THE LOGIC OF GERMAN MONISM AND THE U.S. PUBLIC SCHOOLS: A PHILOSOPHICAL INQUIRY

Benjamin H. Welsh
Morgan State University

Introduction

My sixth grade teacher, Mrs. Hunter, showed me that adults who held positions of power over children could be duplicitous. After several uneventful months, she started singling me out in hurtful ways for no apparent reason. On top of the established threat of being paddled arbitrarily, Mrs. Hunter started to humiliate me in front of my classmates and give me lower grades than I had ever gotten before. The toxic combination shattered my self-esteem and my faith in the adult world for years to come. But, in the ashes of that devastating experience was the seed for my future career as critical scholar, including a life-long fascination with duplicity in public education.

More than two decades later, I was able to forgive Mrs. Hunter. Through my graduate coursework in educational foundations, I learned that public school teachers were frequently expected to solve intractable social problems originating outside of the schoolhouse, and Mrs. Hunter had been no exception. In fact, she was just one of many Southern black teachers practicing in the late 1960s who had been expected to resolve within their classrooms centuries of educational inequality brought about by slavery and Jim Crow-era apartheid. With amazing speed and no apparent training, black teachers such as Mrs. Hunter had to abandon their jobs in their all-black schools, teach in what had been all-white schools with unchanged all-white administrations, and adjust to teaching black and white students together in the same room. No wonder Mrs. Hunter was angry—especially at middle class white children such as me! She must have seen us as the enemy.

The more I studied public education, the more I came to believe that duplicity was an inextricable part of it. It was as though the U.S. public schools operated according to a single Orwellian-style maxim: *no education without alienation*. This *culture of duplicity* was not only invisible to most stakeholders. It seemed to reproduce itself with remarkable precision and regularity. This paper is concerned with the possible philosophical origins of this culture.

German Philosophy and the American Public Schools

I first became aware that German philosophy was important to the origins of American public education while researching my dissertation. At that point, I discovered that Hegel (1770-1831) was mandatory reading at teachers' colleges at the turn of the 20th century. [1] Later, I discovered that Horace Mann (1796-1859) had modeled the public school system in Massachusetts on the Prussian public school system, and that the Massachusetts schools had become the prototype for the public schools throughout the U.S. I also learned that the Prussian public school system, still relatively new at the time, had been influenced by a contemporary of Hegel, Johann Fichte (1762-1814). Fichte believed that the primary function of schools was to make docile citizens who would serve the State without questioning it. Third, I discovered a link between Ernst Haeckel's (1834-1919) Social Darwinist "recapitulation theory"[2] and the public school curriculum[3] via the work[4] of Herbert Spencer[5] (1820-1903) , G. Stanley Hall[6] (1844-1924), and "child study" research out of Stanford in the 1890s.[7] Haeckel, Spencer, Hall, and the others applied Haeckel's evolutionary theory to human society and education, creating a curriculum based on a fixed, deterministic hierarchy of race and culture that ostensibly mirrored the fixed, deterministic development of children. In short, Haeckel seemed to be a common philosophical ancestor[8] of *both* the Third Reich[9] *and* the U.S. public school system. That common philosophical ancestor is commonly referred to now as German Monism.

German Monism: Its Purpose and Logic

The original intent of German monism was to remove the mind(soul)/body dichotomy that was prominent in Cartesian philosophy but originated with the ancient Greeks. The effort took place over a century in a predominantly Protestant, Judeo-Christian context (sixteenth century Germany) in which the Source of the Soul (i.e. God) was traditionally thought of as an

