Quantification and Intelligence Testing: A Reassessment

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Intellectual ability shaped by culture.

Though not a student of the history of testing for intelligence, I have always thought that intellectual ability, the ability to think conceptually, is primarily shaped by culture and that testing for intelligence reflects the culture of the West, not human intelligence *qua* human. "I got rhythm" is a cultural statement, not a description of a genetic trait.

This thought recurred when Charles Murray of the American Enterprise Institute was given prominence at several conferences that I recently attended. Since the publication of *The Bell Curve*[1] a decade and a half ago, Murray has become the most listened to, if not the reigning authority, on intelligence and education—at least in some circles.

This article will critique the "strong hereditarian" bias characteristic of Murray, whose arguments defy just about every philosophical and theological truth of the Western philosophical tradition. It will also warn of the dangers to academic freedom presented by the push for measurement of learning outcomes that now dominates the accreditation of higher education degree programs and institutions.

With respect to the latter, the U.S Department of Education under former Secretary Margaret Spellings engaged in a system-

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[1] Richard J. Herrnstein and Charles Murray, *The Bell Curve: Intelligence and Class Structure in American Life* (New York: Free Press, 1994).

atic effort to "dumb down" college education in America by the forced imposition of a progressive education ideology that compels colleges and universities to apply quantitative measurements to "learning outcomes."

The debate about measuring what students learn at accredited colleges has practical significance because of the Education Department's desire to measure the learning outcomes of students in every course taught in every college in America. It gains further significance in light of Murray's advocacy of restricting a college education to those who score in the top 20th percentile on IQ tests.

Nonbiological explanations for intelligence significant.

Murray's focus on genetics—received intelligence—proved embarrassing to his neoconservative colleague Nathan Glazer, who wrote: "I wish Herrnstein and Murray had pressed further other explanations for these differences among groups before taking up differences in biological inheritance. Indeed, I wish they had dropped resort to such explanations totally: little would have changed in their argument if they had. For the nonbiological explanations will carry us far, to the point perhaps we need make no reference to genes at all."[2]

There are other reasons for questioning Murray's celebrity, including numerous findings that contradict Murray's thesis by Richard E. Nisbett, a cultural psychologist and co-director of the Culture and Cognition Program at the University of Michigan. The following data, which are taken from Nisbett's 2003 book *The Geography of Thought: How Asians and Westerners Think Differently . . . And Why*,[3] are relevant:

- Economic and social factors can affect perceptual habits, which accounts for the differences between agricultural peoples and those living in industrial societies (42).
- Asians' feeling good about themselves is tied "to the sense that they are in harmony with the wishes of the groups to which they belong" (49).
- Unlike for Westerners, for Asians choice is not a high priority (49).

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[2] Nathan Glazer, "Scientific Truth and the American Dilemma," in Steven Fraser, ed., *The Bell Curve Wars* (New York: Basic Books, 1995), 143.

[3] Richard E. Nisbett, *The Geography of Thought: How Asians and Westerners Think Differently . . . and Why* (New York: The Free Press, 2003); page numbers from this work are cited within parentheses in the text. For further evidence that broadly contradicts Murray's thesis, see Richard E. Nisbett, *Intelligence and How to Get It: Why Schools and Culture Count* (New York: Norton, 2009).

- Asians prefer jobs in which everyone works together, and no one person is singled out for personal honor (63).
- In the West, the purpose of negotiation is to achieve a desired result. In Asia negotiation avoids either/or choices (75).
- Differences between the sexes are greater in the West (99).
- Chinese regard change as more likely than Americans (104).
- Westerners think in linear terms (108).
- Asians organize their perceptions in terms of perceived relationships (140).
- Western children learn nouns more rapidly than they learn verbs, but East Asian children learn verbs at about the same rate that they learn nouns (149).
- East Asians live in an interdependent world in which the self is part of a larger whole (76).
- "For Westerners it is the self who does the acting; for Easterners, action is something that is undertaken in concert with others or that is the consequence of the self operating in a field of forces" (158).

Intelligence an historical discovery.

