

CONSTRUCTING THE "GIFTED" AND "ACADEMICALLY TALENTED"
STUDENT: "INTELLIGENCE," INTELLIGENCE TESTING, AND
EDUCATIONAL OPPORTUNITY IN THE ERA OF *BROWN V. BOARD*
AND THE NATIONAL DEFENSE EDUCATION ACT

By

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ABSTRACT

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This dissertation analyzes debates about intelligence and educational opportunity in the post-World War II US, from 1945-1965. I examine how "intelligence"--as an idea about human difference--was constructed in this period in response to a shifting complex of social and scientific pressures and moreover, how it functioned through policy to regulate educational opportunity. This was a period dense with events that rapidly transformed the educational landscape, including the fitful early years of desegregation following *Brown v. Board*, the Sputnik Crisis and the passage of the National Defense Education Act (NDEA). Such rapid transformations readily evoked the ordering principle of "intelligence."

While exploring larger Cold War/Civil Rights contexts, my research focuses on specific networks of collaboration between ETS, the National Education Association (NEA), Eisenhower administration architects of the NDEA, and James Bryant Conant, via his widely disseminated study of US public high schools, *The American High School Today*. These actors formed a largely *sub*

rosa collaboration that worked to the political and financial advantage of the NEA and ETS. As well, they positioned *The American High School Today* as a seemingly independent, scientifically objective endorsement of the NDEA. To wit, *The American High School Today* and the NDEA both pressed--yet without observable affiliation--the need to identify "highly able" high school students through augmented guidance and testing programs, and to afford these students selective curricula in the sciences, math and foreign languages. While the NDEA contained broad and neutrally stated initiatives addressed to these aims, *The American High School Today* followed six months later mapping well-defined, naturalized thresholds of individual intelligence to proposed sequences of ability-tracked science, math and foreign language curriculum.

This collaboration propelled the subsequent explosion of a new strain of discourse across a range of national media and popular literatures that worked to construct the category of the "academically talented" and "gifted" child, and advocate for this student's access to select curricula in the public schools. Furthermore, while calls to identify and selectively educate high "intelligence" drew explicit justification from the Sputnik Crisis and the science race with the Soviets, I find that white anxieties about "race"--and, specifically, desegregation following *Brown v. Board*--were a powerful tacit driver.

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To my parents, my first and best teachers, for their unflagging
support and abiding belief.

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TABLE OF CONTENTS

LIST OF TABLES.....	x
KEY TO ABBREVIATIONS.....	xi
INTRODUCTION AND HISTORIOGRAPHY.....	1
INTRODUCTION.....	3
BACKGROUND.....	5
METHODS, AIMS, AND APPROACH.....	18
HISTORIOGRAPHY OF PSYCHOLOGY, SOCIOLOGY OF SCIENTIFIC KNOWLEDGE AND RELATED THEORY	24
HISTORY OF PSYCHOMETRICS, INTELLIGENCE AND MENTAL MEASUREMENT	27
NATURE AND NURTURE.....	29
GROUP AND INDIVIDUAL.....	35
HISTORIOGRAPHY OF THE US COLD WAR AND COLD WAR EDUCATION	40
CHAPTER SUMMARIES.....	52
CHAPTER I: DEBATING THE NATURE OF INTELLIGENCE: 1900-1950.....	58
THE DAWN OF THE INTELLIGENCE TEST: THE DOING OF TESTING, THE FORGING OF BELIEF	59
NATURE, NURTURE AND THE HERITABILITY OF INTELLIGENCE	68
NATURE, NURTURE AND IDEOLOGIES OF GROUP DIFFERENCES: 1920-1950	75
'NATURE-AND-NURTURE' AND IDEOLOGIES OF INDIVIDUAL DIFFERENCE	83
CHANGES IN RHETORIC, CONTINUITIES OF ASSUMPTION: HEREDITARIANISM INTO NEO-HEREDITARIANISM	90
THE INDIVIDUALIZATION OF INTELLIGENCE: SHIFTING DIFFERENCE FROM "RACE" TO INDIVIDUAL	99
"ACCENTUATE THE POSITIVE".....	111
CONCLUSION.....	118
CHAPTER II: STUDY DESIGN OF J.B. CONANT'S <i>THE AMERICAN HIGH SCHOOL TODAY</i>	120
<i>LIFE</i> IN MANHATTAN AND RICHMOND HILL, ONTARIO	121
"TALENT," "INTELLIGENCE" AND THE AMERICAN HIGH SCHOOL TODAY (1959)	131
THE FACE OF <i>THE AMERICAN HIGH SCHOOL TODAY</i> : JAMES BRYANT CONANT	134
THE STUDY DESIGN: IQ THROUGH AND THROUGH.....	140

CONANT'S STANDING BELIEFS ABOUT IQ.....	156
CONANT's 21 THESES: RECOMMENDATIONS FROM <i>THE AMERICAN HIGH SCHOOL TODAY</i>	160
RECOMMENDATION: MORE SCIENCE, MATH AND FOREIGN LANGUAGE FOR THE ACADEMICALLY TALENTED	163
RECOMMENDATION: ABILITY GROUPING.....	165
RECOMMENDATION: GUIDANCE COUNSELORS.....	170
"PROBLEMS OF THE AMERICAN HIGH SCHOOL": THE DIVERGENT EDUCATION OF BOYS AND GIRLS	175
OTHER "AMERICAN PROBLEMS".....	182
CONCLUSION.....	185
CHAPTER III: ACADEMIC TALENT, "INTELLIGENCE" AND A COLD WAR CRISIS IN EDUCATION.....	189
PRESS JUNKETS AND PR ROLLOUTS.....	190
RED, WHITE AND BLACK: A BREWING CRISIS OVER DESEGREGATION, GLOBAL COMMUNISM, AND THE CURRICULUM OF US SCHOOL	200
THE RED COMET.....	214
CONANT AND THE AMERICAN HIGH SCHOOL TODAY TO THE RESCUE	218
CONANT, IKE, AND THE EMERGENCE OF THE EISENHOWER ADMINISTRATION VERSION OF THE NDEA	223
CONCLUSION.....	240
CHAPTER IV: "INTELLIGENCE" AND ACADEMIC TALENT: RESOLVING THE POLITICS OF PLACE AND "RACE".....	242
INDIVIDUAL DIFFERENCES IN INTELLIGENCE AND THE POLITICS OF PLACE	244
THE LOCAL COMPREHENSIVE HIGH SCHOOL.....	247
AN IDEALIZED HISTORY: AMERICAN DEMOCRATIC EXCEPTIONALISM	249
"INTELLIGENCE" AS A CHECK TO LOCAL PROVINCIALISM	257
"TALENT" AND RACE: EASING WHITE ANXIETIES ABOUT DESEGREGATION	268
CONANT IN PRIVATE COMMUNICATION: IQ AND THE SPATIAL CODING OF "RACE"	270
NO "RACE" IN <i>THE AMERICAN HIGH SCHOOL TODAY</i>	274
DIVERSITY REDEFINED: HETEROGENEITIES OF TALENT	276
INTEGRATION REBRANDED: DEMOCRATIC COEXISTENCE OF THE BRIGHT AND NOT-SO-BRIGHT	281
CONCLUSION.....	288
CHAPTER V: UNDER THE CLOAK OF THE EXPERT: ETS, NEA, CARNEGIE, CONANT AND THE NATIONAL DEFENSE EDUCATION ACT.....	290

BEHIND <i>THE AMERICAN HIGH SCHOOL TODAY</i> :	
<i>DRAMATIS PERSONAE</i>	293
CONANT, CARR AND GARDNER.....	295
CONANT, ETS AND <i>THE AMERICAN HIGH SCHOOL</i>	
<i>TODAY</i>	311
CONANT, ETS AND THE NDEA.....	318
ETS RESEARCH AND DEVELOPMENT: COOPERATIVE	
PLAN FOR GUIDANCE AND ADMISSIONS	319
ETS RESEARCH AND DEVELOPMENT: NEW TESTS FOR	
THE PHYSICAL SCIENCES STUDY COMMITTEE AND	
OTHER NDEA CURRICULUM DEVELOPMENT EFFORTS	325
ETS RESEARCH AND DEVELOPMENT: THE NATIONAL	
GUIDANCE TESTING PROGRAM (NGTP)	327
RECORD GROWTH: TRENDS IN ETS NET WORTH IN	
THE NDEA ERA	332
CONCLUSION.....	334
 CHAPTER VI: A "PRECIOUS MINORITY": CONSTRUCTING THE	
"GIFTED" AND "ACADEMICALLY TALENTED" STUDENT IN THE	
WAKE OF <i>THE AMERICAN HIGH SCHOOL TODAY</i> AND THE NATIONAL	
DEFENSE EDUCATION ACT.....	336
ISOLATED GIFTEDNESS.....	338
GIFTEDNESS: A NATURAL CATEGORY REDISCOVERED.....	342
TESTING AND GROUPING.....	356
TALENT AND NATION.....	360
NEGLECTED GIFTEDNESS, DAMAGED MINDS.....	363
TIMING.....	370
PSYCHOLOGICAL DAMAGE AND <i>BROWN VERSUS BOARD</i>	378
PSYCHOLOGICAL DAMAGE AND THE NDEA.....	383
CONCLUSION.....	388
 CONCLUSION.....	391
 BIBLIOGRAPHY.....	399

LIST OF TABLES

TABLE 1: Number of Students Taking AP Examinations (1954-1957).....	372
TABLE 2: Number of Schools (Public and Private) Providing AP Curriculum Leading to Examination (1954-1957).....	373

KEY TO ABBREVIATIONS

AAGC	The American Association for Gifted Children
AP	Advanced Placement
CPGA	Cooperative Plan for Guidance and Admission (ETS)
EPC	Educational Policies Commission
ETS	The Educational Testing Service
JBC	James Bryant Conant
NANA	North American Newspaper Alliance
NCCBS	National Citizens Council for Better Schools
NCLB	No Child Left Behind (2002)
NDEA	The National Defense Education Act (1958)
NEA	The National Education Association
NGTP	The National Guidance Testing Program (ETS)
NSF	The National Science Foundation
PSSC	Physical Sciences Study Committee
SAT	Scholastic Aptitude Test
SCAT	School and College Ability Test
SSK	Sociology of Scientific Knowledge
SPSSI	The Society for the Psychological Study of Social Issues
STEP	Sequential Tests of Educational Progress
UNESCO	The United Nations Educational, Scientific and Cultural Organization

INTRODUCTION AND HISTORIOGRAPHY

While histories of intelligence testing usually stop with the beginning of World War II, this dissertation examines the adaptation of discourses about "intelligence" to a post-World War II context. Furthermore, it traces the ensconcement of this new post-World War II science of intelligence as it became federally funded educational policy in the late 1950s US. In particular this analysis accomplishes:

- 1) An extension of the historiography of psychometrics from the interwar into the post-World War II era and thereby traces the discursive evolution and adaptation of hereditarian theories of IQ across these periods. In doing so, I find continuities between earlier hereditarian theories of development and an NDEA/*Brown*-era push for selective education of the "gifted" and "academically talented."
- 2) The recovery of this NDEA/*Brown*-era lobby for the "gifted" and "academically talented."
- 3) The discovery of a *sub rosa* network of scientists, politicians, policymakers, professional institutions and cooperative media and PR outlets that worked in support of this movement. This network was led by James Bryant Conant

and Eisenhower Administration architects of the National Defense Education Act, and included ETS, the National Education Association, and the Carnegie Corporation.

4) A joining of the historiography of psychometrics with the historiography of education.

a) In accomplishing this, this research has the dual effect of importing examination of "intelligence" and "ability"-tracked curriculum into the historiography of education, while at the same time studying how and where psychometrics took a broadly actionable form through its incorporation in educational policy.

b) It also thereby reappraises the significance of the NDEA, understanding it to be not just a centrist victory for federal funding of public schools, but also a successful merging of educational policy with the science of "intelligence."

5) A drawing together of Cold War and Civil Rights aspects of this period, via analysis of discourses of "intelligence."

a) This has the potential to inform historiographies of the Cold War and Civil Rights that focus separately on either paradigm to the exclusion of the other.

b) This approach positions *Brown v. Board* and the NDEA in a new dialogic relationship with each other. NDEA policies can now be seen as, in part, a reaction to *Brown*.

INTRODUCTION

This dissertation in the history of science and education analyzes debates about intelligence and educational opportunity in the post-World War II US, from 1945-1965. I ask how "intelligence" as an idea was constructed in response to this moment's shifting complex of social and scientific pressures, and further how these evolving constructions of intelligence functioned to regulate educational opportunity.

This dissertation takes up a period in US history just before and after the passage of the National Defense Education Act (1958). This was a moment that saw public educational policy reshaped decisively around the science of "intelligence." In what I argue was a response both to Sputnik (1957) and *Brown v. Board* (1954), there was an urgent call at this moment for "individualized education" tailored to the individual "intelligence" or "ability" of students. The validity of *individual* "intelligence" was stressed here, I argue, in an attempt to disentangle intelligence testing from the "race-group IQ" controversies of interwar psychometrics, and at the same time to reassert its utility in an educational context. This policy shift was accompanied by a dramatic expansion of "ability" testing and grouping in schools, and by a major PR effort on behalf of "academically talented" and "gifted"

students. This was moreover a PR effort that maintained such students were in fact talented by virtue of natural, hereditary difference.

This dissertation focuses predominantly on the hidden role of "race" in conditioning supposedly "race"-neutral constructions of "intelligence" post-World War II. Beliefs about gender and "intelligence" are not considered as comprehensively within the scope of this analysis. If race is often an absence in these sources, gender is perhaps doubly so. While *Brown v. Board* had redoubled the potency of "race" among the many pressures at this moment compelling schools to change and adapt, there was no equivalent novel additional pressure in relation to gender. Yet both race and gender are socially constructed categories used to imply natural difference. And it is doubtless that gender was busily, albeit quietly, at work in this moment in relation to "intelligence."¹ It is clear too that there were other powerful forces outside the school that gendered expectations about educational attainment and professional preparation in this time period.

It is also abundantly evident from numerous vantage points that gender shapes historically contingent beliefs about "intelligence" as a human difference. Very recent psychological

¹ Anne Fausto-Sterling, *Myths Of Gender: Biological Theories About Women And Men*, Revised Edition (Basic Books, 2008), 13-24.

research, for example, has determined that young girls (ages 6-8)—even with relatively little prior schooling and exposure to school-based performance assessments—are more likely to attribute "really, really smart" behavior to boys. Yet, pre-school-aged young girls are far less likely to make such gender distinctions. The authors of this study suggest life-course and long-range consequences of such a dynamic: that "the distribution of women and men across academic disciplines seems to be affected by perceptions of intellectual brilliance."² Where do such beliefs and "perceptions" come from? Our history. Where gender makes itself evident in these sources it will be examined, but a more comprehensive systematic analysis of gender with respect to "intelligence" will have to await further research.

BACKGROUND

In February of 1959 James Bryant Conant published *The American High School Today*, a study of US public high schools which powerfully influenced educational policy and beliefs about individual differences in "intelligence" in the post-World War II era. Central among *The American High School Today's*

² Lin Bian, Sarah-Jane Leslie, and Andrei Cimpian, "Gender Stereotypes about Intellectual Ability Emerge Early and Influence Children's Interests," *Science* 355, no. 6323 (January 27, 2017): 389-91.

recommendations was that the top 15% of students in measured aptitude should take a well-developed sequence of advanced courses in the sciences, mathematics and foreign languages. Conant optimistically noted that some schools around the country were already doing something like this. Many other schools though, had quite a bit of work ahead of them in this regard. Instituting Conant's reforms would mean both implementing across the nation much more systematic aptitude testing programs and vigorous efforts in curriculum development.

Conant himself was something of a factotum among the world of elite professionals. He had been at various points a renowned chemist, president of Harvard University, an ambassador to West Germany, and an active member of the highly influential Educational Policies Commission. He had high level connections in the worlds of education, the sciences, and government and his opinion as a spokesperson on education, particularly science education, carried great weight. Close to 100,000 free copies of *The American High School Today* were delivered, upon its publication, to nearly every superintendent and school board in the country. Conant's recommendations were widely discussed, and generally endorsed by teachers, principals, scientists and educational leaders across the nation.

The American High School Today appeared to its audience to constitute the independent unaffiliated recommendations of a

scientist-expert. Yet historical analysis reveals this was not the case. Conant's call to action followed a mere 6 months after the passage of the National Defense Education Act. I argue, the recommendations of *The American High School Today* worked in well-tuned sympathy with this important federal educational legislation.

