

Symphilosophie

International Journal of Philosophical Romanticism

Ein Schuß in die blaue Luft

The Early German Romantic Hypothesis

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ABSTRACT

This essay examines the contributions made by Friedrich Schlegel and Novalis to what hypotheses can be and do in the context of Early German Romanticism. It situates these two thinkers against the backdrop of eighteenth-century discussions that examine both the usefulness of the word *Hypothese* in the German context and the ways in which hypotheses can be established in scientific and philosophical discourses. Using Schelling's systematic thinking about hypotheses as a point of departure, I show how Schlegel and Novalis each use the hypothesis heuristically to test the capabilities of the positing individual in general terms and to forge connections between key Romantic concepts (such as religion and mythology), all the while keeping methodological considerations in mind.

Keywords: hypothesis, supposition, experience, knowledge, truth

RÉSUMÉ

L'article examine l'apport de Friedrich Schlegel et de Novalis à la question de la nature des hypothèses, et de ce qu'elles peuvent produire, en régime romantique. Les discussions du XVIII^e siècle relatives à la fois à l'utilité du mot *Hypothese* dans le contexte allemand et aux façons d'établir des hypothèses en science et en philosophie forment la toile de fond sur laquelle ces deux penseurs sont ici situés. Partant de la réflexion systématique de Schelling sur la notion d'hypothèse, on montre comment Schlegel et Novalis recourent chacun à l'hypothèse de manière heuristique pour tester les capacités de l'individu qui la pose de manière générale et forger des liens entre des concepts clés du romantisme (tels la religion et la mythologie), tout en gardant à l'esprit des considérations méthodologiques.

Mots clés : hypothèse, supposition, expérience, connaissance, vérité

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Introduction

At the end of July, 1794, Novalis received a letter from his friend Friedrich Schlegel. It contains several of the elements one might expect to find in a correspondence between two friends at the end of the eighteenth century, including apologies for a delay in communication, along with descriptions of both the writer's location (a picturesque small farmer's house in Pillnitz, near Dresden) and his state of mind (Schlegel claims to have finally found some measure of peace after a "painful" time). At the end of the letter, Schlegel turns to the topic of his friendship with Novalis. He expresses the wish to see Novalis again before they become strangers to one another, adding that such a thing would, of course, never happen on his side. Schlegel feels less secure about Novalis' ability to reciprocate:

Your way is perhaps not just diverging from mine, but rather is diametrically opposed. Let me know how much farther you have traveled upon it, and if it is to your satisfaction. I will be happy if I see that your earlier inclinations and your later path are joined in harmony.¹

Novalis, in his response to Schlegel, is swift to affirm the reciprocal intensity of feeling, but he offers a corrective to Schlegel's metaphor of two radically diverging paths. "Know," writes Novalis, "that I certainly remain and will continue to remain worthy of you. We can travel only *one* path."² He returns to the same image of his and Schlegel's path at the end of the letter:

...never again forget that I cannot forget you and that it was a hypothesis, a pure, sheer hypothesis, about the diverging path – a shot into the blue sky. Our way must be approximation – until we both ignite from a single flame, to the left and right of us, as on Christmas, where then the new year comes eight days later.³

The primary motivation for lingering on this episode from Novalis' and Schlegel's correspondence is not to revisit the discourse of friendship as it is encoded at the end of the eighteenth century, but to examine the thinking that informs the particular image of two paths and the corresponding idea of the hypothesis. Schlegel's letter has already provided the metaphor, which he constructs in a way similar to a calculus problem devoted to ascertaining the distance between two lines at any point in time. For Novalis, it is less a

¹ Novalis, *Schriften* (=HKA), vol. 4, eds. Richard Samuel, Hans-Joachim Mähl and Gerhard Schulz (Stuttgart: Kohlhammer, 1998), 363. All translations are mine unless otherwise noted.

² HKA 4, 140.

³ HKA 4, 141.

problem of mathematics than it is one of physics or even ballistics. He redefines Schlegel’s metaphor as a hypothesis of the most arbitrary kind one can imagine: a shot fired aimlessly into the air. According to Novalis, Schlegel’s hypothesis is entirely incorrect, because the problem of their respective trajectories is one that should be posed in terms of approximations, rather than divergences; his is a more optimistic way to identify the current state of separation between two objects. Under Novalis’s pen, the hypothesis is not simply a fiction or a wild idea, but rather a moment of absolute arbitrary creativity accompanied by approximation as a positive heuristic tool – something to be used advantageously until a flame can be (re)kindled between the objects in question.

In the timeframe of interest to the present essay, Novalis’s articulation of a *blanke Hypothese* appears at a chronological – and admittedly arbitrary – middle point between two momentous chapters in the history of the hypothesis, with eighteenth-century definitions on the one side and a Romantic reconfiguration of the hypothesis on the other. The first part of the following discussion will therefore touch upon a few of the narrative strands that dominated eighteenth century writing on the hypothesis, several of which are encapsulated within Novalis’s letter to Schlegel. This essay will address how the hypothesis was distinguished by discipline in the writings of Johann Heinrich Lambert, how the elements of its definition sparked a debate between Joachim Campe and Karl Philip Moritz, and how it became connected to a language of the arts in Johann Samuel Traugott Gehler’s *Physical Dictionary*. There is clearly much more to say about the hypothesis – enough to fill several volumes – if one were to include a more detailed discussion of the role the hypothesis played in modern scientific thinking.⁴ The goals of the present essay are narrower: to show how the early German Romantic use of the word hypothesis, in good Romantic fashion, accomplishes something contradictory: incorporating aspects of a particular German tradition while, at the same time, articulating something new. The second part of the essay will therefore look beyond the middle point to examine the ways in which the hypothesis was subsequently reshaped in the writings of Schelling, Novalis, and Schlegel, with a focus on the latter two. It will show how an Early Romantic argument for the necessity of hypothesis

⁴ For an overview, see Michael Heidelberger’s and Gregor Schiemann’s edited volume, *The Significance of the Hypothetical in the Natural Sciences* (Berlin, New York: Walter de Gruyter, 2009), which testifies to the irreducible plurality of views on the scientific hypothesis: “The significance attributed to hypothesis is, so to say, a kind of a litmus-paper for the changing and diverging conceptions of science of the scientific actors themselves, as well as of the philosophers who reflect upon the sciences” (1).

took different forms that shared an epistemological emphasis on the making or “inventing” of knowledge that both preserved and transformed the tradition of thinking of the hypothesis in terms of creativity.

Part One: Eighteenth-Century Perspectives

The German term *Hypothese* is slow to enter the lexica of the eighteenth century, unlike its English and French counterparts. Raphson’s⁵ *Mathematical Dictionary* (1702), a translation of a Jacques Ozanam’s *Dictionnaire mathématique* (1691), defines it as “a Supposition; among Mathematical principles Postulates are sometimes so called. The different Systems of the World are also called by that Name.”⁶ The entry does not further explain what, precisely, is meant by a supposition, but the introduction to the dictionary elaborates on the qualities of a hypothesis, with a focus on geometry:

When we make a Demonstration from any Geometrical Figure whatever, we suppose the figure to be infinitely more exact than it appears on the Paper, *viz.* such exactly as the Soul conceives it to be, and this we call an *Hypothesis*. Wherefore an *Hypothesis* is a supposition of that which is not, for that which may be. Whence it follows that it is not necessary that the Hypothesis should be true, but it is sufficient that it is possible. Whence it follows that there may be several Hypotheses on the same Subject.⁷

The central part of this definition is likely what is most familiar to modern-day readers: that the truth value of the hypothesis is yet to be determined. The hypothesis begins its life in the vague category of “that which is not” with the hope that at a later stage it may, in fact, become that which is. The 1694 edition of *Le grand dictionnaire de l’Académie françoise*, which positions the “hypothesis” beneath the definition of “thesis,” uses similar language:

Hypothese. feminine noun. Philosophical term, supposition of a thing, be it possible, be it impossible, of which one draws a consequence ... It is also said of the assembly of several things which one imagines, and

⁵ This dictionary was edited by Joseph Raphson, whose name is frequently misprinted (including on the cover of the dictionary) as Ralphson.

