The mathematical Messiah: Benjamin and Scholem in the Summer of 1916

O Messias matemático: Benjamin e Scholem no Verão de 1916

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Resumo

No verão de 1916, Benjamin propõe um "difícil comentário" como base para uma teoria messiânica da história: os anos podem ser contados mas não numerados. Para ajudá-lo a desenvolver essa teoria, Benjamin convida Scholem, um estudante de matemática, para participar em prolongadas discussões. Scholem responde propondo sua própria "teoria matemática da verdade", na qual o messias é simultaneamente místico e matemático. A crítica de Benjamin sobre um prévio ensaio de Heidegger indica as linhas gerais de sua enviesada teoria: quando os anos podem ser contados, só podem ser arbitrariamente numerados; quando podem ser apropriadamente numerados, já não há mais anos a contar. No entanto, o impasse que Benjamin encontra ao desenvolver seu "difícil comentário" em uma teoria da história foi produtivo: deu forma à sua teoria da linguagem, e forneceu o ímpeto para sua análise da forma dramática.

Palavras-chave: Messianismo, matemática, teoria da história, teoria da linguagem.

Abstract

In the summer of 1916, Benjamin proposes a "difficult remark" as the basis for a messianic theory of history: years can be counted but not numbered. In order to help him develop this theory, Benjamin invites Scholem, a student of mathematics, to participate in lengthy discussions. Scholem responds by proposing his own "mathematical theory of truth", in which the messiah is both mystic and mathematician. Benjamin's criticisms of an early essay by Heidegger indicate the general outlines of his thwarted theory: when years can be countered, they can only be arbitrarily numbered; when they can be properly numbered, there are no longer any years to count. The impasse Benjamin encountered in developing his "difficult remark" into a theory of history was nevertheless productive: it shaped his theory of language, and it provided the impetus for his analysis of dramatic form.

Keywords: Messianism, mathematics, theory of history, theory of language.

The following essay revolves around a conversation that took place in the summer of 1916. The premise of this conversation is that Martin Buber is wrong, and never so completely wrong as when he speaks of "lived experience" (*Erlebnis*). For the two participants in the conversation, all discussion of "lived experience" is only chatter, which calls for no response other than stony silence. For the younger participant,

namely Gerhardt Scholem, who was beginning to call himself Gershom in his diaries of the period, the rejection of Buber's teaching is something of a conversion — not a conversion to the Zionist cause, to be sure, for by the summer of 1916, Scholem saw himself as a divided soul that, in accordance with Buber's teaching, demanded a higher unity. In Scholem's case, the division was particularly high-minded: one side of his soul was oriented toward Zion, the other toward higher mathematics. The conversion Scholem underwent in the summer of 1916 took the form of a growing aversion to the terminology in which Buber cast his case for lived experience in general and Jewish experience in particular. This aversion was not so much guided by a positive goal as prompted by a friend he met the previous summer, Walter Benjamin, who was the other participant in the conversation under discussion.

In a diary entry from the 23rd of August, 1916, Scholem interprets Buber's talk of "Jewish experience" as the indecisive, merely aesthetic side of a Kierkegaardian either/or: "One says, [either] 'I have *experienced* my Jewishness'... or: 'I have *seen* Zion. For this is something *entirely* difference: vision and lived experience [*Vision oder Erlebnis*]."[1] The operative idea of "vision" is indebted to Benjamin, who was developing a theory of "pure seeing" (*reines Sehen*) in various sketches and fragments of the period[2]. Of particular importance for Benjamin is the appearance of color, especially the "colors of fantasy", which can be called "pure" because they do not derive from experience but must be considered non-conceptual because they cannot be constructed. The terms "pure" and "non-conceptual" can be attributed to the phenomenon of color, however, only if — like space and time, according to Kant — it is a "form of appearance" in its own right. Zion occupies the place in Scholem's reflections that Benjamin reserves for the colors of fantasy: it is what "pure seeing" sees. Soon after Scholem presents Buber's idea of Jewish experience as the aesthetic side of an either/or, he describes his debt to Benjamin: "Not that I have learned from Benjamin; on the contrary, I have thought precisely the same for months, and only in a single point has it now also become clear in linguistic form: in the denial of the value of 'experience'."[3] Scholem, in other words, acquires a vocabulary from Benjamin — but learns nothing new. Nevertheless, the ability to propose a fitting vocabulary is no small talent. It is a particularly useful talent for among editors. Benjamin — so the suggestion goes — should be at the helm of the journal Buber founded in the spring of 1916 under the provocative title, *Der Jude*.