The National Defense Education Act, passed into law in early September of 1958, dwarfed what few earlier and comparatively minor forays the federal government had made into public education. In total, the NDEA authorized the expenditure of nearly 1 billion dollars over its 4 year term and paved the way for the Elementary and Secondary Education Act, enacted as the NDEA's successor in 1965.³ NDEA's various titles undertook a range of initiatives including the establishment of student loan programs and the funding of more coordinated state level efforts to compile educational data. Yet, blended innocuously among its other mandates was a broadly stated initiative for the "strengthening" of high school math, science, and foreign language curricula (title III) and an initiative to fund state testing programs to "identify students with outstanding aptitudes and ability," and to "advise students of courses of study best suited to their ability, aptitudes and skills (title

³ Wayne J. Urban, *More Than Science and Sputnik: The National Defense Education Act of 1958* (University of Alabama Press, 2010), 172-173.

V)."⁴ These two titles combined—science, math, and foreign language curricula development, and testing and guidance counseling—amounted to nearly half of the NDEA's total budget expenditures over its four years.⁵

The drafting and passage of the NDEA was animated—at least at the level of explicit political overture—by fears about the advance of Soviet science and technology. The Soviet development of the Hydrogen Bomb in 1953 and the launching of the Sputniks in 1957 signaled to many observers that the USSR had leapt from sprawling preindustrial hinterland to a technoscientifically formidable world power. US public schools were blamed for what was suddenly perceived as a "shortage of scientific manpower."⁶ At a National Education Association meeting in 1957, President Eisenhower rallied educational leaders to action, insisting that:

The strength of our arms is always related to the strength of our minds. Our schools are strong points in our National Defense. This is true if for no other reason than that modern weapons must be manned by highly educated personnel...and the energy of the atom can only be understood and developed by the most highly trained minds in the country.⁷

⁴ Public Law 85-864, Sept. 2, 1958, Title V: p 1592

⁵ Urban, *More Than Science and Sputnik*, 172-173.

⁶ Barbara Barksdale Clowse, *Brainpower for the Cold War: The Sputnik Crisis and National Defense Education Act of 1958* (Greenwood Press, 1981), 11.

⁷ United States Government Printing Office, "Address at the Centennial Celebration Banquet of the National Education Association, April 4, 1957," *Public Papers of the Presidents of the United States, Dwight D. Eisenhower, 1957: Containing the Public Messages, Speeches, and*

The National Defense Education Act was championed as legislation to address this perceived scientific manpower shortage by in part strengthening high school science, math and foreign language curricula and by supporting more systematic nation-wide aptitude testing of junior high and high school students. Conant's primary recommendations in *The American High School Today*—essentially that “smart” students should be taking advanced, rigorous college preparatory curriculum—matched these two general and loosely defined NDEA titles a mere six months later but with an interlocking series of specific recommendations. This historical analysis finds that Conant picked up where the NDEA left off. *The American High School Today* discussed the utility of particular tests of aptitude in the schools, and laid out well-defined, naturalized thresholds of individual intelligence along with specific sequences of curriculum—in ‘high,’ ‘medium’ and ‘low’ tracks—for suitably intelligent students.

My research shows Conant communicated closely—via mail, telegram, and in personal meetings—with Eisenhower administration architects of the NDEA, and with Eisenhower himself, as he conducted his school study. Conant even offered

Statements of the President, January 1 to December 31, 1957
(Government Printing Office, 1999), 265.

Marion Folsom, head of Eisenhower's Office of Education, substantive feedback on the White House administration's version of the emerging bill. Even so, *The American High School Today* makes no mention of the National Defense Education Act. I argue that such openly declared points of correspondence could have illuminated *The American High School Today* as a partisan endorsement of a particular political agenda and compromised its reception as an objective study of US public schools: the determinations of a scientist-expert with long experience in the world of education. Similarly, while Conant was foremost among even elite experts as a spokesperson on education, and science education in particular, he was not called by NDEA architects to publically testify (as were so many others like Isidor Rabi, Edward Teller or Werner von Braun) on behalf of the bill in congressional hearings. The disclosure of such a public alliance again might have compromised the reception of *The American High School Today*. It might also have appeared as too deliberate an attempt to manipulate public opinion and so jeopardized reception of the NDEA itself.

Yet I argue the NDEA necessarily depended on *The American High School Today* to guide its implementation across a highly decentralized US public school system and in a volatile political climate. Nowhere in the NDEA legislation itself is there any mention of IQ. Neither is there any attempt to define

what psychometric thresholds constituted high or outstanding aptitude or ability, nor what particular tests might measure or identify it. This was all politically perilous territory that could have evoked the contested race science of a bygone era and risked the passage of the landmark federal education initiative. Conant stressed in communications with the Eisenhower administration that a "scheme for identifying the academically talented youth by a testing program...will require careful explaining to the public and to some educators if it is not to be misunderstood."⁸ Yet Conant believed that this identification and promotion of the "academically talented" was of paramount importance, and that the federal government could and should play a well-defined role:

the idea that we must distinguish between the academically able and those who are not and give them different types of high school education is fundamental to an improvement of the present situation. A push from the Federal Government here can accomplish a great deal without raising the spectre of "Federal Control of Education."⁹

The National Defense Education Act and *The American High School Today* taken together accomplished a skillful political chemistry: the separate presentation of controversial funding initiatives and scientific recommendations. These potentially

⁸ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Sherman Adams (Regarding Meeting with Secretary Folsom)," December 12, 1957, UAI 15.898, A-Correspondence: 1957-1964, Box 127, Harvard University Archives.

⁹ Ibid.

volatile initiatives and recommendations could then be safely, neutrally recombined as they were publically enacted and discussed.

Thus I argue that *The American High School Today* and the NDEA together mark a crucial and well-coordinated effort to shape post-World War II, Cold War educational policy around the science of "intelligence." The two texts and the broader educational movement they energized represent a powerful—though in many ways camouflaged and unexamined—continuation of intelligence testing policy from World War I and the interwar years.

There was good reason to coordinate out of the public eye. Not only was federal funding for the nation's schools a political gamble, intelligence testing itself had a long and controversial history in the United States. This history of IQ in the early decades of the 20th century has been extensively examined by an existing historiography. Historians are in agreement that as World War I and interwar era IQ testing expanded in practice and popularity, its central claims—that differences in intelligence were largely hereditary, and that different "race" groups exhibited different mean IQs—aroused heated scientific debate.¹⁰ Simply put, by the 1920s, a vocal

¹⁰ John Carson, "Mental Testing in the Early Twentieth Century: Internationalizing the Mental Testing Story," *History of Psychology*

set of critics and critical social scientists had begun to mount an argument that IQ testing was not only methodologically flawed, but also racist. A scientific stalemate ensued. Neither side could definitively disprove the other, but a politically resonant ambivalence reigned over the discussion.

This mounting criticism of IQ within the left wings of the social sciences had emerged contemporaneously with a growing international indictment of US racial policies. Historian Meredith Roman has shown, for example, how Soviet party officials and expatriate African Americans cooperated in the interwar era to depict and publicize the harsh realities of life under Jim Crow, thereby "contest[ing] America's image as the world's beacon of democracy and freedom."¹¹

The US found itself increasingly at pains to manage its reputation on an international stage in regard to its racial policies. Thus while IQ had gained a strong hold on the popular imagination and IQ testing had expanded impressively both in

17, no. 3 (2014): 249-55, 254; John Carson, *The Measure of Merit: Talents, Intelligence, and Inequality in the French and American Republics, 1750-1940* (Princeton: Princeton University Press, 2007), 227-228; Carl N. Degler, *In Search of Human Nature: The Decline and Revival of Darwinism in American Social Thought* (Oxford University Press, USA, 1992), 167-178; Leila Zenderland, *Measuring Minds: Henry Herbert Goddard and the Origins of American Intelligence Testing* (Cambridge: Cambridge University Press, 2001); Stephen Jay Gould, *The Mismeasure of Man* (W. W. Norton & Company, 2006).

¹¹ Meredith L. Roman, *Opposing Jim Crow: African Americans and the Soviet Indictment of U.S. Racism, 1928-1937* (U of Nebraska Press, 2012), 1.

frequency of use and context of application across the interwar years, it was perhaps too controversial to be implemented systematically as part of any kind of national-level, federally funded educational policy.

This was then even more so the case immediately following World War II, with international revelations about the relation between Nazi race science and Nazi genocide. These atrocities compelled many to draw unnerving comparisons between the Nazi and US racism and race science. Anything—such as IQ testing—that readily evoked a history of hereditarianism or scientific racism was increasingly problematic in US national rhetoric and policy.¹²

But intelligence tests had proved to be such expedient sorting tools in the interwar progressive era. And, following World War II public education seemed so in need of sorting out. By the early 1950s schools were overwhelmed by decades of neglect and underfunding, and strained past capacity by the post-war baby boom. How to manage a massive increase in demand on an already inadequate educational infrastructure? Intelligence tests could be readily put to use to organize these surging enrollments: differentiating students by “native

¹² Degler, *In Search of Human Nature*, 203-204; Mark Mazower, *Dark Continent: Europe's Twentieth Century*, 1st Vintage Books Ed (Vintage, 2000), 102-103; Roman, *Opposing Jim Crow*, 11.

ability" for different curricular resources. How then to neutralize the interwar controversies over IQ and make intelligence testing amenable for use as a matter of national policy?

I find that following World War II, advocates of intelligence testing developed a number of strategies to rebrand and reauthenticate testing in a new world order where expert discourses were perhaps more sensitive to and on guard against the race science of preceding generations. Firstly, while World War I and interwar era testers unproblematically referred to the "intelligence" or "intelligence quotient" (IQ) of an individual or a group, NDEA-era testers were much more likely to use more neutral, historically unencumbered words like "aptitude" or "ability." Secondly, whereas World War I era testing and IQ debates focused predominantly on the problem of the "subnormal"—with arguments for the barring, quarantining, even sterilizing of those individuals—advocates of testing in the NDEA era were more concerned with the more politically expedient problem of identifying supra-normal "intelligence." *The American High School Today*, for example, took up as its special cause the selection and education of "academically talented" and "gifted," whom Conant defined as the top 15% of the normal distribution of IQ.

Thirdly, while most World War I testers—such as Lewis Terman or Henry Goddard—were unabashedly hereditarian in their conception of “intelligence,” NDEA era advocates of testing almost always softened their rhetoric with the new interactionist language of “nature and nurture.” These new post-World War II claims nonetheless often defaulted to the implicit assumption that high measured intelligence was fixed or otherwise determined *a priori*—a kind of neo-hereditarianism. Finally, whereas World War I era testers made claims about the intelligence of “race” groups, advocates of testing in the NDEA era argued tests were now used only to measure ‘individual’ intelligence, and that individual “academic talent” or even “giftedness” could emerge from out of any group, community, “race” or ethnicity, and from within any region of the country.

All these innovations to the discourse on “intelligence” were held together, in an educational context, by a meritocratic reconception of “equal educational opportunity.” “Equal educational opportunity” for post-World War II meritocrats generally meant not the same opportunities for all, but rather ones proportionally sized to natural “ability.”

Finally, while alarmed discussion of the advance of Soviet science explicitly animated the politics of the NDEA, I find that beliefs about “race” and racism played a suppressed though powerful role at this transformational moment. NDEA came close

on the heels of the 1954 *Brown v. Board* Supreme court decision for the desegregation of all US public schools, a mandate that met with tremendous anxiety and opposition in numerous quarters of the white public (*vis.* the 1957 protest in Little Rock Arkansas). Yet, open discussion of "race," racism, racial justice or even the recent *Brown* mandate are all oddly absent from the hearings and proceedings of the National Defense Education Act and from the pages of *The American High School Today*.

How could these highly visible and important educational policy documents have ignored the problem of "race," and disparities in educational opportunity that grew out of a long history of educational segregation? Simply put, many policy makers and scientist-experts like Conant proceeded as if measured individual IQ was something fixed durable and real, and that it was raceless: an impartial, scientifically objective determination of inherent individual worth. Measuring "intelligence" (or "aptitude" or "ability") was a way of making fair discriminations about who belonged where in the public school curriculum. Assumptions about naturalized, individualized "intelligence" would vault these new educational policies—*Brown* and NDEA—over the quagmire of "race."

Thus with the suppression of "race"—the admission that it could no longer serve as a criterion for making discriminations,

and the denial that it still did—individualized “intelligence” now shouldered a weight and import it had not before. More broadly I argue that the interwar challenge to racism in the social sciences—and the complex of rhetorical and conceptual adjustments this challenge provoked—begot a reintensified focus on the individual as the locus of a set of alleged hereditary differences.

The NDEA has been received into the historiography as a joint victory for moderate, centrist Republicans and the expert left. It was precedent-setting federal funding of public schools, at last, after over a century of effective, right-leaning local and state resistance. All this is true. But in this analysis the NDEA also reveals continuities in the evolution of hereditarianism and the science of intelligence from the interwar years into the post-World War II era, and the rapid entrenchment of these practices in the schools.

METHODS, AIMS AND APPROACH

My analysis presumes that whatever “intelligence” is, it is not simply an ahistorical or organically determined given, but rather a nexus of assumptions, practices and performances that shape-shift over time in response to cultural exigencies. This analytical position denatures “intelligence” and instead makes visible how *ideas* about intelligence (as a quality that

differentiates human worth) have served as powerful but under-examined regulators of status and opportunity in our culture. If, as David Bloor and others have noted, the history and sociology of science has been concerned in part with a critique of naturalistic conceptions of "Reason" inherited from Enlightenment thought, then a critical evaluation of "intelligence" as an ideology about difference can and should, extend this critique of Reason on to naturalistic conceptions of individual "reasoners," especially as "intelligence" posits—for these reasoners—differential capacities for apprehending Reason.¹³

I argue that in the post-war US, following the aftermath of Nazi atrocities, when group identifiers came under mounting scrutiny as constructed and potentially discriminatory categories—individualized "intelligence" rather gained currency as a valid, measurable identifier of natural capability. With more comprehensive testing, the prejudicial referrals of teachers could be overturned. The iniquity of low circumstance might be undone. Intelligence tests could identify the worthy—scattered among all roles, races and walks of life—who before had been overlooked. Historian Michael Ackerman has

¹³ David Bloor, *Knowledge and Social Imagery*, 1st ed. (University Of Chicago Press, 1991), 65-74.

demonstrated that the boom in IQ testing in the 1940s and 50s was ushered along in the relative absence of public criticism.¹⁴

In this sense, and in the context of attempts to build a post-World War II meritocracy, I argue that "intelligence" should be viewed as a culturally constructed category in its own right, on par with and functioning in dynamic relation to other highly salient categories of cultural analysis like race, class, or gender. Clearly, deeply entrenched beliefs about race, class, and gender still powerfully shaped constructions of what intelligence was, who was likely to be perceived as intelligent and in what ways, but now more than ever before, measured individual "intelligence"—a set of numbers one bore through one's school years like both a prophecy and a personal essence—asserted itself as another primary marker of worth.

Moreover my research attends to a system of differentiations that formed symmetrically between "intelligence" as constructed *in the individual*, and "intelligence" *in the epistemological order*, among its various disciplines, branches of knowledge, and ways of knowing. In other words, as "intelligence" was used to sort individuals, it also recreated a hierarchy of disciplines. The question *who was*

¹⁴ Michael Ackerman, "Mental Testing and the Expansion of Educational Opportunity," *History of Education Quarterly* 35, no. 3 (October 1, 1995): 279-300.

"smart" was inevitably entwined with the question *which disciplines or vocations required the most "smarts" (and thus should draw the "smartest" people)?* Thus this dissertation will, in part, also trace the historical formation of epistemological hierarchies, a contest which grew particularly acute, and perhaps increasingly one-sided, in the years following the National Defense Education Act.

Let me be clear: I am not holding that there is no such thing as intelligence (defined as competency) or differences in intelligence or learning styles. People are amazing in their differences in learned competencies and even in the ways and degrees to which they have 'learned how to learn.' Rather I am suggesting there is a quietly vigorous and unexamined ideology of "intelligence"—clearly operating in the time period I study—that is certain without really knowing, that falsely or unwarrantedly arranges observed difference in a value hierarchy, and that reflexively attributes observed difference to putative inherited, inherent or otherwise fixed organic differences among individuals.

Let me also say—as I set out to examine how ideologies of intelligence also reconstructed pecking orders of knowledge outside the learner—that I am not arguing there is no such thing as valuable knowledge or useful competencies. We can see, in any discipline we care to familiarize ourselves with, that there

are widely agreed upon norms and standards for effective engagements with that body of knowledge, engagements that often produce practical and sometimes remarkably useful results. Rather, I am suggesting the need for a more vigorous and ongoing reevaluation of what counts as useful knowledge and competent practice, as part of a more truly democratically evolving social order.¹⁵

Historian Michael Sokal has drafted a useful set of prescriptions for an approach to the history of post-World War II intelligence testing and I argue that these suggestions can be applied profitably not just to the historiography of *testing*, but also to a history more broadly concerned with the conceptualization of "intelligence" itself.¹⁶ In particular, Sokal argues for the need to attend to psychometric's emergence, in the post-World War II/ Cold War years, as another facet of Big Science. Attention should be paid, he argues not only to the discipline's reliance on large-scale public funding, but also to its broad interdigitation with other institutions and networks of knowledge. Further, Sokal argues that such a history should be as broadly and fully contextual as it can, drawing together where possible intradisciplinary,

¹⁵ John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education* (Macmillan, 1916), 98-110, 124-38.

