, *Perush 'al Moreh Nevukym*, I, 50. Reedition, Jerusalem, 1960, p.70

¹⁵⁵ Spinoza, *Ethics* I, 15, scholium

¹⁵⁶ Spinoza, *Ethics* II, 2

¹⁵⁷ Spinoza, *Ethics* I, 15 ; P. Macherey, *Introduction à l'Éthique de Spinoza. La première partie, la nature des choses*. Paris, PUF, 2001, p.127

¹⁵⁸ J. Lacan, *L'éthique de la psychanalyse*. Paris, Le Seuil, 1986, p. 84

¹⁵⁹ J. J. Rozenberg, *Éthique, langage et abstraction selon la tradition hébraïque*. *Revue de Métaphysique et de Morale*. 90, 3, 1985, pp. 362-376

¹⁶⁰ J. Zacklad, *Pour une Éthique I. De Dieu*. Lagrasse, Verdier, 1979, pp.39-41. The term Name (*Shem*) comes to designate, in the *Pentateuch*, the Tetragrammaton, cf. *Leviticus* 24:11.

¹⁶¹ A. Me'yr Ibn Gabay, *'Avodat ha-Qodesh*. Reedition Lemberg, 1857, p.10a. On the status of the notion of *Eyn Sof* in this kabbalist, cf. A. Bar-Asher, *Beqadmut 'Eyn Sof: Pyrush 'Eser sefyrot le-R.David Ha-Kohen talmyd ha-Rashb'a*. *Daat*, 82, 2016, pp.151-153.



remains a simple appellation, for lack of a better means of expression: "He is called Infinite (God) ('Eyn Sof), because all existents have an end whereas He has no end (*kol hanimç'aym sof we-Hu* 'Eyn lo sof)."¹⁶²

In fact, we can conceive naming in a way that is not reductive regarding to the named being to whom we refer. Such an approach seems to have been first envisaged, in a mathematical context, by Henri Lebesgue, who introduced, in 1904-1905, the notion of the "named set,"¹⁶³ in relation to Cantorian infinity. He then distinguished between existence, which is logically deduced from non-measurable sets, and the possibility of naming them by means of finite expressions in order to be able to describe these two different types. However, this notion of naming gave rise, among several Russian mathematicians of the early twentieth century, such as Nikolai Lusin and Dmitri Egorov, to a confusion responsible, on the one hand for a pantheistic drift consisting in identifying God with his Name, and on the other hand for a polytheistic shift, since His Names are multiple. The proponents of "Name Worshipping" (*Imiaslavia* in Russian) found in Lebesgue the idea of "naming" God, without however defining Him.¹⁶⁴ Let us note that Lebesgue had indeed used the term naming as a synonym for definition, but then in opposition to a reductionist approach to the divine.¹⁶⁵

Saul Kripke introduced a similar distinction, by separating the proper name, which designates an individual in all possible worlds, from his or her definite description, which is always subject to some variations according to circumstances. When we fix the reference of a proper name, we do not determine, by any limitation, the properties of its reference.¹⁶⁶ It emerges from the approaches of Lebesgue and Kripke that the Name may well constitute a divine attribute, while remaining radically distinct from the Infinite Being that this Name comes to name.¹⁶⁷ In this sense, God's designation remains unitary, since it expresses God's unity without ever reducing it to His Name.¹⁶⁸ For Maimonides, the Tetragrammatic Name refers to the essence of the divine, thus adopting a non-representative approach to reference, which anticipated the theories of Hilary Putnam and Saul Kripke.¹⁶⁹ Indeed, the Tetragrammatic Name can be understood as the rigid designator of an invariable reference, allowing us to conceive God in a purely abstract way, without ever perceiving Him sensorially.¹⁷⁰ These reminders allow us to understand that Spinoza's error consisted in wanting to identify the essence of God, of an intensional order, with His Name, of an