Murray, to reiterate, gives little consideration to the historical and cultural origins of cognitive ability. By way of contrast, for many of us trained in the Western philosophical tradition, intelligence is best understood as an historical discovery: a discovery discussed in studies by Bruno Snell and Werner Jaeger, among others.[4] Those studies, along with Eric Voegelin's interpretation of cosmological consciousness in *Israel and Revelation*, *The World of the Polis*, and *The New Science of Politics*, capture the essence of what Voegelin called the "break with myth" and the discovery of man's unity of soul and mind (intelligence).[5]

Voegelin fashioned a philosophical anthropology that defined Western societies as "macroanthropos" and counterposed them to

[4] See Snell's seminal essay, "Homer's View of Man," a chapter in his *The Discovery of the Mind: The Greek Origins of European Thought*, trans. T. G. Rosenmeyer (New York: Harper and Row, Torchbooks, The Academy Library, 1960). See also Werner Jaeger's *The Theology of the Early Greek Philosophers* (Oxford: The Clarendon Press, 1947), which consists of the 1936 Gifford Lectures in which Jaeger captures the mystic aspects of early natural science.

[5] See Eric Voegelin, *Order and History, vol I: Israel and Revelation* (Baton Rouge: Louisiana State University Press, 1956); *Order and History, vol II: World of the Polis* (Baton Rouge: Louisiana State University Press, 1957); and *The New Science of Politics* (Chicago: The University of Chicago Press, 1952).

societies and cultures preceding the advent of philosophy in Hellas and revelation in Israel, which he described as "cosmological."

Ancient man, living within a world of experience that was "cosmological," did not see the world around him as a universe of differentiated objects but as a cosmos composed of other beings whose living presence was manifest in the progress of daily life. That consciousness still resides in Asia, Africa, and amongst aborigines and American Indians, and explains, I believe, why science has progressed in the West to the degree it has. Nor did ancient, pre-philosophic man understand himself as a 'person'—a later concept reflecting differentiated consciousness—consisting of unified body and mind.

Everywhere ancient man turned he encountered the gods and interpreted his own actions by reference to their decisions. Political order was also understood as standing in direct relationship with the gods. It was not an order that was autonomous or independent of an order higher than itself. Rather, it was perceived as an extension of cosmic order. Political community was experienced as a smaller portion of a larger sacred order or cosmos.

This worldview can be traced back to the early evidence of uniquely human existence in the Neolithic age, a cosmological consciousness that was discarded by the Greek mystic philosophers who searched for a first principle that expressed the sacred *arche* in terms that were, by varying degrees, non-mythic.

Still very close to mythic descriptions, Thales suggested that the origin of the process of coming into being, growth, and death was water, a symbol of generation in all mythic cultures. Anaximenes, perhaps more revolutionary, said that it was air; and Anaximander made the complete break with the formulation that the *arche* was infinite *(to apeiron)* and that the infinite *arche* of being was divine *(to theion),* which symbol, itself, was a philosophic revolution. No longer from that point could the question of the beginnings be answered in terms of a mythic god. Anaximander had abstracted the essence of the genderless divine *(theion)* reality from the mythic gods and chose the neuter article *(to)* to express that absence of myth. The *arche* of nature is not a god *(theos),* he said, it is the divine *(to theion)* reality.

Socrates stood in this constructive tradition of criticism of myth, founded upon a new concept of divine reality differentiated intellectually from the previous mythical forms.

The intellect manifest in our understanding of human intelligence was shaped by an intellectual shift (Voegelin calls it a "leap") from mythic consciousness to philosophic in Hellas and through revelation in ancient Israel and the Gospels.

Culture shaped by these Western influences of what Voegelin calls *pneumatic* and *noetic* experiences sustained the differentiated consciousness of post-mythic order and contributed to the development of the skills that are measured today by IQ testing.

Let's look more closely at the assumption that intelligence can be measured. If intelligence can be measured, we must first agree on what it is we are measuring. In the language of Eric Voegelin, intellect is differentiated consciousness of the nature and limits of mind or *nous* experienced as in-between the divine and the world. So an examination of the scientific methods of testing of intelligence necessarily takes us back to the Presocratics, Socrates, Plato, and Aristotle.

Bruno Snell's *The Discovery of the Mind* traces the discovery of the human person and parallel changes that occurred in Greek representations of the human form. That change in ancient Greece from tenth-century depictions of men composed of stick-like members called "geometric art" to second-century depictions of the human form as a unified body is the result, Snell shows, of Heraclitus' discovery of the soul (*psyche*). That discovery transformed the previously dominant Homeric vocabulary by which ancient Greeks understood themselves as men and in turn altered the Greek depiction of man in the plastic arts.[6]

The question is raised: If intelligence is an artifact that was discovered by the Greek philosophers, is it not a bit strange to say that it is inherited by genes?