⁶ Raphson, *Mathematical Dictionary. A Mathematical Dictionary, or a Compendious Explication of All Mathematical Terms, Abridg’d from Monsieur Ozanam, and Others. With a Translation of his Preface; and an Addition of several easie and useful Abstracts*, J. Raphson translator and editor (London: J. Nicholson, T. Leigh, and D. Mitwinter, 1702), [the pages containing dictionary entries are not numbered].

⁷ Raphson, *Mathematical Dictionary*, 34.

which one supposes in order more easily arrive at the explication of certain phenomena, which one otherwise calls system.⁸

Along with the graphical subordination of hypothesis to thesis on the printed page of the dictionary, the French and English words “supposition” – which Gehler’s *Physical Dictionary* will some decades later render as *Voraussetzung* – help to solidify the spatial metaphor of the hypothesis. The *Oxford English Dictionary* entry on the prefix “sub-,” of which “sup-” is a variation, connects its etymology to the Greek prefix ὑπο- (hypo-) and defines it primarily in terms of spatial positioning: “under, close to, up to, towards.”⁹ The hypothesis, as supposition, is both proximate and subordinate to that which comes next.

Ephraim Chambers’ 1738 *Cyclopaedia* provides a much more extensive definition that covers the use of the term hypothesis in logic (“a proposition or principle which we suppose, or take for granted in order to draw conclusions therefrom, for the proof of a point in question”) and in physics (“a kind of system laid down from our own imagination, whereby to account for some phaenomenon or appearance of nature”).¹⁰ Chambers also adds his thoughts on contemporary critiques of the use of hypotheses. He distinguishes the philosophical position whereby true conclusions can be drawn even from false hypotheses (using the example that, should the sky fall down, one would be able to catch a lark) from a more skeptical attitude towards the fictional quality of hypotheses in general: “Whatever is not deduced from phaenomena, says Sir Isaac Newton, is an *hypothesis*; and *hypotheses*, whether metaphysical, or physical, or mechanical, or of occult qualities, have no place in experimental philosophy.”¹¹ Chambers’ *Cyclopaedia* and other eighteenth-

⁸ “hypothese,” *Le dictionnaire de l’Académie françoise*, vol. 2, M-Z (Paris: Coignard, 1694), 561.

⁹ “sub-, prefix”. OED Online. September 2021. Oxford University Press. <https://www-oed-com.azp1.lib.harvard.edu/view/Entry/192418?rsk=3z6YOK&result=20&isAdvanced=false> (accessed November 28, 2021).

¹⁰ Ephraim Chambers, *Cyclopaedia, or an Universal Dictionary of Arts and Sciences*, vol. 1, s.v. “hypothesis” (London: [publisher not listed], 1728), (pages unnumbered).

¹¹ Chambers, *Cyclopaedia*, s.v. “hypothesis.” For more information about Newton’s “troublesomely ambivalent legacy” where the hypothesis is concerned, see Ernan McMullin’s essay, “Hypothesis in Early Modern Science” (Heidelberger and Schiemann, *The Significance of the Hypothetical in the Natural Sciences*, 7-38, 32). It is also interesting to note that the term *supposition* has its own history of falsehood. The *Oxford English Dictionary* also states in no uncertain terms that the history of *supposition* is shadowed by less savory meanings than the one listed above, including the “act of passing off one child for another,” “production of a fake document,” “transient discord” (in music), and the “fraudulent attribution of a work of art to an artist who did not produce it” (“supposition, n.”. OED Online. September 2021. Oxford University Press. <https://www-oed-com.azp1.lib.harvard.edu/view/Entry/194705?redirectedFrom=supposition>, accessed November 28, 2021).

century reference works place Newton – rather unfairly, as the Newton scholarship has shown – at one end of a spectrum where hypotheses are concerned, but the focus, by and large, is on the potential for knowledge to be gained through their use.

What one can gather then, based on these examples from French and English texts, is that it is possible to think of the hypothesis in terms of number (which is to say, the hypothesis can refer to a singular statement or to a collective, when understood as a system); as a spatial metaphor (a foundational position by necessity proximate to the subsequent conclusions placed “on top” of it); as a product of the imagination, regardless of whether it is valorized positively or negatively; and as something that, according to some scientific perspectives, exists in tension with observation and experiment. Connecting several of these elements is also the visualization of a hypothesis, an idea which encompasses acts of the imagination as well as pen on paper, where the geometric figure emerges as a different kind of approximation of a pure idea. By contrast, the neologism *Hypothese* takes hold only gradually in German-language writings. It does not merit its own entry in Zedler’s *Universal Lexicon*, which was published between 1731 and 1754, although the word *Hypothese* does appear sporadically in that publication. Johann Lambert’s multi-volume *New Organon*, first published in 1764, offers a more comprehensive view. In a departure from the definitions we have observed in the examples from French and English sources, it first refers to hypotheses as “arbitrary concepts” [*willkürliche Begriffe*] in the volume on dianoiology (the science of the intellectual faculties).¹² *Willkürlich* is a peculiar word in German. In current usage, it refers to things done arbitrarily, randomly, or haphazardly, but the eighteenth-century context is murkier. Adelung defines it first of all as something done deliberately, in such a way that is grounded in ideas [*Vorstellungen*].¹³ The second and third definitions deviate from the first, however: they encompass actions that are grounded purely in willfulness, as opposed to ideas and even actions that are accomplished “according to and based upon unclear ideas [*dunkeln Vorstellungen*], in which sense it is opposed to that which occurs by choice or according to clearly recognized reason.”¹⁴ The use of the word *willkürlich* to refer to hypotheses thereby accomplishes two things: it de-emphasizes the

¹² Johann Lambert, *Neues Organon oder Gedanken über die Erforschung und Bezeichnung des Wahren und dessen Unterscheidung vom Irrthum und Schein*. Vol. 1 (Leipzig: Johann Wendler, 1764), 44.

¹³ See “willkürlich” in Johann Christoph Adelung, *Versuch eines vollständigen grammatisch-kritischen Wörterbuches der hochdeutschen Mundart*, vol. 4 (Leipzig: Johann Gottlob Immanuel Breitkopf, 1780), in col. 230-231.

¹⁴ “willkürlich,” in Adelung, *Versuch*, col. 1151.

heretofore clearly defined spatial configuration (such as one had in the *supposition*) in favor of metaphorical “darkness,” and at the same time it introduces a note of epistemological uncertainty that was, to be sure, always included in the general understanding of the hypothesis, but still not rendered in such stark terms. The tension between these two aspects of the hypothesis – its metaphorical spatiality and epistemological uncertainty – take center stage in a debate between Joachim Campe and Karl Philip Moritz on the status of the German word *Hypothese* that I will discuss below. From Lambert’s perspective, however, the hypothesis’s quality of being “*willkürlich*” remains central, given that he repeats this definition of the hypothesis throughout the *New Organon*: beginning in the first section, “On Concepts and Explanations,” where the context is a theory of nature, and continues to introduce the hypothesis in subsequent sections on physics, mathematics, and astronomy in the third section, as well as in the eighth section, devoted entirely to empirical investigation (“Von der Erfahrung”). The eighth section contains the most elaborate commentary on the hypothesis: what it is (“an arbitrarily assumed concept of a thing, from which [concept] one tries to explain it”) and how you can use it.