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[1] Benjamin H. Welsh, "Into the Eye of *Monon*: An Historical and Analytic Philosophical Investigation into the Connotative Concept of 'Research' as Denoted By *Studies in Education*, Volume I, Earl Barnes, Editor (Second Edition, Stanford University, 1903)." PhD diss., University of Pennsylvania, 1997.
[2] Stephen J. Gould, *The Mismeasure of Man* (New York: W.W. Norton & Co., 1996).
[3] Herbert M. Kliebard, *The Struggle for the American Curriculum, 1893-1958* (New York: Routledge, 1995).
[4] Herbert Spencer, *Education: Intellectual, Moral and Physical* (Totowa, NJ: Littlefield, Adams & Co., 1969).
[5] Kieran Egan, *Getting it Wrong from the Beginning: Our Progressivist Inheritance from Herbert Spencer, John Dewey, and Jean Piaget* (New Haven, CT: Yale University Press, 2002).
[6] Dorothy Ross, *G. Stanley Hall: The Psychologist as Prophet* (Chicago: University of Chicago Press, 1972).
[7] Earl Barnes, ed., *Studies in Education: A Series of Ten Numbers Devoted to Child-Study and the History of Education* (Stanford/Philadelphia: Editor, 1903).
[8] Charles E. Strickland, "The Child and the Race: The Doctrines of Recapitulation and Culture Epochs in the Rise of the Child-centered Ideal in American Educational Thought, 1875-1900." PhD diss., University of Wisconsin, 1963.
[9] John Cornwell, *Hitler's Scientists: Science, War, and the Devil's Pact,* (New York: Viking Penguin, 2003).

entity separate from humanity. What surprised me most about the monism's development was not the dichotomous back-and-forth between body and mind, but that monistic philosophers introduced a universal aspect (hereinafter referred to as a "monad" meaning "unit") that was supposed to incorporate or envelop the dichotomy without fully removing or resolving it. Because this approach resembled the First Council of Nicaea's attempt to resolve the three different manifestations of the Christian God, I refer to such thinking henceforward as Trinitarian after the Holy Trinity, which ostensibly resolved the apparent Three God/One God contradiction.[10]

Monists, in their use of the Trinitarian reasoning to approach the mind-body dichotomy, created paradoxes similar to the one God/three God contradiction. On one hand, they presume a universal Truth ($monad_u$). On the other, the universal is consistently split or divided into parts ($monad_a$+ $monad_b$), often to hide contradictory information or beliefs. Yet, these "internal" contradictions are included and never disputed. As such, duplicity is found to be inherent to monistic reasoning. Henceforward, the paradox of Trinitarian reasoning will be expressed with the following equation: "$monad_u = monad_a + monad_b$."

Monism's Foundation: Plato, Aristotle, and the Pythagoreans

Although Plato is not considered a monist, I associated Trinitarian reasoning with Plato's ideal world. Plato believed that the "world of pure ideas" is somehow distinct from and superior to the "world of the apparent, which we perceive with our senses."[11] Further, people are thought to be divided hierarchically according to who can and cannot access the ideal world. Presumably, only philosopher-kings can access the ideal world, while ordinary people have to rely upon the limited version of that same world available through the senses, i.e. the shadows flickering on the wall of the cave. Plato's paradox: philosophers and ordinary people are human, yet philosophers possess an extraordinary "sense" that places them above ordinary people. In monistic terms, Plato's ideal world is the universal aspect ($monad_u$), while the dichotomy is the split between those who possess the extraordinary sense ($monad_a$) and those who do not ($monad_b$).

To me, such a paradox was less immediately apparent in Aristotle. Initially, I understood Aristotle as believing that the objects of our senses exist independently of mind and do not require mind for their existence. So, if mind is ultimately part of that objective reality, then there is only one, universal

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[10] After writing this I discovered that my use of this term to describe monistic reasoning was not unique. See the book by David M. Schlitt, *Hegel's Trinitarian Claim: A Critical Reflection* (Leiden, the Netherlands: E.J. Brill, 1984).

11 George R. Knight, *Issues and Alternatives in Educational Philosophy* (Berrien Springs, MI: Andrews University Press, 1998), 42.

reality ($monad_u$ = $monad_u$) and dichotomies disappear. But, this materialistic reading of Aristotle is incorrect, even as it anticipates Haeckel's monism.