¹⁶² R. M. Cordovero, 'Eylmah Rabaty, p.2b

¹⁶³ H. Lebesgue, Sur les fonctions représentables analytiquement. *Œuvres scientifiques*. Paris, Gauthiers-Villars, 1972, Tome III, p. 16

¹⁶⁴ L. Graham & J-M. Kantor, *Naming Infinity: A True Story of Religious Mysticism and Mathematical Creativity*. Cambridge Mass. London, The Belknap Press of Harvard University Press, 2009, pp.15-17

¹⁶⁵ H. Gispert, La théorie des ensembles en France avant la crise de 1905: Baire, Borel, Lebesgue. . . et tous les autres. *Revue d'histoire des mathématiques*. 1, 1995, p.63

¹⁶⁶ S. Kripke, Naming and necessity. Cambridge, MA. Harvard University Press. 1980, pp.58-59

¹⁶⁷ N. Horwitz, *Reality in the Name of God*, New York, Punctum Books, 2012, p.73 and pp.166-167

¹⁶⁸ M. T. Miller, *The Name of God in Jewish Thought: A philosophical analysis of Mystical Traditions from Apocalyptic to Kabbalah*. London, New York, 2016, p.105

¹⁶⁹ Maimonides, *Guide*, I, 61. Cf. E. Z. Benor, Meaning and Reference in Maimonides' Negative Theology. *The Harvard Theological Review*, 88, 3, 1995, p.347, note 28.

¹⁷⁰ Y. Gellman, Names and Divine Names: Kripke and Gikatilla. In M. Koppel and E. Merzbach (Eds), *Sefer Higayon, Studies in rabbinic logic*. Alon Shevut, Zomet, 1995, pp.52-54; S. Kripke, Naming and Necessity, p.11; R. Yosef Gikatilla, *Gynat 'Egoz*. Reedition Jerusalem, Ha-Hayym we-ha-Shalom, 1989, pp.19-28.



extensional order.¹⁷¹ Indeed, Spinoza equates Nature with is one of God's Derived Names: 'Elohyim, whose numerical value is the same as the term "the nature" (*ha-tev'a*). He was most certainly familiar with this correspondence, as well as with the commentaries of R. Ibn Ezra and Maimonides on this topic.¹⁷² By reducing the absolute ontological referent to one of Its Derived Name, he did also reduce the *natura naturans* to the *natura naturata*. Then, at the same time Spinoza corporealized the divine as being a *res extensa*,¹⁷³ thus following the example of Zoroastrianism, which divinized space as an expression of a fusional relationship with the natural divine.¹⁷⁴

Another type of encounter between Cantor and the Jewish tradition concerns a distinction, already proposed by Bolzano, between the notion of equivalence, which can be applied to infinite sets, and that of equality, which must be reserved for finite domains.¹⁷⁵ The *Talmud* explains that the Biblical injunction to follow the ways of the Tetragrammaton ("thou shalt walk in His ways," (*Deuteronomy* 28:9) does not concern a relationship of equality between finite creatures and the infinite Creator, but it implies a relationship of emulation.¹⁷⁶ According to Maimonides, such an emulation (*imitatio Dei*) constitutes the only legitimate framework for expressing, from a human point of view, the divine attributes. What does it mean to follow His ways? Just as He is called "Compassionate (*Hanun*)," man should be compassionate toward his neighbor. Just as He is called "Merciful (*Rahum*)," each one should be merciful to the other. Just as He is called "Holy" (*Qadosh*), every individual should aspire to holiness.¹⁷⁷ For Gersonides the notion of *imitatio Dei* must stimulate everyone's desire to perfect others, which constitutes the greatest of perfections.¹⁷⁸

For Maimonides, the notion of emulation allowed the prophets of Israel to describe divine actions in order to set out the rules of behavior by which man must imitate God, without ever pronouncing on His essence.¹⁷⁹ This is why, beyond the tension between the infinity of the divine intellect and the finitude of the human intellect,¹⁸⁰ man's cognition remains capable of knowing the Names of God that designate His actions in the world. This suggests the impossibility of accessing, as Spinoza claimed, the domain *sub specie aeternitatis*,¹⁸¹ because such an attempt always uses a language that necessarily remains temporal in nature and then contradicts this claim.¹⁸²

This is precisely what Cantor sought to establish when he pointed out that there is no *Genus supremum* of the actual infinite, because that which surpasses the finite and the

¹⁷¹ On the importance of the notions of intension and extension in the formation of Spinozism, see J. J. Rozenberg, *Spinoza, Spinozism and the Foundations of Secularization*. pp. 38-39.