Out of Lambert’s wide-ranging remarks on hypotheses, which cover varying requirements for exactitude (greater in mathematics, less in the physical sciences) and the potential usefulness of incorrect hypotheses, along with various tests for proving and disproving the truthfulness of hypotheses, I would like to focus on just one point from the eighth section: the use of the *regula falsi*, the method of false position, better known colloquially as the ‘trial and error’ method.

Lambert refers to this method as an example of how a hypothesis becomes a useful tool, by virtue of the simple example of an arithmetical problem that is solved through a series of increasingly more educated guesses:

[The method of false position] proscribes that one should take any random number instead of the sought after one, and with it so proceed, as if it were the true one. If it fulfills the condition of the problem, then it is at least one of the true ones because sometimes several and, where the problem is indetermined, endlessly many are possible. Should, however, the randomly chosen number not fulfill the condition of the problem, then one sees how [this number] deviates from it, and from the deviation is the number determined which does not deviate at all, and is accordingly the true one or one of the true ones, which satisfies the problem.¹⁵

¹⁵ Lambert, *Neues Organon*, 361-362.

According to this method, the trick to solving at least some mathematical problems is to take, as it were, a shot in the blue sky. Lambert's suggestion to choose "any random number" is echoed in Novalis's "pure, sheer hypothesis": they are essentially one and the same. In a similar manner, Lambert's suggestion that one proceed by quantifying deviations and reducing them through newer, more accurate hypotheses is echoed in Novalis's plea to Schlegel that their path should be one of approximation. For his part, Lambert is well aware of the difficulties involved when trying to apply the method of the *regula falsi* in other areas of scientific inquiry. After a few comments on the more complicated scenario of alphabetic decoding, he suggests that the method works best in those branches of science where the problem at hand has a relatively low number of possible outcomes to test out. These include astronomy, "if one takes the proposition, that either the earth moves, the sun moves, or that they both move."¹⁶ Kepler's revision of the Copernican system is, for Lambert, a case where one uses the *regula falsi* to take an insufficient hypothesis to determine the degree of deviation from the desired results and with it formulate a new, more fitting hypothesis.

Questions concerning the use and abuse of hypotheses in the name of scientific progress linger throughout the eighteenth century and, as will become evident in the second part of the essay, are also a concern in Novalis's appropriation of the hypothesis. The seeds for what will become a Romantic interest in the potentially creative, inventive power of the hypothesis are already present even in the most mainstream scientific publications, such as Johann Gehler's *Physical Dictionary* [*Physikalisches Wörterbuch*], an interdisciplinary compendium of scientific concepts and theories that enjoyed a broad readership. The entry *Hypothese*, like each one in the dictionary, begins with a succinct German definition, followed by the equivalent terms in Latin and French. In this case, they are: "*angenommener Satz, Voraussetzung, Hypothese, Suppositio, Hypothese, Supposition.*"¹⁷ The "*angenommener Satz*" is a proposition that is assumed. *Voraussetzung* is the German translation of the French *Supposition* or Latin *Suppositio*, although the composite prefix "*voraus-*" is somewhat more complicated than "*sup-*," being a prefix that can connote both spatial and temporal priority. One will notice that there is no mention of the "arbitrary concept" or *willkürlicher Begriff* here – nor does the term appear at any point in the entry. Despite that fact, Gehler's subsequent

¹⁶ Lambert, *Neues Organon*, 363.

¹⁷ "Hypothese," in Johann Samuel Traugott Gehler, *Physikalisches Wörterbuch oder Versuch einer Erklärung der vornehmsten Begriffe und Kunstwörter der Naturlehre mit kurzen Nachrichten von der Geschichte der Erfindungen und Beschreibungen der Werkzeuge begleitet in alphabetischer Ordnung*, vol. 2 (Leipzig: im Schwickertschen Verlage, 1789), 675.

discussion of the *Hypothese* jumps directly into metaphors of the hidden and the visible in its first sentence:

The true causes of natural effects and phenomena are often very hidden and cannot be stated with decisive certainty. In such cases one takes refuge in the elucidation of the phenomena to a representation that has merely been thought up; one assumes that the natural occurrence to be elucidated occurs due to this or that cause, in this or that way...¹⁸

The uncertainty of the hypothesis, couched in terms of an “invented” point of view, is central to Gehler’s discussion. He gives the example of Benjamin Franklin’s hypothesis concerning the cause of electrical phenomena: Franklin’s assumption of a “fine material” [*feine Materie*] whose excess or lack thereof correlates to the presence or absence of electrical phenomena is, in Gehler’s words, an “idea, merely thought up by him, whose correctness cannot be proven with certainty, a physical hypothesis.”¹⁹ In a departure from Lambert, for whom hypothesis falls relatively neatly into the categories of true or false, Gehler adds some epistemological fine-tuning when he writes that hypotheses lack apodictic certainty [*Gewißheit*] and instead possess probability [*Wahrscheinlichkeit*]²⁰. The two emphases in Gehler’s discussion of the hypothesis – that they are invented or imagined, and that they possess greater or lesser degrees of probability, rather than certainty – overlap within aesthetic metaphors: “[t]he good hypotheses, even when they are not the truth themselves, still make the connection between occurrences more sensuous.”²¹ The “sensuous” perceptibility of the hypothesis is a component of its epistemological rigorousness: as with any physical construction, visual metaphors can also be tested to ascertain their viability. The gravest abuses are perpetuated by those for whom hypothesis-making becomes something like an uncontrollable desire [*Begierde*] and whose efforts at imagining and visualizing hypotheses lead to an “artificial structure” [*künstliche Gebäude*] of less value than an individual fact.²²

Hypothese vs. Wage-Satz

There are at least two reasons why the incorporation of the word *Hypothese* into the German language did not occur seamlessly. The first has to do with a desire for linguistic purism present throughout the eighteenth century,

¹⁸ “Hypothese,” in Gehler, *Physikalisches Wörterbuch*, 675.

¹⁹ “Hypothese,” in Gehler, *Physikalisches Wörterbuch*, 675.

²⁰ “Hypothese,” in Gehler, *Physikalisches Wörterbuch*, 675.

²¹ “Hypothese,” in Gehler, *Physikalisches Wörterbuch*, 677.

²² “Hypothese,” in Gehler, *Physikalisches Wörterbuch*, 678.

provoked by the concern that too many foreign terms were entering the language where words with Germanic stems would serve just as well or better. The second reason has more to do with semantics: there was disagreement over how to express the two key aspects of the hypothesis – its spatial metaphor of foundation-laying and its connotation of epistemological uncertainty – within a single word. The dissenting points of views were published toward the end of the eighteenth century in a debate between Joachim Heinrich Campe (1746-1818) and Karl Philipp Moritz (1756-1793). Despite occupying a purist’s stance where the German language is concerned, Campe was not generally a conservative thinker. Quite the contrary: he was an admirer of the French Revolution and was even granted honorary French citizenship in 1792. He was passionately devoted to school reform and, as a countermeasure to conservative educational agendas, he founded his own scholastic publishing house. Campe’s preference for words of Germanic origin in his native language can therefore be read from a more democratic perspective, as an attempt to come up with German terms that a common person could understand, rather than as an expression of xenophobia.