Benjamin would not only refuse to occupy this position, however; he will not even allow his work to appear in *Der Jude*. So he tells Buber in a remarkable letter from July 1916, which contains in abbreviated form an entire theory of language and action. Benjamin had originally expressed some interest in contributing to *Der Jude*; but after reading the first issue and finding himself enraged by its attitude toward the war, he will make no contribution to the journal in its current "stage of development"[4], as he notes in the conclusion of his letter. The audacity of this letter can perhaps be seen by comparing Benjamin's response to Buber with that of older, better-known writer, namely the Fontane-Prize winner, Franz Kafka. Upon receiving a request from Buber to submit his work, Kafka is initially hesitant — but only because he feels "too burdened and insecure to speak up in such company, even in the smallest way."[5] Soon afterwards, however, he

[1] Gershom Scholem, *Tagebücher, nebst Aufsätzen und Entwürfen bis 1923*, ed. Karlfried Gründer, Herbert Kopp-Oberstebrink und Friedrich Niewöhner unter Mitwirkung von Karl E. Grözinger (Jüdischer Verlag: Frankurt am Main, 1995-2000), 1: 386.

[2] See, in particular, a text Benjamin wrote and privately circulated around 1916, "The Rainbow: Dialogue on Fantasy", in Walter Benjamin, *Gesammelte Schriften*, ed. Rolf Tiedemann and Hermann Schweppenhäuser (Frankfurt am Main: Suhrkamp, 1972-91), 7: 19-26.

[3] Scholem, *Tagebücher*, 1: 386.

[4] See Walter Benjamin, *Gesammelte Briefe*, ed. Christoph Gödde and Henri Lonitz (Frankfurt am Main: Suhrkamp, 1995), 1: 325-27.

[5] See Martin Buber, *The Letters of Martin Buber: A Life in Dialogue*, ed. Nahum Glatzer and Paul Mendes-Flohr, trans. Richard and Clara Winston (New York: Schocken, 1991), 182.

changes his mind and sends Buber a dozen stories, two of which eventually appear in *Der Jude*[6]. By contrast, Benjamin sends Buber only his letter of rejection[7]. Scholem records its central claim in his diary from August 1916, quoting from memory one of its crucial phrases: "Benjamin demands of [Buber] and his journal that their words should be directed at the 'core of innermost muteness'."[8] At the opening of the letter, Benjamin informs Buber that his position vis-à-vis the new journal become clear during a discussion with Scholem. And when Benjamin then invites Scholem to visit him and Dora Pollak at her husband's estate outside of Munich — Dora and Walter will get married in the spring of 1917 — the first order of business, so to speak, is a reading of the letter that sealed their friendship.

This, then, is the situation: in August 1916 Scholem, having repudiated Buber's talk of lived experience, arrives at the large home of Max Pollak, who is away on business, or so he is told, and there he stays for three days. Benjamin and Scholem are both under the threat of being inducted into the war, and in accordance with Benjamin's wishes, there will be no talk of this or any other "current event." Dora, for her part, is generally absent for their conversations, it seems, except when, during a visit to her husband's library, she makes fun of Scholem for expressing interest in a book by Ernst Mach. The two men discuss a large number of topics; but one of these topics stands out, for it occupied an entire rain-soaked afternoon, and it was of such importance to both participants that they would repeatedly refer to this conversation in their subsequent correspondence. Furthermore, this conversation is a reprise of the one that first brought them together, for in both cases the philosophy of history is under discussion[9]. As for our knowledge of the conversation, it stems largely from Scholem, who twice recorded a few of Benjamin's comments — first in a series of remarks that the editors of Benjamin's writings call "Aphorisms" (2: 601), and then again in a series of notes that Scholem included in his diary under the title "From a Notebook Walter Benjamin lent me, 'Notes toward a Work on the Category of Justice'"[10]. Most of these notes are concerned with a theory of justice that begins with the enigmatic claim that goods can be possessed, but no one — not even society as a whole — can justly possess them. At the end of these notes, as an appendix of sorts, Scholem records the thesis of his friend that set their mid-August conversation into motion. This we know because Scholem tells us twice — first in his *Diaries*, and then again, some sixty years later, in *Walter Benjamin: The Story of a Friendship*.

Let me now turn to Scholem's reconstruction of the conversation: "We discussed [the theory of history] for an entire afternoon in connection with a difficult remark of [Benjamin's]: the series of years are doubtless countable but not numerable. This led to a discussion of the meaning of course [*Ablauf*], number, series, direction. I spoke about how we know that time does not behave like certain curves, which have a continuous course at every point but at no particular point a tangent, that is, a determinable direction. We discussed whether years, like numbers, are exchangeable, just as they are numerable."[11] Despite the characteristic clarity of Scholem's prose, this account of the conversation is thoroughly perplexing. Above all, it is traversed by a contradiction. Benjamin's

[6] See Buber, *The Letters of Martin Buber*, 215-16.

