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Articulating a hermeneutic theory of writing assessment

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1. Retrieving writing assessment from scientism

1.1. Introduction: scientism and 'weak thought'

At the turn of the century, Wilhelm Dilthey (1883/1989) sought to apply the scientific method to human behavior; he argues that the "human sciences" can produce strong truths, or valid knowledge (p. 67) about universal aspects of human nature, if they are grounded in an epistemology of experience.[1] For Dilthey, human science methodically assesses inner, rather than outer, nature using universal scientific principles to establish strong, objective truth. Educational assessment, following the human science of psychology, uses standardized writing tests because scientific reasoning assumes it can indirectly observe and measure the transcendental function of writing ability. Recently, new interpretative or qualitative assessments have been developed to directly assess human performances and attenuate the use of psychometric methods. Some assessment scholars suggest that non-standardized, direct assessments open a "dialectic between two diverse approaches to drawing and warranting interpretations of human products and performances—one based in psychometrics and one in hermeneutics" (Moss, 1994, p. 5). Following Dilthey, some qualitative scholars argue that an attenuated psychometric methodology produces relatively objective assessments, which belong to the same order of knowledge as the natural sciences; I will call this position "neo-empiricism."

Writing assessment is dominated by neo-empiricism because its methodology legitimates evaluation by producing quantitative data that is reliable and valid. Both direct writing assessments and holistic scoring accommodate the scientific methodology of measurement (Huot, 1990, pp. 201ff,

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[1] Dilthey creates the word "Geisteswissenschaften," the human sciences, from "wissenschaften," natural sciences.

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2002, p. 24; Williamson, 1993; White, 1984, pp. 400ff, 2007, pp. 165–169).[2] These accommodations push away from strong empiricism, yet concomitantly, hold writing assessment in the orbit of educational assessment theory. Patricia Lynne (2004) argues, in her groundbreaking *Coming to Terms: A Theory of Writing Assessment*, that writing assessment gravitates to neo-empirical inquiry. Her analysis of the "criteria of 'validity' and 'reliability'" (p. 6), which are the currency and legitimating terms of writing assessment, demonstrates this hegemony and analyzes the ways that many scholars – including those who work in the "social constructionist paradigm" – do not "seriously [challenge the] principles" of neo-empiricist educational measurement (p. 4). Unlike Lynne, I do not think that constructivism, either as it is generally practiced, or as a theoretically coherent epistemology, offers us a new framework to assess writing because it does disclose the key philosophical assumption of writing assessment: scientism. Scientism is a modernist prejudice, which, for the most part, is transparent and anterior to understanding; unseen and unquestioned, it assumes that scientific thinking is the best – the "strongest" thinking – because it produces quantified, generalized, reliable, and true information.

Educational assessment is overtly neo-empiricist; and many composition scholars explicitly accommodate it, while many constructivists implicitly accommodate it. Bullough (2006) notes, "standing between the humanities and the social sciences has proven difficult" (p. 6); the major difficulty is that the "social science frame is rooted in an unfulfilled and deep longing for the status and authority of the hard physical sciences" (p. 4). As Lynne aptly demonstrates, scientism has assimilated writing assessment and constructivism is implicated in maintaining quantitative methodologies. Denzin and Lincoln (2003) argue that scientism has assimilated qualitative assessment: "[h]istorically qualitative research was defined within the positivist paradigm, where qualitative researchers attempted to do good positivist research with less rigorous methods and procedures" (p. 14). Rather than valorizing positivist research, the humanities valorize a 'weak' hermeneutic notion of truth – truth is disclosed through argumentation and persuasion – that both reveals and conceals truth.

Friedrich Schleiermacher, a romantic, stakes out the modern field of hermeneutics. Whether it is Schleiermacher, Dilthey, at the end of the 19th century, Emilio Betti or E.D. Hirsch, in the 20th century, hermeneutic thinkers focus on understanding and interpretation, not as means to an end, but as a method for analyzing historical experience. Following Schleiermacher (1838/1977), this group represents the axis of objectivist hermeneutics; they argue "method" can correctly reconstruct the original meaning of historical texts and recreate an author's thoughts and intentions with certainty (p. 188). Dilthey (1900/1996) argues that method establishes the "objective apprehension" necessary for "human science" (p. 235) to produce strong objective truth. For Hirsch (1967), while the "logic of uncertainty is fundamental to all humane sciences," it produces interpretations that are certain and correct (pp. 173–174). Martin Heidegger (1996) starts the critique of this synthesis of neo-empiricism and hermeneutics, arguing it marginalizes the ontological implications of understanding and interpretation (pp. 196–211; Gadamer, 1976, 1978, 1979/1981, pp. 99, 1960/1990, pp. 173–197).

Heidegger stakes out a second axis of modern hermeneutics called ontological hermeneutics, whose proponents include Hans-Georg Gadamer and Gianni Vattimo. Ontological hermeneutics is the only position that unequivocally places itself outside both the metaphysics of scientism, and its

[2] Huot (1996) describes how holistic scoring was developed to fit the "empirical methodologies of educational and psychological measurement" (p. 1). Holistic scoring "is a product of the same thinking that produced the indirect tests" of writing through "grammar, usage and mechanics" (Elbow, 1996, p. 122; Huot, 1990, pp. 201ff, 2002, p. 24).

desire to accommodate the strong epistemology and methodology of the natural sciences. Ontological hermeneuticists articulate the ontological structures of understanding and interpretation—as modes of human existence that disclose and appropriate one's environing world. Understanding is "the possibility of interpretation, that is, the appropriation of what is understood" (Heidegger, 1996, p. 150). For ontological hermeneuticists, human being comes to presence through involvements that open understanding of a world; a human being discloses meaning as he or she interprets the world. Interpretation is an ontological relation in which being increases as one appropriates understanding in the performance of a project. Understanding is not habit of mind that produces correct "knowledge," nor does it exclude ambiguity; but, in spite of the ontologically inseparable nature of truth and errancy, human beings come to presence as they perform in-the-world.[3]

There is no methodology, no epistemology that can untangle the ontological event structure and sift truth from errancy in a consistent, reliable, and universal manner. As Gadamer (1960/1990) notes, only rhetoric asserts "itself against modern scientific methodology" because the "concept of evidentness belongs to the tradition of rhetoric. The eikos, the verisimilar, the 'probable' [. . .], the 'evident,' belong in a series of things that defend their rightness against the truth and the certainty of what is proved and known" (p. 485). Ontological hermeneutics argues that the probable truth claims of rhetoric are sufficient to evaluate human products and performances. As John K. Smith (1993) notes, ontological hermeneutics does not argue epistemology is "some sort of special process one engages in" to interpret (p. 133). He notes, "the demise of empiricism means that it is time to move beyond the need for a theory of knowledge and the various dichotomies that are necessary for any theory of knowledge" (pp. 120–121).

In ontological hermeneutics, rhetoric, which appeals to practical reasoning, is a sufficient way to adjudicate truth claims. If one is engaged in legitimatizing interpretative claims to an audience, accountability means presenting the best available evidence in support of the most probable interpretation, not "correctness." Gadamer (1967/1997) states:

> Rhetoric from oldest tradition has been the only advocate of a claim to truth that defends the probable, the *eikos* (verisimilar), and that which is convincing to the ordinary reason against the claim of science to accept as true only what can be demonstrated and tested. (p. 318)

Neo-empiricism and ontological hermeneutics agree that truth claims are adjudicated by probabilistic criteria, even though neo-empiricists argue that truth claims can be objectively "correct," as long as any conclusion drawn can and should be revised – since it is predicated on relative objectivity (Hirsch, 1967, pp. 172–173).

In contrast, ontological hermeneutics does not attempt to overcome either problems of epistemology or methodology. Vattimo (1998) argues that a "'program' of weak ontology" ["il 'programma' di un'ontologia debole" (p. 23)] does not attempt to overcome errancy by using the correct methodology. He calls the 'program' "weak thought" ["pensiero debole"] because there is no method that can, or ever will, remove errancy from the disclosure of truth and produce 'strong' foundational truths; however, "weak" implies neither a relativist plurality of incommensurate truths, nor a desire to overcome particular problems so as to secure foundational, or 'strong' truth. Errancy cannot be overcome or stabilized by either "the measurements of science or the organizational framework of technology, nor can it proceed by its logic of verification and its rigorous methods of demonstration" ["il misurare della scienza o l'organizzare

[3] See Heidegger (1996, pp. 203–211) and Petruzzi (2006) for a detailed exposition of the hermeneutic concept of errancy.

della techica, non può procedere con una logica della verificatione e del rigore dimonstrativo" (p. 24)].