In 1790, in a journal founded by him (likewise the publishing house), Campe published a forty-page text titled “Tests of a few Experiments in German Language-Enrichment” [*Proben einiger Versuche von deutscher Sprachbereicherung*], a document which contains numerous suggestions for replacing foreign words with Germanic equivalents. Nestled between the suggestions of transforming *Hippocrene* into *Roßbach* and *Individuum* into *Einzelwesen*, one finds the term *Hypothese*. Campe’s suggestion is to replace *Hypothese* with *Wage-Satz*:

because a hypothesis [*Hypothese*], as hypothesis, is not yet proven, thus there is always something risked [*etwas Gewagtes*] thereby, placing it as a foundation in order to build other propositions upon it. We certainly already have the word presupposition [*Voraussetzung*]; only there are still cases where we would have reservations using it, and for which we still seem to be lacking a proper word; as, for example, when we speak of the hypothesis of predetermined harmony, etc.²³

Campe’s comments make it clear that a shift has occurred over time in terms of how the uncertainty of a hypothesis is expressed, in that metaphors of knowledge coded in terms of darkness or light have been replaced by the

²³ Joachim Heinrich Campe, “Proben einiger Versuche von deutscher Sprachbereicherung,” *Braunschweigisches Journal*, ed. by Ernst Christian Trapp, vol. 3, no. 11, November 1790 (publication location n.a.): im Verlage der Schulbuchhandlung, 1790), 289.

language of uncertainty and probability. The fact that there is nothing about the construction of the word *hypothesis* that denotes the calculations of risk made every time the practice of hypothesis-making occurs is a problem for Campe that is remedied by the introduction of the root *wag-*, meaning risk or dare. Some of his readers, however, felt that the neologism *Wage-Satz* went too far. In a 1792 rebuttal directed towards Campe’s broader efforts to keep the German language Germanic, Karl Philipp Moritz takes particular issue with Campe’s rejection of the neologism *Hypothese*. The problem, according to Moritz, is that *Wagesatz* “only expresses one part of the concept...namely the sheer *uncertainty* of a presupposition.”²⁴ Moritz points out that the etymology of the word [hypothesis], with its Greek origins, represents the presupposition “as a *foundation*, whereupon one *builds* a consequence that is *certain* as long as the foundation remains firm.”²⁵ The conclusion Moritz draws is that any element of uncertainty in the hypothesis only lies in the initial presupposition, and not in what one builds upon it. The kind of uncertainty Moritz has in mind is distinct from what has been observed so far because it has more to do with the creative, fiction-generating quality of the presupposition as action than with epistemological determinations of content.

Moritz died a year after his rebuttal of Campe was published, allowing Campe the opportunity to have the final word. In 1801, Campe printed a “supplemental volume” to Adelung’s well-established German dictionary. This additional volume was billed as a *Dictionary for the Elucidation and Germanizing of Foreign Expressions That Have Encroached Upon Our Language* [*Wörterbuch zur Erklärung und Verdeutschung der unserer Sprache aufgedrungen fremden Ausdrücke*]. With regard to the *Hypothese/Wagesatz* debate, the volume mostly contains a summary of what has come before. Campe reiterates his suggestion to use *Wagesatz* instead of *Hypothese* and makes reference both to writers who support him and to Moritz’s rebuttal. Campe offers a (somewhat belated) response by turning Moritz’s own logic against him: just as Moritz accuses Campe of preserving the element of uncertainty at the expense of leaving out the notion of a foundation, Campe points out that, Moritz’s comments notwithstanding, *Voraussetzung* is all foundation and no uncertainty. In fact, he writes, the Greek term also makes the same “mistake.” Campe proposes to resolve the problem by asking, which of the two options is the most necessary and whether one even needs to have all

²⁴ Karl Philipp Moritz, “Ueber die bisherigen Beschäftigungen der akademischen Deputation zur Kultur der vaterländischen Sprache,” in *Deutsche Monatsschrift* (Berlin: Friedrich Vieweg dem Älteren, Sept.-Dec. 1792), 286.

²⁵ Moritz, “Ueber die bisherigen Beschäftigungen,” 286.

aspects of the meaning of a word expressed in its parts. In a somewhat circular logic, he observes that the existence of the word *Hypothese* itself proves just the opposite. His solution, ultimately, is to utilize *Wagesatz* for those cases where the uncertainty of the proposition is emphasized, and *Voraussetzung* for those where the act of foundation-laying is dominant. With little exception, Campe's suggestions are largely ignored by the greater hypothesis-building community. If one looks hard enough, though, one can find a few traces. The chemist Jacob Joseph Winterl, for example, uses both *Hypothese* and *Wagesatz*: the former to lay the foundation for his argument, and the latter, admittedly tucked away in a footnote, within a situation of experimental uncertainty. Such cases are the exception that proves the rule: the *Hypothese* has taken root in the German language, to the general exclusion of the *Wagesatz*.

Part Two: The Romantic Hypothesis

Even though the *Wagesatz* has no role to play in early German Romantic writings, the element of risk-taking, whether in the form of a wild shot or a cast net, will prove to be a formative component of how Schlegel and Novalis incorporate the term hypothesis into their writings. Before turning to Schlegel and Novalis, the next few pages will take a brief look at Schelling's nature-philosophical system as a model for how to navigate between the largescale perspective of the hypothesis as system and the more focused discussions of individual hypotheses. I then turn to Novalis and Schlegel's notes and fragments to show how aspects of the hypothesis which are already present in the philosophical and scientific contexts of the eighteenth century are reworked and re-evaluated. The decision to limit the discussion to Novalis and Schlegel is motivated, at least in part, by the desire to show that the process of hypothesis-formation is innately compatible with the experimental thinking displayed by these two writers in their notes, aphorisms, and essays. As will be shown, there is a strong and consistent early Romantic argument for the necessity of hypotheses in philosophical, scientific, and aesthetic contexts. The notion of a "thought up" representation (Gehler), treated somewhat cautiously by Enlightenment-era thinkers, is now given full rein, and the epistemological emphasis on "making" or "inventing" knowledge is valued positively. It will also be discussed below how such ideas are not articulated by suppressing earlier notions of doubt as contained in the meaning of hypothesis and its heuristic use. Rather, the drive to create hypotheses occurs and is expressed dialogically, in explicit tension with questions of truth and falsehood.

Friedrich Schelling, a familiar presence in the textual landscape of Schlegel’s and Novalis’s philosophical explorations, stands out for his far-reaching engagement with the hypothesis. In two of his nature-philosophical treatises, *Ideen zu einer Philosophie der Natur* [Ideas for a Philosophy of Nature] (1797) and the *Weltseele* [World Soul] (1798), Schelling provides ample evidence for a philosophical understanding of the hypothesis that operates across scale.²⁶ The primary hypothesis that Schelling analyzes in the first section of the *Ideen* is first introduced as a claim (*Behauptung*) that warmth is a “mere modification” of light, an idea that Schelling has already tested out in conjunction with a few empirical examples.²⁷ The move from claim to hypothesis occurs within the act of broadening the inquiry: “One can ask: whether the aforementioned hypothesis is so easily joined with all light phenomena as it is with the empirical examples introduced above.”²⁸ The plasticity of a hypothesis can also be defined in other ways, such as in cases of failure. Schelling acknowledges, for example, that even if the propagation of light has not yet been successfully explained, this is still no reason to abandon the hypotheses that have been generated during the process of investigation, since “it may be that all those hypotheses are *equally* false, and that a common error is the basis of all of them.”²⁹ Schelling also uses the word “presuppose” as a noun (*Voraussetzung*) and as a verb (*voraussetzen*) in close proximity in those contexts where the hypothesis is also invoked. He suggests that one might “presuppose” that light plays one of the fundamental roles in nature and that the “presupposition” is confirmed by assumptions which can be ventured about the formation of the planetary system we inhabit, including Kant’s “hypothesis” [*Hypothese*] about the early development of our planet from its original fluid and gaseous states.³⁰ For Schelling,

²⁶ This aspect of Schelling’s thinking receives a more detailed analysis in Dalia Nassar’s *The Romantic Absolute. Being and Knowing in Early German Romantic Philosophy (1795-1804)* (Chicago: University of Chicago Press, 2013), 206-208. Nassar shows how Schelling’s initial approach to the hypothesis (that “every experiment must be guided by a hypothesis,” and that “the hypothesis acts as the regulative idea of the experiment”) were undertaken with the goal that one should “arrive at the idea of nature itself” (206-7). She then shows how these thoughts lead Schelling to the idea of the “absolute hypothesis,” which functions “as the ground of the system as a whole and as such is the basic premise upon which the knowledge of nature is based” (207), ideas which are given elaborate philosophical grounding in Nassar’s reading.