¹⁶ Michael M. Sokal, "Approaches to the History of Psychological Testing," *History of Education Quarterly* 24, no. 3 (October 1, 1984): 419-30.

interdisciplinary, and broader social and institutional contexts. This dissertation accomplishes Sokal's prescriptions by demonstrating how testing and ideologies of intelligence were tied together as big science with big business, through governmental, academic, and private-public philanthropic networks.

To this end, this dissertation focuses 1) on a 1958 scientific study of US public high schools conducted by James Bryant Conant and published as the book *The American High School Today*, 2) on the psychometric legacy this study imported and on which it rested its arguments, 3) on the cultural context that shaped, even beckoned this study forth, 4) on the networks of collaboration (Educational Testing Service, National Education Association, the Carnegie Corporation, and architects of emergent National Defense Education Act legislation) that worked to produce this study and, 5) on the study's widespread cultural influence and policy-shaping power—in tandem with the NDEA—to mold belief and practice in relation to “academic talent” and “intelligence.”

Such a project necessarily draws together a range of literatures to support its analysis. I have relied heavily on particular bodies of work in the history of science and related sociology of scientific knowledge, in the history of the US Cold War, and in the history of education. I will discuss these

historiographies in turn and explain how my project depends on, extends or modifies the various arguments these literatures make.

HISTORIOGRAPHY OF PSYCHOLOGY, SOCIOLOGY OF SCIENTIFIC KNOWLEDGE AND RELATED THEORY

As a project that begins in the history of science, my work draws on related SSK methods developed by David Bloor, Bruno Latour, Ian Hacking, Thomas Kuhn, Robert Merton and others which seek to show how the rational content of science is shaped by both its institutional norms and its broader historically-conditioned cultural milieu.¹⁷ I will proceed in the assumption that the "knowing" of science is often driven and delimited by the need-or *perceived need*-for certain kinds of "doing" in culture. Or, as Shapin and Schaffer suggest, "solutions to the problem of knowledge are embedded within practical solutions to the problem of social order, and that different practical

¹⁷ Bloor, *Knowledge and Social Imagery*. Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Harvard University Press, 1987). Ian Hacking, *Representing and Intervening* (Cambridge University Press, 1988). Ian Hacking, *The Social Construction of What?* (Harvard University Press, 1999). Thomas S. Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1996). Robert K. Merton, *The Sociology of Science: Theoretical and Empirical Investigations* (University of Chicago Press, 1973).

solutions to the problem of social order encapsulate contrasting practical solutions to the problem of knowledge."¹⁸

The years following World War II saw psychology win its spurs. The behavioral sciences were put to work in a variety of new ways both during World War II and the decades immediately after, accounting for a dramatic rise in the prestige accorded to psychology.¹⁹ Following on Ellen Herman's influential and path-breaking *The Romance of American Psychology*, a new generation of historians have, from different angles, illuminated the growing influence of the behavioral sciences, and their increasing integration with military, government, and policy making bodies all within World War II and Cold War era contexts.²⁰ The body of work has been enormously useful to my research. My argument complements it by demonstrating the increasing proximity psychology gained not only to state power

¹⁸ Steven Shapin and Simon Schaffer, *Leviathan and the Air Pump: Hobbes, Boyle, and the Experimental Life* (University Press, 1989), 15.

¹⁹ Nicholas Lemann, *The Big Test: The Secret History of the American Meritocracy* (Macmillan, 2000); Ellen Herman, *The Romance of American Psychology: Political Culture in the Age of Experts* (University of California Press, 1996).

²⁰ Herman, *The Romance of American Psychology*; Ron Theodore Robin, *The Making of the Cold War Enemy: Culture and Politics in the Military-Intellectual Complex* (Princeton University Press, 2009); Jamie Nace Cohen-Cole, *The Open Mind: Cold War Politics and the Sciences of Human Nature* (Chicago; London: The University of Chicago Press, 2014); Jessica Grogan, *Encountering America: Humanistic Psychology, Sixties Culture, and the Shaping of the Modern Self* (HarperCollins, 2012); Joel Isaac, *Working Knowledge* (Harvard University Press, 2012); Jr Jackson John P., *Science for Segregation: Race, Law, and the Case against Brown v. Board of Education* (NYU Press, 2005).

in the years following World War II, but also to one of the central institutions of the state: public education.

Psychological testing had arguably entered the schools in a noteworthy way in the 1920s.²¹ Yet, the new and entirely more systematic scale of intelligence testing in the 1950s suggests psychology, specifically psychometric theory and practice, had gained even more intimacy with and policy-shaping power over a setting with which it had long had an acquaintance. New forces were at work. New resources were diverted by the state for the expressed purpose of intelligence testing, for developing new technologies of testing and systems of educational data collection, and for the development of a new supporting profession to test *and enforce* the results of school-place testing: the guidance counselor.

Finally, while not a work of history of science per se, I am also indebted in my analysis to Benedict Anderson's influential study of nation formation and nationalism, *Imagined Communities*.²² If, in Anderson's work, nation is an ideology, an "imagined community" organized around a shared experience of print media, I have found "nation" could also be a collective experience organized and energized around media-driven

²¹ Paul Davis Chapman, *Schools As Sorters: Lewis M. Terman, Applied Psychology, and the Intelligence Testing Movement, 1890-1930* (New York University Press, 1990).

²² Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (Verso, 2006).

narratives about "intelligence." Part of my historical analysis locates "academic talent" as the very fabric of a spatially arranged allegory about nation, one that produced a shared imagination of a democratic national body in which every part, every locale small or large, could potentially contribute its proportional share of talent—its quota of "intelligence"—to the progress of the nation.

HISTORY OF PSYCHOMETRICS, INTELLIGENCE AND MENTAL MEASUREMENT

There is a substantial historiography of psychometrics and IQ debates for the pre-World War II era. This literature has explored a range of issues related to the science and social applications of "intelligence" in the first half of the 20th century: e.g. intelligence testing's refurbishment of the racial taxonomies of the 18th and 19th centuries, and its methodological disposition to reify "intelligence" as an *a priori* essence, along with its linkages with both the rational-technocratic aims of the progressive era and with eugenical anxieties about subnormality and national progress.²³ Historian John Carson has

²³ John Carson, *The Measure of Merit: Talents, Intelligence, and Inequality in the French and American Republics, 1750-1940* (Princeton University Press, 2007); Chapman, *Schools As Sorters*; Hamilton Cravens, *Before Head Start: The Iowa Station & America's Children* (University of North Carolina Press, 1993); Stephen Jay Gould, *The Mismeasure of Man* (W. W. Norton & Company, 2006); Leila Zenderland, *Measuring Minds: Henry Herbert Goddard and the Origins of American Intelligence Testing* (Cambridge University Press, 2001).

demonstrated that by the mid-1920s the new psychometric conception of intelligence had already gained perhaps irreversible cultural traction, thanks in large part to the mass exposure generated by widely popularized debates about the World War I army testing program. Measured "intelligence" was fast "becoming an established way of talking or worrying about biological differences at the level of individuals as well as groups."²⁴ Yet Carson is also interested in showing how, since at least the late 18th-century, the Enlightenment ideal of universal equal *rights* had been qualified by a rhetoric of differential *talent*. This checking of rights/equality against talent/difference was maintained, Carson argues, by a linking of the "sciences of human nature with theories of republican governance."²⁵

Similarly, Hamilton Cravens' *Before Head Start* (1993) provides a study of the emergence of a coherent "environmentalist school" at the Iowa Child Welfare Research Station from the mid- twenties up until the mid-forties.²⁶ While limited to one institution, Craven's analysis is nonetheless keenly sensitive to the role of broader cultural processes: namely the increasing atomization of the social order.

²⁴ Carson, *The Measure of Merit*, 252.

²⁵ Carson, *The Measure of Merit*, 14.

²⁶ Hamilton Cravens, *Before Head Start: The Iowa Station & America's Children* (Chapel Hill: Univ of North Carolina Press, 1993).

Specifically Cravens argues that "seeing" individual fluctuations in measured IQ required that researchers look beyond the reliable aggregate group norms of classic psychometrics to the volatile, less predictable Brownian jostling of individuals beneath the placid composite. This "radical individualism," Cravens argues, paved the way for later compensatory education projects like Head Start which sought to address disadvantages created by the "overwhelming social forces of the time, such as poverty, racism, poor education and the like."²⁷

My study will both depend on and advance this historiography in a number of specific ways. All but one of these earlier works trace the intelligence debate only up until World War II at the latest.²⁸ My project will break new ground as it follows these discourses forward from 1945 to 1965. This will allow examination of the effect of previously unconsidered cultural, political developments on the debates about "intelligence" and educational opportunity, notably *Brown v Board* and the NDEA.

²⁷ Ibid, 252.

²⁸ Lemann, *The Big Test*. While Lemann's work is an invaluable reference for the expansion of the SAT after World War II, his work does not consider the theorization and construction of intelligence per se, nor does he consider early childhood education.

NATURE AND NURTURE

Tracing beliefs about intelligence necessarily means wading into debates about the developmental etiology of intelligence. Was it due to nature/heredity? To nurture/environment? Or to some combination of both? On this point it is perhaps better here to be brief. An expanded discussion will follow in chapter 1.

Carl Degler's *In Search of Human Nature* (1992) has been an invaluable resource here.²⁹ This work offers a large-scale synthetic analysis of the social sciences from circa. 1910-1970 and persuasively depicts—on the basis of an extensive historical review of the scientific literature—an alternation there between biological and sociological (i.e. natural/genetic and nurtural/cultural) theories of causation.

Hamilton Cravens' *Before Head Start*, has been equally useful in illuminating the conflicts and resolutions that are part of the nature-nurture debate in the first half of the 20th century.³⁰ His attention to the clash between styles of thought—between seeing either static groups or seeing malleable individuals in psychometric analysis—and his attention to the growing visibility of the individual as distinct from whatever

²⁹ Degler, *In Search of Human Nature*.

³⁰ Cravens, *Before Head Start*.

group with which they bore association, has been particularly influential to this analysis.

Finally Evelyn Fox-Keller, in her *The Mirage of a Space Between Nature and Nurture* (2010), has laid out two extremely useful prescriptions for anyone treading into the thicket of "nature-nurture": 1) pay attention to whether claims are being made about a trait as an undifferentiated universal (i.e. "human intelligence") or as a trait difference (i.e. the normal distribution of "intelligence") and 2) pay attention to whether claims are being made at the level of the group or the level of the individual.³¹

I have taken these perspectives together and applied them to new evidence exhumed from the education debates of the 1950s, evidence which is chronologically downstream by a decade to two from the bulk of the extant historiography on nature-nurture and "intelligence." This approach has led me to several broadly related historiographical claims related to debates about nature and nurture and to shifts in the analytical loci between the group (often meant as "race" group) and the individual. I will introduce these claims briefly here and then examine and develop them fully in chapter 1.

³¹ Evelyn Fox Keller, *The Mirage of a Space between Nature and Nurture* (Duke University Press, 2010), 10-12, 31-72.

Firstly, there is a problem with seeing the nature vs. nurture debate as merely a see-saw or pendulum that swings back and forth with the winds of circumstance and judgement, reversing the conclusions of the previous eras as it does so. This is the received interpretation of much of the secondary literature on the intelligence debates of the pre World War II era—notably Fancher and Hilgard—a literature which often limits its analysis to strictly scientific discourses which echo-back and forth—through the lonely halls of academia. While Degler too traces this alternation, he is also careful to observe contrary motions which call this simple pattern into doubt.

Rhetoric, research agendas and debates within academe did, to some extent, shift. Following the 1930s, and again especially after World War II, it became steadily less fashionable to make baldly hereditarian claims in the scientific literature about the inherent intelligence of a "race" group. But where the rubber hit the road, in the mass practice of school-place intelligence testing and ability grouping in the 1950s, hereditarianism survived the War, alive and well, though it had emerged somewhat altered, less recognizable, in a new set of clothes, and rehearsing the new, more flexible apologetics of "nature-and-nurture."

Hereditarianism was adapting to a new set of historically conditioned discursive constraints. It is perhaps no surprise

that this should be evidently the case in the particular and particularly large context of the public schools, where—following the tide of baby boomers surging to school age and the clarion call of *Brown v Board*—the perceived need to sort based on difference was more compelling than anywhere else.

Secondly, and it follows from this, there is a problem then too with seeing the nature vs. nurture debate as eventually giving way to a fair and balanced interactionism—"nature-and-nurture"—that was apolitical, politically neutral, or somehow decidedly more objective than what had come before. The problem I argue, with taking interactionism at face value is that this ignores the scope this the discourse still preserved for defaults to the older more established—challenged but un—disproved—hereditarianism. In this argument, I have followed Michelle Brattain who has observed—in relation to debates across the sciences in the early 1950s over the genetic versus social construction of "race"—that *stalemates* in scientific understanding reverted to older assumptions. She refers to this process as a reversion to the "null hypothesis."³²

There has been over the second half of the 20th century repeated calls in relation to the nature-nurture controversy of

³² Michelle Brattain, "Race, Racism, and Antiracism: UNESCO and the Politics of Presenting Science to the Postwar Public," *The American Historical Review* 112, no. 5 (December 2007): 1386–1413.

'enough already.' Pointing to its apparently ancient, timeless volte-faces, it was, these sorts of calls suggest an insoluble paradox, and as such a non-controversy, a pseudo-problem. These calls were taken up soon after the achievement of what many heralded as the nature-and-nurture compromise of the early 1940s, and this stance prevailed into the late 50s, the time period I examine closely.³³ Anne Anastasi, a mid-century leader in the field of psychometrics wrote in 1958:

Two or three decades ago, the so called heredity-environment question was the center of lively controversy. Today, on the other hand, many psychologists look upon it as a dead issue. It is now generally conceded that both hereditary and environmental factors enter into all behavior.³⁴

This identification of nature vs. nurture as a "dead issue" along with urgings to cease and desist are taken up much more recently by secondary literature on psychometrics such as Lelia Zenderland's *Measuring Minds*. Zenderland argues that most of the literature on intelligence testing has been locked too narrowly in the nature-nurture debate and that historians should seek to "examine a wider range of controversies."³⁵ I agree, as

³³ Cravens, *Before Head Start*, 215. Cravens notes that following the controversy around the 1940 Yearbook for the National Society for the Study of Education, a nature-nurture interactionism (one that was nonetheless biased heavily, he argues, toward hereditarianism or fixity) prevailed until the 1960s.

³⁴ Anne Anastasi, "Heredity, Environment, and the Question 'How?,'" *Psychological Review* 65, no. 4 (1958), 197-208: 197.

³⁵ Zenderland, *Measuring Minds*, 3 - 9, quote on 9.

an ontology of development, nature vs. nurture is unsolvable, at least in the ways it has been historically conceived.

But the *rhetoric* of "nature-and-nurture" on the other hand was never moot or defunct. It was very close to where the action was. The rhetoric of "nature-and-nurture" acted more like a curtain behind which a great deal of work got done. As historians, philosophers, educators and perhaps even scientists, We need not waste much more energy trying to solve nature vs. nurture. We need merely to look behind the curtain of "nature-and-nurture." There we will discover—at least in the time and place I have examined—that things were neither shoulder-shruggingly agnostic nor serenely apolitical. There behind the curtain, things were busy.

GROUP AND INDIVIDUAL

Following Fox-Keller and Cravens, a key strategy in my examination of change and continuity in claims about nature, nurture and intelligence has been to pay close attention to historically shifting loci of analysis for these claims: did they fall at the level of the group or at the level of the individual? Over time, both 'group' and 'individual' have acted as distinct, yet interacting categories of social analysis. Likewise approaching intelligence more consistently as, not an organic given, but a discourse or ideology about difference, has

allowed me to examine aspects of the dynamic interaction between 'group' and 'individual' over time that seem to have fallen outside the purview of other historiography. In other words, paying careful attention to claims over time both about intelligence-by-group and intelligence-by-individual has helped me avoid seeing only one category as problematic, while taking the other as a matter of fact or common sense. More than this, this perspective has allowed me to observe in the historical interaction between the two categories what amounts to a baton-passing over time.