Ontological hermeneutics is a framework of inquiry that focuses on human existence. There is an incommensurate relation, or an ontological difference, between truth that is disclosed by human beings-in-the-world, and the truth that is uncovered by the natural sciences about physical objects – which Heidegger (1996) calls "ontic inquiry" rather than "ontological" (pp. 9–12). For Gadamer (1960/1990), while the neo-empiricists emphasize "objectivity" and constructivists emphasize "subjectivity," they both ignore the performative process of understanding: "being is self-presentation and [. . .] all understanding is an event, this first and last insight transcends the horizon of substance metaphysics as well as the metamorphosis of the concept of substance into the concepts of subjectivity and scientific objectivity" (p. 484). Neither constructivism's subjectivist epistemology (Guba, 1990, p. 27) nor neo-empiricism's methodological goal of relative objectivity addresses the ontological character – performative nature – of writing. Ontological hermeneutics is particularly relevant to writing assessment because it can help us create writing assessments that focus students' proficiency in understanding and interpreting academic readings, rather than focusing on methodology or epistemology (Gadamer, 1960/1990, p. 513). It provides a reasonable justification to deepen our understanding of performative assessments and to stop asserting that 'strong' quantitative data corresponds to writing ability.

1.2. Neo-empiricist assessment theory

William A. Doll, Jr., (1993) states that Descartes' "mechanistic methodology permeates modernist epistemology and is evident at both subtle and overt levels of contemporary curriculum instruction" (pp. 114–115). It also permeates educational and writing assessment in an effort to produce repeatable, valid, reliable, and objective and correct data, which supposedly objectively measures writing. Modernist educational assessment theories assume that objects are, as Rene Descartes states it, *res extensa*, merely matter mechanically extended in space.[4] Descartes assumes the human body is a mechanism that can be measured by a method based on the criteria of mathematical reasoning and logic (Doll, 1993, pp. 26–33). Descartes applies mathematical reasoning to recover eternal truths and to eliminate rhetoric and argumentation from scientific methodology (Perelman, 1982, pp. 155–60). The neo-empiricist writing assessment is modeled on psychometric measurement methodology and preserves the assumption that by eliminating subjectivity we reveal the 'real' object.

In the social sciences, scholars who attenuate the strong empiricism are often called either "post-empiricist" or "post-positivist" because they assume the "demise" of empiricism. According to Smith (1993), empiricism is "a foundational theory of knowledge – one that claimed to have established via the undistorted observation of experience – the Archimedean point upon which to construct all knowledge" (p. 51). The post-empiricists propose to reconstruct empiricism using 'relatively objective' methods that produce valid claims; since they do not go beyond or end empiricism, I use the term "neo-empiricism" because they remain committed to empiricism's core values. As Doll (1993) notes, "for them the task is to rework or modify [. . .] a number of core elements of empiricism. . . . Although they acknowledge that truth and objectivity can no

[4] Gadamer (1997) reminds us that the discourse of science uses rhetoric: "Even Descartes, that great and passionate advocate of method and certainty, is in all his writings an author who uses the means of rhetoric in a magnificent fashion" (p. 318).

longer be defined in terms of certitude of knowledge claims, they argue that these ideals must be maintained" (pp. 61–62). Emilio Betti (1980) puts it this way:

> In order to avoid any misunderstanding, it should be admitted that objectivity means something quite different in the Geisteswissenshaften compared to the natural sciences where we are dealing with objects that are essentially different from ourselves. But it is necessary to reject the unwarranted conclusion that it is impossible to maintain a clear distinction between the knowing subject and his object, or that the 'in-itself' of an historical phenomenon is nothing more than [an illusion]. (emphasis added; p. 63)

On the one hand, empiricism is modernist and foundational epistemology, claiming to have access to the "real" through sense impressions; on the other hand, the neo-empiricism is an epistemology that "fully realize[s] that traditional empiricism was unable to establish a firm foundation . . . upon which to construct knowledge" (Smith, 1993, p. 63).[5] However, both argue for the normative role of criteria or standards to methodologically regulate measurements of the "real," which, in our case, is writing ability, with "reasonable" objectivity and certainty. Neo-empiricists recognize that absolute certainty is not possible and that what is accepted today as a valid interpretation may be revised tomorrow, if new evidence arises; since they argue for relative objectivity, neo-empiricists are often referred to as qualitative, or interpretative researchers (Denzin & Lincoln, 2003, p. 33).

While neo-empiricists downplay empiricism's demand for "strong" objective and certain truth claims, they claim that without objectivity inquiry cannot produce valid knowledge. Neo-empiricists consistently justify the efficacy and necessity of maintaining scientific methods to produce data following rules of quantitative reasoning. In writing assessment, some neo-empiricists implicitly, and others explicitly, ease their validation anxiety by arguing we can overcome specific methodological or terminological problems to reach relative objectivity. Edward M. White's (2005) proposal to score portfolios typifies the way that neo-empiricism focuses on remediating methodological problems caused when they are inappropriately applied to writing. Most commonly, they claim, *a priori*, that assessment "measures" writing ability. While neo-empiricists, like Betti, clearly note that human products "are essentially different," writing assessment scholars are in an untenable position because they seek to "measure" ontological objects with tools designed for physical objects; writing is a different order of object that requires a humanist, not scientific evaluation. Technical rationality cannot be applied to writing assessment *as if* writing is merely another physical object to be measured.

Second, neo-empiricist reformers reify traditional assumptions about assessment methodology and assume that they can be applied to any problem or situation. As Lynne (2004) has argued, the continued use of "validity" and "reliability" "perpetuates an intolerable incongruity" between scientific methods and humanistic approaches (p. 13). However, the concepts are rooted in modernist faith in scientism, and all too often an argumentative strategy is used to reify the concepts and their goal of producing "strong" truth. The concepts are most often embedded in calls for interdisciplinary dialogue; however, behind their proposals we can see scientism in their universalizing of calculative reasoning. They reify calculative reasoning by persisting in the specious

[5] Smith's (1993) taxonomy of research starts from the "demise" of empiricism; there are three frameworks: post-empiricism, critical theory, and interpretation (p. 2). Smith has aptly noted, both the post-empiricists, who argue for "a validation hermeneutics," and critical theorists, who argue "critical hermeneutics" demystifies ideology, promote legitimating methodologies.

argument that writing assessment "measures" writing ability. Those inclined to dispute or question the necessity and primacy of applying scientific methods to writing assessment have been admonished and dismissed by a pattern of *ad hominem* argumentation.

If one does not assent to and accommodate what White (in Broad, 1994) calls "serious measurement" theory, then one is "amateurish," not "knowledgeable," and "ignorant" (p. 264). Scharton (1996) states that teachers "exhibit an exasperating tendency to use home-rule arguments to polarize education and larger society, [. . .] to engage in *technically amateurish* evaluation of their programs" (emphasis added; p. 61). Huot (2002) claims, "writing teachers and program administrators tend *not to be knowledgeable about the technical aspects of measurement* and *validation*" (emphasis added; p. 157). White (1996) argues that English teachers react emotionally to writing assessment because they lack the power to shape the "*criteria*, *instruments,* or scoring," and because they have "*a general ignorance of statistical* thinking" (emphasis added; pp. 11–2).

As Smith (1993) has noted, social sciences conceptualize their subject matter "in such a way that it could be brought into line with the philosophical doctrine or realism that seemed to work so well for the study of the physical realm" (p. 34). When we consider the history of writing assessment, for example, White's (1984) "Holisticism," which chronicles the development of holistic scoring, it is clear that neo-empiricist reforms were both necessary and important. Nonetheless, their successful remediation of local rather than global problems – caused by the fact that writing does not fit the scientific model of assessment – does not justify either the underlying scientism or the explicit accommodation to educational assessment practices:

> The early development of what we now call holistic scoring took place wholly under the auspices of the Educational Testing Service, and ETS deserves considerable credit for sponsoring the research and developing the techniques which have led to the present state of the art. The problem of developing valid, reliable, and economical measures of writing ability has been a particularly difficult and thorny one for ETS, and we have all profited from the results. (p. 401)

White's (1984) claims that holistic scoring was a "major advance in the measurement of writing ability" clearly demonstrates that this advance operates wholly within the scope of educational assessment; he assumes scientific methodology is an appropriate measure of writing because it can self-correct any apparent errors; in other words, he argues that we can remediate empiricism. The "major advance" White describes does not challenge the basic assumptions of psychometrics; it does not approximate what Thomas S. Kuhn (1970) calls a "major substantive" advance; rather, it is, more modestly, a solution Kuhn would call 'puzzle-solving.' White accepts the efficacy of ETS's methodology, and has no interest in critically destroying and re-imagining the methodological and technological premises of educational assessment. In spite of the way that he frames holistic scoring as a "major advance," a revolutionary victory against "the dominant tendency of our time, the analytical spirit" (p. 400), it is more accurately the work of what Kuhn calls 'normal' science.