In monistic terms, Aristotle's objective reality is the universal ($monad_u$) and the dichotomy within it is between soul ($monad_a$) and substance ($monad_b$). The soul animates some substances such as humans and plants, but not others, such as rocks. Furthermore, soul, itself, is not a singular entity, but a plural one, characterized as a "set of capacities."[12] The capacities are what determine the form that life takes, e.g. whether it is a plant or animal. Within people, these capacities can be cultivated to access Truth. This division of the soul into parts is more fully developed in Leibniz and Haeckel, below.

Trinitarian reasoning (outlined above) appears to have its origins in Pythagorean number philosophy.[13] Number philosophy is traditionally attributed to the Pythagoreans.[14] While there are variations within number philosophy,[15] there seem to be a few central tenets that were preserved in ancient texts and translated, so that they could be read by European philosophers directly. For a sense of these central tenets, we turn to one such text by Theon of Smyrna. More recent interpretation is included[16]:

> Unity is the principle of all things…: all things emanate from it and it emanates from nothing…It is immutable and never departs from its own nature through multiplication (1x1=1). Everything that is intelligible and not yet created exists in it; the nature of ideas, God himself, the soul, the beautiful and the good, and every intelligible essence.[17]

Interpretation:

> If One represents the principle of Unity from which all things arise, then Two, the Dyad, represents Duality, the beginning of multiplicity, the beginning of strife, yet also the possibility of logos, the relation of one thing to another.[18]

Back to Theon's text:

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[12] Richard Sorabji, "Body and Soul in Aristotle." *Philosophy* 49, no. 187 (1974), 64.
[13] It is entirely possible that the First Council of Nicaea relied upon Pythagorean number philosophy, as well.
[14] Pythagoras lived from 570-495 BC. His followers spanned several centuries after his death.
[15] Charles H. Kahn, *Pythagoras and the Pythagoreans: A Brief History* (Indianapolis, IN: Hackett Publishing Co., 2001).
[16] David R. Fideler, ed., "Introduction," in *The Pythagorean Sourcebook and Library: An Anthology of Ancient Writings which Relate to Pythagoras and Pythagorean Philosophy,* trans. and compiled Kenneth Sylvan Guthrie (Grand Rapids, MI: Phanes Press, 1987).
[17] Ibid., 21.
[18] Ibid.

> The first increase, the first change from unity is made by doubling of unity which becomes 2, in which are seen matter and all this is perceptible, the generation of motion, multiplication and addition, composition and the relationship of one thing to another.[19]

Finally, the relationship between Unity and Duality, Monad and Dyad, or monism and dualism was demonstrated with a figure attributed to the Pythagoreans. The numbers, multiplication symbols, and the dashed second circle were added to emphasize how a dichotomy could exist within a single monad:

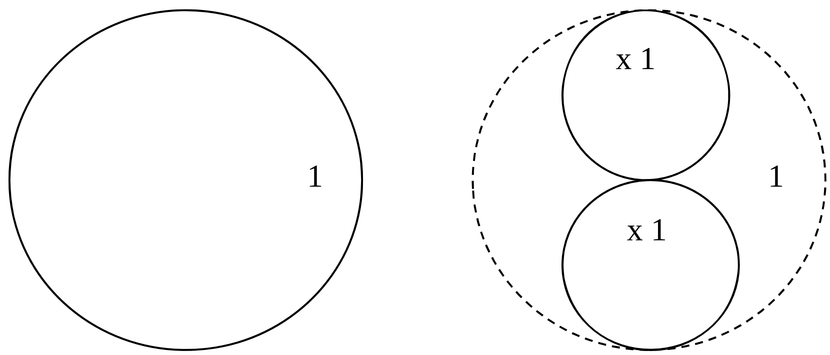

Fig. 1: The Trinitarian paradox from Pythagorean Number Philosophy

Thus, the universal aspect ($monad_u$) represented by the larger circle, can be divided into two aspects, which differ one from the other, represented by the two smaller circles ($monad_a + monad_b$). The dichotomous aspects remain part of the universal by virtue of the fact that they are treated as possessing multiplicative (x 1), rather than an additive (+1), properties. These so-called monads do not have scale. The diagram illustrates relationships, solely.