A brief example from recent secondary literature on the history of intelligence testing, Fancher's *The Intelligence Men*, will help illustrate what attention to analysis-by-group and analysis-by-individual has gained me. In setting the stage for his discussion of mid-20th century psychometrician David Wechsler, Fancher stresses the ground-breaking, highly innovative nature of Weschler's contributions to psychometric methods. Fancher, by way of biographical excursion, then goes on to note that:

Wechsler was born in Romania in 1896, but emigrated with his family to America at age six (ironically, as part of the tide of eastern European immigrants who aroused such concern for Yerkes and Brigham).³⁶

³⁶ Fancher, *The Intelligence Men*, 147-149, quote on page 149.

But what is 'ironic' for Fancher? He points out, here was a notably smart—even brilliant—individual whom World War I testers like Robert Yerkes and Carl Brigham might have discarded as inferior, or less educable, by virtue of his "racial"-national heritage. This irony then becomes the story of the diamond-in-the-rough (or from the rough part of town): the bright individual from a lower class or non-Anglo background who rises to the top of their field thereby validating their group, and belying any general stereotype someone might have formed about the potential intelligence of that or any individual from that group. Because of now-acknowledged racism (acknowledged at least in the American *past*), this story of the diamond-in-the-rough is most often applied to ethnic groups—Romanians, African Americans, Italians, Poles, etc. It is a story that wants to suggest how far US culture has come in regard to "race" and perhaps in regard to difference in general. The diamond-in-the-rough narrative, nearly ubiquitous in the historiography of intelligence testing, then advances sentiments of anti-racism *but* does so by creating or strengthening existing attachments to the naturalness of individual merit/intelligence.

Just how Fancher and many others have interpreted their histories in this way is, I argue, a legacy of the very time and set of circumstances I analyze in this dissertation. It is a narrative *produced* by post-World War II and specifically NDEA-

era debates about "intelligence" and educational opportunity, and it is a narrative that I aim to examine critically as a narrative.

I seek to show that the history of intelligence testing and "intelligence" is not—as Fancher and others would have it—the triumph of some form of objective individualism over racism: 'we as a culture have come to see the differential merit of individuals as individuals, free of their "race"-identity.' But rather this history is the result of the dynamic *interplay* between racism and individualism. Specifically, I argue that racism—because it was challenged in and to *some degree* thwarted from one discursive channel—begot a reintensified focus on the individual. Correspondingly, hereditarian assumptions about groups (however they were constructed)—again in *just one or a limited set of discursive channels*—migrated instead to the level of individual nature.

This is evidenced in part, in the context of my study, by what became reliable jargon among certain educational policy shapers in the mid to late 1950s: that testing and school-place grouping practices were now "individualized." The tacit assumption for these speakers and their audience was that this made these grouping decisions fair — more fair than they might have been in a bygone era when people and institutional

practices were more given to prejudicial group judgements than they were now.

Nonetheless, my historical analysis and a host of educational sociology since the mid-1960s bears out the fact that this more individualized approach to grouping based on a more individualized technology and ideology of intelligence still nonetheless recreated more or less the same strata, divisions and patterns of placement *by color* that were common to a past from which we had supposedly cut ourselves loose.³⁷ If there was a difference, it was that now these patterns were formed—perhaps more painstakingly, one individual at a time.

³⁷ David A. Goslin, *The Search for Ability; Standardized Testing in Social Perspective*, Social Consequences of Ability Testing, v. 1 (New York: Russell Sage Foundation, 1963); David A. Goslin, Roberta R. Epstein, and Barbara A. Hallock, *The Use of Standardized Tests in Elementary Schools* (Russell Sage Foundation, 1965); David A. Goslin and David C. Glass, "The Social Effects of Standardized Testing in American Elementary and Secondary Schools," *Sociology of Education* 40, no. 2 (April 1, 1967): 115-31; Leonard Beeghley and Edgar W. Butler, "The Consequences of Intelligence Testing in the Public Schools before and after Desegregation," *Social Problems* 21, no. 5 (June 1, 1974): 740-54. Samuel Bowles, *Schooling In Capitalist America: Educational Reform and the Contradictions of Economic Life*, Reprint edition (Chicago, Ill: Haymarket Books, 1976, 2011); Jeannie Oakes, *Keeping Track: How Schools Structure Inequality* (Yale University Press, 1986); Robert E. Slavin, "Ability Grouping and Student Achievement in Elementary Schools: A Best-Evidence Synthesis," *Review of Educational Research* 57, no. 3 (September 1, 1987): 293-336; Robert E. Slavin, "Achievement Effects of Ability Grouping in Secondary Schools: A Best-Evidence Synthesis," *Review of Educational Research* 60, no. 3 (September 1, 1990): 471-99; Kathleen Bennett DeMarrais and Margaret Diane LeCompte, *The Way Schools Work: A Sociological Analysis of Education* (Longman, 1990); Karolyn Tyson, *Integration Interrupted: Tracking, Black Students, and Acting White after Brown* (New York: Oxford University Press, 2011).

Chapter 1 will more extensively lay the groundwork for this argument and the succeeding chapters will bear it out.

HISTORIOGRAPHY OF THE US COLD WAR AND COLD WAR EDUCATION

In order to more fully examine ideologies and practices of "intelligence" this study has relied not only on a historiography of psychometrics and intelligence testing, but also with a secondary literature on US education and US Cold War history. This makes sense as the post-World War II school was a particular hotbed of activity for practices and ideologies of "intelligence." This approach has allowed me to focus on public education during 1950s, from the *Brown v. Board of Education* Supreme Court decision to desegregate schools, and through passage of the National Defense Education Act, and the changes in policy and practice that followed in its wake. While this is perhaps a narrow slice of time to investigate, it is a period dense with events that rapidly transformed the educational landscape. These are developments moreover on which my research questions bear with a particular weight and I believe, shed new light.

The mid-1950s are commonly discussed in the historiography as an extremely hot moment of the Cold War era in US public education. The launching of the Sputniks in 1957—and the ensuing moral crisis these launches generated—precipitated

radical federal-level educational reform: the National Defense Education Act (NDEA). The NDEA (1958) was a watershed moment in the public funding of education in the US. It was the only major federal educational legislation since the Morrill Acts (1862, 1890) and the Smith-Hughes Act (1917). It was also by far the largest federal spending initiative for public education, dwarfing its few predecessors in the scope and scale of its funding.³⁸ Among its numerous provisions, the law itself released monies for 1) the development of new advanced science, math and foreign language high school curriculum (title III), 2) aptitude-based graduate fellowships (title IV), 3) greatly expanded high school intelligence testing and guidance counseling allowing for a more efficient and systematic placement of students by "ability" (title V), and 4) augmented state level educational statistics and record-keeping infrastructure (title X).³⁹

It is thus well acknowledged in the historiography that the Cold War climate of the late 40s and 50s functioned as a spur to

³⁸ Barbara Barksdale Clowse, *Brainpower for the Cold War: The Sputnik Crisis and National Defense Education Act of 1958* (Greenwood Press, 1981), 162-167; Carl Kaestle and Marshall Smith, "The Federal Role in Elementary and Secondary Education, 1940-1980," *Harvard Educational Review* 52, no. 4 (1982): 384-408, 387-389; Jennings L. Wagoner and Wayne J. Urban, *American Education: A History* (Taylor & Francis, 2008).

³⁹ Clowse, *Brainpower for the Cold War*. Wayne J. Urban, *More Than Science and Sputnik: The National Defense Education Act of 1958* (University of Alabama Press, 2010), 2-4.

eventual US educational reform. It is important to note, in this regard, that Cold War thinking penetrated—to varying depths—many aspects of cultural life in the US in the late 40's and 50's. It was certainly more than geo-political brinksmanship and cloak and dagger diplomacy. The Cold War was also “a contest to prove the superiority of contending political and economic systems in generating power and well-being, and as ‘models of development’ for the post-colonial and non-developed nations.”⁴⁰ Political and educational leaders in the US were aware of the rapid industrialization and radical transformation of society underway in the USSR, and they feared the Soviet Union would surpass the US not only in economic and cultural—but also in scientific and technological—achievements.⁴¹

Yet, if Cold War rhetoric and ideology were so formative, this time period also featured landmark developments and conflicts in public education more commonly associated with an emergent Civil Rights movement: notably *Brown v. Board* (1954), and the internationally visible standoff in Little Rock, Arkansas (1957) following *Brown*. Approaches to the historiography of education that focus on this moment's “Cold War” aspects tend to de-emphasize the importance of its Civil Rights developments. *Vice versa*, histories of education in this

⁴⁰ John Harper, *The Cold War* (Oxford University Press, 2011), 1.

⁴¹ Mazower, *Dark Continent*.

era that center around its Civil Rights conflicts tend to lose sight of its "Cold War" dimensions. My research—by zeroing in on a central set of political and scientific networks concerned with reforming public schools—draws together both the Cold War and Civil Rights faces of this moment in the history of the public schools, demonstrating the shared significance and the powerful though sometimes subtle modes of interaction of these two dimensions.

Of course, these 'dimensions' (Cold War and Civil Rights) emerged around particular constructions of "otherness." I find this was a moment driven by white middle class anxieties about two different specific "others": the Soviet/Communist other and the African American "other." Yet, there was an asymmetry with which these anxieties were expressed in scientific, governmental and policy making circles. Within the networks I examine, it is common to hear calls to action around the Soviet threat. It is harder to sound out anxieties—among these professionals and public officials—about the changing face and color of American public schools in the *Brown v. Board* era. These worries about "race" are there nonetheless, unmistakably. If these anxieties were voiced directly and unabashedly by white protesters in Little Rock, they were expressed (and to some degree resolved) technocratically, and with perhaps less overt intentionality, by their counterparts in public office, in academia, in the private

sector and in public-private philanthropy, where there were more institutional moving parts to distribute the friction and heat.

Maintaining what Mary Dudziak refers to as the "image of American democracy" on a national and international stage demanded this asymmetry in expression of anxiety. The United States held that it was a nation of free individuals, a nation that did not discriminate on the basis of color or creed. It was thus far easier to overlook glaring cracks and fissures internal to this image of democracy, and point instead to the totalitarian other, the external other, as our antithesis, the source of our discomfort and threat to our way of life.

In this this move to draw together "Cold War" and "Civil Rights" aspects of this history I am indebted to Dudziak's *Cold War Civil Rights: Race and the Image of American Democracy*.⁴² While not a history of education per se, its chapter on the standoff in Little Rock, AR over desegregation, makes plain that the conflict in US schools following *Brown v. Board* played out on both national and international stages and in fact drew together what have often been examined separately by historians: concerns about "race" at home and "totalitarianism" abroad.⁴³

⁴² Mary L Dudziak, *Cold War Civil Rights: Race and the Image of American Democracy* (Princeton, N.J.; Woodstock: Princeton University Press, 2011).

⁴³ Ibid, 115-151.

In this vein too this dissertation has engaged more broadly with an active historiography that—following Peter Kuznick and James Gilbert's *Rethinking Cold War Culture*—has questioned just how unitary a phenomenon the Cold War was.⁴⁴ This body of work taken all together calls for the study of the Cold War as less a static, monolithic, deterministic category, and instead a more fluid set of phenomena that permeated US culture along different gradients, and in different degrees of intensity along these different gradients. Some, moreover, have held that the Cold War simply did not have as wide a cultural compass as many earlier Cold War historians have argued. Filene for example has held that it was a struggle engaged (and voiced) largely by cultural and military elites, and that daily life for most Americans was to a great degree continuous with pre-World War II experience, still moored primarily around the everyday problems of work and family, not the threat of global communism.⁴⁵

My research similarly suggests that the Soviet threat and national security concerns are only part of the story. I argue that my approach reveals a middle road whose traversal through

⁴⁴ Peter J. Kuznick and James Burkhart Gilbert, *Rethinking Cold War Culture* (Smithsonian Institution Press, 2001); Joel Isaac and Duncan Bell, *Uncertain Empire: American History and the Idea of the Cold War* (OUP USA, 2012); Jamie Nace Cohen-Cole, *The Open Mind: Cold War Politics and the Sciences of Human Nature* (Chicago; London: The University of Chicago Press, 2014). Isaac, *Working Knowledge*.

⁴⁵ Filene, Peter, "'Cold War Culture' Doesn't Say It All," in *Rethinking Cold War Culture*, ed. Peter J. Kuznick and James Burkhart Gilbert (Smithsonian Institution Press, 2001), 156-74.

Cold War-Civil Rights culture depends on a particularity of approach and method. I find that ideologies of "intelligence," as they were put to work within the public schools, had a high degree of cultural penetrance. Discourses around "intelligence" connected what were for Filene the largely disparate realms of the cultural/political elite and the everyday middle class. "Intelligence" was an idea—that was also a scientific tool, that was also a conglomeration of morals and values—that readily shuttled through the realms of the think tank, the war room, the policy committee, Senate reports, Congressional hearings, White House conferences, and through the school, through the everyday, daily world of work and family. Everyone together could be expected share some degree of worry over where their children might be placed in an educational system that was rapidly retooling itself around gradations of "academic talent."

Ideologies of "intelligence" also unite in the same framework *Brown v. Board*, the Sputniks, Little Rock and NDEA, and show how all these developments played upon each other. Ideologies of "intelligence" were a thread that bound together not only these issues and their debates, but also the structure of their solutions and resolutions. In other words, "intelligence" policy of the late 1950s solved—for its architects and the largely white middle class audience for whom it was intended—two anxieties at once: the anxieties of the

communist other and of the other "other," the African American "other" whom Fields and Fields argue have lived an experience-- as a result of their particular construction in the American racial imagination--of being "native born but 'foreign,' hardworking but not free."⁴⁶ Concern about the communist "other" was in the foreground and attended by loud debate and alarm, but it mobilized action that also responded to suppressed concern (again suppressed specifically in official public, professional and institutional channels) about the African American "other" and the desegregation of the US public schools.

Relatedly, specific findings in the dissertation are indebted to Ellen Herman and John Jackson's recovery and discussion of the fact that, as a court proceeding, *Brown v. Board* centered around and took its formal legal structure as a damages claim.⁴⁷ In deciding on *Brown v. Board*, the Supreme Court in the end upheld central scientific arguments--notably those of psychologists Kenneth and Mamie Clark--that segregation was *psychologically damaging* to African American children, and thus desegregation should be implemented with all possible haste. I argue this new attention and weight placed on "psychological damage" as a demonstrable and scientific legal

⁴⁶ Karen Fields and Barbara J. Fields, *Racecraft: The Soul of Inequality in American Life* (Verso Books, 2012), 11.

⁴⁷ Herman, *The Romance of American Psychology*, 193-199; Jr Jackson John P., *Science for Segregation: Race, Law, and the Case against Brown v. Board of Education* (NYU Press, 2005), 127-143.

claim, was re-appropriated for socially diametrical ends in the years immediately following *Brown v. Board*. With the passage of the NDEA and the reception of *The American High School Today*, a largely white middle and upper middle class cohort of parents, teachers, and educational policy makers were emboldened to argue that "gifted" and "academically talented" children risked suffering various forms of psychological damage if not placed in appropriately advanced curricula.

My dissertation also depends on and extends the analyses of others who have written specifically on Cold War education.⁴⁸ Barbara Clowse's *Brainpower for the Cold War* is an excellent legislative history examining the political machinations behind the passage of the National Defense Education Act.⁴⁹ And though its title acknowledges that the NDEA was at heart about promoting intellectual talent, it does not explicitly consider what the NDEA, as a legislative development, meant in terms of broader debates about "intelligence." Wayne Urban describes his *More Than Science and Sputnik*, as an "ideological history" in the sense his work traces the political inclinations and agendas

⁴⁸ Clowse, *Brainpower for the Cold War*; Wagoner and Urban, *American Education*; Urban, *More Than Science and Sputnik*. Kaestle and Smith, "The Federal Role in Elementary and Secondary Education, 1940-1980;" Carl Kaestle and Marshall Smith, "The Historical Context of the Federal Role in Education," *Harvard Educational Review* 52, no. 4 (1982): 383. Andrew Hartman, *Education and the Cold War: The Battle for the American School* (Palgrave Macmillan, 2011).

⁴⁹ Clowse, *Brainpower for the Cold War*.

of key architects of the NDEA legislation.⁵⁰ He also argues that the NDEA was a landmark success for those interest groups— notably the National Education Association, led by William Carr— that had been, until that moment, fruitlessly pursuing large-scale federal funding of public schools.

If some of the historical literature on Cold War education has been concerned with political-legislative ideology behind developments in Cold War education, others like Andrew Hartman have taken up questions about pedagogical philosophy in the curriculum debates that sprung up around the Life Adjustment and the Orthodox Subject Matter movements of the late 50s.⁵¹ Like Dudziak, Hartman has been concerned with how ideas about both “race” and the threat of global communism shaped these debates.⁵²

This body of work on Cold War education has examined in turn other ideological facets of the debates about education in the 50s such as: 1) the tension between local autonomy of vs. federal intervention in public schools,⁵³ 2) the perception that schools were or could be a crucible in which a particular kind of political philosophy—American democracy—was continually reborn,⁵⁴ and that 3) therefore curriculum could be an antidote

⁵⁰ Urban, *More Than Science and Sputnik*, 1.