As Heidegger argues, technology is a way of relating to nature as if it were merely present to us so that we can order, measure, and objectify it.[6] The neo-empiricists frame resistance or doubts about the application of educational 'measurement' methods to writing assessment as incorrect or flawed knowledge of quantitative reasoning or as an intellectual deficit in quantitative reasoning

[6] Huot (2002) states that educational assessment specialists' faith "in the technology of testing [. . . is] largely unwarranted" (p. 14). Huot is correct; Heidegger, Gadamer, and Vattimo teach us that the essence of the technology of standardized testing is not technological (Zimmerman, 1975).

skills. The rhetorical strategy, which seems to happen with regularity, personalizes resistance and describes those who dissent as errant. It deflects attention from the lengthy philosophical conversation about the natural and human sciences, as well as the post-modern critique of "strong" systematic thinking, which the natural sciences use to assess causes and to map the dynamics of the physical world (Phelps, 1988). A counter charge could be made: they show a general ignorance of philosophical controversy; and, they mystify calculative reasoning and methodology so that it appears to be the unquestionable ground of writing assessment. However, the important point is: the implicit accommodation and defense of the scientific paradigm – often made with distracting and illogical claims – impedes substantive change that is, as Kuhn (1970) states, "destructive as well as constructive" (p. 66).

Neo-empiricist reformers have attenuated educational testing methods by assimilating the concerns of compositionists, with direct writing assessment and holistic scoring. However, they have done little to make major substantive changes in the epistemology, methodology, or the ontology assumed by the sciences. While neo-empiricists attenuate 'strong' foundational epistemology because they no longer attempt to establish foundational knowledge, and they recognize that even correct methodology only produces a reasonable interpretation based upon the best available evidence, as Phillips (1990) states, neo-empiricists claim to prevent research from going down "the rocky road to relativism" (p. 38).

1.3. Constructivism, paradigms, and writing assessment theory

Like some other constructivists, Lynne explains the disciplinary disjunction between educational assessment – a human science – and composition – a sub-field of English and the humanities – in terms of contending paradigms. Other constructivists, like Norman K. Denzin and Yvonna S. Lincoln (2003) use the concept of paradigms to analyze "the researcher's epistemological, ontological, and methodological premises" (p. 33). They identify "four major paradigms [that] structure qualitative research: positivist and post-positivist, constructivist-interpretive, critical (Marxist, emancipatory), and feminist-post-structural" (p. 33). For Denzin and Lincoln, all "qualitative" paradigms "work within relativist ontologies (multiple constructed realities), interpretative epistemologies (the knower and known interact and shape one another), and interpretative, naturalistic methods" (p. 33). Other scholars in the "constructivist-interpretative paradigm," such as Liz Hamp-Lyons and William Condon (2000, pp. 7ff), and Egon G. Guba and Yvonna S. Lincoln (1983, pp. 53ff; 1989, pp. 43–45), Guba (1990, pp. 17ff), Lincoln (1990, pp. 77ff), use the concept of paradigms for taxonomic purposes. The original purpose of the term "paradigm" was not taxonomic, and while it may help to classify different approaches, it does not adequately inquire into the hegemonic, modernist prejudice: the transparent scientism that is pervasive and that frames educational and writing assessment.

Many education scholars, like Guba and Lincoln, and writing assessment scholars, like Lynne (2004), Murphy and Grant (1996), and Hamp-Lyons and Condon (2000), argue for a constructivist assessment paradigm (p. 8). Many others, who do not explicitly refer to themselves as constructivists, assent to the general tenets of constructivism that revolve around, as Lynne (2004) and James Berlin note, a set of philosophical claims: "Social constructionism is first and foremost an epistemological position, offering 'assumptions about the very nature of the known, the knower, and the discourse community involved in considering the known' (Berlin, 1987, 3)" (p. 119). While there are scholars who argue for other forms of qualitative inquiry such as critical theory, ethnology, phenomenology, naturalist, or participatory modes of inquiry, most assent to the

basic intellectual framework of constructivism.[7] Denzin and Lincoln's second tenet of constructivism – it promotes "an ongoing critique of the politics and methods of postpositivism" (p. 13) – comfortably accommodates Critical theorists, like Berlin.

For Betti, the road to relativism has been paved by constructivist epistemology. He disputes the claim that knowledge is socially constructed, in part, because it leads to the unwarranted epistemological conclusion that we cannot distinguish a subject from his or her knowledge. Denzin and Lincoln (2003) describe constructivist epistemology this way: "Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry" (p. 13). Guba (1990) articulates the unwarranted claim that Betti finds in constructivism – there is no 'in-itself,' or objective reality, to historical or social phenomenon: "the constructivist chooses to take a *subjectivist* position. [. . .] If realities exist only in respondents' minds, subjective interaction seems to be the only way to access them" (author's emphasis; p. 26).[8]

Constructivists have only moderately attenuated, and hardly addressed scientism, which regulates and confounds our assumptions about assessing writing. As Lynne (2004) notes, educational assessment methods are "incompatible with what compositionists know about writing and learning to write" (p. 3). Lynne aptly notes that composition scholars in writing assessment "gesture" toward educational measurement to frame their practices and methodology.[9] While Lynne (2004) notes the gesture is pervasive, she takes the transparency of scientism to be a 'lack' of theory: "The majority of writing assessment scholarship published by compositionists in the last decade either gestures in the direction of educational measurement theory or simply never addresses the question of theory at all" (p. 163). The subjectivist epistemology, which promotes relativism, both helps to create the transparency of theory, and to promote educational measurement by construing alternative practices as contending and divergent conceptions, which cannot be adjudicated because they are incommensurate.

We can see how Moss's (1996) call for a dialogue between "interpretative conceptions of social science" and "assessment practice" (p. 20) tries to establish a consensus about assessment practices between contending epistemologies – even though they are incommensurate. For Moss, there is "a dialectic between [the] two diverse approaches to drawing and warranting interpretations of human products and performances – one based in psychometrics and one in hermeneutics [. . .] *My point is not to overturn* but rather *to suggest that it be treated as only one of several possible strategies* serving important *epistemological* and ethical purposes" (emphasis added; p. 5).

[7] For example, Broad (2003), advocates an ethnographic methodology (pp. 13–14); Guba and Lincoln (1981) blend neo-empiricism and constructivism – what they call "responsive evaluation"; Huot and Williamson (1997) and Huot (2002) blend neo-empiricism, constructivism, and critical theory to focus on situational validity (consensus) from multiple stakeholders, and on the ways social power emerges in the politics of writing assessment (pp. 44–53 and pp. 54–58); and, Berlin (1994, cited in Lynne, 2004) assents to the general principles of constructivism blending them with critical theory to demystify cultural processes of writing (p. 61).

[8] In Immanuel Kant's epistemology, a knowing subject constructs knowledge; Kant's notion that the mind shapes knowledge is fundamental to constructivism. Kant agrees with Descartes' attack on rhetorical or probable truth claims, and he accepts Descartes' metaphysical dualism. However, Kant's epistemology is based on a transcendental method that uncovers *a priori* concepts, which are universal and necessary, to synthesize understanding with sense perception. Through critical subjectivity, or reflective judgment, nature gives science its rules. Natural science provides methods that produce valid or certain knowledge. Through "genius," nature provides the criteria for art, so that even the truth-value of art derives objective validity from the subjective *a priori*.

[9] Delandshere (2002) agrees with Lynne, "current educational assessment is still for the most part a relic of the past" (p. 1478) because it retains and accommodates "empiricist and rationalist epistemological assumptions" (p. 1478).