Gottfried Leibniz (1646–1716)

In his effort to eliminate the mind-body dichotomy, Leibniz appears to have taken the Trinitarian reasoning (see Fig. 1) to a logical extreme. While his effort took German monism a step closer to a materialism and pantheism, it remained a first step. The efforts of later philosophers were needed to reach the goal.

[19] Ibid.

Although Trinitarian reasoning is evident in Leibniz's writing, "there are… two kinds of truth, those of reasoning and those of fact,"[20] his overarching philosophy does not stop with a single dichotomy. Much as Aristotle claimed that the soul was not singular but a *set* of entities, Leibniz reasoned that the universal was composed of an infinite number of aspects (1 x 1 x 1 … 1 = 1). These infinite aspects of the universal Leibniz called monads.

To Leibniz, monads are "the real atoms of nature and, in a word, the elements of things."[21] Each is considered an indestructible, indivisible and potentially quantifiable substance that can be differentiated one from the other by its level of development. Each monad is, in effect, a unique, full expression of the universal aspect, even as there seem to be infinite varieties of them. Growth or development is accounted for with the argument that different stages of development form different monads.

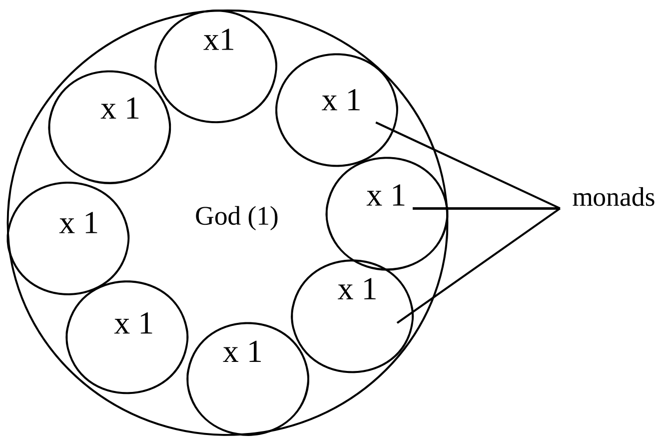

Fig. 2: Leibniz's monads

Leibniz favored "body" over mind. He argued for a physical or materialistic approach to the universal, rather than a metaphysical or immaterial one. In Hegel's words, "The definition, which states that the Absolute is the Object, is most definitely implied in the Leibnizian monad."[22] Further, truth, reason and facts are considered divine monadic substances, as is God: "the final reason of things must be in a necessary substance…and this substance we call God."[23] Leibniz's language is reminiscent of the Nicene Creed in which Jesus

[20] Gottfried Wilhelm Leibniz, *The Monadology*, trans. Robert Latta (1898, facsimile, Forgotten Books, 2008), 8, para. 33, retrieved from http://www.forgottenbooks.org
[21] Leibniz, *The Monadology*, 1, para. 3.
[22] As quoted by Paul Guyer, "Hegel, Leibniz, and the Contradiction in the Finite" *Philosophy and Phenomenological Research* 40, no. 1 (1979), 77. (emphasis added).
[23] Leibniz, *The Monadology*, 8, para. 38.

is described as "being of one *substance* [i.e. essence] with the Father," suggesting that the monistic-Trinitarian connection is more than coincidental.

In Leibniz's effort to account for the wide variety of "substances" in the universe, Leibniz ended up breaking the "single" dichotomy within a single monad into infinite monads (If $monad_u = monad_a + monad_b$ then $monad_u = monad_a + monad_b + monad_c \ldots$). These multiple monads exist within a dichotomy, Leibniz ended up creating infinite dichotomies within the universal (i.e. $monad_u = (monad_a + monad_b) + (monad_c + monad_d) + (monad_e + monad_f)\ldots$). In other words, since there were an infinite variety of monads, each monad could be put into opposition to any other *ad inifinitum* (see Fig. 3). Perhaps this is what Hegel meant when he stated that Leibniz "represent[ed] contradiction in its complete development."[24]