¹⁷² W. Z. Harvey, Idel on Spinoza. *Journal for the Study of Religions and Ideologies*. VI, 18, 2007, p.90

¹⁷³ Spinoza, *Ethics* II, 2

¹⁷⁴ J. A. Montgomery, "The Place" as an Appellation of Deity. *Journal of Biblical Literature*. 24, 1, 1905, pp.21-22

¹⁷⁵ Cf. A. Koyré, *Etudes d'histoire de la pensée philosophique*. Paris, Gallimard, 1971, pp.26-28

¹⁷⁶ *Deuteronomy* 13:5; *Shabat* 133b; *Sotah* 14a; *Syfy* 'Egev 49.

¹⁷⁷ Maimonides, *Hilkot de'ot*, I, 6; *Hilkot 'avadym*, IX, 8; *Hilkot Megylah*, II, 17; *Hilkot tumat 'ohalym*, XVI, 12.

¹⁷⁸ Gersonides, Commentary on the *Song of Songs*, I, 2; cf. M. Kellner, Gersonides on Imitatio Dei and the Dissemination of Scientific Knowledge. *The Jewish Quarterly Review*, New Series, 85, 3/4, 1995, pp.284-285. Gersonides thus expressed an idea developed by the Kabbalists, of the purpose of creation as concern for the good of the other. Cf. R. Moshe Cordovero, *Me'or Moshe 'al Sefer Shomer Ha-Pardes*. Bney Braq, 1996, p.213.

¹⁷⁹ Rambam, *Hilkot de'ot*, I, 5-6

¹⁸⁰ H. Kreisel, Imitatio Dei in Maimonides' "Guide of the Perplexed". *AJS Review*, 19, 2, 1994, p.180

¹⁸¹ Spinoza, *Ethics* V, 23, scholium

¹⁸² A. Kojève, *Introduction à la lecture de Hegel*. Paris, Gallimard, 1947, pp.351-354



transfinite cannot be described in terms of genus. The absolute infinite constitutes a singular unity totally inaccessible to man; he is the *Actus Purissimus* which is called God.¹⁸³

CONCLUSION

This article has sought to understand the nature of the relationship between, on the one hand, the Cantorian notions of absolute infinity and the transfinite, and on the other hand, the Kabbalist notions of *Eyn Sof* and *sefyrot*, by confronting them with the Spinozist concepts. The notions of substance and infinite attributes have often been associated with these Kabbalist notions. I have analyzed the significance of Adolph Jellinek's project, to present the essential notions of R. 'Azry'el of Gerona's Kabbalah, in the *more geometrico* form which is specific to Spinoza's *Ethics*. I then showed the fundamental differences between these two approaches, particularly concerning the notions of infinity and divine unity. I then examined the abstract status of number in Jewish commentators such as R. Ibn Ezra and the Gaon of Wilna, who posited the equivalence between the notions of number and *sefyrah*. Finally, I analyzed the post-Cantorian theory of naming, showing that it agrees, on the one hand, with the negative theology of Maimonides, and on the other hand with the semantics of Saul Kripke.