Moss (1996) argues that "interpretative research [can] inform assessment practice" (p. 20), if we make "an ethical commitment *to understand [the] alternatives*" (emphasis added; p. 27).[10] Moss is not interested in what I take to be the fundamental question for compositionists: "*whether or not we should adopt an interpretative* or naturalist approach" (emphasis added; p. 22) for performative writing assessments.[11] However, understanding the alternatives does not explain the incompatibility any better than the concept of paradigms, which analyzes intradisciplinary, not interdisciplinary, knowledge.

Unlike Moss, Guba and Lincoln (1989) want to replace neo-empiricist methodology: "Constructivist methodology is the approach that we propose as a replacement for the scientific mode that has characterized virtually all evaluation carried out this century" (p. 43). For Lynne (2004), the "clash of two paradigms" marginalizes "social constructionist principles" (p. 11); therefore, she states, "in order for [constructivist] theories to be more influential, we need to separate them from educational assessment theory" (p. 100). Unfortunately, too few constructivists have clearly and unequivocally advocated that we abandon traditional methodology. Rather, constructivists focus on overcoming specific, local methodological problems – mostly by redefining terminology (Broad, 2000, pp. 223ff, 2003, p. 15; Guba & Lincoln, 1989, pp. 39–45; Moss, 1996, p. 27).

Kuhn (1970) describes "revolutionary change" when a paradigm shift radically transforms practice, while "normal science" merely "puzzle–solves," or "refines, extends and articulates" current understanding. For Kuhn, "paradigms are not corrigible by normal science at all" (p. 122). As Heidegger (1952, 1954, 1962/1977) fears, modernity's scientism fosters and reifies "the precedence of methodology"; writing assessment "is circumscribed by means of its results," by "having-to-adapt-itself to its own results" (Heidegger, 1977: p. 124).[12] Heidegger accurately characterizes the way that constructivist writing assessment so often advocates we remediate neo-empiricist methods; he explains the muted and conflicted tones of the constructivist descriptions of the hermeneutic enterprise of writing assessment (Rose, 2006, pp. 117–121; pp. 185–186).

The puzzle that constructivists most want to solve is how to connect neo-empiricism to constructivism. Huot (2002) distrusts the standard formulation of validity (White, 1994; Yancey,

[10] Moss (1992, 1996) and Moss et al. (1992) argue that performance assessments should be used to assess the domains of knowledge that are dynamic and social. Even though performance and portfolio assessments are framed with a dynamic and contextual notion of knowledge, Camp (1993) states, "the relatively low reliability of" performance assessment raises concerns for "the measurement community" (p. 49). Moss et al. do not argue we should abandon the concept of reliability; but, they insist that we must accommodate validity as a measurement goal. Kuhn (1991) might say that Moss falls prey to the notion that while "social concepts shape the world to which they are applied, concepts of the natural world do not" (p. 20). Kuhn's correction is quite relevant for writing assessment: "no more in the natural than in the human sciences is there some neutral, culture-independent, set of categories within which the population – whether objects or of actions – can be described. When constructivists accommodate scientific methodology, they imply that the neo-empiricist claim to produce objective descriptions needs to be "understood" because it has some relative truth-value, which it does not have.

[11] Kuhn never claims that the "old" knowledge, as long as it remains coherent in terms of its paradigm, is equally true to new revolutionary knowledge. According to Kuhn, paradigms are neither commensurate – common standards of measure – nor competing models of measurement. Arguments that favor the accommodation of various assessment paradigms assume that paradigms are competing models of measurement. Kuhn's position is: old paradigms are outdated, irrelevant knowledge; a new paradigm creates "revolutionary" knowledge that replaces the old.

[12] Gould (1981) rejects the empirical model of intelligence; he argues empiricism causes two logical fallacies, reification and ranking. His analysis "intelligence" applies equally to writing "ability": "The argument begins with one of the fallacies – *reification*, or our tendency to convert abstract concepts into entities [. . .] We therefore give the word "intelligence" to this wondrously complex and multifaceted set of human capabilities (p. 24). The "second fallacy – ranking, or our propensity for ordering complex variation as a gradual ascending scale. [. . .] But ranking requires a criterion for assigning all individuals to their proper status in the series. And what better criterion than an objective number?" (p. 24).

1999) asks a methodological question: do our tools measure the object correctly? On the one hand, Huot argues writing assessment must accommodate the concept of construct validity; but, on the other hand, he wants to overcome an error in neo-empiricist thinking by redefining validity to mean social construct validity. He remains committed to neo-empiricism's validation anxiety, and to constructivism's consensus anxiety, by arguing that we need to use empirical data in ways that will be accepted by those in educational assessment.

The goal is to redefine key terms and accommodate neo-empirical methods, thereby defusing the threat of centralization and making validity into a social calculation of multiple, incommensurate, and local values.[13] There is no reason to assume that redefining validity will hold off right-wing efforts to consolidate "power and control with a central authority" removing it from "teachers and their immediate supervisors" (Huot, 2002, p. 14 citing Broad, 2000; Williamson & Huot, 1993). The claims are: (1) we can resist the imposition of federal or national standards by advocating for local values; (2) we can negotiate and compromise with various "stakeholders," who are not professional educators; (3) and, we can develop local modes of assessment based on local knowledge. Yet, there is no mechanism to evaluate the "local" knowledge and practices in this relativist framework, because "anyone" can speak to the "conceptual integrity." I see no logical reason why non-professionals will be able to intelligently judge the conceptual integrity of an assessment, nor why either centralized or local control, *a priori,* is superior or inferior; it is particularly illogical in terms of the constructivist argument that knowledge is contextual and relative rather than universal. Centralized programs or, for that matter, decentralized site-based programs, cannot be *a priori* determined to be appropriate or not, without a stable universal foundation.

Additionally, constructivist theory implicitly accommodates scientism by valorizing consensus to legitimate the use of alternative paradigms. As Perelman (1982) helps us to see, advocating for a consensus epistemology is predicated on a method designed to give knowledge about physical objects. The natural sciences use 'consensus' to establish knowledge claims without "subjective' values or rhetorical argumentation. Note how Guba (1990) claims that the goal of constructivist methodology is consensus:

> the constructivist proceeds in ways *that aim to identify the variety of constructions that exist and bring them into as much consensus as possible*. This process has two aspects: hermeneutics and dialectics. The hermeneutic aspect consists of *depicting individual constructions as accurately as possible* [. . .] The *hermeneutic/dialectic methodology* aims to produce as informed and sophisticated a construction (or, more likely, constructions) as possible. (emphasis added; p. 26)

Guba's claim that hermeneutics "consists of depicting individual constructions as accurately as possible," is objectivist – hermeneutics is a method to produce objective correspondence between a subject and reality.[14] Constructivists argue that "dialogue" can adjudicate truth claims by gaining consensus (Broad, 1994, p. 265; Guba & Lincoln, 2003, p. 273); in this view, dialogue legitimates contending methodologies and makes them commensurate – if consensus is reached with stakeholders from each belief system.

[13] Heidegger's (1977) concept of "enframing" describes the power that key terms such as validity and reliability have to transparently frame the way people understand the world through the technology of calculation and measurement (pp. 20ff).

[14] His epistemological gesture towards consensus mirrors the one made for holistic scoring (White, 1984, pp. 408–09): it accommodates modernism's technical rationality.

Lynne (2004) aptly notes that recycling and redefining neo-empiricist concepts – such as reliability and validity – so they reflect constructivists' values is a form of accommodation (Huot, 2002, pp. 45–51; Moss, 1994, p. 6; Moss et al., 1992). For example, Broad (2003) states: "validity is not a quality of an assessment instrument . . . but rather a quality of the *decisions* people make on the basis of such instruments" (author's emphasis, p. 10). The premise is: if we redefine validity in a non-empirical way, then we can reintroduce the term "back into the realm of public discourse, *in which anyone* could speak to the educational effects and conceptual integrity of an assessment" (emphasis added; p. 10). Scharton (1996) also claims that validity "turns on the beliefs of the affected parties" (p. 54). There appear to be very few reasoned arguments from the "affected parties," nor do we see many stakeholders examining the "data that tests produce" (p. 55). And yet, "the *beliefs* of the affected parties" purportedly have the power to transform "values" into "validity."