²⁷ Friedrich Wilhelm Joseph Schelling, *Ideen zu einer Philosophie der Natur*, in *Historisch-Kritische Ausgabe* (=AA), im Auftrag der Schelling-Kommission der Bayerischen Akademie der Wissenschaften, eds. H. Michael Baumgartner, Wilhelm G. Jacobs, Jörg Janzen, Hermann Krings, vol. 1.5, (Stuttgart: Frommann-Holzboog, 1994), 16.

²⁸ Schelling, *Ideen*, 16.

²⁹ Schelling, *Ideen*, 30.

³⁰ Schelling, *Ideen*, 31-32.

the Kantian hypothesis is interesting, among other reasons, for its potential to be extended to the formation of the planetary system as a whole.³¹

The characteristics of Schelling's handling of the hypothesis, including the desire to utilize it to its fullest potential and expand its reach, as established in the *Ideen*, are further developed in the *Weltseele*, which bears the subtitle: "a hypothesis about higher physics" [*eine Hypothese zur höhern Physik*]. R. J. Richards comments that Schelling's hypothesis about the world-soul "implied that all of nature was bound together as a living balance of forces," and positioned as it is with reference to the work as a whole, this use of the hypothesis also recalls its other meaning as a synonym for system.³² Schelling makes this connection clear in the first section of his treatise, when he refers to the interplay of positive and negative forces essential to all worldly phenomena: "both of these conflicting forces, taken together, or envisioned in conflict, lead to the idea of an *organizing principle*, forming the world into *system*. The ancients wanted perhaps to indicate such a [principle] through the *world soul*."³³ The terms "System" and "*first hypothesis*"³⁴ in this treatise are interconnected, but the *Weltseele* also allows room for other, more focused hypotheses to receive individual attention, such as Franklin's hypothesis about positive and negative electrical material³⁵ or Schelling's own hypothesis about barometric changes.³⁶ As in the *Ideen*, there is also the potential to move along the spectrum from hypotheses about specific phenomena to the all-encompassing hypothesis of the world soul – Schelling would like for Newton's and Euler's followers to join forces, in order to see their perspectives as complementary and able to be joined into a single hypothesis.³⁷ One can hear echoes of this sentiment in how Friedrich Schlegel and Novalis approach the hypotheses. In a collection of notes dated from the time between August 1799 through February 1800 – roughly a year or two after the publication of Schelling's *World Soul*, Novalis explores a line of thought that resonates with Schelling's understanding of the hypothesis: "Just as the thinking *experimenter* seeks thoughts or ideas, that is, laws in nature, so too does the *philosopher* seek to develop the unity of the laws or of the system of

³¹ Schelling, *Ideen*, 32.

³² Richards, "Romantic Biology: Carl Gustav Carus at the Edge of the Modern," in *Palgrave Handbook of German Romantic Philosophy*, ed. by Elizabeth Millán Brusslan (New York: Palgrave Macmillan, 2020), 350.

³³ Friedrich Wilhelm Joseph Schelling, *Von der Weltseele – eine Hypothese der höhern Physik zur Erklärung des allgemeinen Organismus*, AA, vol. 1.6, 4.

³⁴ Schelling, *Weltseele*, x.

³⁵ Schelling, *Weltseele*, 90.

³⁶ Schelling, *Weltseele*, 149.

³⁷ Schelling, *Weltseele*, 13.

thought to a rich manifold. Both can make the most glorious discoveries by pursuing *hypotheses*.”³⁸

Schlegel's Hypotheses

Unlike Schelling, Friedrich Schlegel is no system-builder. Like Schelling, however, Schlegel develops a way to bridge between focused and more sweeping perspectives on the hypothesis. Throughout his notebooks, the hypothesis appears sporadically in the context of a number of famously laconic definitions, but in only one of these – “hypothesis is [mythological] proposition”³⁹ – does it occupy the subject position. Other statements formulate comparisons to hypotheses, granting it a metaphorical status by positioning it as a predicate: “Every fact is hypothesis, of course”⁴⁰; “Speculation perhaps nothing other than a hypothesis in the spirit of universality.”⁴¹ This latter example dates from 1798, the same year that Friedrich Schelling published his treatise on the *Weltseele* [World Soul] – one will recall that Schelling also refers to his *Naturphilosophie* as a “speculative physics.” In other short statements, Schlegel focuses on various aspects of the hypothesis, in order to articulate something essential about its nature, and its limits. Here are just a few examples:

In every hypothesis the *primitive* is certainly true, if also poorly expressed.⁴²

Observation of the phenomena must be the spirit of every depiction, and examination of the hypothesis has to be the character of the investigation [*Abhandlung*].⁴³

Phenomenon is that which deviates from a hypothesis.⁴⁴

Collectively, these can be read as steps in a method, where by the first is the generation of the hypothesis as an imperfect statement that attempts to capture something true, the second is the comparison of the hypothesis to the phenomena to measure correlations and deviations, and the third is the

³⁸ HKA 3, 611, 344.

³⁹ Friedrich Schlegel, *Philosophische Lehrjahre*, in *Kritische Friedrich-Schlegel-Ausgabe* (=KFSÄ), vol. 18, eds. Ernst Behler, Jean-Jacques Anstett, Hans Eichner (Munich et al.: Schönningh, 1963), 51, 332.

⁴⁰ KFSÄ 18, 131, 107.

⁴¹ KFSÄ 18, 131, 108.

⁴² KFSÄ 18, 168, 528.

⁴³ KFSÄ 18, 221, 323.

⁴⁴ KFSÄ 18, 306, 1345.

(idealized) description of this process in essayistic form. In his acknowledgement of the hypothesis's incomplete nature, Schlegel also makes the connection to the incomplete nature of systems: "materialism and spiritualism are only *hypotheses*; idealism and realism are only *aspects of the system*, profiles, perspectives."⁴⁵

However, in two more programmatic statements on the hypothesis, located in close proximity to one another in Schlegel's notebooks, he gives more attention to what the hypothesis can be and what it can do:

The *hypothesis* of Idealism is that of *love*; the only hypothesis which is at the same time *experiment*; a presupposition which we always make, the presupposition of our self. <Only [the hypothesis] loosens the knot between *thinking* and *acting*. – In order to resolve this strife, we must sublimate thinking and acting *experimentally*; since nothing remains other than the *infinite* and also *consciousness* <*love striving*> – or a [synthesis] of both.>⁴⁶

This note takes up threads that are by now familiar: as observed before in other contexts, the hypothesis is equated with the presupposition (*Voraussetzung*), which conjures images of both a spatial and temporal priority. It is also connected to the "experiment," a concept featured in other statements on the hypothesis.⁴⁷ At the same time, this programmatic statement also makes claims to singularity. Rather than positing a universal hypothesis in Schelling's sense, Schlegel describes the hypothesis of Idealism: as "[hypothesis] of love." It is the only one, Schlegel writes, which is an experiment at the same time. That this particular hypothesis is tasked with unraveling "the knot between *thinking* and *acting*" adds to this sense of uniqueness given that it is accomplished "experimentally" (*Versuchsweise*, where *Versuch* is another word for experiment). In other words, the uniqueness of this description of the hypothesis lies in the fact that Schlegel

⁴⁵ KFSa 18, 33, 150.