BIBLIOGRAPHY:

- [1.] Abulafya, A. *Gan 'Eden Ganuz*. Jerusalem, 2000.
- [2.] Abrabanel, I. *Perush 'al Moreh Nevukym*. Reedition, Jerusalem, 1960.
- [3.] Aczel, A. D. *The Mystery of the Aleph. Mathematics, the Kabbalah and the Search of the Infinity*. New York: Barnes and Noble, 2005.
- [4.] Altmann, A. "Lurianic Kabbala in a Platonic Key: Abraham Cohen Herrera's *Puerta del Cielo*." *Hebrew Union College Annual* 53 (1982).
- [5.] Antognazza, M. R. *Leibniz: An Intellectual Biography*. Cambridge: Cambridge University Press, 2009.
- [6.] Atten, M. van. "Monads and Sets. On Gödel, Leibniz, and the Reflection Principle." In G. Primiero and S. Rahman (Eds.), *Judgement and Knowledge. Papers in Honour of B.G. Sundholm*. London: College Publications, 2009.
- [7.] Badiou, A. *L'infini, Aristote, Spinoza, Hegel. Le Séminaire 1984–1985*. Paris: Fayard, 2016.
- [8.] Bar-Asher, A. "Beqadmut 'Eyn Sof: Pyrush 'Eser sefyrot le-R. David Ha-Kohen talmyd ha-Rashb'a." *Daat* 82 (2016).
- [9.] Bar-Asher, A. "Dimyon we-meç'yut beheqer r'eshyt ha-qabalah: Perush *Sefer Yeçyrah* ha-meyuhas le-R. Ytshaq Sagey Nahor we-toldotayv." *Tarbiz* 86, 2–3 (2019).
- [10.] Battisti, G. S. "Abraham Cohen Herrera et le jeune Spinoza, entre Kabbale et scolastique." *Archives de Philosophie* 51 (1988).
- [11.] Battisti Del Buffa, G. S. *Alle origini del panteismo: genesi dell'Ethica di Spinoza*. Milano: Franco Angeli, 2004.
- [12.] Belna, J-P. *Cantor*. Paris: Les Belles Lettres, 2000.
- [13.] Beltrán, M. *The Influence of Abraham Cohen de Herrera's Kabbalah on Spinoza's Metaphysics*. Leiden: Brill, 2016.
- [14.] Benor, E. Z. "Meaning and Reference in Maimonides' Negative Theology." *Harvard Theological Review* 88, 3 (1995).
- [15.] Burchard, H. G. W. "Georg Cantor's Ordinals, Absolute Infinity & Transparent Proof of the Well-Ordering Theorem." *Philosophy Study* 9, 8 (2019).
- [16.] Bruno, G. *De monade numero et figura liber...* Francofurti: Ioan. Vvechelum & Petrvm Fischerum, 1591.

¹⁸³ G. Cantor, Letter to Chisholm-Young, June 20, 1908. In H. Meschkowski, W. Nilson (Eds.) *Georg Cantor: Briefe*. Berlin, Springer-Verlag, 1991, p.170. Jean-Pierre Belna made it clear that, while rejecting atheism, Cantor does not defend any confessional point of view. J-P. Belna, *Cantor*. Paris, Les Belles Lettres, 2000, Ed. epub, 26/37.