Lynne (2004) aptly notes that Broad (1994) is the only constructivist who argues against consensus (pp. 266ff). Broad (2003) notes that equating "success" with "reaching consensus," and "dissensus" with "a failure in method" confounds assessment practices.[15] Traditionally, if an assessment produces unreliable scores, it is considered flawed. To correct the flaw, the evaluative frameworks are revised "so [readers] can agree more consistently and more quickly" (p. 7). While Broad sensibly critiques this move, he concludes: "the problem is that [. . . the new evaluative frameworks] fail important tests of validity and ethics" (p. 12). So, while he faults empirical method for its suppression of hermeneutic inquiry into student work, in my view he too ultimately believes that 'if we reform the definition of validity so it means what we want (ethics), then we can save this boat with neo-empiricism as a buoy.'

Guba and Lincoln (1989) claim, "realities are social constructions of the mind" (p. 43). They argue, "it is not possible to prove or disprove a paradigm in an absolute sense" (p. 43). Ironically, their relativist claim rests upon calculative reasoning – an "absolute sense"; and, even the neo-empiricists reject this kind of appeal to absolutes. Most constructivists assent to this definition, but they also apply its relativistic epistemology to paradigms. Guba (1990) states, "[a]s a constructivist I can confidently assert that" each paradigm "is an alternative that deserves, on its merits (and I have no doubt that all are meritorious), to be considered" (p. 27). Guba suggests that because all paradigms have "merit," they function as parallel approaches to a problem. He confounds what Kuhn (1970) calls "puzzle solving," work that goes on within the framework of a paradigm, with the idea that one paradigm can accommodate another paradigm's methods (pp. 35ff).

Relativism confounds the way that practitioners must debate the premises, and "must try, by persuasion, to convert" opponents to the new paradigm (Kuhn, 1970, pp. 198–204). For Kuhn (1970), the concept of paradigms was designed to explain revolutionary change that transforms a disciplinary tradition in the natural sciences; old paradigms are assimilated into the tradition, but in practice they are displaced by the new (p. 97). For Kuhn, paradigms do not function as alternative conceptual frameworks because the new paradigm always *proves* the old paradigm is wrong. Kuhn insists that a new paradigm does not "approximate more and more closely to the truth"; rather, it is simply a better way to solve particular scientific puzzles (p. 206).

Broad's (2003) ethnographic method combines consensus and relativism to argue for the value of local or 'indigenous' writing assessments. Broad's thesis is that local assessment criteria reveal a "dynamic" pattern of a community's values (also Hamp-Lyons & Condon, 2000, p. 6). Broad's

[15] On the one hand, dissensus is an important concept in hermeneutic thinking; Spellmeyer (1993) argues the "dimension of dissent in the ongoing formation of knowledge" is overlooked by Constructivists (p. 162; Petruzzi, 1998, 2001). On the other hand, of the Constructivists, only Broad notes how dissensus challenges normal or 'puzzle solving' discourse.

'method' reveals "124 distinct factors," which he claims are the "real" values embedded in the context. His method assumes that each factor has a relative value that helps organize the community's multiple values. However, an equally reasonable interpretation is that conceptual variety obscures rather than clarifies values. Local "site-based" practices of writing and assessment *could be, and often are, framed by* "current traditional rhetoric"; or, may use classical, rather than modern applications of rhetoric (Hillocks, 2002, pp. 21–27; Huot, 2002, p. 153). Hillocks (2002, 2003a, 2003b) argues if local practices are disparate, unfocused, and incoherent, then the dominant 'normal' values of current traditional practices and epistemology re-emerge. Even if analyzing a context brings to light "the dynamics by which instructors assess students' writing" (Broad, 2003, pp. 127–128), the attendant lack of focus caused by 124 different values that are at play in that context – especially if values are dynamic, in constant flux – does not mean a coherent set of practices can be constructed or that they will be best practices.[16] Under the guise of local values, people are free to argue that any approach is equally reasonable. Concomitantly, site-based or local values may focus on lower order 'skills,' or see little connection between writing well and understanding deeply.[17]

Constructivists do not develop a rigorous and clear definition of the term "hermeneutic". They use it in a loose and confusing manner; consequently, it carries little weight. As Lynne (2004) notes, the term 'hermeneutics' is only "somewhat helpful" because constructivists frame it "as an alternative to reliability rather than a reconceptualization" (p. 116) of epistemological and methodological assumptions about writing assessment. For Hamp-Lyons and Condon (2000), hermeneutics does not obviate the neo-empiricist methodological imperative to produce valid and reliable measures of writing ability. They define the "constructivist paradigm" as "a kind of hermeneutic approach to assessment ... that views embedded concepts such as reliability and validity ... as constructed forms of knowing that can be shaped to fit the circumstances" (p. 8). Constructivism "does not abandon empirical validation" (p. 11).[18] It seems that constructivists use the term without stipulating an exact meaning (Broad, 1994, p. 14; Guba & Lincoln, 1983, p. 87, 1989, p. 39; Hamp-Lyons & Condon, 2000, p. 9; Moss, 1994, p. 5; Moss et al., 1992).

[16] Hillocks (2003a) argues that this problem is pervasive: "Most states, in their statements about goals for education in the schools, talk about the need for students to learn to be critical thinkers. As part of their writing assessments, most states ask student writers to produce some sort of persuasive writing which the states usually see as involving critical thinking. [...] An analysis of the test formats (including prompt, test settings, and time available); the criteria for judging results; and the benchmark papers that demonstrate what the criteria really means indicates that states are not at all much concerned with critical thinking. Rather, most of the assessments examined appear designed to elicit and reward shoddy, vacuous thinking" (p. 5).

[17] Broad (2003) does not address the issue that the writing samples and the writing prompts in Appendix A and B seem to describe an assessment disconnected from critical writing, reading, or thinking. Condon and Kelly-Riley (2004) describe the implementation the writing portfolio program at Washington State University; faculty "lamented that students lacked adequate higher order thinking abilities." While they assumed "that writing and critical thinking were inextricably linked" they noticed that writing was "deemed acceptable in quality despite lacking evidence of analytic skills" (p. 57). They concluded that local values "tended to be satisfied with accurate information retrieval and summary," and did not include eliciting "thinking skills in their assignments" (p. 58). As Lynne (2004) notes, the WSU program "does not clearly test academic reading and writing and use of source materials; the students read only short passages, and there are no directives to cite anything" (p. 149). Flateby and Metzger (1999) note that their assessment instrument at the University of South Florida excluded higher order thinking. Current traditional and rationalist assumptions, about "tone, audience, unity, coherence, and mechanics" (p. 7), excluded cognitive complexity from their writing assessment.

[18] More persuasively, Delandshere and Petrosky (1998) argue that neo-empiricist methods "redefine[s] the nature of the [performative] construct being evaluated in ways that seem inconsistent with the spirit or purpose of the assessment" (p. 22). Lynne's argument is powerful because of her insistent focus on this inconsistency.

In a change from her earlier position, Lincoln (1990) argues that constructivists should not accommodate neo-empiricism: "We [constructivists] have deluded ourselves that the discourse of constructivism could resemble the discourse of other science", and admits that "I and others were wrong" to have believed that constructivism should accommodate scientism (p. 86). In this she has transcended her relativist position by noting the ineffectiveness of accommodation. However, she argues that incommensurability operates only at the level of ontology.

There are two problems with Lincoln's argument: she defines "ontology," which traditionally means the nature and mode of existence of being, as "worldview"; and, she attempts to remediate inter-paradigmatic errors (an inappropriate ontology).

1.4. The hermeneutics of human performance: retrieving writing assessment from methodology and epistemology

For Heidegger (1996), the essence of modernity is the hegemony of scientism and its inherent "strong truth" claims. While science has become "the theory of the real" (p. 157), its methodology of "tabulation does not guarantee a real understanding of what has been ordered. The genuine principle of order has its own content which is never found by ordering, but is rather presupposed in ordering" (p. 48).[19] Heidegger (1952, 1954, 1962/1977) argues that science understands the world by ordering it; but 'methods', though guaranteed to order, do not guarantee to disclose truth:

> Modern science's way of representing pursues and entraps nature as a calculable coherence of forces. [. . . Science] sets up nature to exhibit itself as a coherence of forces calculable in advance, it therefore orders its experiments precisely for the purpose of asking whether and how nature reports itself when set up this way. (1977: p. 21)

Modern scientism frames our understanding, like all historical concepts, in a limited and distorted manner. Science is a pervasive and transparent mode of epistemology; it makes knowledge seem static, like mere objects in space that are present in the world as a "standing-reserve" (p. 167) of material, simply there to use, calculate, measure, regulate, and order (pp. 26–27).