[7] A decade later Benjamin publishes his account of Moscow in another journal Buber edits, *Die Kreatur*; but this is in keeping with his earlier letter of rejection and can even be understood as its expansion.

[8] Scholem, *Tagebücher*, 1: 384.

[9] See Gershom Scholem, *Walter Benjamin — die Geschichte einer Freundschaft* (Frankurt am Main: Suhrkamp, 1976), 13.

[10] For the first instance, see Benjamin, *Gesammelte Schriften*, 2: 601; for the second, see Scholem, *Tagebücher*, 1: 402 (October 1916). For a discussion of the disposition of the manuscript entitled "Notizen zu einer Arbeit über die Kategorie der Gerechtigkeit", see Hermann Schwepenhäuser, "Walter Benjamin über Gerechtigkeit", *Frankfurter Adorno Blätter* 4 (1996): 43-51.

[11] Scholem, *Walter Benjamin*, 45.

opening remark is very difficult indeed: "the series of years are doubtless countable [*zählbar*], but not numerable [*numerierbar*]."[12] In the course of the conversation, however, years are said to be numerable after all. Among the other questions raised by this account of the conversation, the most important are probably these: Why does Benjamin's opening remark lead to a discussion of the meaning "course" (*Ablauf*)? And how exactly do we know that time does not behave like the class of curves that are continuous but non-differentiable, that is, without a tangent? The first question is prompted by the oddity of *Ablauf* in the brief series of terms under discussion. The other terms — *number*, *series* and *direction* — are indispensable elements of mathematics; but this is certainly not true of *Ablauf*, which cannot even be unambiguously translated into English. And as for the second question, it is prompted by the fact that Scholem appears to be in possession of a peculiar kind of knowledge about the precise shape of time. Obviously, when Scholem wrote his book on Benjamin, he was no longer interested in the content of their conversation in August 1916, only in its heady atmosphere. But even so, the account is perplexing enough: what happened on that rainy afternoon?

The account of the conversation that Scholem enters into his diary gives some indication of an answer — but only because, with the exception of its opening sentence, it contradicts the version Scholem's would later publish: "We spent an entire afternoon discussing a very difficult remark", he writes in his diary, "the series of years is indeed countable but not numerable. Which led us to [the topics of] course [*Ablauf*], series of years, and as the final point of departure, direction. Is there a direction without a course? 'Direction is the differential measure of two straight lines'", Scholem writes in quotation marks, without indicating its source, and continues: "This is a thought complex that I very much want to think about again. Indeed, time is a course; but does time have a direction?"[13] In the course of the conversation thus described, the meaning of the term *Ablauf* becomes fairly clear: it designates a continuous "run" (*Lauf*), which can nevertheless be terminated (*Ablauf*, understood as the expiration of a "running" process). That time is "doubtless" an *Ablauf*, for Scholem, means that it is continuous but not necessarily infinite. One representation of a continuous yet finite "course" is a straight line of a certain length. But it is only *one* such representation. Scholem thus adds: "For it is a thoroughly metaphysical assertion that time is like a straight line; perhaps it is a cycloid or something else, which nevertheless has no direction at many points. (Where there are *no* tangents.)" This account of the conversation goes in the opposite direction as the one in Scholem would later publish; but in both cases the question is the same. And the source of this question can be readily identified: Konrad Knopp, the noted mathematician under whom Scholem studied ordinary differential equations in the spring semester of 1915 and would study the theory of complex functions in the following fall semester[14]. One of Knopp's interests at the time was a curious class of functions that are continuous but nowhere differentiable — and thus without direction[15]. The question, then, that came to occupy the conversation between Benjamin and Scholem can be formulated in terms of Knopp's interest: can the function that maps the "run" of time be thus construed? In his *Story of a Friendship*, Scholem says "no". In his diary, by contrast, he says "well, perhaps": "perhaps [time] is a cycloid or something else, which [despite being continuous] nevertheless has no direction at many points."

[12] See also Benjamin, *Gesammelte Schriften*, 2: 601.

[13] Scholem, *Tagebücher*, 1: 390.

[14] These lectures had already been published; see Konrad Knopp, *Funktionstheorie: Grundlagen der allgemeinen Theorie der analytischen Funktionen* (Berlin and Leipzig: Göschen, 1913). The English version is also still in print in a Dover Press edition.

[15] See Konrad Knopp, "Ein einfaches Verfahren zur Bildung stetiger nirgends differenzierbarer Funktionen", *Mathematische Zeitschrift* 2 (1918): 1- 26.