- [17.] Burmistrov, K. *Christian Orthodoxy and Jewish Kabbalah: Russian Mystics in the Search for Perennial Wisdom*. Leiden: Brill, 2007.
- [18.] Busi, G. "Engraved, Hewed, Sealed. Sefirot and Divine Writing in the Sefer Yetzirah." *Mehqarey Yerushalayim beMahshevet Israel* 21 (2007).
- [19.] Cavaillès, J. "Avertissement à la Correspondance Cantor-Dedekind." In *Philosophie Mathématique*. Paris: Hermann, 1962.
- [20.] Cohen Herrera, A. *Sha'ar Ha-Shamayim*. Reedition, Warsaw: Kelter, Spoeki, 1864.
- [21.] Cordovero, M. *Pardes Rimonym*. Reedition Koreç, 1780.
- [22.] Cordovero, M. *Sefer Shy'iur Qomah*. Reprint, Warsaw, 1883.
- [23.] Cordovero, M. *Eylymah Rabaty*. Reedition, Jerusalem, 1974.
- [24.] Cordovero, M. *Me'or Moshe 'al Sefer Shomer Ha-Pardes*. Bney Braç, 1996.
- [25.] Coudert, A. P. *Leibniz and the Kabbalah*. Dordrecht: Kluwer Academic, 1995.
- [26.] Couturat, L. *De l'infini mathématique*. Paris: Blanchard, 1973.
- [27.] Couturat, L. "Sur une définition logique du nombre." *Revue de Métaphysique et de Morale* 8, 1 (1900).
- [28.] Dauben, J. W. "Georg Cantor and the Origins of Transfinite Set Theory." *Scientific American* 248, 6 (1983).
- [29.] Dauben, J. W. *Georg Cantor. His Mathematics and Philosophy of the Infinite*. Princeton: Princeton University Press, 1990.
- [30.] Dedekind, R. *Essays on the Theory of Numbers*. English translation. New York: Dover, 1963.
- [31.] Delmedigo, Y. S. *Maçref LaHokmah (Ta'alumot Hokmah)*. Basel, 1629.
- [32.] Gellman, Y. "Names and Divine Names: Kripke and Gikatilla." In M. Koppel and E. Merzbach (Eds.), *Sefer Higayon, Studies in Rabbinic Logic*. Alon Shevut: Zomet, 1995.
- [33.] Gikatilla, Y. *Sefer Sha'arey 'Orah. Sha'ar II*. Reedition Warsaw, 1842.
- [34.] Gikatilla, Y. *Gynat 'Egoz*. Reedition Jerusalem: Ha-Hayyim we-ha-Shalom, 1989.
- [35.] Gispert, H. "La théorie des ensembles en France avant la crise de 1905: Baire, Borel, Lebesgue." *Revue d'histoire des mathématiques* 1 (1995).
- [36.] Glaz, S. "Mathematics in the Poetry of Sefer Yetzirah." *Bridges Conference Proceedings* (2021).
- [37.] Goetschel, R. *Meir Ibn Gabbay, Le discours de la Kabbale Espagnole*. Louvain: Peeters, 1981.