Since ontological hermeneutics offers writing assessment a tradition that rejects epistemology and methodology, it does not need to remediate scientism or accommodate the epistemology of the natural sciences. As Richard Rorty (1979) notes, ontological hermeneutics and epistemology stand in opposition to each other:

> Epistemology sees the hope of agreement as a token of the existence of common ground which, perhaps unbeknown to the speakers, unites them in a common rationality. For

[19] The Spellings commission (2006) report advocates for "a culture of evidence-based assessment" (p. 23) to evaluate institutions by aggregating student assessments in the first and final years of higher education. The goal is to measure "value added" between students' first and final years to compare institutions. They call for "better data about real performance" (p. 14), "solid evidence, comparable across institutions" (p. 14), "new performance bench marks designed to measure and improve productivity and efficiency" (p. 20) and the publication of "independent, objective information using data" (p. 22). The institutional data will be calculated to objectively report educational performances in ways that have little relation to a convincing interpretation of what students deeply understand when they graduate. In a strange twist of reasoning, which makes perfect sense in terms of Heidegger's claim that technology is a subjective mode of ordering the "real" to increase, preserve, and maintain power (Zimmerman, 1975, pp. 409–411), the Commission advocates for data that is unequivocally subjective, not empirical; they treat student surveys, which are merely consumer preferences, as 'hard' empirical data.

> hermeneutics, to be rational is to be willing to refrain from epistemology—from thinking that there is a special set of terms in which all contributions to the conversation should be put. . . . For epistemology, to be rational is to find the proper set of terms into which all the contributions should be translated if agreement is to become possible. (p. 318)

Rorty notes that epistemology is based on consensus – an agreement that "unites them in a common rationality." Dilthey (1883/1989) sought agreement when he tried to apply the scientific method to human behavior, thereby demonstrating that the "human sciences" share a common rationality with natural science, and can produce valid knowledge. The natural and human sciences "are necessarily two different and irreducible standpoints for a scientific approach aimed at psychophysical life-units" (p. 67). Dilthey thinks both 'sciences' use "empirically observable" relations between social context and the mind to analyze "different manifestations of one ground" (p. 68).

For Gadamer (1967/1997), Dilthey's work fails because it makes "certain" knowledge claims about contingent and ambiguous human performances, such as writing, art, and music. Gadamer argues, contrary to Dilthey, that human performances "are not data of experiment and measurement but unities of meaning" (p. 65). Modernism emphasizes the methodology of measurement and calculation, which may be appropriate to reveal aspects of nature, but it does not explain the meaning of historical understanding embedded in objects produced by human being-in-the-world. Scientific methodology makes "what has grown historically [into] an object to be established like an experimental finding" (Gadamer, 1960/1990, p. xxxiv).

Betti (quoted above) notes that human products have a different ontological status than physical objects, whose being is not determined by its understanding of a world. The principles used by the natural sciences are designed to develop our knowledge of physical objects, which have objective presence; writing, which must be characterized as the articulation of meanings that disclose the way human beings exist in the world (Heidegger, 1996, pp. 39–42), are "essentially different." Writing is an entirely different ontological order[20]; that is, physical objects are "worldless" (p. 5); unlike physical objects, ontological objects like writing, music, or painting are situated in a web of historical understandings and meanings, or a "world" (pp. 49–54).

Because neo-empiricist and constructivist writing assessment theories are framed by scientism and methodology, we should apply ontological hermeneutics to the tradition of writing assessment. In this framework, we can reform writing assessment articulating a sustained and persuasive critique of *the* conceptual framework of scientism. Simpson (1995) argues that "our instrumentally saturated culture [fails] to distinguish the notion of meaning from that of end or goal, that is, its inclination [is]? to collapse talk about structures of meaning to talk about means and ends" (p. 9), which hypostatizes scientific methodology, making its values transparent and beyond critique. Ontological hermeneutics makes merely historical understanding visible and questionable; rather than using tradition for its instrumental values, we evaluate the various historical trends in tradition, analyze its cultural meanings, and retrieve structures of meaning that we appropriate and project into new, future interpretations, or performances of meaning. For Heidegger (1975/1982), the new performances enact a "critical process in which [. . .] traditional concepts" are assessed and evaluated (p. 23). Hermeneutic retrieval of tradition is "a positive return" (Heidegger, 1996, p.

[20] Walker Percy (1954) argues the scientific method makes assertions, which are classificatory and functional in practice, about regularities in the physical world. Applying scientific method to cultural artifacts, which construe a world, produces "an antinomy which compromises the usefulness of the method" (p. 223). The method cannot be usefully applied to cultural artifacts because they are on different "ontological levels" (p. 240).

19), a genealogical analysis that adjudicates historical truth claims, retrieves, and appropriates animating questions or problems in the tradition; in this way, we can evaluate and project new probable interpretations (Gadamer, 1960/1990, pp. 190–192, pp. 265–270; Heidegger, 1996, pp. 142–143).

Not only does ontological hermeneutics help us to articulate the dynamic aspect of tradition, the critical destruction and reconstruction of conceptual frameworks used in writing assessment, it can also help us to understand the rationale for accommodation. Modernity falsely frames history as a linear progress, as *the* dynamic of history; it seems 'natural' to understand any process as progress. Since progress is the result of scientific knowledge, we reform tradition only to 'overcome' its flaws, its errancy. It is 'natural' to want to correct and remediate it, rather than uproot it. If the scientific method is what Heidegger (1996) calls a transparent "fore-structure" of everyday understanding (p. 143), and its calculative impulse unconsciously frames our understanding of the world, then using its methodology, in effect, accommodates its transparency and "enframes" our understanding the world.

As a humanistic discipline, composition should articulate not just the rhetorical aspects of our tradition, but also the aesthetic aspects. If tradition is historical understanding, as Heidegger (1975/1982) states, we must listen to "what speaks to us in tradition" and put "to one side the merely historical assertions" (pp. 71–73). Separating scientific methodology from what "speaks to us" in the humanities can help us to reframe writing assessment within 'weak' thinking that values the tradition of aesthetics, and its sub-field, rhetoric. The three proponents of ontological hermeneutics that I have discussed all suggest that art,[21] rather than science, provides the proper criteria for evaluating performative self-presentations, such as writing. Gadamer (1960/1990) asks.

> Does not the experience of art contain a claim to truth which is certainly different from that of science, but just as certainly is not inferior to it? And is not the task of aesthetics precisely to ground the fact that the experience of art is a mode of knowledge of a unique kind, certainly different from the sensory knowledge which provides science with the ultimate data from which it constructs the knowledge of nature? (pp. 98–99)

For Gadamer (1960/1990), the "work of art is not an object that stands over and against a subject" (p. 102); rather, ontological objects – such as writing – are self-presentations that do not exist outside of their being experienced (read). In other words, writing has the ontological structure of an event of being; the being-there of writing comes to presentation only in a human performance.

We could use artistic criteria to analyze writing as textual performances that articulate self-understanding; we could use practical reasoning to adjudicate truth claims; and, we could use argumentative criteria to evaluate an interpretation. We use a 'weak' rhetorical concept of truth, not to reach consensus, but to be accountable. Accountability means we produce "interpretative summaries" that focus on how students articulate meaning in writing, and that we exhibit the best available evidence in support of the most probable interpretation of their ability (Delandshere & Petrosky, 1998, p. 14). In this way, we discontinue excessively dwelling on collecting and measuring 'hard data'; we discontinue the goals of scientific methodology – measurement, similarity, generalizability, and regularity; and, we discontinue thinking that writing is a worldless object –

[21] See Heidegger (1950/1971), "The Origin of the Work of Art"; Gadamer (1990), Part 1, "The Question of Truth as it Emerges in the Experience of Art"; and Vattimo (2008), Vattimo (1991), Part 2, "The Truth of Art."

simply present and available. Like rhetoric, music, poetry, and art, writing exists ontologically in a horizon of meanings and needs to be analyzed by a different order of thinking than the sciences use.