Regardless of which account may capture the actual course of the conversation, this much is clear: Scholem responds to Benjamin's opening remark by adopting its form and changing the subject. Benjamin says of the years that they are doubtless countable yet nevertheless non-numerable. Scholem says of time that it is certainly continuous yet perhaps non-differentiable. Speculation about the shape of time does not appear to advance the line of inquiry Benjamin began. Nor does the following remark, which directly follows Scholem's qualified support the idea that time is like one of the functions Knopp describes: "Also among the series of numbers there is the same problem. But in this case, numbers [*Zahlen*] somehow bear in themselves numerals [*Nummern*]; properly speaking, however, they are not numerable, since numerability presupposes exchangeability, and that is true neither of numbers nor of years: they are in no way exchangeable."[16] It is unclear to whom these comments should be attributed; but in any case they must have struck Scholem as so strange in retrospect that in his *Story of a Friendship* he changes the story, as it were. Still, the rhythm of the conversation can be grasped: Benjamin proposes a thesis about the years, which are discrete units; Scholem responds by speaking of time, which continually "runs", and the two of them speak of number in general. And then the conversation turns to the entire set of numbers, which can be mapped onto the linear continuum. For Scholem, then, the premise of the discussion is the problem of continuity — primarily of time, secondarily of numbers. For Benjamin, by contrast, the premise of the conversation is that there is something peculiar about the years, in contrast to other countable units. About this peculiarity Scholem apparently has little to say.

Benjamin may have invited him to the Pollak residence for precisely this purpose. Scholem should be a productive participant in a discussion about the "difficult remark" because he was, after all, studying mathematics under the likes of Konrad Knopp. Benjamin was not so well prepared, and he saw himself as deficient in this regard. Occasionally he would pose questions to Scholem about numerical sequences, and he sought his advice about a tutor for his private mathematical studies[17]. As Scholem would have known, Benjamin was related to a well-known mathematician of the period, Arthur Schöenflies, his maternal great uncle, who was an early proponent of Cantor's work on transfinite set theory. One of Schöenflies's books on the development of this theory gives a brief description of its genesis: "Set theory as a science arose at the precise moment when Cantor introduced countability [*Abzählbarkeit*] as a well-defined mathematical concept, undertook the division of infinite sets according to their power [*Mächtigkeit*] and showed, in particular, that algebraic numbers form a countable set, whereas the continuum is not countable."[18] Cantor's response to the surprising discovery that the set of points that comprise the linear continuum is nondenumerable was widely circulated. One of the utterances quoted in this essay can even be counted among its reverberations: "I see it", Cantor says, "but I don't believe it."[19] The demand that Zion be seen regardless of belief can be understood as Scholem's revision of this dictum. But — and this is crucial — Scholem does not understand his demand in this manner. Transfinite mathematics plays no role in his reflection on mathematics. When Scholem attends Knopp's lectures on differential equations, he is thrilled

[16] Scholem, *Tagebücher*, 1: 390; cf. Scholem, *Wálter Benjamin*, 45 (cited above).

[17] See, for example, Benjamin, *Gesammelte Briefe*, 2: 44 and 2: 58. Benjamin thought of asking Käte Holländer to tutor him in mathematics. Scholem first met her in 1916; see *Gesammelte Briefe*, 2: 111.

[18] Arthur Schöenflies, *Entwicklung der Mengenlehre und ihrer Anwendungen*, erster Teil, "Allgemeine Theorie der unendlichen Mengen und Theorie der Punktmenge" (Leipzig and Berlin: Teubner, 1913), 2-3. Benjamin, for his part, uses the term "power" (*Mächtigkeit*) in certain crucial passages of his early work; see, for example, his discussion of the neo-Kantian idea of the "infinite task" (*Gesammelte Schriften*, 6: 51) and especially his introduction to the third part of his essay on Goethe's *Wahlverwandtschaften* (1: 172).

[19] For a detailed account of Cantor's process of discovery, see especially Joseph Warren Dauben, *Cantor: His Mathematics and Philosophy of the Infinite* (Cambridge Mass.: Harvard University Press, 1979).

to hear the following words: "exact version (better: exclusion) of the infinite."[20] And even if the infinite is not exactly excluded from Scholem's reflections on mathematics, there is no discussion of the difference between denumerable and non-denumerable sets — not even when Benjamin begins to develop a theory of historical time based on a corresponding distinction.