- [38.] Golding, J. "Atzmut and Sefirot: A New Approach." In S. Lebens, D. Rabinowitz, and A. Segal (Eds.), *Jewish Philosophy in an Analytic Age*. Oxford: Oxford University Press, 2019.
- [39.] Gottlieb, E. *Mehqarym besifrut ha-Qabalah*. Tel Aviv University, 1976.
- [40.] Gouvêa, F. Q. "Was Cantor Surprised?" *The American Mathematical Monthly* 118, 3 (2011).
- [41.] Graham, L., and J.-M. Kantor. *Naming Infinity: A True Story of Religious Mysticism and Mathematical Creativity*. Cambridge, Mass.; London: The Belknap Press of Harvard University Press, 2009.
- [42.] Gruenwald, I. "Some Critical Notes on the First Part of Sēfer Yezīrā." *Revue des Etudes Juives* 132, 4 (1973).
- [43.] Guetta, A. "Kabbalah and Rationalism in the Works of Moshe Hayyim Luzzatto." In G. Veltri (Ed.), *Italian Jewry in the Early Modern Era: Essays in Intellectual History*. Boston: Academic Studies Press, 2014.
- [44.] Gueroult, M. *Spinoza. I, Dieu*. Paris: Aubier Montaigne, 1968.
- [45.] Harvey, W. Z. "Idel on Spinoza." *Journal for the Study of Religions and Ideologies* VI, 18 (2007).
- [46.] Heath, T. L. *The Thirteen Books of the Elements*. Dover Publications, Newburyport, 2012.
- [47.] Herrera, A. C. *Sha'ar Ha-Shamayim*. Reedition, Warsaw: Kelter, Spoeki, 1864.
- [48.] Horovyc, S. S. *Shef'a Tal*. Reedition Jerusalem: Yaryd ha-Sefarym, 2005.
- [49.] Horwitz, N. *Reality in the Name of God*. Scotts Valley: CreateSpace, 2012.
- [50.] Idel, M. "'Al Toldot musag ha-Tsimtsum beQabalah u-bemehqar." *Mehqarey Yerushalayim beMahshevet Israel* 10 (1992).
- [51.] Idel, M., and Y. Ben Shomo (Eds.). *Mehqarey Qabalah*. Tel Aviv: 'Am 'Oved, 1998.
- [52.] Jacobi, F. H. *The Main Philosophical Writings and the Novel Allwill*. Edited and translated by G. di Giovanni. Montreal and Kingston: McGill-Queen's University Press, 1994.
- [53.] Jellinek, A. *Beiträge zu Geschichte der Kabbalah*. Leipzig, 1852.
- [54.] Jellinek, A. *Ginzei hokmat ha-qabalah*. Reedition Jerusalem: Maqor, 1969.
- [55.] Johnson, P. E. "The Early Beginnings of Set Theory." *The Mathematics Teacher* 63, 8 (1970): 691.
- [56.] Kaplan, Y. "Fylosof lury'any mitequfat ha-B'aroq." *Pe'amym* 70 (1992).
- [57.] Kasher, R. M. *Ha-tequfah ha-gedolah. II*. Jerusalem, 2001.