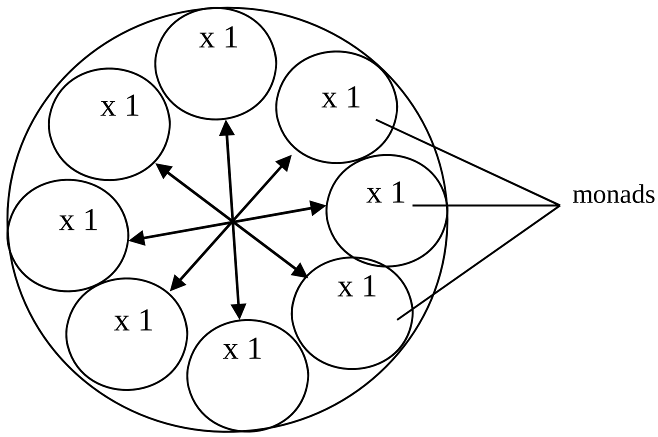

Fig. 3: Leibniz's potentially infinite dichotomies

Leibniz's proposal that God is a monadic substance among an infinite variety of other monadic substances brought science into the realm of religion and vice versa. While Leibniz did not attempt to resolve the gap between religion and science (a gap that must have been growing in his day) as Haeckel did, Leibniz did set the stage for the attempt. At the same time, Leibniz also opened the door for the Hegelian dialectic.

Georg Wilhelm Friedrich Hegel (1770 – 1831)

Leibniz and Hegel can be viewed as opposites in the mind/body debate. If Leibniz argued that all things were material, Hegel argued that all things were mind. Hegel also introduced the notion that monads are not static or fixed entities. Instead, monads evolve.

[24] as quoted by Guyer, "Hegel, Leibniz, and the Contradiction in the Finite," 77.

The importance of development to Hegel's philosophy is made clear early in the *Philosophy of Mind* where he wrote: "The development of the Mind (Spirit) is in three stages: (1)…Mind Subjective[monad$_a$], (2)…Mind Objective [monad$_b$], [and] (3) …Mind Absolute [monad$_u$]."[25] Here in the passage Trinitarian logic is in evidence. It is equally clear that the monads are not static. Instead, the second (monad$_b$) is a stage of development that follows from the first (monad$_a$), and the third (monad$_u$) is a stage of development that follows from the second (monad$_b$). What is more, Hegel appears to be synthesizing Plato and Aristotle here, with an apparent tribute to Leibniz, as well.

Hegel describes the first stage of mind development, Mind Subjective, as "the ideal totality of the Idea…self-contained and free."[26] This stage is reminiscent of Plato's Divine Reality of "pure ideas." Its primacy in Hegel's developmental process could help explain why some characterize Hegel's philosophy as "monistic idealism." Hegel describes the second state of mind development, Mind Objective, as "reality: realized, i.e. in a world produced and to be produced by it: in this world freedom presents itself under the shape of necessity."[27] This second stage suggests Aristotle's objective reality. Lastly, Hegel describes the third stage of mind development, Mind Absolute, as "that unity of mind as objectivity and of mind as ideality and concept, which essentially and actually is and for ever [sic] produces itself, mind in its absolute truth."[28] Hegel's language here is reminiscent of Leibniz, who described monads as "Entelechies, for they have in them a certain perfection…. a certain self-sufficiency…which makes them the sources of their…incorporeal automata."[29] The three stages also follow Hegel's dialectic: Mind Subjective representing thesis (e.g. Idea), Mind Objective representing antithesis (e.g. Reality), and Mind Absolute representing synthesis (e.g. the union of Idea and Reality into the transcendent monad—Mind Absolute).