Despite the rhetoric of radicalism that animates Scholem's *Diaries*, a certain conservatism dominates his scientific studies. This conservatism is perhaps congruent with the other dimension of his divided soul: just as he returns the sources of Judaism, so he wishes to do the same with the sources of mathematics. This scientific conservatism is in any case nowhere more apparent than in a little treatise he wrote in July of 1916 under the title "Potpourri regarding a Mechanistic World-Image". At this auspicious moment in the development of modern science — when Einstein had just completed his generalization of the "equivalence principle" and thereby displaced Newton's *Principia* by freeing himself from Euclid's *Elements* — Scholem not only presents classical mechanics as the model of future scientific inquiry; he goes so far as to propose that mathematics and mysticism encounter each other in the *Elements* and the *Principia*. And the messiah arrives in the course of this encounter. "Out of the work of Euclid and Newton the Bible of this new world would be formed, complete with an introduction by the cognizing mystic or the new Novalis". And he concludes on the following note, in which his divided soul, in accordance with the principles of Buber's teaching, finds a higher synthesis. In Scholem's case the synthesis is the very highest: "Mysticism is eternally in danger of forgetting mathematics. This is the original sin of mysticism; the new mechanistic world-image would be the decisive step in advance of the final synthesis... The aforementioned mathematical mystic or mystical mathematician — he will certainly be a Jew. He will be the messiah."[21]

As the summer of 1916 unfolds, and Scholem begins to view Benjamin as a "new Novalis", he does not then see his own role as that of reminding the mystic of what he would otherwise forget: the rigors of mathematics. Instead, he pursues a theory of his own: "the mathematical theory of truth". Its rudiments are apparent in the August conversation as it is presented in his diary. And some four months later, he comes up with a full sketch. The basis of Scholem's theory, as he notes in the first paragraph of his sketch, is the traditional understanding of truth as the "correspondence" between being and thought. The theory can be called "mathematical" since it interprets correspondence in terms of the theory of functions. Knopp's winter-semester course thus provides the impetus for Scholem's ontological axiom: "To entity A there belongs the truth of this entity = f (A)."[22] Thinking and reality are not two wholly different spheres that accidentally enter into relation with each other. Rather, reality is related to thought because it accrues to the independent variable or "argument" of a function, which, as such, occupies the position of thought. The truth of any given argument is its output or "value". An orderly structure of being can then be established by representing each value as the argument of a higher-level function. The highest function, which also represents the shape of time, is truth pure and simple. The mathematical mystic or mystical mathematician does not so much know as realize this otherwise inestimable value. Scholem's sketch ends with a series of unresolved questions, some of which are clearly indebted to Knopp's lectures, others to his discussions with Benjamin. But none of these outstanding questions resembles those that a student of mathematics could raise in response to the "difficult remark" that began their conversation in August. Such

[20] Scholem, *Tagebücher*, 1: 267.
[21] Scholem, *Tagebücher*, 1: 353.
[22] Scholem, *Tagebücher*, 1: 416.

as the following. What is this idea of "power" (*Mächtigkeit*), through which countable sets are distinguishable from non-countable ones? Under what conditions would it be productive to translate the idea of "power" or "cardinality" into the context of time-reckoning? And can the difference between the concept of cardination and that of ordination be effectively deployed in this context?

Something else is missing from the conversation in August — or perhaps only from Scholem's accounts of its progress. In the written records, Benjamin's "difficult remark" is invariably accompanied by another remark, the opening phrase of which is drawn from the title of a treatise that Georg Simmel published in the spring of 1916: "The problem of historical time", Benjamin writes, citing this title, "is already posed by the peculiar form [*eigentümlichen Form*] of historical time-reckoning."[23] And in one of the folders that contain this additional remark alongside the "difficult" one, there is an additional comment about the structure of the ensuing theory: "The theory obviously does not relate to reality; rather, it must cohere with language [*mit der Sprache zusammenhängen*]. Here lies an objection to mathematics [*gegen Mathematik*]."[24] Tiedemann and Schwepenhäuser are suspicious of the folder in which this remark can be found — or at least unhappy with its title. Scholem calls the folder "Remarks", but Tiedemann and Schwepenhäuser decide that "Aphorisms" would be more appropriate[25]. Their worries about the title are perhaps misplaced, since Benjamin and Scholem repeatedly refer to one of the remarks with this word. Suspicion should fall, rather, on the last-cited observation about the structure of the theory Benjamin would develop. For who, after all, says that mathematics is related to reality? A certain form of Platonism consists, of course, in the thesis that mathematical objects are the basic elements of reality. But the offending party in this case would be Platonism — not mathematics. If the editors of Benjamin's papers were to look for someone who claims that mathematics is related to reality, they need look no further than the one who preserves this remark. Whereas Scholem's theory is predicated on the idea of truth as "correspondence", Benjamin insists that his theory will be developed from a certain "coherence". The final word of the remark in question should read: "gegen die mathematische". The sentence in full thus runs: "Here lies an objection to the mathematical [theory of truth]." Construed in this manner, Benjamin's remark could scarcely be more damning. Scholem may have misrecorded it for this reason. Or Tiedemann and Schwepenhäuser may have misread it — and displaced their suspicions onto the title of the folder as a whole. In any case, the result would be the same: Benjamin would be saying, in effect, that Scholem's pet theory is seriously misguided, perhaps even as misguided as Simmel's *Problem of Historical Time*, about which Benjamin writes the following in a letter to Scholem from 1917: "a completely wretched fabrication that, after the faculty of thinking goes through many contortions, incomprehensibly utters the silliest things imaginable."[26]