- [58.] Kellner, M. "Gersonides on Imitatio Dei and the Dissemination of Scientific Knowledge." *The Jewish Quarterly Review* 85, 3/4 (1995).
- [59.] Kletenik, G. "To Infinity, Not Beyond: Spinoza's Ontology of the Not One." In G. Dynner, S. Heschel, and S. Magid (Eds.), *New Paths in Jewish and Religious Studies: Essays in Honor of Professor Elliot R. Wolfson*. West Lafayette, Indiana: Purdue University Press, 2024.
- [60.] Kojève, A. *Introduction à la lecture de Hegel*. Paris: Gallimard, 1947.
- [61.] Koyré, A. *Etudes d'histoire de la pensée philosophique*. Paris: Gallimard, 1971.
- [62.] Kripke, S. *Naming and Necessity*. Cambridge, MA: Harvard University Press, 1980.
- [63.] Lacan, J. *L'éthique de la psychanalyse*. Paris: Le Seuil, 1986.
- [64.] Langermann, Y. T., and S. Simonson. "The Hebrew Mathematical Tradition." In H. Selin (Ed.), *Mathematics Across Cultures: The History of Non-Western Mathematics*. Vol. 2. Dordrecht: Kluwer, 2000.
- [65.] Lebesgue, H. *Sur les fonctions représentables analytiquement*. In *Œuvres scientifiques*. Paris: Gauthiers-Villars, 1972.
- [66.] Leibniz, G. W. *Monadology*. English translation. Edinburgh: Edinburgh University Press, 2014.
- [67.] Leibniz, G. W. *Die philosophischen Schriften*. Edited by Gerhardt. Berlin: Weidmann, 1875–1890.
- [68.] Lesser, L. M. "Book of Numbers: Exploring Jewish Mathematics and Culture at a Jewish High School." *The Journal of Mathematics and Culture* VI, 1 (2006).
- [69.] Legrand, Th., and Ch. L. Echols. *Transliteration of Hebrew Consonants, Vowels, and Accents*. Academia.edu.
- [70.] Levinas, E. *Totality and Infinity: An Essay on Exteriority*. Translated by Alphonso Lingis. Pittsburgh: Duquesne University Press, 1969.
- [71.] Liebes, Y. "Sefer Yeçyah 'eçel R. Shlomo 'Eben Gabryol u-perush ha-shyr 'ahavatyk'." *Mehqarey Yerushalym Bemahshevet Israel* I, 3–4 (1983).
- [72.] Liebes, Y. *Torat ha-yeçyah shel Sefer Yeçyah*. Jerusalem, Tel Aviv: Shoken, 2011.
- [73.] Macherey, P. *Introduction à l'Éthique de Spinoza. La première partie, la nature des choses*. Paris: PUF, 2001.
- [74.] Maimonides. *Mishneh Torah*. Reedition, Warsaw, 1881.
- [75.] Maharal. *Hydushey 'agadot*. Reedition, Jerusalem, 1964.
- [76.] Matheron, A. *Individu et communauté chez Spinoza*. Paris: Minuit, 1968.
- [77.] Matheron, A. "Idée, idée d'idée et certitude dans le *Tractatus de intellectus emendatione* et dans l'*Éthique*." In *Etudes sur Spinoza et les philosophies de l'âge classique*. Lyon: ENS Editions, 2022.
- [78.] Melamed, Y. Y. "The Exact Science of Non-Beings: Spinoza's View of Mathematics." *Iyyun* 47 (2000).
- [79.] Meschkowski, H., and W. Nilson (Eds.). *Georg Cantor Briefe*. Berlin: Springer-Verlag, 1991.
- [80.] Miller, M. T. *The Name of God in Jewish Thought: A Philosophical Analysis of Mystical Traditions from Apocalyptic to Kabbalah*. London; New York, 2016.
- [81.] Montgomery, J. A. "The Place as an Appellation of Deity." *Journal of Biblical Literature* 24, 1 (1905).
- [82.] Mordell, P. *The Origin of Letters and Numerals According to the Sefer Yetzirah*. Philadelphia, H. Fleischmann, 1914.
- [83.] Mualem, S. "Borges and Kabbalistic Infinity: Ein Sof and the Holy Book." In R. Walsh and J. Twomey (Eds.), *Borges and the Bible*. Sheffield: Sheffield Phoenix Press, 2015.
- [84.] Necker, G. "Circle, Point and Line. A Lurianic Myth in the *Puerta del Cielo*." In R. Elior and P. Schäfer (Eds.), *Creation and Re-Creation in Jewish Thought*. Tübingen: Mohr Siebeck, 2005.
- [85.] Newstead, A. "Cantor on Infinity in Nature, Number, and the Divine Mind." *American Catholic Philosophical Quarterly* 83, 4 (2009).
- [86.] Olitzki, M. "Die Zahlen Symbolik des Abraham ibn Ezra." In E. Hildesheimer and D. Hoffman (Eds.), *Jubelschrift zum siebenzigsten Geburtstag des Dr. Israel Hildesheimer*. Berlin, 1890.
- [87.] Pinto de Brito, R., and G. Araújo Gomes. "Leo the Hebrew and a Kabbalistic Reading of Plato's *Timaeus*." *Prometeus: Filosofia em Revista* 40 (2022).
- [88.] Purkert, W., and H. J. Ilgauds. *Georg Cantor 1845–1918*. Basel: Birkhäuser, 1987.
- [89.] Rav, Y. "Georg Cantor, 1845–1918, par Walter Purkert et Hans-Joachim Ilgauds." *Revue d'histoire des sciences* 43, 2–3 (1990).
- [90.] Recanati, M. *Bi'yur 'al ha-Torah*. 2nd Ed. Venice, 1545.
- [91.] Reinhardt, W. N. "Remarks on Reflection Principles, Large Cardinals, and Elementary Embeddings." In Thomas J. Jech (Ed.), *Proceedings of Symposia in Pure Mathematics*. Vol. 13, bk. II. Providence, RI: American Mathematical Society, 1974.