⁵¹ Hartman, *Education and the Cold War*.

⁵² Ibid., 157–73.

⁵³ Kaestle and Smith, “The Federal Role in Elementary and Secondary Education, 1940–1980.”

⁵⁴ Hartman, *Education and the Cold War*; Clowse, *Brainpower for the Cold War*.

to communism.⁵⁵ All these beliefs and discourses were operant and their recovery and analysis in the secondary literature has been enormously useful in informing the groundwork of my dissertation. I, however, would like to focus on an unexamined facet of Cold War education debates. Therefore, this dissertation carries an analysis of individualized "intelligence" as a scientific instrument and as an ideology into the history of education, a body of work which often takes grouping practices around differential "intelligence," if discussed at all, as an institutional and perhaps even organic given.

An additional historical literature has taken up an examination specific to James Bryant Conant and his work in educational policy formation.⁵⁶ Some of this scholarship also includes treatment of Conant's *The American High School Today*. Again this body of analysis has been useful in many cases for establishing the factual groundwork of his study. But all

⁵⁵ Hartman, *Education and the Cold War*.

⁵⁶ Ellen Condliffe Lagemann, *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy*, 1st ed (Middletown, Conn: Wesleyan University Press, 1989); Lemann, *The Big Test*; James G. Hershberg, *James B. Conant: Harvard to Hiroshima and the Making of the Nuclear Age* (Stanford University Press, 1995); Barry James Teicher, "James Bryant Conant and 'the American High School Today.'" (Unpublished Ph.D. Dissertation, The University of Wisconsin - Madison, 1977); Donna D. McInerney, "The Education Legacy of James Bryant Conant" (Unpublished Ph.D. Dissertation, Rutgers University, New Brunswick, NJ, 2008); Jeanne Ellen Amster, "Meritocracy Ascendant: James Bryant Conant and the Cultivation of Talent" (Unpublished Ph.D. Dissertation, Harvard, 1990).

together this literature does not assess what I argue is the fuller significance and influence of Conant's work with Carnegie in the 1950s, specifically through *The American High School Today*. Likewise, no one has yet to examine important connections (via William Carr) between Conant's study and the National Education Association. In addition, the historiography has yet to examine numerous striking similarities between *The American High School Today* and specific title mandates of the National Defense Education Act. Beyond noting that Conant's recommendations were to identify the "talented," no one has closely evaluated how "intelligence" was deployed as a political, scientific, and rhetorical device, nor how this system of documents (the NDEA and *The American High School Today*)—and their supporting networks—helped in turn shape and reinscribe beliefs about what intelligence was in the first place.

My dissertation has taken up these issues in concert to argue that we have underestimated the influence of *The American High School Today* and the role this study played together with the NDEA, in shaping ideas about talent, intelligence and educability. Again, looking at individual "intelligence" as itself an ideology has helped uncover these relationships

between the National Defense Education Act, *The American High School Today*, and their broader historical moment.⁵⁷

CHAPTER SUMMARIES

Chapter I—Debating the Nature of Intelligence: 1900–1950:

This chapter summarizes and synthesizes the history of “intelligence” and intelligence testing—from the start of the 20th century into the post-World War II era. It argues for important continuities in testing practice and belief across this 50-year time period. I examine the relation of testing to debates about nature, nurture and “racial” intelligence. I also examine a *longue-durée* historical trend toward the individualization of intelligence, and the role this trend played in the transformation of “intelligence” in the years following World War II. I conclude with the emergence of a new, positive rhetoric on individual difference that could accomplish old ends, a rhetoric that was readily adopted and promulgated by specific institutional networks—with James Bryant Conant at the helm—interested in reforming US public education.

⁵⁷ Lemann’s history is a very informative account of the growth of the SAT in the post-World War II years, but does not treat “intelligence” itself as ideology that informs this particular testing practice, nor does it examine beliefs or practices in “intelligence” across the school-age experience leading up to the SAT.

Chapter II—Study Design of James Bryant Conant’s *The American High School Today*: In this chapter I examine how Conant, through *The American High School Today*, constructed an actionable vision of a US public high school more rationally and efficiently ordered around presumed individual differences in intelligence. A close reading of drafts, internal memos and correspondence related to the production of Conant’s study reveal that “intelligence” (operationalized as measured I.Q.) functioned as the study’s central organizing variable. Moreover, Conant presumed that I.Q. constituted an inherent, a *priori* personal essence that was distributed—just waiting to be identified—with a dependable frequency across the national body. Once found, Conant argued, these talented students should be offered rigorous selective “academic curriculum” particularly in the sciences, mathematics, and foreign languages.

Chapter III—Academic Talent, “Intelligence” and a Cold War Crisis in Education: This chapter examines Conant’s work in the context of a concurrent Cold War debate about the quality of US public education. Conant’s study was rapidly disseminated through a meticulously orchestrated national-level PR campaign and media rollout. It met with widespread public approval, and his recommendations were readily endorsed and adopted by school systems around the country. Debate over the content and organization of public school curricula in the mid to late 1950s

had reached a fever-pitch over issues of over-enrollment, desegregation, and fears about the possible superiority of Soviet science and education. Conant's study served as an effective salve for the more caustic strains of this argument. I further argue, on the basis of an analysis that includes new documentary evidence and a reconsideration of the relations between extant documentary evidence, that Conant's efforts played a large role—not in the passage—but in the formulation and then public reception of the National Defense Education Act. I argue that *The American High School Today* was intended to condition public reception of the National Defense Education Act and that Conant was an *ad hoc* architect of the Eisenhower Administration version of the bill.

Chapter IV—"Intelligence" and "Academic Talent": Resolving the Politics of Place and "Race." In this chapter I explore more fully why Conant's recommendations were so effective at resolving the public debate around education. In particular I argue that Conant's set of ideas about individual differences in "intelligence" worked—often implicitly—as a powerful political and rhetorical tool with multiple applications. It was a rhetoric that could be used to 1) weaken rural-conservative resistance to increased federal involvement in local and state-run school systems, 2) ease white middle-class fears about "race" and school integration in the early years after the *Brown*

v. *Board* decision, 3) assuage US anxieties about global communism and collectivist ideologies by suggesting that cultivation of "academic talent" was the cornerstone of democratic individualism and the key to scientific advance. I combine this reading of Conant's materials with a wide range of testimony from Congressional hearings for the National Defense Education Act to show that these multiple and particular rhetorical uses of "intelligence" worked continuously and in mutually supportive ways across these texts.

Chapter V—Under the Cloak of the Expert: ETS, NEA, Carnegie, Conant and the National Defense Education Act: This chapter is a detailed exploration of the organizational, institutional and political networks that supported the production of *The American High School Today*—networks which were also largely, if not in some cases *completely*, hidden from public view. My findings suggest that *The American High School Today* should be viewed less as a "personal study" by Conant himself (as Conant projected and existing analyses have assumed), and more properly as an inter-institutional collaboration between the Carnegie Foundation, the Educational Testing Service and the National Education Association, with Conant serving as the project's highly visible executor, leader and spokesperson. This was a complex collaboration that worked to the political advantage of the NEA, and for the decided

financial gain of ETS. Moreover, I also argue that while *The American High School Today* emerged as a seemingly independent and coincidental endorsement of the very reforms recommended by the National Defense Education Act, the legislative act and the school study were actually conceived in quiet collaboration. This *sub rosa* cooperation is visible in correspondence between Conant and Eisenhower, Eisenhower staff and Marion Folsom, the secretary of Health, Education and Welfare and a key supervisory architect of the executive branch version of the NDEA. *The American High School Today* was far more than a purportedly impartial scientific study of US high schools; it was a strategy of persuasion on behalf of the Eisenhower Administration's National Defense Education Act.

Chapter VI—A "Precious Minority": Constructing the "Gifted" and "Academically Talented" Student in the Wake of The American High School Today and the National Defense Education Act: This chapter discovers the dramatic amplification of a discourse that followed from and was powerfully propelled by Conant's recommendations and NDEA mandates. This new discourse, produced in great volume across a range of media and literatures (specialist and popular), worked to construct the category of the "academically talented" and "gifted" child. Chiefly this new discourse on "intelligence" proposed that the "gifted" and "academically talented" were a *natural* category of person who

were particularly well suited for the study of the sciences and mathematics. Moreover, this new discourse proposed that "giftedness" and "academic talent" were currently largely unrecognized as a distinct human category and that gifted and talented individuals were overlooked neglected as a result. The invisibility of the gifted and their resulting neglect posed a great risk to the gifted themselves as individuals (this was often depicted as the potential for atrophy of talent, isolation, maladjustment or psychological damage), and a great risk to the nation, to our technological and cultural progress and our national security. The idea of "giftedness" is an old one, but it was repurposed in ways very specific to this time period, and it was reimpresed at this historical moment with striking force and visibility upon the national imagination. As this category of person was given renewed attention, it was also systematized, operationalized and made actionable in an educational setting in a way and to a degree it never had been before. Given the cultural bias of these tests and the narrow essentialist underlying conception of intelligence that supported their use, I also argue that this dramatically reinvigorated interest in educating the "gifted" and "academically talented" amounted to a repositioning and safeguarding of whiteness in response to mandated desegregation.

CHAPTER I

DEBATING THE NATURE OF INTELLIGENCE: 1900-1950

This chapter synthesizes and evaluates fifty years in the history of "intelligence" and intelligence testing—from the start of the 20th century into the post-World War II era—and argues for important continuities in testing practice and belief across this time period. While relying primarily on an existing historiography, this chapter establishes the historical background and argument for the remainder of the dissertation.

First I summarize the history of the innovation of intelligence tests and the scaling up of testing practice through World War I Army testing and into the interwar years. As I examine this spread and increasing prevalence of intelligence testing, I also consider the broader range of cultural practices and beliefs about "intelligence" that testing energized. I then explore the relation of testing to increasingly controversial debates about the nature and nurture of both "racial" and individual intelligence. This analysis illuminates an exchanges between conceptualizations of "race" and individuality across the interwar and post-World War II era. These were exchanges that allowed for the refurbishment of intelligence testing as an apparently objective and race-neutral practice. In expert discourses between the interwar and post-World War II eras, claims about race-group intelligence receded—

challenged but undisproved, quiescently operating—into the background. The politically explicit focal point for discrimination then instead came to fall, seemingly with more precision, onto measured individual differences. Additionally this shift was further softened by a new rhetoric of nature-nurture interaction, born out of scientific debates and stalemates of the 1930s. Yet, I find this interactionist rhetoric could still default in practice and assumption to an essentially hereditarian or neo-hereditarian position.

The chapter concludes with the emergence of a new “positive” approach to individual difference. Advocates of intelligence testing no longer fretted over the problem of the “subnormal,” with arguments for their quarantine, exclusion or sterilization. Instead, post-World War II, beliefs about the hereditary nature of individual differences in IQ were now marshalled in the search to identify high measured “intelligence.” This was a rhetoric, moreover that was readily adopted and promulgated by specific institutional networks interested in reforming US public education.

THE DAWN OF THE INTELLIGENCE TEST: THE DOING OF TESTING, THE FORGING OF BELIEF

The early origins of intelligence testing have been well-documented in the secondary literature. It will be useful

nonetheless to summarize key aspects of this history here in the interest of establishing important trends and continuities that shaped debates about "intelligence" in the interwar and on into the post-World War II years. Following their innovation in France by Alfred Binet in 1905 for use among children experiencing various kinds and degrees of delays in school, intelligence tests moved rapidly to US contexts where they were revised for new contexts and applications by a range of American psychologists including Herbert Goddard, Robert Yerkes, and Lewis Terman.¹ By 1916 Lewis Terman had revised the original Binet exam, to produce the Stanford-Binet, an exam meticulously normed and validated to produce a bell curve distribution among "normal" school-age children.² In 1917, with the US entry into World War I, Yerkes, Goddard and Terman together adapted the Stanford-Binet for the US Army, with the intent that entering recruits could be sorted by measured "intelligence" for various ranks and duties within the military.³ Though the army was in

¹ Leila Zenderland, *Measuring Minds: Henry Herbert Goddard and the Origins of American Intelligence Testing* (Cambridge University Press, 2001), 92-108. Raymond E. Fancher, *The Intelligence Men: Makers of the IQ Controversy* (Norton, 1987), 68-83, 117-141. John Carson, *The Measure of Merit: Talents, Intelligence, and Inequality in the French and American Republics, 1750-1940* (Princeton: Princeton University Press, 2007), 177-193.

² Fancher, *The Intelligence Men*, 139-140; Paul Davis Chapman, *Schools As Sorters: Lewis M. Terman, Applied Psychology, and the Intelligence Testing Movement, 1890-1930* (New York University Press, 1990), 27-28.

³ Fancher, *The Intelligence Men*, 117-126; Carson, *The Measure of Merit*, 197-228; Daniel J. Kevles, "Testing the Army's Intelligence:

the end reluctant in many cases to allow test results to override their own personnel process, by 1918, over 1.75 million young adult men had been tested as a part of this World War I army testing program.⁴ This effort produced many orders of magnitude more test data than Goddard, Binet, Terman had so far assembled, and promised ever more reliable measurements of what they saw as that invisible inner essence: intelligence. In 1919, immediately following World War I and based in large measure on the exposure intelligence testing received as a part of the war effort, the National Academy of Sciences funded Lewis Terman to convert the Army Alpha test (itself an adaptation of the Stanford-Binet) into the National Intelligence Tests. The NIT marked the first significant movement of the new intelligence tests into public schools at a national level. Over 400,000 copies of the test were sold nationwide at its debut.⁵

The first 15 years of intelligence testing was marked by rapid transatlantic migration, a rapid expansion in scale of use, and adaptation of new applications and methods for tests in

Psychologists and the Military in World War I," *The Journal of American History* 55, no. 3 (1968): 565-81.

⁴ Fancher, *The Intelligence Men*, 118; Stephen Jay Gould, *The Mismeasure of Man* (W. W. Norton & Company, 2006) 222-234.

⁵ Fancher, *The Intelligence Men*, 146; Paul Davis Chapman, *Schools As Sorters: Lewis M. Terman, Applied Psychology, and the Intelligence Testing Movement, 1890-1930* (New York University Press, 1990), 1-4; Carson, *The Measure of Merit*, 246-247.

their new US contexts. First, tests moved from their originary context in a limited range of institutional settings as diagnostics of grades of deficiency among "subnormal" populations to much larger application among populations of "normal" individuals across a wider range of institutional settings, but most notably and durably, public schools. This shift from "subnormal" to "normal" came with a number of related developments. Testing went from being individually to mass administered and from yielding qualitative age-level comparisons (à la Binet) to yielding an I.Q. score, a single number on a unilinear scale meant to represent a person's general intellectual endowment.

Crucially, these shifts in psychometric method and scale of use were shaped by much broader cultural contexts. The impetus to make intelligence tests useful across a wider and wider range of institutional contexts was tied to a larger Progressive-era quest to rationalize, quantify, measure and make more efficient many aspects of social life, including public education.⁶ In this mission Progressives were responding, in particular value-driven ways, to rapid social and demographic changes that were dramatically altering the fabric of American cultural life. An increasing influx of immigration from Europe and internal

⁶ Zenderland, *Measuring Minds*, 7-8, 222-233

migrations from South to North and from the countryside to urban centers were quickly changing the composition of American cities and American schools.⁷

Yet this was not just about testing practice, it was about the beliefs that inhered in and grew out of this practice. As intelligence was measured, new values and meanings crystallized around and spread out from it. Where Binet, who had used tests in a process of diagnosis and remediation, warned explicitly against assuming the tests measured a fixed capacity, almost all mainstream US psychometricians in the World War I and interwar years were decidedly hereditarian in their interpretation of intelligence tests.⁸ For Goddard, Terman, Yerkes, and many others, IQ measured an inherent stable essence that differed across individuals and groups in large part due to difference in underlying hereditary factors (see below: Nature, Nurture and the Heritability of Intelligence).

John Carson notes that by 1925 intelligence testing had become a stable fixture of the cultural landscape and that a corresponding set of beliefs were beginning to stabilize around this new mass-practice:

⁷ Ibid, 57.

⁸ Alfred Binet, "La Mesure En Psychologie Individuelle," *Revue Philosophique de La France Et de l'Etranger* 46 (1898): 113-23, 122-123 as quoted in Zenderland, *Measuring Minds*, 96; Alfred Binet, "Nouvelles recherches sur la mesure du niveau intellectuel chez les enfants d'école," *L'année psychologique* 17, no. 1 (1910): 145-201, 157 as quoted in Fancher, *The Intelligence Men*, 78..