As for Benjamin's attempt to reflect on the nature of mathematics on his own, without help from either friend or tutor, there is no question that he found himself at a loss, for he admits as much in a letter to Scholem from October 1916. The very same letter announces that this failure has not prevented him from completing a major work, a "little treatise" in fact, which develops the theory of language outlined in his letter to Buber. As he tells Scholem, this treatise began only after he encountered an insurmountable impasse in his attempt to handle the theme of "mathematics and language, that is, mathematics and thinking,

[23] Benjamin, *Gesammelte Schriften*, 2: 601; see Georg Simmel, *Das Problem der historischen Zeit* (Berlin: Reuther & Reichard, 1916).
[24] Benjamin, *Gesammelte Schriften*, 2: 601-2.
[25] See Benjamin, *Gesammelte Schriften*, 2: 1411.
[26] Benjamin, *Gesammelte Briefe*, 1: 409.

mathematics and Zion."[27] As Benjamin adds — and this should perhaps be understood as a complaint — he found himself entirely "unprepared" for this "infinitely difficult theme". The title of the treatise he wrote in response to this impasse sounds systematic enough: "On Language as Such and on the Language of the Human Being."[28] But as Scholem would have known, it is missing something: mathematics as such, and perhaps even human mathematics, *die Mathematik des Menschen*, if there is such a thing. The absence of mathematics means, above all, that the "little treatise" cannot pursue either of the two problems that derive from this theme: the problem of thinking and that of Zion. Nothing further needs to be said at this point about the problem of thinking. It should be clear, however, that the word "Zion" is shorthand for "historical time".

After complaining about his lack of preparation for the "infinitely difficult theme", Benjamin thus returns to the place where this problem first materialized: the "difficult remark" about non-numerability. He adds no further thesis in this regard; but he makes a few comments about a recent essay whose author, namely Martin Heidegger, who obtained his teaching license on its basis. Benjamin may have briefly encountered Heidegger in Freiberg when they both studied under Heinrich Rickert. His assessment of the newly minted Privatdozent's inquiry into "The Concept of Time in Historical Scholarship [*Geschichtswissenschaft*]" is in any case characteristically brutal: "This essay documents in an exact manner how *not* to go about this matter. A terrible work, one that you perhaps will look into, if only to confirm my surmise that not only what the author says about historical time (which I can judge) is non-sense but that his discussion of mechanical time is also wrong-headed, as I surmise."[29] Despite a certain similarity between the condemnation of Heidegger and the evisceration of Simmel, there is nevertheless a major difference: "The Concept of Time in Historical Scholarship" is not a sheer fabrication. Insofar as it shows in an *exact* manner how *not* to go about posing the problem, it represents something like a photographic negative of the requisite path. And there is good reason to suppose that Heidegger shared Benjamin's concerns, for at a crucial juncture in his discussion — as he passes from his reflections on the concept of time in the physical sciences to an analysis of the concept in historical scholarship — he describes an alternative path, which leads directly to the problem: "In historical scholarship [as opposed to physical science] the path that leads from its goal to the function of its concept of time and thereupon to the structure of this concept appears as a detour. Historical scholarship can achieve its goal much more easily and quickly if we only consider the fact that there is a particular auxiliary discipline in the methodology of historical scholarship, an auxiliary discipline that actually concerns itself with the determination of time in historical scholarship: historical chronology. Here the peculiarity [*das Eigentümliche*] of the historical concept of time immediately comes to light. Why this path is not taken can only be explained in the conclusion."[30]

The lines of inquiry pursued by the former students of Rickert converge at this point and indeed on a single word: "peculiarity" (*Eigentümlichkeit*). For Benjamin, historical time-reckoning poses the problem of historical time; for Heidegger, historical chronology leads directly to the structure of the concept of time in historical scholarship, even if, for reasons he will explain at the very end of his essay, he decides to take a detour and follow the methodological directives of Rickert, who is, after all,

[27] All of the quotations are from the letter of October 1916; Benjamin, *Gesammelte Briefe*, 1: 343.

[28] See Benjamin, *Gesammelte Schriften*, 2: 140-57.

[29] Benjamin, *Gesammelte Briefe*, 1: 344; see Martin Heidegger, "Der Zeitbegriff in der Geschichtswissenschaft", *Zeitschrift für Philosophie und philosophische Kritik* 161 (1916): 173-188; reprinted in *Frühe Schriften* (Frankfurt am Main: Klostermann, 1972), 357-75.