- [92.] Rice, L. C. "Paradoxes of Parallelism in Spinoza." *Iyyun* 48 (1999).
- [93.] Robering, K. "The Whole Is Greater than the Part. Mereology in Euclid's Elements." *Logic and Logical Philosophy* 25 (2016).
- [94.] Rosenberg, S. "Mi-Anaximandros we'ad Levinas. LeToldot musag ha-'Eyn Sof." *Daat* 30 (1993).
- [95.] Rozenberg, J. J. "Éthique, langage et abstraction selon la tradition hébraïque." *Revue de Métaphysique et de Morale* 90, 3 (1985).
- [96.] Rozenberg, J. J. *Spinoza, le Spinozisme et les fondements de la sécularisation*. Amazon, 2023.
- [97.] Rozenberg, J. J. "Spinoza and Kabbalah: Convergences, Divergences, and Their Theoretical Implications." *Journal of Religion and Theology* 6, 1 (2024).
- [98.] Rowe, D. E. "On the Origins of Cantor's Paradox: What Hilbert Left Unsaid at the 1900 ICM in Paris." *The Mathematical Intelligencer* 46, 2 (2023).
- [99.] Scholem, G. *Major Trends in Jewish Mysticism*. New York: Schocken Books, 1946.
- [100.] Scholem, G. *The Origins of Kabbalah*. English translation. Princeton: Princeton University Press, 1987.
- [101.] Scholem, G. "Ha-perush ha-'amity shel ha-Ramban leSefer Yeçyrah we-divrey qabalah ha-'aherym ha-mityyahasyim 'elayw." In M. Idel and Y. ben Shomo (Eds.), *Mehqarey Qabalah*. Tel Aviv: 'Am 'Oved, 1998.
- [102.] Scholem, G. "Perush ha-'amity shel ha-Ramban leSefer Yeçyrah we-divrey Qabalah 'aherym ha-mityyahasyim 'elav." In Y. Ben Shlomo and M. Idel (Eds.), *Mehqarey Qabalah* 1 (1998).
- [103.] Serres, M. *Le système de Leibniz et ses modèles mathématiques: étoiles, schémas, points*. Paris: PUF, 1968.
- [104.] Shaptal Horovyc, S. S. Shef'a Tal. *Reedition Jerusalem: Yaryd ha-Sefarym*, 2005.
- [105.] Spinoza, B. *Baruch de Spinoza Opera*, Edited by Carl Gebhardt, Heidelberg, Universitätsbuchhandlung Carl Winter, 1925.
- [106.] Tannery, P. *Mémoires Scientifiques* 13. Correspondance. Paris: Gauthier-Villars, 1934.
- [107.] Tirosh-Rothschild, H. "Sefyrot as the Essence of God in the Writings of David Messer Leon." *AJS Review* 7/8 (1982/1983).
- [108.] Valabregue-Perry, S. "The Concept of Infinity (Eyn-sof) and the Rise of Theosophical Kabbalah." *The Jewish Quarterly Review* 102, 3 (2012).
- [109.] Volken, H. "Je le vois, mais je ne le crois pas... Preuves et vérités dans les sciences formelles." *Revue européenne des sciences sociales* XLI-128 (2003).
- [110.] Walkovsky, R. *Torat Ma'asey B'ereshyt*. Kedahnen, 1934.
- [111.] Wartofsky, M. W. "Nature, Number and Individuals: Motive and Method in Spinoza's Philosophy." *Inquiry* 20, 1-4 (1977).
- [112.] Weiss, J. "Perush Sefer Yeçyrah ha-meyuhas le-Itshaq Sagy Nahor. R'ayot le'iyshush qadmuto." *Tarbiz* 88, 4 (2022).
- [113.] Wolfson, E. R. *Language, Eros, Being: Kabbalistic Hermeneutics and Poetic Imagination*. New York: Fordham University Press, 2005.
- [114.] Wolfson, E. R. "Mystery of Infinity, Malxut deAdam Qadmon, and the Myth of Šimšum." *El Prezente* 16-17 (2022-2023).
- [115.] Wolfson, H. A. *The Philosophy of Spinoza: Unfolding the Latent Processes of His Reasoning*. Cambridge: Harvard University Press, 1934.
- [116.] Wyt'al, H. *Sefer 'Eç Hayym*. *Reedition Jerusalem*, 1963.
- [117.] Zak, B. "Torat ha-Tsimtsum shel Raby Mosheh Cordovero." *Tarbiz* 58, 2 (1989).
- [118.] Zacklad, J. *Pour une Éthique I. De Dieu*. Lagrasse: Verdier, 1979.