Within German monism, was the universal physical or metaphysical? Although Hegel critiqued and was clearly influenced by Leibniz, he rejected Leibniz's materialistic stance in favor of a metaphysical one. This difference between Leibniz and Hegel highlights what must have been a vigorous philosophical debate of the day. Indeed the question was not settled until Ernst Haeckel developed his recapitulation theory of evolution which, buoyed by

[25] Georg W.F. Hegel, *Hegel's Philosophy of Mind being Part Three of the Encyclopaedia of the Philosophical Sciences* [1830, trans. William Wallace], *Together with the "Zusatze" in Boumann's Text* [1845, trans. A.V. Miller] (Oxford: Clarendon Press, 1971), 20 (italics and capitalization original).
[26] Ibid.
[27] Ibid.
[28] Ibid.
[29] Leibniz, *The Monadology*, 4, para. 18).

empirical research, was eventually expanded into a "theory of everything"[30] and a religious faith called monism.

Ernst Haeckel (1834-1919)

Ernst Haeckel came the closest to removing the mind/body dichotomy. He said,

> we [monists] regard the whole of human knowledge as a structural unity; in this sphere we refuse to accept the distinction between the natural and the spiritual. The latter is only a part of the former (or vice versa); and both are one.[31]

Haeckel, like Leibniz, chose body or "the natural" over mind or "the spiritual" to resolve the dichotomy, arguing that everything, including the mind or soul was ultimately material. But, it was not Haeckel's argument that made him stand out among the monists, nor does it explain his influence, which was far-reaching. What made Haeckel unique was his use of science, including scientific theory and evidence, to bolster a "mechanical and pantheistic"[32] philosophical system.

Haeckel was the grand synthesizer of the German monists. Much as Hegel synthesized Plato, Aristotle, and Leibniz, Haeckel synthesized Aristotle, Leibniz and Hegel (among others), *together with* scientific theory such as Darwin's theory of evolution.[33] In addition, Haeckel was actively involved with testing his monistic theory of evolution with zoological research, including detailed drawings of human embryos at various stages and the classification of numerous new species. In contemporary terms, one might say that the German monism formed the theoretical framework that guided Haeckel's empirical work. But Haeckel's notoriety as philosopher and scientist would not have been possible without Trinitarian reasoning, prominent in his theory of evolution.

Haeckel's universal aspect ($monad_u$) was similar to Aristotle's objective reality in that it included all things, living and non-living. Indeed, Haeckel's broadest dichotomy was between organic "nature" and inorganic "nature." Unlike Aristotle, Haeckel's universal evolved much as Hegel's did. For instance, Haeckel claimed that organic nature ($monad_b$) "evolved" from the inorganic ($monad_a$) "at a relatively late period,"[34] suggesting that the inorganic-to-organic evolution was not theory but fact, the specifics of which would be ascertained through further scientific research. Here Haeckel not only echoes Hegel's Mind development and Leibniz's monadology; he foreshadows the

[30] John Cornwell, *Hitler's Scientists,* 76.
[31] Ernst Haeckel, *Monism as Connecting Religion and Science: A Confession of Faith of a Man of Science,* trans. J. Gilchrist. (London: Adam and Charles Black, 1894), 4.
[32] Haeckel, *Monism as Connecting Religion and Science,* 4.
[33] Cornwell, *Hitler's Scientists.*
[34] Haeckel, *Monism as Connecting Religion and Science,* 3.

(pseudo-) scientific debate surrounding the beginning of life on earth that continues into the 21st century.

Haeckel's dichotomizing of the universal did not stop with the organic/inorganic distinction. He noted the animal/vegetable dichotomy within the organic monad and the human/animal dichotomy between "lower animals and man"[35] among others. Most important was the dichotomy at the heart of his theory of evolution. On one side was ontogeny (monad$_a$), the (embryonic) development of the individual. On the other side was phylogeny (monad$_b$), the evolution of the species to which the individual belongs. The universal element (monad$_u$) that contained ontogeny and phylogeny was (rigidly hierarchical) organic nature. At the top of this evolutionary ladder were (Aryan?) white males.[36] Furthermore, Haeckel's theory of evolution, summarized by the statement "ontogeny recapitulates phylogeny" was treated more like natural law, on par with the Law of Gravity, accepted as fact until disproven rather than a theory to be modified as evidence was collected. Eventually, of course, recapitulation theory was debunked,[37] but not before leaving an indelible mark on the Third Reich and the U.S. public schools.