[30] Heidegger, *Frühe Schriften*, 368.

directed his dissertation. When Benjamin condemns Heidegger for proceeding in *exactly* the wrong direction, he is presumably taking issue with this decision. Heidegger is not so much misguided as obsequious. And his discussion of historical chronology at the end of this essay can be correspondingly rectified by appending a "not" — or "not necessarily" — to its claims: "Year numbers [*Jahreszahlen*] are convenient numerical marks [*Zählmarken*]; still, considered in themselves, they are meaningless [*ohne Sinn*], since for any number, another number could be equally substituted, if one only shifts the inception of the counting. But precisely the beginning of time-reckoning shows that this time-reckoning always starts with an historically meaningful event (the founding of the city of Rome, the birth of Christ, Hijra). The auxiliary discipline of historical scholarship, historical chronology, is therefore only meaningful [*bedeutsam*] for the theory of the historical time concept from the perspective of the *beginning* of time-reckoning."[31]

Much could be said about the conclusion to Heidegger's essay, especially its noticeable silence about Jewish chronology. But from the perspective of Benjamin's unambiguous judgment of the essay — namely, that its discussion of historical time is "non-sense" (*Unsinn*) — only one point must be made: year numbers are not, as Heidegger claims, "senseless" (*ohne Sinne*). Or more exactly, they are not necessarily "convenient numerical marks", which can be replaced by other numbers if only a different starting year is stipulated. Conversely, as soon as *any* starting year is stipulated, the subsequent numbers are indeed only "convenient markers", the meaning of which depends on an act of stipulation that some temporal power — whether it be Roman, Christian, or Islamic — corroborates and enforces. For this very reason, however, the year numbers are no longer *historical*; rather, they are only expressions of this convening power. If, however, the beginning of the count is really the beginning, regardless of who stipulates it as such, then historical years *can* be numbered. In this case, year numbers enjoy the same status as proper names, as they are formulated in Benjamin's "little treatise": they are that by which the thing in question is knowable. The following note thus appears in Benjamin's papers of the period: "Historical years are names"[32].

In a series of contemporaneous attempts to solve Russell's set-theoretical paradox, Benjamin draws a fundamental distinction between "judgments of designation" and "judgments of predication". Only in the case of the latter can one speak of "meaning" (*Bedeutung*) in the proper meaning of the word[33]. Terms that owe their origin to acts of stipulation, by contrast, are only improperly meaningful. They mean only what they are said to mean. It is no accident that Benjamin's primary example of a "judgment of designation" is drawn from a mathematics primer: "*a* designates the BC side of a triangle."[34] For mathematical proofs begin with the designation of what its signs are supposed to mean. Benjamin does not take sides on the old debate between nominalsts and realists as to whether the subsequent theorems are matters of convention or not. But it is nevertheless certain that, in his view, one form of applied mathematics, which he calls "historical time-reckoning", cannot free itself from the stipulation with which it begins. The designation of the first determines all subsequent year numbers. In other words, years can be counted as soon as one says which one is first; but this speech act evicts the numbers from the paradisal sphere of sheer meaning.

There is no evidence that Scholem responded to Benjamin's request that he look over Heidegger's

[31] Heidegger, *Frühe Schriften*, 375.
[32] Benjamin, *Gesammelte Schriften*, 6: 90.
[33] See especially Benjamin, *Gesammelte Schriften*, 6: 10.
[34] Benjamin, *Gesammelte Schriften*, 6: 9.

essay and see whether its account of mechanical time is as wrong-headed as its exposition of historical time. At the end of the diary entry in which he proposes the "mathematical theory of truth", however, Scholem does make this note to himself: "The essay on historical time is very ridiculous and unphilosophical. Benjamin is right in his judgment."[35] With this remark, unhelpful in the extreme, the conversation begun in August apparently comes to an end — with the impasse on the way to the "infinitely difficult theme" still in place. Nevertheless, the following line of thought can be extrapolated from Benjamin's remarks in conjunction with his comments on Heidegger's "Concept of Time".

Anyone with the requisite arithmetic competence can count the years, beginning with whatever year he or she wishes. Prisoners are thus said mark the days of their imprisonment. And just as the marks made by prisoners are valid solely for them, so are the numbers with one counts the years — unless, of course, a temporal power makes this chronological system into a convention. Heidegger inadvertently hits upon the "problem of historical time" when he writes in parentheses: "the founding of the city of Rome, the birth of Christ, Hijra". The diversity of historical chronologies is comparable to the dispersion of languages after the collapse of the Tower of Babel. It is not as though the years are non-numerable because humanity as a whole has failed to agree on a single chronological system; rather, there is no such thing as "humanity as a whole" until the years acquire their proper numbers — at which point there are no longer any years to count. When, in short, years are countable, they cannot be numbered; when they are properly numbered, there are none to count. Historical years are countable but non-numerable. Numerability is of a higher "power" than countability, and this difference in "power" — which has nothing to do with dominion — is decisive with respect to the problem of historical time.