From a concept of only limited cultural purview before the war, by the mid-1920s, intelligence was becoming an established way of talking or worrying about biological differences at the level of individuals as well as groups, by providing a language for discussing and a means for assessing the relative superiority /inferiority of whoever was at issue.⁹

Following Norton Wise and Crosbie Smith, Carson has noted that the "the act of measuring imparts value to the object measured."¹⁰ In the case of the 'measurement' of non-objects like mind or intelligence, the valuation accomplished by measurement amounts to a 'thing-making' or reification of a 'non-thing.'

The heat and light generated by the newly circulating discourses around intelligence reflected back on the profession of psychology itself. IQ soon had established itself as the single most reliably reproducible measure in all of psychology and was a boon to the profession in its long-standing bid to be counted a "hard" science among other natural sciences like physics, biology and chemistry.¹¹

Perhaps most famously, the scientific results of the Army tests, analyzed and discussed in Yerkes' *Army Mental Tests*

⁹ Carson, *The Measure of Merit*, 252.

¹⁰ Ibid, 225; M. Norton Wise and Crosbie Smith, "Measurement, Work and Industry in Lord Kelvin's Britain," *Historical Studies in the Physical and Biological Sciences* 17, no. 1 (1986): 147-73, 172.

¹¹ Hamilton Cravens, *Before Head Start: The Iowa Station & America's Children* (Univ of North Carolina Press, 1993), 23. Jim Wynter Porter, "Experimental Psychology," in *A Companion to the History of American Science*, ed. Georgina Montgomery and Mark Largent, 1 edition (Chichester, UK; Malden, MA: Wiley-Blackwell, 2015), 101.

(1920) and Carl Brigham's *A Study of American Intelligence* (1923), attracted widespread public attention.¹² In particular, Yerkes and Brigham claimed that testing demonstrated that the average mental age of the new army recruit was about 13 years, powerfully communicating the impression that the United States was teetering on the brink of moronity, poised to slip down a steep slope into biological and cultural degeneracy. This claim about average mental age was coupled with an analysis of test results by nation of origin, a category that mapped neatly onto early 20th-century constructions of race and also tied closely to contemporary and hotly contested discussion about recent influxes of immigrants. Yerkes and particularly Brigham held that the tests showed that individuals of northern European origin—the 'Nordic' stock—were more intelligent on average than members of the 'Baltic,' 'Mediterranean,' 'Slavic' and 'Latin' races which Brigham held predominated in southern and eastern Europe. Moreover, all these European "races" scored better on the army alpha and beta intelligence tests than did non-European "races," particularly African Americans. For Brigham, Yerkes and many others, these differences in test results demonstrated clear racial cleavages and differences in inherent racial mental

¹² Clarence Stone Yoakum and Robert Mearns Yerkes, *Army Mental Tests* (H. Holt and company, 1920); Carl C. Brigham and Robert M. Yerkes, *A Study of American Intelligence, by Carl C. Brigham, A Foreword by Robert M. Yerkes*. (Princeton University Press, 1923).

endowment, reproducing the racial hierarchies of the 19th century race science work of anthropology and craniometry.¹³

In addition, by 1926, it was clear that public schools were beginning to use intelligence tests to make decisions about ability group assignments within their curricula.¹⁴ Lewis Terman, perhaps the leading exponent of a new meritocracy of "IQ" in public education held that this unilinear scale of "intelligence" actually revealed boundaried zones—or domains of intellect—that superimposed neatly over the different vocational strata. In this regard, Terman espoused:

The use of the tests in education and vocational guidance is hardly less important than their use in re-grouping... Preliminary investigations indicate that an IQ below 70 rarely permits anything better than unskilled labor; that the range from 70-80 is pre-eminently that of semi-skilled labor, from 80 to 100 that of the skilled or ordinary clerical labor, from 100 to 110 or 115 that of the semi-professional pursuits; and that above all these are the grades of intelligence which permit one to enter the professions or larger fields of business.¹⁵

The increasingly specialized modern labor force would be better supported and more efficiently supplied, Terman argued, if it were mirrored by a stratified, tracked curriculum that differentially directed its students toward vocational endpoints matching the natural boundaries of their capabilities.

¹³ Stephen Jay Gould, *The Mismeasure of Man*, Revised Edition (W. W. Norton & Company, 1996), 214-222.

¹⁴ Chapman, *Schools As Sorters*, 2.

¹⁵ Lewis Madison Terman et al., *Intelligence Tests and School Reorganization* (World book company, 1922), 27.

Note Terman's IQ 115+ threshold, marking the entry to the citadel of the professions. On the normal bell curve distribution of "intelligence" produced by the Stanford-Binet exam, a score of 115 denoted the edge of the first standard deviation above a mean IQ of 100. This number, 115, which marked a critical boundary in the emergent IQ meritocracy, will reappear in successive chapters which consider developments in testing and school placement in the mid to late 1950s. An IQ of 115 was the very same score that James Bryant Conant and his collaborators chose as the boundary of a zone of cognitive ability that Conant referred to as "academically talented." Though Terman's efforts to systematically institute this meritocratic reform of education based on a strictly psychometric conception of "intelligence" were interrupted—as were efforts to do almost anything with or to the public schools—by the Great Depression and World War II, Conant and his collaborators would resume Terman's project with zeal and vigor, and in response to a new (and old) set of anxieties in the post-World War II order.

The existing historiography on "intelligence" and intelligence testing demonstrates that this hereditarian position did not go unchallenged. Following World War I testing, there was mounting criticism of testing and the testers' assumptions (particularly assumptions regarding the innateness of measured *race-group*

differences) from scholars such as Walter Lippmann, John Dewey, William Bagley, Margaret Mead and Horace Mann Bond.¹⁶ Yet, while both primary claims of the World War I testers—national average mental age and racial intelligence—were challenged by a few vocal critics, they were also widely accepted at the time by powerful political movements interested in arguing that democracy was imperiled by degenerative elements both from abroad and within. The eugenics movement (with its resultant legislation and sterilizations) and the Immigration Restriction Act of 1924 offer primary cases in point.¹⁷ Advocates of both initiatives drew extensively on the Army test data to support their positions. As a result, intelligence testing and the related beliefs about “intelligence” that were bound up within them—continued to expand outward into culture despite the controversies that sprung up around them. The range of potential social needs and anxieties that tests could serve proved more compelling.

NATURE, NURTURE AND THE HERITABILITY OF INTELLIGENCE

Given “intelligence” as a set of beliefs took on a life of its own in the early 20th century US, it is important to note

¹⁶ Carl N. Degler, *In Search of Human Nature: The Decline and Revival of Darwinism in American Social Thought* (New York: Oxford University Press, USA, 1992), 167-186.

¹⁷ Diane B. Paul, *Controlling Human Heredity, 1865 to the Present* (Humanities Press, 1995); Gould, *The Mismeasure of Man*, 1996, 222-232.

parallel trends and developments in the history of *conceptualizations* of intelligence that in certain cases moved in tandem with the history of intelligence testing discussed above. I am referring here to the changing tendencies to see or make claims about "intelligence" as a quality that defined a group (e.g. "race") as opposed to a quality that could be said to inhere only in individuals as distinct from whatever group identity they might also share. I am also referring to shifting debates or claims about the etiological or developmental causation of "intelligence" that came to animate the much-discussed 'nature-nurture' debates of the first half of the 20th century. Clearly both these sets of beliefs—was intelligence a group or merely an individual trait?, was it due more to the immutable nature of biological inheritance or to the influence of contingent environmental factors?—intertwine at many points. Dynamic shifts in these discourses have important implications for developments in the post-World War II era that I discuss in subsequent chapters.

It was not until the late 19th century, following the work of Charles Darwin and Francis Galton—and emergent conceptions of a hard heredity positing some form of material genetic essence—that the specific terms 'nature' and 'nurture' polarized in relation to each other and took on their now familiar semantic positions as separate, distinguishable and even competing

categories of casual influence.¹⁸ Even as late as the mid-19th-century, a hard line between 'nature' and 'nurture' had yet to be drawn. Commenting on scientific discourses about the heritability of mental traits in early to mid 19th century Britain, historian John Waller argues:

Partly because physicians accepted axiomatically that acquired afflictions could become hereditary, clear distinctions were rarely drawn between environmental factors and heritability, and the two were generally conflated.¹⁹

This, Waller notes, was because of the still predominant belief that characteristics acquired through experience, injury, practice, habit, happenstance etc. could be passed on and inherited by progeny—in Lamarkian fashion—along with any other inborn traits.²⁰

Yet, following the acceptance of Weismann's late 19th-century germ plasm theory—and the impermeable boundary it theorized between the soma and germ cells—conceptions of nature and nurture became correspondingly polarized. Whatever the body gained or lost through experience nonetheless did not alter or overwrite an underlying heritable essence that the body

¹⁸ Evelyn Fox Keller, *The Mirage of a Space between Nature and Nurture* (Duke University Press, 2010), 10-13, 21-30; John C Waller, "Ideas of Heredity, Reproduction and Eugenics in Britain, 1800-1875," *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 32, no. 3 (September 2001): 457-89, 457.

¹⁹ Ibid, 460.

²⁰ Ibid, 460 f.n.

preserved and passed on. The dichotomized debate between nature and nurture, Fox-Keller argues, then grew out of this rapidly crystalizing perception that the gene—this heritable essence—was the long sought after fundamental particle of biology. The more prominent and discrete the gene became in scientific conception, the more it created its dichotomized antithesis: everything that was not genetic.²¹

The early testers were all explicitly hereditarian in their beliefs about the developmental etiology of "intelligence." Because IQ was such a stable measure in the aggregate, and because mass testing reliably repeated a bell curve over larger and larger sample sizes, testers assumed they were measuring real essential fixed differences among individuals and especially groups in the social order. It was from this vein of thought that Yerkes, following World War I testing, boldly claimed that intelligence tests were "originally intended and now definitely known to measure native intellectual ability."²² Of course it was not only Yerkes who promulgated this explicitly hereditarian interpretation of IQ. Psychologist Carl Brigham's 1923 write-up of the World War I testing program, *A Study of American Intelligence*, was buoyed at every turn of its analysis

²¹ Keller, *The Mirage of a Space between Nature and Nurture*, 10-13.

²² Yoakum and Yerkes, *Army Mental Tests*, 17.

by hereditarian assumptions about intelligence particularly in regard to perceived group (i.e. racial-national) differences.²³

Likewise, Goddard—in collaboration with geneticist Charles Davenport—stoked eugenicist energies by averring simple single unit Mendelian assortment for feeble-mindedness.

Feeble-mindedness, Goddard held, must be the result of a homozygous recessive pattern of inheritance. Moreover, heterozygosity for the trait would produce silent—or at least less readily detectable—carrier of the debility: the moron. The implications were clear. If we were not vigilant, the allele for feeble-mindedness would soon swamp our culture. Goddard's *The Kallikak Family: A Study in the Heredity of Feeble-mindedness*, a loosely constructed, largely fabricated analysis of a family history of feeble-mindedness functioned as a morality play about good and bad breeding.²⁴ Goddard's Kallikak story—received throughout the teens and 20s as a serious academic treatise—became a touchstone of the eugenicist movement, and moreover serves as another powerful indication of the cultural capital “intelligence,”—specifically a hereditarian conception of intelligence—was accruing.²⁵

²³ Brigham and Yerkes, *A Study of American Intelligence*.

²⁴ Zenderland, *Measuring Minds*, 169-185.

²⁵ Gould, *The Mismeasure of Man*, 2006, 198.

In 1919, soon after the World War I testing program had concluded, Goddard was invited to Princeton University to deliver the celebrated annual Louis Clark Vanuxem lectures.²⁶ There, speaking on behalf of his other World War I psychometricians, he declared, that:

our thesis is that the chief determiner of human conduct is a unitary mental process which we call intelligence: that this process is conditioned by a nervous mechanism that is inborn: that the degree of efficiency to be attained by that nervous mechanism and the consequent grade of intelligence or mental level for each individual is determined by the kind of chromosomes that come together with the union of the germ cells: that it is but little affected by any later influence except such serious accidents as may destroy part of the mechanism.²⁷

It was now additionally clear for Goddard that not just "subnormal" but that also differences in observed or measured *normal* intelligence were hereditary and fixed. If environment played any role in the developmental process it was negative, relegated to injuries and accidental degradations. Moreover, he followed with a sweeping claim about "intelligence" in the social order: "as a consequence any attempts at social adjustment which fail to take into account the determining character of the intelligence and its alterable grade in each individual is illogical and inefficient."²⁸ "Intelligence" was

²⁶ Zenderland, *Measuring Minds*, 297.

²⁷ Henry Herbert Goddard, *Human Efficiency and Levels of Intelligence: Lectures Delivered at Princeton University April 7,8,10,11, 1919* (Princeton University Press, 1920), 1. I'm indebted to Zenderland for exhuming this primary source material see *Measuring Minds*, 293-298.

²⁸ Goddard, *Human Efficiency and Levels of Intelligence*, 1.

the organic lynch pin coupling a vast array of social problems. The solution to these social problems lay in using intelligence testing to determine the right place for people in the social order.

In addition to Yerkes and Goddard, Terman likewise was convinced of the prepotently genetic-hereditary etiology of measured differences in "intelligence" and believed that the existing class structure was the outcome of innate difference in mental ability across groups of individuals. Dismissing social-environmental causation, and forging a new more certain hereditarian consensus, Terman wrote:

The common opinion that the child from a cultured home does better in tests solely by reason of his superior home advantages is an entirely gratuitous assumption. Practically all of the investigations which have been made of the nature and nurture on mental performance agree in attributing far more to original endowment than to environment.²⁹

By 1928, as chair of *Nature and Nurture*, the Yearbook for the National Society for the Study of Education, Terman had quantified what he believed were the relative and disproportionate contributions of nature (80%) and nurture (20%) to differences in intelligence.³⁰

²⁹ Lewis Madison Terman, *The Measurement of Intelligence: An Explanation of and a Complete Guide for the Use of the Stanford Revision and Extension of the Binet-Simon Intelligence Scale* (Houghton Mifflin, 1916), 115.

³⁰ Barbara Burks, "The Relative Influence of Nature and Nurture upon Mental Development: A Comparative Study of Foster Parent-Foster Child Resemblance and True Parent-True Child Resemblance," in *National*

NATURE, NURTURE AND IDEOLOGIES OF GROUP DIFFERENCES: 1920-1950

Yet there was a growing body of research from the social sciences over the 1910s, 1920s, and into the 1930s that sought to explode hereditarian assumptions about *group* differences in mentality and behavior by exploring historical, cultural and environmental influences on development. Degler notes that much of this emphasis on socio-cultural causation in the social sciences grew out of a new cultural school of anthropology, largely initiated by anthropologist Franz Boas in response to race science claims of physical anthropology of the 19th century.³¹ For example, Otto Klineberg, psychologist and student of Franz Boas, spent much of his career making the case for cultural causation and experimentally deconstructing the claims of differential racial-national intelligence made by the World War I army testers. He traveled to Europe to gather his own data that empirically countered Brigham's claims of 'Nordic' intellectual superiority. Klineberg also debunked a selective migration hypothesis Yerkes had employed to explain why African

Society for the Study of Education, Twenty-Seventh Yearbook, pt.1, Nature and Nurture, Their Influence upon Intelligence., ed. Guy Whipple (Public School Publishing Co. (Oxford, England), 1928), 219-316; L. M. Terman, "The Influence of Nature and Nurture upon Intelligence Scores: An Evaluation of the Evidence in Part I of the 1928 Yearbook of the National Society for the Study of Education.," *Journal of Educational Psychology* 19, no. 6 (September 1928): 362-369; Cravens, *Before Head Start*, 200-201.

³¹ Degler, *In Search of Human Nature*, 67, 84-104.

Americans who had migrated to northern cities tested higher than those who had remained in the south.³²

Klineberg and a host of like-minded researchers in the social sciences including Franz Boas, Ruth Benedict, Alfred Kroeber, Ada Arlitt, J.R. Kantor and a young Margaret Mead made headway with these arguments in their respective professional literatures throughout the mid to late 20s and into the 1930s. Degler notes that by the mid-1930s there had been a decided shift in disciplinary conversation in psychology and anthropology. The "racial" verities of the World War I intelligence testers and of 19th and early 20th century physical anthropology had been challenged, in some cases decisively, and the cultural school now stood viably on its own impressive redoubt of scientific literature. By 1930 psychologist Carl Brigham, swayed by this new body of research, had recanted, calling into question his own earlier assertions of racial differences in intelligence.³³ By the mid-1930s, other mainstream psychometricians who had cut their teeth on the World War I testing program—notably Terman—had begun to more quietly withdraw their confident claims about the heredity of *group* differences.³⁴ Yet this process of recanting or now abstaining

³² Otto Klineberg, *Race Differences* (Harper, 1935), 183-184; Degler, *In Search of Human Nature*, 181.