⁴⁶ "Die *Hypothese* des Id[ealismus] ist die der *Liebe*; die einzige H[ypothese] die zugl[eich] *Experiment* ist; eine Voraussetzung die wir immer machen, die Voraussetzung unsrer selbst. <Nur diese löst d[en] Knoten zwischen *Denken* und *Handeln*. – Um diesen Streit zu heben, müssen wir *Versuchsweise* Denken und Handeln aufheben; da bleibt nichts übrig als das *Unendliche* und auch *Bewußtseyn* <*Liebe Streben*> – oder eine [Synthese] von beiden.>," KFSa 18, 404, 1000.

⁴⁷ The same note that calls a fact a hypothesis also aligns the fact with mystery and experiment (KFSa 18, 131, 107). Another note suggests that Fichte's philosophy is both hypothesis and experiment (KFSa 18, 251, 684), and a third draws a correlation between hypothesis, experiment, and phenomenon (KFSa 18, 405, 1015). See also Lothar Pikulik, *Frühromantik: Epoche, Werke, Wirkung* (Munich: C.H. Beck, 2000²), 103, on the proximity of hypothesis and experiment in Early German Romanticism.

mobilizes it in the service of a second-order thought experiment: a thought experiment about the relation of thought to action.

To read Schlegel’s second programmatic statement on the hypothesis in tandem with the first one – something that lends itself naturally, given that it follows immediately on the tail of the first – is to be confronted with a significant difference in scale. No longer concerned with a particular hypothesis, Schlegel instead engages in a Cartesian exercise of annihilation and reconstruction that aligns the hypothesis with a primary intellectual act. It is, in that regard, a logical continuation of the thought experiment suggested by the prior reflection on the hypothesis:

In the theory of the world, nothing is necessary except annihilating matter and space and reducing everything to time and activity. With every repetition of the original hypothesis one of the first acts is also joined. – This hypothesis is the foundation of thinking, really thinking itself. – *Act and the hypothesis* form a *lever*, *faith* is the hypomochlion. Exchange of the poles – makes the act into hypothesis and the hypothesis into act. What is *limited* must be dissolved [*aufgelöst*] into that which determines, just as *matter* and *space* must be destroyed.⁴⁸

For Descartes, the one certain thing left after tearing down everything else – the philosophical Archimedean point – is the certainty of oneself as a thinking thing. For Schlegel, it is also a model inflected with a kind of primitive mechanical metaphoricity as embodied by a lever, a figure which Early German Romanticism also aligns with a model of the self.⁴⁹ In the scenario constructed by Schlegel’s example, the lever is mobilized when action occurs in the form of thought, and where thought takes the form of hypothesis. The relation between these terms makes sense when one recalls that the logic of the lever is one of equivalence: the force applied to one arm of the lever at a certain distance from the fulcrum can be reconceived in terms of the forces being applied to the other arm. Schlegel, Novalis, and other Romantic-era thinkers take this mechanical logic of equivalence and rework it in frameworks which allow relationships between diverse concepts to be established; one finds numerous examples in Schlegel’s and Novalis’s planned encyclopedia project. According to the mode proposed in the above note, one can further interpret the lever as positing a mutually dependent relationship of hypothesis and act such that these two terms are inextricable

⁴⁸ KFS 18, 404, 1002.

⁴⁹ In my book, *The Lever as Instrument of Reason: Technological Constructions of the Human* (London: Bloomsbury, 2019), I explore this idea in greater depth, drawing on examples from Kant, Early German Romanticism, *Naturphilosophie*, and empirical psychology around 1800.

from one another, bound within a broader trajectory of thought that takes as its point of departure an original hypothesis and all subsequent iterations of further hypotheses. Schlegel makes the metaphysical grounding of this mechanical model very clear by placing faith at the fulcrum point or “hypomochlion,” i.e., the position of mediation, between act and hypothesis.

Towards a Conclusion: Approximation and Divergence

By bringing Schlegel’s and Novalis’s thoughts about the hypothesis into dialogue with one another in this final section, the essay will essentially conclude where it began: with the question of approximation or divergence between two friends. This time around, the question will be posed more concretely in terms of the hypothesis and answered in a way that, in true Romantic fashion, manages to both preserve and escape the binary logic of either/or. And just as the initial exchange of letters between Schlegel and Novalis staged a fictional communication, each of the two examples discussed below appear in the fictional guise of conversation or dialogue, whereby the first is from Novalis’s *Dialogues*, and the second is from Schlegel’s *Dialogue on Poetry*.

It is perhaps good to keep in mind that, compared to Schlegel, Novalis wrote relatively little about the hypothesis. One would imagine the *Fichte Studies* to be another fruitful source, but the word hypothesis appears there only once, albeit in a thought-provoking note: “To presuppose [*Voraussetzen*] is a very welcome expression. Positing [*Setzen*] has to be used in the sense that it is in the expression: I posit the case. It is the action of the hypothesis [*Hypothese*].”⁵⁰ Novalis’s best known use of the hypothesis comes from the fifth of his *Dialogues*, composed in late summer 1798. This dialogue is also well-known for its statement “princes are zeroes,” and it is sometimes read

⁵⁰ HKA 2, 199, 282. For a reading of this passage, see Joan Steigerwald’s essay, “Traces of Novalis in Schelling’s Philosophy,” in *Schelling’s Philosophy. Freedom, Nature, and Systematicity*, ed. by Anthony Bruno (Oxford: Oxford University Press, 2020), 32—52. As Steigerwald writes, “The I can only cognize what it is in the sphere of conscious reflection. Yet ‘what I do not know, but feel [...] I believe.’ Novalis’ reference to belief is not meant to denote an act of faith; rather it is the projective act of hypothesis we can only feel or presuppose. In characterizing Fichte’s principle ‘I am I’ as an ‘illusory proposition’ and the original act of self-positing as a presupposition, Novalis highlighted its character as a belief or hypothesis we project” (35). For more on the hypothesis in the context of the *Wissenschaftslehre*, see Jeffery Kinlaw, “Self-Determination and Immediate Self-Consciousness in the Jena *Wissenschaftslehre*,” in *Fichte and Transcendental Philosophy*, ed. by Tom Rockmore, Daniel Breazeale (New York: Palgrave Macmillan, 2014), 176—189, where Kinlaw describes how “Fichte defends a unified and comprehensive explanatory hypothesis for consciousness. The structure and content of all intentional relations are initiated and grounded upon the free self-activity of what Fichte calls the I” (176).

in conjunction with *Faith and Love*, which was published the following year. As in the other dialogues, there are two speakers, A and B, whose personas and topics of interest shift somewhat between one dialogue and the other. A and B are, by definition, never in accord with one another, and in the fifth dialogue this structural divergence manifests in a disagreement about hypotheses. A uses his own hypothesis, “princes are zeroes,” as a point of departure for a broader inquiry about the status of hypotheses in general, and he makes two claims: that a “single truly observed fact” is worth more than any hypothesis; and that the impulse to keep producing new hypotheses is a morally risky one, a “scientific wantonness” that dulls one’s sense of truth.⁵¹ B then speaks up both poetically and prosaically in favor of the hypothesis, beginning with two distiches that reintroduce the theme of the hypothesis’s eternal regeneration:

Hypotheses are nets, only he catches who casts.
Is not America itself discovered by hypothesis?
Let the hypothesis live high and above all else – only it remains
Eternally new, as long as it may keep conquering itself.⁵²

The metaphor of the net is new for Novalis in connection with the hypothesis, but the essential gestures of casting and recasting, and learning from one’s mistakes, should seem familiar by now where hypotheses are concerned, given that we have already seen the same idea expressed in somewhat different terms by both Lambert and Schlegel. B continues, in prose, to elaborate on the usefulness of hypotheses. He leads with a derogatory remark about “the skeptic” who attempts to weaken the ground upon which structures of knowledge might be erected without making any direct contri-

⁵¹ HKA 2, 668. For more background on Early German Romanticism’s understanding of the “fact,” see my essay, “Facts Are What One Makes of Them: Constructing the Faktum in the Enlightenment and Early German Romanticism,” in *Fact and Fiction. Literary and Scientific Cultures in Germany and Britain*, ed. by Christine Lehleiter (Toronto: University of Toronto Press, 2016), 33–49. For an analysis of the point of view adopted by Speaker A, see Pikulik, *Frühromantik*, 104. Pikulik notes that Speaker A’s rejection of the hypothesis goes quite a bit further than the mainstream scientific position at that time.