Intellect a learned capacity.

If we think of intellect as a learned capacity that was discovered in a process in which the *physiologoi* (natural philosophers) challenged the myths of ancient Greece, we see that nurture, not nature, plays the dominant historical role in shaping the "intelligence" of cultures.

I like to refer to the West Indies and India, which were subjected to British colonial rule for hundreds of years, as evidence that civilizations shaped by mythic consciousness can traverse the divide between myth and differentiated consciousness through the cultural imperialism of the West. West Indians and Indians from

[6] Snell, *The Discovery of the Mind*, 1-22.

India are comfortable in the West and have progressed in material and scientific ways that nations in the grip of tribal myths have not. Richard Nisbett demonstrates that citizens of Hong Kong can change how they think by shifting from Western to Asian modes.

In Western philosophic terms, the transition from tribe to community is one of movement to consciousness of the common rational part of the soul (*logos*) that holds community together, not physical or material growth in size. For that reason education (*paideia*) is of supreme importance for the survival of community.

Yet in *Real Education* Charles Murray asserts his belief that a real college education is attainable only by persons in the upper 20th percentile of intelligence as defined by IQ. Low-ability children (10th to 37th percentile), he argues, cannot be educated.

That, too, conflicts with Richard Nisbett's findings that IQ is not immutable, that it can be improved, that it is higher amongst persons raised in upper middle class families and lower among persons from lower socioeconomic classes, that lack of schooling reduces IQ, that schooling improves memory, and that studies of the IQ of persons raised in adoptive families reflect also an environment characteristic of adoptive parents, not merely inherited IQ.

The Greek discovery of a common reason that all Greeks shared (but not foreigners) was differentiated in the West by consciousness of the universality of mankind. The phrase that immediately came to mind in 1776 was "all men are created equal," not "all Americans are created equal."

The "science" of intelligence testing runs counter to centuries of thinking about education as a cultural artifact (*paideia*), and it achieved full impact only after World War II when Europe lay prostrate and American behaviorists played a role in the reconstruction—or deconstruction—of European higher education.

The danger for society at large, and Western culture at large, is that, if we participate in a science that denies non-objective truth, then everything non-objective is mere opining. That, of course, is an upside down world in which the lovers of truth are supplanted by the lovers of opinion.

I conclude, therefore, that the science of testing for intelligence misinterprets the meaning of science *and* intelligence. The assertion that intelligence testing is "scientific" reflects ignorance of

philosophy, anthropology, culture, and, of course, philosophical anthropology.

Not all that is real can be measured quantitatively. Character education, the instilling of virtue, love for one's fellow man, and the nuanced truths of classical philosophy are not measurable in terms of behaviors, but they are important aspects of what the Greeks called *paideia*.

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Aristotle asked in the *Nicomachean Ethics*, "What is the measure of what is right?" He replied, "the good man" (*spoudaios*). He touched upon an important truth. In life we are guided by good men—and women—whose judgment we trust and whose qualities of character compel us to use them as a standard and measure of what is right and wrong, true and untrue, honorable and dishonorable, just and unjust. We ourselves may not know what to do, but we can know what the good man would do.

In American higher education today, entire universities are being compelled to measure the learning outcomes acquired by their students. In engaging in this research and reporting, the compilers of these measures are instructed to state learning as "behavior."

Students don't learn, understand, or appreciate; they define, compare, contrast, and analyze. These emasculated learning outcomes devalue what education is all about and exemplify what Eric Voegelin described as the "derailment" of philosophy by propositional metaphysics.

In my own courses in the history of political theory and modern ideologies that I teach online at Yorktown University I have described the learning outcomes of every teaching session. Listed are conclusions described in "behavioral" terms of some of the greatest intellectual events that occurred in the West—the break from mythic consciousness, the turning around of the soul depicted in Plato's Myth of the Cave, the discovery of the mind, the discovery of the human person in relation to transcendent divine reality, the measure of what is right and just, and the growth of the administrative state.

Using the language of progressive education and stating these discoveries as "learning outcomes," I have "reified"—made into things—experiences of reality that have no "thingness" and cannot be defined in terms of learned *behaviors*. Yet they are the source of all that we admire in Western civilization.

Yorktown University has been directed by the U.S. Department

of Education to engage in a process of hypostatization by which truth, justice, God, heaven, and hell become things. Every institution up for re-accreditation will encounter similar pressures.

That raises the question: "How many learning outcomes can stand on the head of a pin?"