Not only was Hegel's concept of development evident in Haeckel's inorganic/organic dichotomy; it was evident in his evolutionary theory as well. Both ontogeny and phylogeny were believed to occur in distinct stages that went from the simplest and most primitive to the most complex and advanced, much as Hegel's Mind(Soul) developed. Perhaps the overall Haeckelian monad would be best described as two Hegelian monads situated within the living or animated side of the Aristotelian universal.

Indeed, Haeckel believed that he had isolated Aristotle's soul in physical form: "What we…designate as the 'human soul,' is only the sum of our feeling, willing, and thinking—the sum of those *physiological functions whose elementary organs are constituted by the microscopic ganglion-cells of our brain*"[38] (emphasis added). Here was Aristotle's anima "in the flesh" and it was an organ that predisposed all life—including single-celled organisms—to move, change and grow, much as DNA is viewed today.[39]

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[35] Ibid., 4

[36] According to Cornwell, *Hitler's Scientists,* 78-79: "Haeckel's views began to merge with ideas of Gobineau, whose essay [i.e. "An Essay on the Inequality of the Human Races" (1853-1855)] had found widespread resonance in Germany, where the theme of Teutonic superiority was in time developed by the Englishman Houston Stewart Chamberlain. Chamberlain had become a friend of Wagner and was an ardent devotee of mystical pan-Germanism, and was to exert a powerful influence over Adolf Hitler."

[37] Gould, *The Mismeasure of Man.*

[38] Haeckel, *Monism as Connecting Religion and Science,* 40.

[39] Haeckel actually foreshadowed the discovery of DNA with the following passage: "there is present in the egg-cell (as potential energy) a hereditary cell-soul, out of which

Leibniz's concept of monad was also evident in Haeckel's approach to development. Evolution occurred in distinct stages. Each stage, whether on the phylogeny or ontology side, was treated as an elemental life form or living monad that was held in common by species belonging to that particular class of animals. Thus, when Haeckel asserted that "ontogeny recapitulated phylogeny," he was *not* suggesting that the embryonic development of the individual *resembled* certain stages of the species' evolution, but that each individual *actually lived each evolutionary stage that the species had already gone through*, albeit in a much shorter time frame.[40]

Furthermore, Haeckel contended that each of these elemental life forms could be found in nature, *in toto*, as actual species. By looking to the stages in development of the human fetus, Haeckel was able to "predict" the existence of new species in the world and vice versa. This gave Haeckel's theory of evolution an ostensibly empirical basis allowing it to be treated as fact. Indeed, in Haeckel's lifetime, recapitulation theory quickly became an accepted "given" in academic circles throughout Europe and the U.S., becoming a cornerstone of G. Stanley Hall's field called child-study (later known as child psychology)[41] and the public school curriculum.[42] Unfortunately, the heredity-based, progressive and deterministic approach to evolution and embryonic development that was at the core of Haeckel's original recapitulation theory went with the theory as it was transferred to other fields. The result was an approach to human behavior and development that was hereditary-based, progressive and deterministic. Could deterministic monistic reasoning have been the source of duplicity in the U.S. public schools?

In 1892, Ernst Haeckel gave a talk to the Associate of German Naturalists and Physicians in which he outlined the tenets of a religious faith called Monism. Haeckel said that the purpose of this new faith was to "establish…a bond between religion and science, and thus contribute to the adjustment of the antithesis so needlessly maintained between…the two highest spheres in which the mind of man can exercise itself."[43] Here we see evidence of Haeckel synthesizing Hegel ("antithesis") and Leibniz ("spheres"). Furthermore, with this talk, Haeckel must have seen himself as contributing to the removal of yet another dichotomy—the dichotomy between religion ($monad_a$) and science ($monad_b$) that existed within the human mind ($monad_u$). Unlike Haeckel's contemporary and compatriot, Karl Marx, who believed that society would shed religion as it evolved, Haeckel sought to amend religion in

man, like every other animal, is developed," *Monism as Connecting Religion and Science,* 42.