⁵² HKA 2, 668. Daiber uses this passage from Novalis as an example for how Novalis uses the “via negationis” to use discrepancies between subsequent hypotheses and “proven reality” to come closer and closer to the truth; Daiber, *Experimentalphysik des Geistes. Novalis und das romantische Experiment* (Göttingen: Vandenhoeck & Ruprecht, 2001), 253. The model of the hypothesis that Daiber has in mind – a “syntactically well-formed, semantically meaningful, generalizable statement” – would, however, not necessarily include Novalis’s “Schuß in die blaue Luft” (Daiber, *Experimentalphysik*, 18).

bution to science,⁵³ but for the “hypothetician” [*Hypothetiker*], B has more positive words:

The true hypothetician is none other than the inventor – before whose eyes the discovered land darkly hovers prior to his invention – who hovers with the dark image over observation, [over] experiment – and only through free comparison – through manifold touch and friction of his ideas with experience finally encounters the idea which relates negatively to positive experience, so that both eternally hang together – and a new heavenly light should radiate around the force that has come to the world.⁵⁴

Even if B has the last word – and, in general, more words – in this dialogue than A does, one can still observe that B’s response does not leave A’s claims behind altogether. Instead, A’s inherent resistance to hypotheses in favor of facts, which A posits in terms of a preference for truth over fiction, is incorporated into B’s response as a second, embedded dialogue between the skeptic and the hypothetician. B then synthesizes these two positions into a productive encounter of negative and positive that brings a new light and new force to the world. The dialogue thereby preserves both the distinction of two philosophical positions through the offset paragraphs of A and B, even as it, one narrative frame deeper into the text, offers the possibility, through repeated encounters, of a reconciliation between the two.⁵⁵

The *Dialogues* do not contain Novalis’s final words on the hypothesis. One can find two further notes in the collection *Fragments and Studies* that have been dated from August 1799 to February 1800. These notes hearken back to the positions articulated by both A and B: first, by suggesting that both the “thinking experimenter” and the philosopher can make the “most brilliant discoveries” through the “pursuing of *hypotheses*”⁵⁶; then, by proposing that the basis of nature is “necessary hypothesis.”⁵⁷ This second note does more than capture the ideas mentioned in the “prosaic” part of B’s response – its first line also recalls the poetic metaphor about hypotheses as nets: “Die Natur fängt, um mich so auszudrücken mit dem Abstracten,

⁵³ HKA 2, 668. Pikulik also underscores the fact that Speaker B’s Romantic perspective does not preclude the acquisition of knowledge (*Frühromantik* 104).

⁵⁴ HKA 2, 669.

⁵⁵ With its emphasis on balancing and reconciling a plurality of voices, my reading agrees with the concluding remarks John Neubauer makes in his essay, “Nature as Construct,” in *Literature and Science as Modes of Expression*, ed. Frederick Amrine (Dordrecht et al.: Kluwer, 1989), 129–140: “If we take the plural voice of this dialogue seriously, we may perceive in it a recognition of, if not a plea for, methodological pluralism” (138).

⁵⁶ HKA 3, 611, 344.

⁵⁷ HKA 3, 667, 607.

an.”⁵⁸ Even more striking is the fact that, with the pairing of two closely related verbs, *fangen* and *anfangen*, one has a neat inversion of human and nature: the human casts and catches [*wirft* and *fängt*], and with each hypothesis hopes to learn a bit more about nature whereas nature, as primary hypothesis, simply begins [*fängt an*].

These last two notes by Novalis on the hypothesis were published posthumously, but they were written around the same time as a statement by Schlegel which occurs in one of his best known poetological works, the *Dialogue on Poetry (Gespräch über die Poesie)*.⁵⁹ Though not his final word on the hypothesis within the broader context of his philosophical notes and other writings, the passage on the hypothesis in this essay is notable for the way in which it formulates the hypothesis in terms of converging divergences. Readers familiar with this essay will recall that it is staged as a conversation among several friends, one of whom, Ludovico, holds a lengthy discourse on what he describes as a “new mythology.” In the wake of his contribution, the conversation turns to the question of a unified view of the arts and sciences.⁶⁰ Another speaker, Lothario, voices an opinion that finds general consensus: that “the innermost mysteries [*Lebenskeime*, or “life seeds, J.H.] of all the arts and all knowledge are therefore a possession of poetry.”⁶¹ He continues: “Everything has emerged from it and must flow back to it.”⁶² The accompanying idea is a familiar trope of German Romanticism: that our current state is fractured, but ideally all knowledge and all arts would be “one” and articulated poetically. Ludovico agrees with Lothario and restates their shared idea in terms of the hypothesis. His comments are, accordingly, rooted in the postlapsarian perspective, after the original unity of arts and sciences has been shattered. In the current moment, however, one can witness a rapprochement:

I am of Lothario’s opinion that the energy of all the arts and knowledge meets at one central point...I prefer physics also for the reason that the

⁵⁸ This is how the line is printed in the standard Novalis edition. In many other places, however, one finds: “Die Natur fängt, um mich so auszudrücken, mit dem Abstracten an.”

⁵⁹ KFSA 2, 284—362; cf. Friedrich Schlegel, *Dialogue on Poetry and Literary Aphorisms*, translation and introduction by Ernst Behler and Roman Struc (University Park and London: Pennsylvania University Press, 1968).

⁶⁰ Herbert Uerlings paraphrases the project of the ‘New Mythology’ as making totality able to be experienced “under the conditions of modernity”; this is possible by making scientific processes symbolic, “through which the individual and the idea of the whole, the particular and the general” are mediated, Herbert Uerlings, “Jenaer Romantik/Frühromantik: Novalis, Schelling, Schleiermacher, Tieck,” in *Friedrich Schlegel Handbuch. Leben–Werk–Wirkung*, ed. by Johannes Endres (Stuttgart: J. B. Metzler, 2017), 54.

⁶¹ Schlegel, *Dialogue*, 90.

⁶² Schlegel, *Dialogue*, 90.

connection here is most visible. Physics cannot conduct an experiment without a hypothesis, and every hypothesis, even the most limited, if systematically thought through, leads to hypotheses of the whole, and depends on such hypotheses even if without the conscious knowledge of the person who uses them.⁶³

This passage ties together multiple threads. It serves as a reminder that the activity of science (via the experiment) and poetic creativity (indexed, in this case, by the hypothesis) occur in tandem. Even though the discursive context of the hypothesis may be one of fragmentation, it symbolizes a unifying point that conjoins scientific experimentation with poetic creativity, thereby indexing both the originally unified state from which the world has departed and the ideally unified one which is yet to come. It also situates this activity within a broader mythic/historical context of unification. And in the unconscious, unaware actions of the hypothesis-user, it recalls the wild “shot into blue air” which is the arbitrary starting point of the more conscious work that brings two apparently diverging objects into the convergence which is innately theirs to begin with.