Benjamin's "difficult remarks" thus cohere with his treatise "On language as Such and on Human Language". The point crossing point is the theme for which Benjamin found himself unprepared: "mathematics and language, that is, mathematics and thinking, mathematics and Zion". For the "little treatise" is predicated on a claim that, as Benjamin admits, borders on a mystical conception of language. As soon as a linguistic unit is meant to say something, it is no longer a linguistic unit, properly speaking. The only linguistic units that cannot be made to say anything in particular are particular languages themselves, each of which means the very same non-thing: language pure and simple. The omission of mathematics from the treatise on language is comprehensible from this perspective, for mathematics and language are mutually exclusive: mathematics begins with judgments of designation, in which certain signs are said to mean certain things. Language, by contrast, collapses into "parts of speech" as soon as a judgment is made that something is supposed to mean something else. "Historical time-reckoning" is the place where meaning (language) and designation (mathematic) meet. An "historically meaningful event" — to quote Heidegger against himself — must be designated as such in order for a particular chronological system to get going; but the designation means that the event on which the counting of years is based can no longer be considered meaningful. The numbers of the chronological system can no longer be said to count.

So it goes with the problem of "mathematics and Zion". With regard to the coordinated problem of "mathematics and thinking", Benjamin left some scattered notes, which were probably intended for the letter to Scholem he was unable to complete. At the center of these notes is a "magic circle of language" with the following four moments: "God creates" (at the top); "The thing is called" (in the middle, left side); "The human being knows" (in the middle, right

[35] Scholem, *Tagebücher*, 1: 418.

side); "Mathematics thinks" (at the bottom)[36]. The word *thinking* doubtless sounds good; but as its position at the nadir of the circle perhaps indicates, it is not. Rather, thinking is evil. Benjamin does not make this claim in these preliminary notes; but it is an essential element of the work that most fully develops the line of inquiry he began in 1916, namely his *Habilitationsschrift* on the *Origin of the German Mourning Play*. It would perhaps be better to say, however, that the theme of the *Trauerspiel* book develops of the impasse he encountered in pursuing — without sufficient preparation and without reliable assistance — the "difficult remark" in which the theory of historical time is rooted. For immediately after Benjamin says of historical numbers that they are proper names, he adds a remark that briefly yet decisively discloses an alternative path to the problem, a path that goes around the "infinitely difficult theme" of mathematics and language: "The problem of historical time must be grasped in correlation with that of historical space (history on *stage* [*Geschichte auf dem Schauplatz*])."[37]

Just as Heidegger organizes his inquiry into the concept of time in historical scholarship around a methodological digression, so Benjamin takes a detour in his effort to pose the problem of historical time — a detour through the problem of dramatic form. The sketch from 1916 entitled "Tragedy and *Trauerspiel*" thus begins with a few remarks about the insuperable distinction between historical and mechanical time.[38]

The theme of "mathematics and Zion" can therefore be bypassed. That of "mathematics and thinking" appears in the final sections of the eventual work as an inquiry into the characteristics of the purely subjective thinker, who, while "pondering" over things, plunges into the boundless depths of evil. The language of the ponderer shares one essential trait with that of the mathematician: it begin with a judgment of designation. But the ponderer, unlike the mathematician, never proceeds beyond this beginning, in which things suddenly acquire — and lose — "meaning" in the improper or figural sense of the word. The null-language of subjective thinking is not mathematics as such but, rather, allegorical expression, which could also be called "human mathematics", *die Mathematik des Menschen*. And the thinker, in turn, can be likened to the mathematician who is always only beginning, saying in ever different ways, for example, "*a* designates the BC side of a triangle". Someone like Scholem perhaps. In any case, not only not the messiah but one who is actively unfamiliar with the category of the messianic.

For Scholem, the messiah must be a mathematician. The notes and comments Benjamin drew up in the second half of 1916 support the very opposite conclusion. But this conclusion says nothing against mathematics — only against its beginning, which historical time-reckoning, like allegory, forever reiterates. The messiah at any rate ends history not by numbering the years but by showing that the years are numbered.

[36] Benjamin, *Gesammelte Schriften*, 7: 786.
[37] Benjamin, *Gesammelte Schriften*, 6: 90.
[38] See Benjamin, *Gesammelte Schriften*, 2: 133-37.