³³ Degler, *In Search of Human Nature*, 176.

³⁴ Gould, *The Mismeasure of Man*, 221-222.

did not positively overturn or rebuke past claims so much as it furnished a "veil of silence" that could be draped over them.³⁵ Historian Carl Degler accords the progress of the cultural school by the mid-1930s a "triumph" not because it bested "race"-group hereditarianism, but because it mounted an effective alternate theoretical position to early 20th century race science. But, he carefully notes, it was a challenge that did not—for its scientific audience—positively refute or disprove biological explanations for group differences in measured intelligence.³⁶

Even Klineberg, perhaps the most ardent champion of cultural explanations for observed group differences in mentality, remained in the end faithful to positivism over anti-racism, conceding that the logical outcome of his research was agnosticism about the possibility of race differences. He concluded that while there was "no scientific proof of racial differences in mentality, this does not mean that there are no such differences," and that perhaps later scientific methods would make the case for or against with more certainty.³⁷ This interwar shift in professional discourse in the social sciences can perhaps be best described not as an overturning of the race-

³⁵ Ibid, 221.

³⁶ Degler, *In Search of Human Nature*, 184-185.

³⁷ Klineberg, *Race Differences*, 345; Degler, *In Search of Human Nature*, 185.

science of intelligence but a movement from racial dogma to doubt.

Yet, despite Klineberg's hopes, science failed to achieve a definitive or even more certain understanding of "race" in the ensuing decades. The conversation about the scientific status of "race" difference and—soon enough—the ontological status of "race" itself had re-emerged in the late 1940s and early 1950s, attended now by new levels of shock and remorse following Nazi atrocities of World War II, and the understanding that those atrocities were in part attributable to, or at least had been justified by, Nazi race-science.

In 1950, in an effort to establish consensus for a new post-war anti-racist understanding of human difference, the United Nations Educational, Scientific and Cultural Organization (UNESCO) gathered—at first under the direction of anthropologist Ashley Montagu—a host of leading scientists from the natural and social sciences to author and cosign a document for a wide public audience. This document would, Montagu and other original organizers believed, represent a shared understanding among the sciences in regard to "race." The first UNESCO statement of 1950, actually a lengthy pamphlet, "UNESCO and its Programme: The Race Question" sought to definitively establish that the "old" race science of physical anthropology—with its fixed typologies and hierarchical taxa—had been replaced by a

new more enlightened non-racist science that understood human variation as some as yet imprecisely determined interaction of genes and environment.³⁸

The 1950 UNESCO statement, directed by Ashley Montagu, posited that "race" itself was not a matter of categorical biological differences, but rather a shared and long-enduring "social myth" that produced (via racism) profound differences in the lived experiences of those who were racially marked.³⁹ This position was in harmony with a post-World War II international populist, anti-colonial critique of "race" as an ideological product of colonialism, and in line with a social constructionist position on race emergent in cultural anthropology.⁴⁰

Yet there was something of a revolt among the cosigning scientists—particularly the geneticists and physical anthropologists—after the publication of the 1950 document. Montagu's social constructivist conception on "race" was the

³⁸ UNESCO, "UNESCO and Its Programme: The Race Question" (Paris: UNESCO, 1950); Michelle Brattain, "Race, Racism, and Antiracism: UNESCO and the Politics of Presenting Science to the Postwar Public," *The American Historical Review* 112, no. 5 (December 2007): 1386-1413, 1386.

³⁹ UNESCO, "Statement of 1950," in *Race Question in Modern Science: Race and Science* (New York,: Columbia University Press, 1961), 494, 499.

⁴⁰ Michelle Brattain, "Race, Racism, and Antiracism: UNESCO and the Politics of Presenting Science to the Postwar Public," *The American Historical Review* 112, no. 5 (December 2007): 1386-1413, 1396; Penny M. Von Eschen, *Race against Empire: Black Americans and Anticolonialism, 1937-1957* (Cornell University Press, 2014), 69-95.

minority position among the cosignatories, many of whom soon objected on various technical points with Montagu. Claims in the first 1950 statement of no "racial" differences in mental and moral characteristics like temperament and intelligence proved a particular vexation to many of the signatories.⁴¹ It was determined that the original Montagu-directed statement would have to be retracted and a second revised UNESCO statement published in its stead. Montagu was replaced in his role as director and rapporteur by anthropologist Alfred Metraux and a second UNESCO statement on "race" was drafted and released in 1951.⁴² This second statement averred that "race" was more than social construction or shared myth. It was a manifest reality that was both self-evident and scientifically knowable.⁴³ What was more, those alleged biological differences that constituted "race" *might* translate into "racial" differences in moral and mental characteristics. This possibility at least could not be ruled out.

Historians differ in their assessments of the degree to which an older racism had been expunged from the UNESCO statement. Psychologist and historian of psychology, Ernest

⁴¹ Brattain, "Race, Racism, and Antiracism," 1400-1401.

⁴² Ibid., 1398-1401.

⁴³ L.C. Dunn, "Report on Meeting of Physical Anthropologists and Geneticists for a Definition of the Concept of Race," UNESCO Papers (Paris: UNESCO, June 4, 1951); quoted in Brattain, "Race, Racism, and Antiracism," 1401.

Hilgard, sees the 1951 UNESCO statement as a confident break with the race science of the first half of the century and an affirmation among the sciences at large that claims of white racial superiority no longer had any basis in science.⁴⁴ Hilgard moreover points to this UNESCO statement as evidence of the emergence and stabilization of a politically neutral, unideological, objective interactionist interpretation of human difference: that variation must be the result of some combination of nature and nurture, or genes and environment.

Historian Michelle Brattain, who has studied the production of this related series of post-World War II UNESCO documents on "race" in great detail, draws a different set of conclusions. Brattain notes the fifth section of the revised 1951 statement—a section devoted to mental characteristics and race—was now marked by equivocal claims: namely that 1) anthropologists did not make racial classifications based on mental criteria, but that 2) science *had* established that there were "mental differences between more and less 'civilized' races," and that 3) some scientists held these group differences were innate, and biologically inherited, and that 4) some scientists believed these differences were environmental.⁴⁵ Brattain notes of the revised 1951 statement that "section five [on mental

⁴⁴ Hilgard, *Psychology in America*, 471.

⁴⁵ Brattain, "Race, Racism, and Antiracism," 1401.

characteristics] became a Rorschach blot into which almost any interpretation might be read."⁴⁶

The UNESCO statement, a bid to recertify the objectivity of the sciences in regard to "race," produced on its surface what historians like Hilgard take to be a clear departure from 20th-century race-science: the bald claims of white superiority and racial hierarchy of the World War I testers were not only gone, but proscribed from serious scientific discussion. Yet, a closer reading reveals older attachments to "race" and "race" difference, but now buried under a technical thicket of equivocation. The UNESCO statement in Brattain's analysis is revealed to be not even a single statement, but rather a series of retractions and revisions that in the end reproduced (or at least allowed for the viability of) claims about "intelligence" and "race" reminiscent of the World War I army testers, but 30 years later. What was more, a rhetorical escape valve had been added that could quickly evacuate controversy: some scientists thought the differences were genetic, some thought they were environmental, and the truth likely lay at some mysterious, as yet unknown, point in between.

Brattain notes that in failing to positively *disprove* the ontological status of "race," the UNESCO debate:

⁴⁶ Ibid.

replicated the logical structure of the most elementary experimental trials, where one claim assumed the status of the 'null' hypothesis—the claim by default assumed to be true—and the burden of evidence fell exclusively on those [i.e. the Montagu minority] who advocated an "alternative" hypothesis. This epistemological dynamic reproduced the limitations of the collective scientific imagination at that moment, precluded a more profound reassessment of the race concept, and inadvertently reconstructed an intellectual space for thinking of race as a legitimate and determinist category of human variation."⁴⁷

It was not the case that nothing had changed. New rules, limits, technical requirements and boundaries had been applied to the discourse. It was that the possibility of the old was alive and well in the new.

'NATURE-AND-NURTURE' AND IDEOLOGIES OF INDIVIDUAL DIFFERENCE

A monolithic acceptance of hereditarian explanations for *race-group* differences had been cast in doubt, but clearly not overturned, by the legacy of Boas' cultural school. Yet assumptions about the biological heritability of *individual* differences in measured intelligence occupied a different wing on the same stage and were in some ways more deeply ensconced and widely accepted. The clear majority of psychometricians in 20's and 30's accepted innateness and fixity of an *individual's* IQ.⁴⁸ Tellingly, but for Kantor, all of the prominent cultural school critics of hereditarian claims of "race" differences in

⁴⁷ Ibid, 1390.

⁴⁸ Cravens, *Before Head Start*, 96.

intelligence (i.e. Boas, Klineberg, Kroeber and Mead) still maintained a belief in the largely biologically heritable nature of *individual* differences in intelligence.⁴⁹

And yet with the questioning of the heredity of group differences mounted by the Boas school, assumptions about the biological heritability and fixity of *individual* differences was, by the 1930s, being examined anew in certain quarters, generating fresh and intensifying controversy. This new individualistic perspective had grown out of the collaborative work of a generation of developmental psychologists at the Iowa Child Welfare Research Center, whose research suggested an individual's IQ—and presumably "intelligence"—was far more malleable over the developmental life-course than had been previously suspected. In their work, the Iowa researchers were cutting decidedly against the grain, however. Hamilton Cravens observes that "the Iowa station became increasingly noted in the early to mid-1930s for its work on the inconstancy of intelligence quotient" at a moment when "it was rapidly becoming an *idée fixe* among most scientists...that the IQ was fixed in individuals at birth."⁵⁰ Researchers from this Iowa group tended to examine relatively small numbers of individuals over time and tested the role of changing environmental and life-historical

⁴⁹ Degler, *In Search of Human Nature*, 135, 185, 191.

⁵⁰ Cravens, *Before Head Start*, 130.

variables on individual outcomes. For example, developmental psychologist Beth Wellman studied the effects of early education on the IQs of young children. In 1934, she conducted a natural experiment on three different groups of preschoolers—one group that had continuous schooling, one group that had no schooling, and one group that either transferred into or out of schooling. She then compared variations in individual IQs within these groups over a period of about 50 months. She found that those enrolled continuously in school made a mean gain of 17 IQ points, those transferring in or out gained on average 9.2 points, and those who had no schooling actually lost about 1 point.⁵¹ Numerous other experiments within the Iowa followed this mould and obtained similar results.⁵²

It was through studies like these that the individual—beyond whatever group or typological affiliations they might be said to share—emerged as a locus of analysis for psychologists. In this new analytical context, IQ began to appear as a far more malleable measurement than it had before.⁵³ The Iowa group had

⁵¹ B. L. Wellman, "Growth in Intelligence under Differing School Environments," *Journal of Experimental Education* 3 (1934): 59-83; Cravens, *Before Head Start*, 133-134.

⁵² Harold M. Skeels, "The Relation of the Foster Home Environment to the Mental Development of Children Placed in Infancy," *Child Development* 7, no. 1 (1936): 1-5; Beth Wellman and Harold Skeels, "Decreases in IQ of Children Under an Unfavorable Environment," *Psychological Bulletin* 35 (1938): 715; Cravens, *Before Head Start*, 181-182; Cravens, *Before Head Start*, 177.

⁵³ Cravens, *Before Head Start*, 132-134, 173-174, 182-183, 212-214

broken with the methods of the mainstream psychometric community by following and testing *individuals* from across groups whose educational and social environments varied much more widely and markedly over the experimental period.

The Iowa Child Welfare Research group's research drew the criticism of the mainstream psychometric community, particularly Terman's Stanford-based enclave of psychometricians and educational psychologists. The conflict, building since 1937, came to a crux in the 1940 annual *Yearbook of the National Society for the Study of Education*.⁵⁴ Yet, given all that was at stake, a struggle over the Yearbook's composition—just whose research it should include, and what conclusions it should draw—started several years before its publication. Terman networked assiduously, stacking the committee responsible for selecting contributors to the Yearbook 5:2 in favor of those who held to the orthodox hereditarianism of Stanford psychometrics.⁵⁵

The stakes for the mainstream psychometric community were high and mounting. If the 1920s debate in the social sciences over "race" group and IQ had destabilized or cast in doubt

⁵⁴ *The Thirty-Ninth Yearbook of the National Society for the Study of Education: Intelligence: Its Nature and Nurture, Part 1, Comparative and Critical Exposition*. (Public School Publishing Co (Bloomington, IL,US), 1940); *The Thirty-Ninth Yearbook of the National Society for the Study of Education: Intelligence: Its Nature and Nurture, Part II, Original Studies and Experiments*. (Public School Publishing Co (Bloomington, IL, US), 1940).

⁵⁵ Cravens, *Before Head Start*, 202.

assumptions about the heritability of *group* differences, the nature-nurture problem had, over the 1930s, focused more acutely on the *individual* locus of analysis, IQ's remaining mantle of legitimacy. If IQ were decisively challenged at the level of the individual, it perhaps would lose a great deal of its credibility as a scientific construct.

Latour reminds us that often, the more technical scientific arguments become, the more is at stake for the interested scientists both professionally and in terms of the claims of their research program. Competing researchers arm themselves against dissenters and adversaries by marshalling and referring to increasingly dense networks of allies and supporting arguments. In this process, which Latour maintains is essentially an argument from authority, the contest is also elevated and placed out of reach of the laymen.⁵⁶

Observing the heated commitments and charged rhetoric attending the production of the 1940 National Society for the Study of Education Yearbook, commentator Guy Whipple, noted that the 'nature-nurture' issue was now more controversial than it had been in 1928, at the height of the "race" group intelligence

⁵⁶ Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Harvard University Press, 1987), 30-44, 62.

controversy.⁵⁷ He also added that the scientific arguments laid out for both positions were bristling with technicalities:

The treatment will seem ultra-technical to many readers not professionally concerned with the nature and investigation of intelligence. It is technical. The editor [referring to self], at any rate, felt that not infrequently he had walked off the edge and was likely to become *spurlos versunken* [sunk and lost without a trace].⁵⁸

The 1940 Yearbook crystallized around the networks the original steering committee had assembled, with the preponderance of selected contributors upholding the orthodoxy that individual IQ was largely if not entirely fixed.⁵⁹ Leta Stetter Hollingworth, for example, contributed a synoptic review of the scientific literature in the field demonstrating that IQ was innate and stable over the lifecourse of the individual.⁶⁰ The volume, moreover, included 10 studies on the impact of nursery school interventions on IQ. Eight out of those ten studies broke decisively with Wellman's reported IQ gains and argued the educational interventions had little to no effect on children's IQ over time.⁶¹ In other chapters, various members of the Terman group, Terman included, mounted an array of methodological

⁵⁷ Guy Whipple, *Intelligence - Its Nature and Nurture: The Thirty-Ninth Yearbook of the National Society for the Study of Education. Original Studies and Experiments. Part 1* (Public School Publishing Company for the National Society for the Study of Education, 1940), xvii.

⁵⁸ Ibid., xviii

⁵⁹ Cravens, *Before Head Start*, 206.

⁶⁰ Ibid., 207.

⁶¹ Ibid.

arguments against the findings of the Iowa group, whittling away individual gains as either measurement errors or statistical aberrations in light of the stable bell-curve fixity of their large aggregate analyses.⁶²

Researchers among the Iowa group mounted a spirited and cogent defense of their research in the Yearbook's conclusion. In turn, they held that the statistical critiques of psychometricians could not explain away the measured gains that the Iowa Child Welfare research consistently produced. They also argued that the macroscopic distributions and correlations that were the warp and woof of mainstream psychometrics were removed from and insensitive to the microscopic, though crucial events in the social, educational and home lives of developing children.⁶³

If the two camps—the environmentalists and the hereditarians—were talking at crossed purposes in the National Society for the Study of Education Yearbook exchange, Hilgard sees this miscommunication as function of divergent methodological approaches. Stanford/Hereditarians tended to favor *correlational methods* deriving reliability and validity (and inferring the fixity) of those correlations against large macro-statistical aggregate norms. Iowa/Environmentalists

⁶² Ibid., 204-205; 208, 211.

⁶³ Ibid., 210.

looked primarily at changes in mean IQ among individuals. Such differing modes of analyses, he argues, radically affected the way the Iowa and Stanford groups interpreted not only their own data, but the data of their adversaries.⁶⁴ Cravens similarly sees the 1940 Yearbook controversy as evidence of a Kuhnian incommensurability between two research paradigms: one that attended to individual fluctuation, the other to aggregate stability. But for Cravens, this was a conflict in which the macro-statistical (i.e. Stanford) perspective was clearly the dominant and normative one. From this normative perspective, the Iowa group was making a fetish of anomalies.