Elements from earlier eighteenth-century discussions of the hypothesis – the idea of uncertainty, of something risked, of a tentative foundational gesture that is merely one in a series of steps – return, transformed, in the worldview of Early German Romanticism. Novalis’s image of a “shot in the blue air” unwittingly taps into the production of hypotheses through the *Regel falsi*, an arbitrary shot – or cast of the net – that leads to ever better approximations. Schlegel and Novalis’s notes and fragments allow for such gestures to function across scale, from the hypotheses produced by particular schools of thought, such as Idealism, to broader reflections about nature as a whole that is characteristic of Romantic *Naturphilosophie*. The poetological writings of Schlegel and Novalis – in this case, the *Dialogues* and *Dialogue on Poetry* – integrate multiple points of view about the hypothesis. These perspectives are allowed to coexist, but they are not unified – the emphasis is on a current state of coming into contact within a long history of past and future unity. In retrospect, then, the correspondence between Schlegel and Novalis that reflects on the status of their friendship lends itself to being read as if Schlegel and Novalis unwittingly and unconsciously personify the tendencies that will later be codified in their poetological works – a dual perspective that allows for perspectives of convergence and divergence, coupled with the longing for ever greater proximity.

⁶³ Schlegel, *Dialogue*, 90.

List of Works Cited

- Campe, Joachim Heinrich. “Proben einiger Versuche von deutscher Sprachbereicherung,” *Braunschweigisches Journal*, ed. Ernst Christian Trapp, vol. 3, no. 11. [Publication location n.a.]: Im Verlage der Schulbuchhandlung, November 1790, 257–296.
- Daiber, Jürgen. *Experimentalphysik des Geistes. Novalis und das romantische Experiment*. Göttingen: Vandenhoeck & Ruprecht, 2001.
- Gehler, Johann Samuel Traugott. *Physikalisches Wörterbuch oder Versuch einer Erklärung der vornehmsten Begriffe und Kunstwörter der Naturlehre mit kurzen Nachrichten von der Geschichte der Erfindungen und Beschreibungen der Werkzeuge begleitet in alphabetischer Ordnung*, vol. 2, from Erd to Lin. Leipzig: Schwickert, 1789.
- von Hardenberg, Friedrich (Novalis). *Schriften*, ed. Richard Samuel, Hans-Joachim Mähl, and Gerhard Schulz, 6 vols. Stuttgart: W. Kohlhammer, 1960-...
- Heidelberger, Michael, and Schiemann, Gregor, eds. *The Significance of the Hypothetical in the Natural Sciences*. Berlin, New York: Walter de Gruyter, 2009.
- “hypothesis,” in Ephraim Chambers *Cyclopaedia, or an Universal Dictionary of Arts and Sciences*, vol. 1. London: [publisher not listed], 1728.
- “hypothese,” *Le dictionnaire de l’Académie française*, vol. 2, M-Z. Paris: Coignard, 1694.
- “Hypothese,” in Johann Samuel Traugott Gehler, *Physikalisches Wörterbuch*, vol. 2, from Erd to Lin. Leipzig: im Schwickertschen Verlage, 1789.
- “hypothesis,” in Joseph Raphson [sic], *A Mathematical Dictionary: or, a Compendious Explication of all Mathematical Terms, Abridg’d from Monsieur Ozanam, and Others. With a Translation of his Preface; and an Addition of several easie and useful Abstracts*. London: J. Nicolson, T. Leigh, and D. Midwinter, 1702.
- Kinlaw, Jeffery. “Self-Determination and Immediate Self-Consciousness in the Jena *Wissenschaftslehre*,” in *Fichte and Transcendental Philosophy*, eds. Tom Rockmore and Daniel Breazeale. New York: Palgrave Macmillan, 2014, 176–189.
- Lambert, Johann Heinrich. *Neues Organon oder Gedanken über die Erforschung und Bezeichnung des Wahren und dessen Unterscheidung vom Irrthum und Schein*, vol. 1. Leipzig: Johann Wendler, 1764.
- Moritz, Karl Philipp. “Ueber die bisherigen Beschäftigungen der akademischen Deputation zur Kultur der vaterländischen Sprache,” *Deutsche Monatsschrift*. Berlin: Friedrich Vieweg the elder, Sept.–Dec. 1792, 282–288.
- Nassar, Dalia. *The Romantic Absolute: Being and Knowing in Early German Romantic Philosophy (1795-1804)*. Chicago and London: University of Chicago Press, 2013.
- Neubauer, John. “Nature as Construct,” in *Literature and Science as Modes of Expression*, ed. Frederick Amrine. Dordrecht, Boston, London: Kluwer, 1989, 129–140.

- Pikulik, Lothar. *Frühromantik: Epoche, Werke, Wirkung*. 2nd edition. Munich: C. H. Beck, 2000.
- Richards, Robert J. "Romantic Biology: Carl Gustav Carus at the Edge of the Modern," in *Palgrave Handbook of German Romantic Philosophy*, ed. Elizabeth Millán Brusslan. New York: Palgrave Macmillan, 2020, 347–374.
- Schelling, Friedrich Wilhelm Joseph. *Ideen Zu Einer Philosophie Der Natur* (1797). *Historisch-Kritische Ausgabe*, series 1, volume 5, ed. Manfred Durner. Stuttgart: Frommann-Holzboog, 1994.
- Schelling, Friedrich Wilhelm Joseph. *Von der Weltseele – eine Hypothese der höhern Physik zur Erklärung des allgemeinen Organismus* (1798). *Historisch-Kritische Ausgabe*, series 1, volume 6, ed. Jörg Jantzen. Stuttgart: Frommann-Holzboog, 2000.
- Schlegel, Friedrich. *Dialogue on Poetry and Literary Aphorisms*. Ernst Behler and Roman Struc, translation and introduction. University Park and London: the Pennsylvania State University Press, 1968.
- Schlegel, Friedrich. *Philosophische Lehrjahre I. Kritische Friedrich-Schlegel Ausgabe*, volume 18, ed. Ernst Behler, Jean Jacques Anstett, and Hans Eichner. Munich: F. Schöningh, 1958.
- "sub-, prefix". OED Online. September 2021. Oxford University Press. <https://www-oed-com.azp1.lib.harvard.edu/view/Entry/192418?rskey=3z6YOK&result=20&isAdvanced=false> (accessed November 28, 2021).
- Steigerwald, Joan. "Traces of Novalis in Schelling's Philosophy," in *Schelling's Philosophy. Freedom, Nature, and Systematicity*, ed. G. Anthony Bruno. Oxford: Oxford University Press, 2020, 32–52.
- "supposition, n.". OED Online. September 2021. Oxford University Press. <https://www-oed-com.azp1.lib.harvard.edu/view/Entry/194705?redirectedFrom=supposition> (accessed November 28, 2021).
- Uerlings, Herbert. "Jenaer Romantik/Frühromantik: Novalis, Schelling, Schleiermacher, Tieck," in *Friedrich Schlegel Handbuch. Leben – Werk – Wirkung*, ed. Johannes Endres. Stuttgart: J. B. Metzler, 2017, 51–55.
- Uerlings, Herbert. "Novalis und die Wissenschaften. Forschungsstand und Perspektiven," in *Novalis und die Wissenschaften*, ed. Herbert Uerlings. Tübingen: Max Niemeyer Verlag, 1997, 1–22.
- "willkürlich," in Johann Christoph Adelung, *Versuch eines vollständigen grammatisch-kritischen Wörterbuches der hochdeutschen Mundart*, vol. 4, from Sch to V. Leipzig: Johann Gottlob Immanuel Breitkopf, 1780.