[40] Gould, *The Mismeasure of Man.*

[41] Ross, *G. Stanley Hall.*

[42] Kliebard, *The Struggle for the American Curriculum.*

[43] Haeckel, *Monism as Connecting Religion and Science,* vii.

such a way that would acknowledge and accommodate the material reality of science, to acknowledge that "all the wonderful phenomena of nature around us, organic as well as inorganic, are only various products of one and the same original force."[44]

Once Haeckel had established the purpose of his proposed monistic faith, he argued that religions and philosophies prior to monism were inferior *because* they were not monistic, but dualistic or pluralistic instead:

> All these older religious and teleological conceptions…(such as those of Plato and the Church fathers)…stand in direct antithesis to our monistic philosophy of nature. Most of them are dualistic, regarding God and the world, creator and creature, spirit and matter, as two completely separate substances.[45]

In the process of dismissing these "primitive," "anti-monistic" religions, Haeckel applied his hegemonic understanding of species and individual development to society and culture. In so doing, he echoed Herbert Spencer's application of Haeckel's recapitulation theory to society, culture and education that was already well-established in print by the time of Haeckel's speech.[46]

Following the discussion of religions that placed monism as the superior culmination of society's religions (and human evolution), Haeckel launched into a summary of scientific discovery, probably emphasizing aspects that clearly supported monism. Included in the summary was a discussion of what was then known about atoms. Also included was a kind of update on his theory of evolution using Trinitarian reasoning that should be, by now, quite familiar. Clearly, Haeckel considered monism a crowning achievement of Western philosophy and science, and he was not alone. Although it is no longer referred to by that name, its influence continues, especially in the U.S. public schools.

German Monism in the U.S. Public Schools: The Hermeneutics

One does not need historical evidence to discover monistic reasoning in the U.S. public schools and see how duplicity has been institutionalized. To start, the hierarchy of employees within public education (monad$_u$) appears to be a series of overlapping Platonic monads, administrators (monad$_a$) from the U.S. Department of Education down serving as philosopher-kings, acting as though they, alone, can see Truth. Teachers and students (monad$_b$), in contrast, are put in opposition to the administrators because their understanding of Truth

[44] Ibid., 16
[45] Ibid., 12
[46] Spencer, *Education.*

is presumed to be limited. They must live by their philosopher-kings' decisions, else face ejection from the monad.

A combination of the Aristotle and Leibniz seems to be captured in the orientation towards student ability. Like Aristotle's soul, ability ($monad_u$) is made up of a set of capacities. These capacities are presumed to be mirrored by school subjects, such as English ($monad_a$) and math ($monad_b$). Nonetheless, ability is treated as a static objective reality because its measurements (i.e. test scores) are used to make important educational decisions that have long-lasting consequences, even as the student population changes year-to-year, minimally. Finally, the test scores suggest Leibniz for they have multiplicative properties and scores can never exceed 1.00 or 100%.

Hegel and Haeckel are evident in the organization of schooling. Children must have six-year-old *bodies* to attend Grade one and seven-year-old bodies to attend Grade two, etc., regardless of their minds' capacities. This "body-based" organization persists in spite of evidence that learning is not as dependent upon age as was previously believed.

Hegel's concept of development and Haeckel's recapitulation theory are evident in the curriculum's content and structure. Like Hegel's evolving monad, letters are studied before words, and the state is studied before the country, because the latter is presumed to evolve out of the former. Like Haeckel's theory of evolution, "primitive" content, such as the "hunting and gathering" of 18th century Native Americans is reserved for young students where "advanced" content, such American government, is reserved for older students when they have reached the "appropriate developmental age/stage."

I end with the "school choice" movement. Reforms under that moniker include any change from decentralized management, in which building principals are given autonomy to make their schools unique; to privatization, where outside for-profit companies are brought in to run certain schools; to charter schools where certain entities are granted permission to create their own school with their own agendas. As it happens, however, these "alternative schools" rarely have complete control of their budgets or forms of student assessment. Thus, "school choice" can be seen as a monistic sleight of hand in which a new set of monads replaces the old, but their relationship to the original universal remains the virtually the same.