2. Assessing for understanding and interpretation: performance portfolios and academic writing

Writing proficiency assessment can use humanistic models, goals, and justifications to evaluate writing if we apply hermeneutic principles regarding: (a) deep understanding; (b) reading sequences that use disciplinary or primary texts; (c) performance assessments of cognitively complex interpretations; and, (d) writing portfolios that are formative and performative.

2.1. Performative assessment of deep understanding

Howard Gardner and other education reformers, like Theodore R. Sizer and Grant Wiggins, argue that educational assessment must develop strategies to assess how well students can demonstrate deep understanding and then apply it for their own purposes. For Gardner (1995/2004), educational assessment avoids assessing "performances of disciplinary (genuine) understanding" (p. 11).

> There has been a virtual conspiracy to avoid assessment of understanding, though this avoidance may have been innocent. If one assumes that understanding is equivalent to mastery of factual materials, or, if one assumes that understanding follows naturally from exposure to materials, then there is no reason to require explicit performances of understanding. But it is more likely that we have avoided assessing understanding because doing so takes time and because we have lacked confidence that we will actually find clear evidence of understanding. (Gardner, 1999, pp. 161–162)

While Gardner uses a cognitive framework, which, on the surface, appears far from the concerns of ontological hermeneutics, his claims about the primacy of understanding are consonant with Heidegger's argument that we perform understanding by appropriating and applying it in projects, which open the possibility of interpretation.

As Gardner (1995/2004) states:

> . . . understanding is not an acquisition that clicks into place at a certain developmental juncture [, . . .] processes of understanding involve sets of performances – carrying out analyses, making fine judgments, undertaking syntheses, and creating products that embody principles or concepts central to a discipline" (p. 186)

Assessments that value the application of concepts, the demonstration of close reading, and appropriation of understanding in cognitively complex projects are "performative." Performative assessments require students to engage readings that explore a complex disciplinary problem.[22]

[22] George Hillocks (2003) argues that both writing portfolios and text-based writing assessments are positive steps toward the evaluation of rigorous thinking (pp. 17–20). For Hillocks (2002), writing assessments should be cognitively complex and have "characteristics of epistemic rhetoric, interactive and deliberative thinking through problems and their relevant data with attention to different perspectives" (p. 187). Bok (2005) claims that "surveys show that most [college] seniors do not think they have substantially improved their writing or critical thinking" (p. 2) skills because students can "rely on memory to pass exams" (p. 2).

Contextualizing writing assessment in sequences of academic reading makes the purpose explicit: understanding and interpreting texts.

Performance assessment is commonly defined as 'any type of performance.' This is not adequate because it implies that 'performance' is simply 'doing' something; rather, it should specify particular qualities. It confounds 'doing' rote or skill-based activities with cognitively complex performances of deep understanding. "Performance assessment" should stipulate a cognitively complex mode of assessment that evokes and evaluates higher order habits of mind. Writing assessments should evaluate the kinds of student performances that are valued in academic contexts, and "that have not traditionally been measured in large groups of students—skills such as integrating knowledge across disciplines" (Rudner & Boston, 1994, p. 4). Performance assessments demonstrate whether or not students can explicate issues presented in a sequence of primary texts, can synthesize their understanding with concepts in the texts, can appropriate their understanding and project an interpretation, and can articulate the interpretation in extended argumentation.

While scholars acknowledge the important role of portfolios as performative assessments, they persistently try to apply natural science methodology to portfolio assessments. Hamp-Lyons and Condon (2000) argue that portfolio assessment, "like traditional direct tests of writing, focuses on a product" (p. 5); so, "in and of themselves" they do not "enact a constructivist paradigm of evaluation." According to Hamp-Lyons and Condon (2000), portfolios "open the possibility of constructivist evaluation," and provide the benefits of performance assessment (p. 9); yet, they also can accommodate "the traditional psychometric quality of reliability, in terms of decisions raters make in reading the portfolios," and that "it was a far more valid instrument for assessing the students' academic writing skills" (p. 77). On one hand they claim that portfolios are collections of *completed products*, and, on the other hand, this claim is elided by another claim that there are benefits to portfolio assessments, which one assumes is because they are performative and do not fit the constraints of traditional methods.

Portfolios do not work with traditional methods because, as Lynne (2004) notes, "performance assessment deals with the evaluation of complex tasks. [. . .] These kinds of tests produce results that are not easily reduced to statistically reliable numbers" (p. 88).[23] Larson (1997) articulates a claim that haunts portfolio assessment: portfolios "have yet to be shown to permit the kinds of reliable, consistent, criterion-referenced scoring that makes possible firm judgments about students" (p. 279). Camp (1993) argues that performative assessments – since they are hermeneutic and rhetorical forms of writing – are not "statistically reliable"; portfolios require substantial latitude to evaluate "the complexities of understanding and interpreting"; evaluations produce too much variation to yield any objective, hard data (p. 49). For Moss (1992), portfolios are a problem because of validity:

> . . . performance assessments present a number of validity problems not easily handled by traditional approaches and criteria for validity research. These assessments typically permit students substantial latitude in interpreting, responding to, and perhaps designing

[23] Linn, Baker, and Dunbar (1991) argue that even though performance assessments are direct and cognitively complex, the methodology of standardized testing (p. 16) is the foundation for any systematic scoring. For them, expanding the definition of validity establishes "complementary roles for conventional and alternative" paradigms. Delandshere and Petrosky (1998) argue that performance assessments cannot be assessed by assigning numbers; and, we should use "*interpretative summaries* of performance" (authors' emphasis; p. 14). While Delandshere and Petrosky (1998) and Moss et al. (1992) "question" the relevance of natural science methods, they accept it for "simple and discrete behaviors" (1998, p. 23) or certain "domains" of knowledge (1992, p. 12).

> tasks [. . . that require responses to be] complex, reflecting integration of multiple skills and knowledge." (p. 230)

Performance writing assessments present a horizon of meanings that measurement methodology cannot standardize, remediate, or overcome. However, this realization has not led to a clear unequivocal call to exclusively use performative writing assessments because the hegemony of scientism frames performance assessments as a puzzle to be solved from within neo-empiricist methodology.

For Sizer (1992), performative assessments are more rigorous than traditional assessments: "we must expect more: the students must be able to use [their] knowledge, to acquire the habit of its thoughtful use" (p. 147). Sizer (1996) argues we should assess educational goals that promote deep understanding, and the retention of "enduring intellectual habits" p. 182), which enable written and verbal reasoning. Sizer (1984, 1992, 1996) has developed a model to redesign American high schools, which he calls "Essential Schools," that teaches and assesses "enduring understanding" (pp. 116–119; pp. 98–101; pp. 83–91). Students thoughtfully use knowledge when they engage in primary texts, in a sequence of reading about an "essential" or broad disciplinary question, and develop specific concepts used to frame and analyze the question. Wiggins and McTighe (1998) call this approach "uncoverage," because topics have narrow scope and depth of inquiry; learning outcomes are performances of specific habits of mind that produce deep understanding, which has "value beyond the classroom" (p. 23).

The educational objective of writing assessment should focus on critical literacy. Rose (1989) argues that students need flexible strategies to facilitate their capability to analyze, synthesize, evaluate, and understand complex problems (pp. 188–189). For Gardner (1995/2004), performative assessment uses open-ended tasks directed at primary sources to produce extended discourse and to evaluate "certain more sophisticated performances that signal deeper understandings" (p. 178). Sophisticated writing performances demonstrate rhetorical and argumentative strategies, higher order habits of mind, extended opportunities to develop understanding by engagement with sequences of primary and secondary texts, and recursive thinking through drafts and revision.

2.2. *Text-based writing assessment*

> Reading fundamentally involves interpretation. [. . .] Interpreting music or a play by performing it is not basically different from understanding a text by reading it. (Gadamer, 1960/1990, p. 399)

Text-based writing pedagogy utilizes the "revolution in the concept of reading" (White, 1985, p. 94) that was influenced by Gadamer's hermeneutic theory and phenomenological analysis of reading. Gadamer's (1990) hermeneutic analysis of reading shows that it is performative. "Text-based" performance assessments extend tasks to contexts that require a rigorous demonstration of understanding what was read, and appropriating understanding in an interpretation. Drawing on reader response criticism, composition scholars have applied hermeneutic insights to writing (Bartholomae & Petrosky, 2005; Petrosky, 1982; Rose, 1989; Salvatori, 1996; Spellmeyer, 1993) – particularly by using reading sequences as a context for academic writing.

The term 'text-based' often refers to the kind of prompt one finds on the 'new' SAT. White (2007) states that "text-based" prompts make different "conceptual demands on the writer" (p. 144). Different perhaps, but prompts that use small snippets of text are not "text-based" assessments; they remain merely prompts. Just as doing ordinary 'tasks' should not be considered, *a*

priori, performative, so too, using pieces of texts as prompts should not be considered, *a priori,* text-based. Text-based assessments use reading sequences to evaluate students' critical reading, to evaluate student's ability to appropriate texts in academic inquiry, and to evaluate students' ability to synthesize their understanding with disciplinary conversations.

Text-based practice is hermeneutic because it demands reading, thinking, and writing recursively. As Doll (1993) states, recursion refers "to the human capacity of having thoughts loop back on themselves. Such looping, thoughts on thoughts, distinguishes human consciousness" (p. 177). Recursive reading and writing about specific complex topics is a central habit of mind in academic writing (Downs & Wardle, 2007, p. 561; Rose, 2006, pp. 114–115). Perfetti, Britt, and Georgi (1995), studied two groups of students who "covered" the same material: one group used the "traditional" or "coverage" pedagogy; and, the other used an interpretative text-based pedagogy based on a sequence of primary readings. They drew two conclusions about text-based pedagogy: students developed a deeper understanding of the issues under consideration; and, students' writing demonstrated an increase in the quality of reasoning and deliberation. Perfetti et al. (1995) concluded that students in the text-based section synthesized evidence better, developed substantially better written arguments, and demonstrated a significantly higher level of reasoning than students taught with the traditional pedagogy.

Traditional pedagogy and assessment artificially separates reading, writing, and thinking; for students, writing assessments that are discrete, fragmented, a-contextual, and rote are 'busy-work activities' (Rose, 2006, pp. 121–122). Rose (2006) has written extensively and convincingly about teaching students to internalize and to independently perform a few crucial academic habits of mind. He uses sequences of academic reading from across the curriculum to help students to develop specific habits of mind that produce successful academic writing (pp. 126–27; 1989, pp. 138–140; Rose & Hull, 1990, p. 243). For Rose (1989), summarizing, defining, synthesizing, and analyzing – are the critical thinking strategies used in academic writing; however, he notes they are transparent to those who have what Gardner (1995/2004) calls "unschooled" minds. Students who are unschooled find themselves "on the boundaries" of academic success because they have a limited repertoire of cognitive capabilities. Unschooled minds are capable of "merely rote, ritualized, or conventional" (p. 18) performances because they apply "entrenched understandings" that "constrain" cognition and produce poor academic performances (p. 49). Reading sequences provide "an overarching structure," a context that facilitates enduring understanding; a context to learn "strategies of argument" and reasoning (Hillocks, 1995, p. 183); and, a context to apply the recursive and inter-animating processes of reading, thinking and writing.

2.3. *Configuring performative portfolios: what is the role of reflective essays?*

Writing portfolios are generally considered performance assessments even though they are often collections of finished products, rather than independent performances that assess deep understanding. Merely assembling a portfolio – collecting, selecting, and sometimes reflecting on past productions – does not fit the hermeneutic definition of a performance assessment because collecting and selecting artifacts are lower order thinking skills, which relate only tangentially to the higher order thinking skills, such as analysis, synthesis, evaluation, and critique.[24] The

[24] As Elbow and Belanoff (1991) aptly note, portfolios address "a critical, professionwide problem in evaluation that most teaching sweeps under the rug. That is, to grade a paper is to interpret and evaluate a text, yet our profession now lacks (if it ever possessed) a firm theoretical disciplinewide basis for adjudicating between different interpretations or evaluations of a text" (p. 15).

self-reflective essay or letter, which introduces and analyzes the texts in a portfolio, is current 'best-practice' because it is the performative artifact in a portfolio that contains classroom products; consequently, as evidence, without a performative artifact that synthesizes the artifacts, there is little or no consistent evidence to evaluate.

White's (2005) proposal to replace holistic scoring methods for portfolios accommodates neo-empiricist methodology. White realizes that assessing diverse genres cannot lead to a 'reliable' portfolio assessment; therefore, White argues that a self-reflective essay, which functions as the unifying artifact in a portfolio that contains multiple kinds of artifacts, will produce reliable scores. However, if we abandon the methodological imperative that sanctions a practice as "scientific," then both the need to include a self-reflective essay, and to use "reliable" method no longer applies to portfolios.

The realization that writing portfolios fit neither the model of indirect assessment nor the model of direct assessment developed by educational "measurement" should be considered a significant benefit rather than a "puzzle" that we must solve. Since a portfolio both collects multiple products and, most commonly, different genres of writing, holistic scoring is not an appropriate 'method' of evaluation. But generally, the assumption is that a portfolio should have multiple genres because, as Broad (2003) states, they "provide a richer context for – and thereby enhance the validity of – high stakes decisions" (p. 103). However, this assumption is problematic, as Hamp-Lyons and Condon's (1993) research shows: "We have found again and again in portfolios of different kinds, at different times, from different readers, a clear suggestion that readers do not attend equally to the entire portfolio" (p. 182). Their results show that portfolios with multiple genres are more, not less, difficult to score.

Murphy (1997) notes that "there is pressure to standardize portfolios because traditional statistical kinds of reliability appear easier to achieve when students are asked to submit the same sorts of assignments completed under the same sorts of conditions" (p. 73). But, standardizing content should not hinge on reliability; it should hinge on whether or not self-reflective writing is a capability, or an essential habit of mind that contributes to proficiency in academic writing. White (2005) notes that the evaluative weight should be heaviest on an independently produced self-reflective essay because it is performative (p. 594). But self-reflection is not a common habit of mind valued or taught in most academic fields. As White (2005) notes, his proposal requires that we teach students to analyze their own writing performances (p. 591).

Rather than establishing self-reflection as a programmatic learning outcome, writing portfolios should contain a single genre of text-based and broadly analytical and argumentative papers. Gleason (2000) argues that the genre of writing in a portfolio must have "some uniformity" (p. 565). Hermeneutic assessment of portfolios that have uniform artifacts gives people "multiple opportunities to apply their knowledge in new ways [that] are likely to advance toward enhanced understandings" (Gardner, 2000, p. 129). The most important piece of evidence in a performance portfolio is a "new" independently produced (outside class instruction) essay.

A performative text-based, argumentative, analytical, performance essay can anchor a portfolio that includes previously written supporting papers. Supporting papers – which come from different classes – function as formative, not performative, assessments. While the classroom products provide supporting evidence for a well-warranted writing assessment, a text-based performance essay, which synthesizes and analyzes a sequence of readings – is the most valuable element of a portfolio. A performance portfolio includes an independently produced text-based analytical essay and provides clear evidence that students have specific academic capabilities: proficiency in close reading; in synthesizing concepts from sequenced readings; in using texts to support an argument; and, in applying concepts for a specific academic purposes.

3. Conclusion

The principles of ontological hermeneutics, if applied to writing proficiency assessment, are valuable because they illuminate the pervasive presence of scientism in writing assessment. Writing assessment applies reasoning designed to analyze observational data of nature – which confounds our thinking with excessive focus on means and ends. This form of instrumental thinking is 'method hope' and obviates the complex ontological processes of reading, understanding, cognition and interpretative performance that constitute writing in the academy.

Ontological hermeneutics frames writing assessment in the educational values of the humanities, not the natural or human sciences. This framework supports – finally and unequivocally – the use of a 'weak' rhetorical notion of evidence and proof, not the 'strong' one derived from natural sciences. Accountability reports to stakeholders could be "interpretative summaries," that use rhetorical reasoning rather than quantitative measures of objective data (Delandshere & Petrosky, 1998, p. 14). Stakeholders could receive arguments – *well warranted credible explanations* – about student *understanding as demonstrated* by the evaluation of text-based performance portfolios (Moss et al., 1992, p. 12). Interpretative summaries could describe the meaning of students' capabilities and limitations as writers using practical reasoning, rather than mathematical reasoning. Ontological hermeneutics could change our historical perspective on writing assessment, so that we could develop new practices that are appropriate and congruent with current composition theory. We are not 'measuring' writing as scientists; rather, we are humanists analyzing the thinking and reasoning – equally hermeneutic and rhetorical performances – of other human beings.[25]

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