CHANGES IN RHETORIC, CONTINUITIES OF ASSUMPTION: HEREDITARIANISM INTO NEO-HEREDITARIANISM

But what now was the 'state of the field'? What was the understanding about the relative influence of nature and nurture on the development of *individual* IQ following the 1940 National Society for the Study of Education Yearbook dispute? Cravens, who has examined this controversy in great detail, suggests that the Iowa argument for significant malleability in individual IQ, while not definitively disproved, was effectively muted following the Yearbook controversy. In support of this claim Cravens notes that though Beth Wellman continued to study

⁶⁴ Hilgard, *Psychology in America*, 481-82.

environmental influence on and malleability of individual IQ well into 1940s, the rest of the field all but ignored her ongoing research. The Iowa research program in psychometrics declined noticeably in the years following the controversy. Cravens also argues that interest in the malleability/inconstancy hypothesis disappeared and did not reemerge as a coherent research approach until the sixties, along with the Johnson administration's War on Poverty.⁶⁵ Maris Vinovskis' history of the political and conceptual foundations of Sargent Shriver's Project Head Start of the 1960s supports this interpretation.⁶⁶

Other historians like Raymond Fancher and Ernest Hilgard call the 1940 National Society for the Study of Education Yearbook controversy a draw.⁶⁷ They argue that neither side could mount a definitive disproof of the other, and moreover that both positions offered coherent arguments in their defense. Therefore what emerged, these historians argue, was a stabilized interactionism: the agreement that both 'nature and nurture' must contribute significantly to the development of individual IQ. This mainstream interpretation seems to have followed

⁶⁵ Cravens, *Before Head Start*, 215.

⁶⁶ Maris A. Vinovskis, *The Birth of Head Start: Preschool Education Policies in the Kennedy and Johnson Administrations* (University of Chicago Press, 2008), 9-11.

⁶⁷ Fancher, *The Intelligence Men*, 131-132; Hilgard, *Psychology in America*, 479-82.

Robert Woodworth's synopsis of the Yearbook's findings a year later after the dust had settled. Here Woodworth, whom Hilgard describes as a "wise and sensitive middle-of-the-roader," laid out the scope of the problem with philosophical equilibrium:

Nothing is more certain, after a little consideration, than the statement that heredity and environment are coacting factors in the development of any living individual and that both are absolutely essential.⁶⁸

What he found, after reviewing the scientific literature presented in the 1940 Yearbook was that:

From foster children compared with own children in similar homes we gather that the inter-family differences are due partly to differences in heredity and partly to differences in home environments and about equally to the two factors.⁶⁹

At least in terms of inter-family analysis, Woodworth concluded that heredity and environment were equally (1:1) responsible for the differences observed in IQ scores: a middle-of-the-road position.

Thus, the debate about the nature/nurture of *individual* differences is often told in a very similar vein as the debate over "race" and nature-nurture of *group* differences: as a pattern of controversy and stalemate that produced a sensible agnosticism on the one hand ("race") and interactionist consensus on the other (individual differences). In this mode

⁶⁸ Robert Woodworth, *Heredity and Environment: A Critical Survey of Recently Published Material on Twins and Foster Children*, vol. x (New York, NY, US: Social Science Research Council, 1941), 1.

⁶⁹ *Ibid*, 84-85.

of historicizing, the story becomes a process of compromise and concession that leads to a better scientific understanding of human difference, one that is fair and balanced, more objective and apolitical. In the view of historians like Fancher and Hilgard, anything that challenges or falls outside this agnosticism or interactionism flirts with extremism.⁷⁰

This interactionism became the dominant way of conceptualizing difference in the post-World War II era. In the late 1980s Snyderman and Rothman performed a comprehensive and widespread media analysis of public perceptions of IQ over the preceding four decades. They noted that

In the 1950s it was widely agreed by both experts and the informed public that intelligence was something that could be measured by IQ tests, and that both the genetic endowment of the individual and his or her environment played a role in differences in measured intelligence.⁷¹

It seems fairly clear then from multiple points of view that IQ-interactionism reigned, at least in the first decade and a half after the World War II. IQ was a legitimate measure of a stable personal essence thought of as "intelligence," and both genes and environment were held to contribute in some measure to the differential development of this quality across any number of individuals.

⁷⁰ Hilgard, *Psychology in America*, 472, 482; Fancher, *The Intelligence Men*, 132.

⁷¹ Mark Snyderman and Stanley Rothman, *The IQ Controversy, the Media and Public Policy* (Transaction Publishers, 1988), ix.

Yet, as Evelyn Fox-Keller notes, there is something conceptually dubious about this classic interactionist conception of development that might for example purport to estimate that 50-80% of development was attributable discretely to 'nature' and the rest to 'nurture' (or vice versa). Notwithstanding the controversial findings of twin studies, how could anyone pretend to pull these classes of cause apart and isolate them for analysis? Foregrounding the entangled, mutually co-influencing aspects of human development, Fox-Keller argues that:

Not only is it a mistake to think of development in terms of separable causes, but it is also a mistake to think of the development of traits as a product of causal elements *interacting* [my italics.] with one another. Indeed, the notion of interaction presupposes the existence of entities that are at least ideally separable - i.e. it presupposes an a priori space between component entities--and this is precisely what the character of developmental dynamics precludes.⁷²

If there is something *scientifically* dubious about this conceptualization of development, I wonder if there is also something politically dubious [or literally, duplicitous] about it. Nature and nurture? Genes and environment? What hidden, as-yet-unidentified genes? What myriad, numberless, trackless features of a person's environment? What did this interactionism really mean as it was applied to the question of

⁷² Keller, *The Mirage of a Space between Nature and Nurture*, 6.

how fixed or malleable a person's capacities were, how educable a person was? It could mean, I argue, whatever its moment and its particular explicators and advocates required it to mean.

My research, which examines the joining of psychometric theory with education policy in the mid-to-late 1950s in the US—strongly suggests that Hamilton Cravens' assessment of the outcomes of the Iowa/Stanford debates were born out. Despite criticism, controversy and stalemate, Terman's orthodoxy—a polite concession to interactionism that tipped heavily toward hereditarianism—remained alive and well through the 1950s into the 1960s (arguably into the final decades of the 20th century and beyond), and could be repurposed by policy makers to whatever pressing needs were at hand. In this sense something very much like Brattain's null hypothesis (as she applied it to the evolution of scientific understanding of "race" *group* differences) was also at work here in the related arena of *individual* differences.

My research illuminates that these sorts of stalemates or equivocations in scientific discourse did not amount to an ideological neutralization of opposing forces. In fact they created sheltered spaces where pressing institutional work, operating under the older pre-existing default assumptions, got done. The pressing institutional work in the case of this history is a strong and coordinated national-level push to sort

individual students by "ability" "aptitude" or "intelligence," (the language varies across sources, the meaning is the same) as if the matter of their educability, and question of their future vocational potential, had been decided long before the test that measured said "ability, "aptitude" or "intelligence."

What this series of scientific stalemates and concessions over "intelligence" *did* produce was new compensatory rhetoric that appeared to resolve the controversy and point the way forward. Users of this refined language were careful (and now equipped)—especially following the international anathema of Nazi science—to avoid the often baldly eugenical—and perhaps proto-fascist—language of their forbearers. For example James Bryant Conant, one of the leading exponents of educational policy change around a Terman-style conception of psychometrics never used the words 'genetic' or 'hereditary' to advance his recommendations, nor did he ever openly talk about putative differences in intelligence across "race" groups. What he publically relied on were concepts and locutions consonant with an interactionist conception of "intelligence," addressed to the individual as the locus of analysis, the individual as the cornerstone and basic social-atom of democratic liberalism.

Yet I maintain that these deferrals and appeals to an incontestably sensible, and yet also expediently indefinable interactionism—'nature-and-nurture'—frequently defaulted (via a

trapdoor sometimes difficult to notice) to older "standing assumptions": hereditarian, hereditarian-like or neo-hereditarian beliefs about the fixity of "intelligence." A brief example here will illustrate this pattern of interactionism-default in action, and establish a point to be born out many times over in later chapters.

Dr. Ruth Strang, professor of Educational Psychology at Columbia University, an advocate of the Terman orthodoxy in the 50s—and an active participant in the "search for talent" that swept the nation in the wake of the National Defense Education Act and James Bryant Conant's *The American High School Today*—published an article in 1954 in the *Journal of Teacher Education* on the genesis of intellectual "giftedness," and the importance of its early identification. Strang averred that:

Giftedness is a product of the interaction of native ability and life experiences. If a child has native ability, his environment determines the use makes of his gifts and special talents.⁷³

These two sentences suffice to make the point, if we look at them each in turn. Statement #1: "*Giftedness is a product of the interaction of native ability and life experiences.*"

"Ability" and "experience/environment": here is interactionism—fair and balanced, so reasonable. Of course it must be. All intelligent people should agree on this point. Statement #2:

⁷³ Ruth Strang, "The Psychology of Gifted Children," *Journal of Teacher Education* 5, no. 3 (September 1, 1954): 215-17, 215.

"If a child has native ability, his environment determines the use he makes of his gifts and special talents." Here is the outline of the trapdoor beneath the carpet. Suddenly "ability" has separated out as its own discrete causal agent. It is now "native," sits *a priori* to "experience" and is clearly a more important and determining element in the developmental milieu. The relation between 'ability' and environment has now become one of essential 'cause' and circumstantial 'context.' Notice, too, the crucial "If" that begins statement #2. Clearly, not everybody has got it. Probably then, given this framing of development and "intelligence," it would be important to find those select, inherently "gifted"—those that did have 'it'—and make sure they were situated in an environmental context that was good for them. Yet what was clearly—once we looked carefully—a selective, interested and perhaps politically partisan gambit, appeared first concealed, rendered polite, reasonable—even incontestable—by an interactionist preamble.

If this interactionist-default trapdoor to older enduring assumptions is not always detectable in the language of policy and scientific debate, it is almost always evident, in this history, in the institutional practices that churned away busily beneath the rhetoric. My history tells the events of a period of years when school-place intelligence testing and "ability" grouping expanded exponentially again beyond its interwar

levels, a practice that in its wake redoubled the ensconcement of "intelligence" as a stable inherent personal essence. Just as UNESCO rapporteur and geneticist L.C. Dunn's had reasoned about the biology of "race," the real durability of *individual* differences in intelligence were also manifestly evident to the scientist, the man on the street, and to teachers and students in the classroom. Everyone could simply see with their own eyes what psychologists were measuring with their tests.

THE INDIVIDUALIZATION OF INTELLIGENCE: SHIFTING DIFFERENCE FROM "RACE" TO INDIVIDUAL

The point of carefully discriminating between similar strands of debate as they play out in the conjoined arenas of *group* versus *individual* difference is to show the close dance these two perspectives on social analysis have made with each other. Intelligence was—over the *longue duree*, from its roots in Enlightenment conceptions of "Reason"—gradually pried free of its *explicit* construction as a description of the quality or worth of a group and referred to increasingly as a trait that inhered in and marked the quality only of individuals. This process was propelled by a deeper yet parallel atomization/individualization of the social order, which Giddens and others situate as a consequence of the industrial revolution, the fall of the *ancien regime*, and the volatilization of social and economic relationships that

accompanied these shifts.⁷⁴ And though clearly there was always a dynamic interplay between group and individual levels of social analysis, the more these traditional social roles, patterns of relation, and group-bound identities receded, the more separate, atomized individual identities could be viewed, rendered 'legible,' and analyzable in the cultural foreground.⁷⁵

For a number of reasons, some already discussed, the individualization of "intelligence" in the US was further and more rapidly accelerated by developments in the interwar and post-World War II United States. First among these individuating factors was the rise of technologies of legibility—i.e. various forms of population statistics—and specifically the development and deployment of mass intelligence testing itself.⁷⁶ Simply enough, as exponentially more individuals were tested, and tests were employed across a greater swath of cultural life, "intelligence" itself was rendered with increasing pointillism, as a visible quality of individuals—distinct from any group identity they might also

⁷⁴ Anthony Giddens, *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Stanford University Press, 1991), 1-5, 20.

⁷⁵ James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press, 1999), 25, 29, 35-36, 44-45.

⁷⁶ Scott, *Seeing Like a State*; Amir Weiner, *Landscaping the Human Garden: Twentieth-Century Population Management in a Comparative Framework* (Stanford University Press, 2003). M. Norton Wise, ed., *The Values of Precision* (Princeton University Press, 1997); Cravens, *Before Head Start*, 185-216.

share—and with finer and finer shades of distinction among those individuals on a normal distribution.

In this light, the interest of the Iowa Child Welfare Research Center in individual flux in IQ in response to environmental changes (as opposed to the aggregate stability of orthodox psychometrics) seems to represent a transitional moment in this emergent individualization of "intelligence." Cravens remarks that in the context of this Iowa research the:

...individual could now be thought of as a person whose group membership was no fatalistic identity, and whose membership in a particular group could be questioned, if for no other reason than the individual's perceived distinctiveness, idiosyncrasy and asymmetry.⁷⁷

The individual as an individual specifically in terms of his or her individually measured "intelligence" was beginning to emerge from and stand clearly distinguishable next to his or her social group identities.

A second force working in tandem with this process of individualization was the increasing perception among policy-makers that determinations of intelligence or educational opportunity based on group categories was prejudicial and impolitic. As already mentioned, such awareness was propelled by the Boas school critique of hereditary racial difference, and emergent transnational populist criticisms of colonialism and

⁷⁷ Cravens, *Before Head Start*, 257.

racism. Such critiques of "race" and claims of "race" difference were only strengthened in response to the ugly international spectacles of racism within Nazi and US Jim Crow regimes.⁷⁸

The US civil rights movement again redoubled and intensified attention on "race" and the critical discourses growing in opposition to it. As Mary Dudziak argues, Civil Rights developments in the post-World War II US were not only energized by internal domestic pressures, but were also propelled by the United States' attempts to manage its image—as a model democracy—on an international stage and in the intensifying light of Cold War rivalries.⁷⁹ Overt indications of racist or "race"-driven institutional policies and practices at the heart of this US democracy were increasingly a political liability in both a national civil rights and international cold war context.

In 1948, two years before Ashley Montagu struggled to assemble a consensus among scientists on the question of "race," President Truman's Commission on Higher Education published a

⁷⁸ Mary L. Dudziak, *Cold War Civil Rights: Race and the Image of American Democracy (New in Paper)* (Princeton University Press, 2011); Degler, *In Search of Human Nature*, 204; William B. Provine, "Geneticists and the Biology of Race Crossing," *Science* 182, no. 4114 (November 23, 1973): 790-96; William B. Provine, "Geneticists and Race," *American Zoologist* 26, no. 3 (August 1, 1986): 857-88.

⁷⁹ Mary L. Dudziak, *Cold War Civil Rights: Race and the Image of American Democracy* (Princeton University Press, 2011), 3-17.

report newly asserting a "race"-free definition of equal educational opportunity that foreshadowed *Brown v. Board*: "The time has come to make public education at all levels equally accessible to all, without regard to race, creed, sex or national origin."⁸⁰ This need for an explicit assertion of "race"-free, or "race"-neutral educational policy was, the report allowed, due in part to international perception of US race relations. A Commission author noted, "Our statesmen are sometimes embarrassed in their international dealings by racial discrimination within the United States."⁸¹

Such a confident, explicit "race"-free nondiscrimination policy vision—if we take it at face value as a sincere and actionable prescription and not a pleasing political mirage—would remove external barriers (i.e. social and institutional prejudices directed at an array of *groups*) leaving only what were held to be the natural internal limits of the *individual* learner. The report promised that no "qualified individual in any part of the country will encounter an insuperable economic barrier to *the kind of education suited to his aptitudes and interests*."⁸² Consider: to say that educational opportunity

⁸⁰ *Higher Education for American Democracy, The President's Commission on Higher Education: a Report*. (Washington, 1947), 38.

⁸¹ *Ibid.*, 26.

⁸² Ackerman, "Mental Testing and the Expansion of Educational Opportunity," 283-284. *Higher Education for American Democracy, The President's Commission on Higher Education: a Report*, 27-39, quotation on p. 36. My italics.

should be suited only to an individuals' "aptitudes" would somehow land too hard, would too immediately evoke the controversial simplicities of the World War I testers. Even in the subtle elaboration—"his aptitudes *and interests*"—we see already the ghostly afterimage of 'nature-and-nurture:' the compensatory and expedient evocation of what is soft and malleable, subject to flux, vicissitude and even choice, to blanket an interest in what is allegedly hard, immutable and fixed. Here was the assertion of the new meritocratic definition of equal educational opportunity. Equal educational opportunity did not mean the same opportunities for all, but an education somehow suitably *proportioned*—for different individuals with different inherent capacities.

Such a retooling of the calculus of educational opportunity allowed policy makers to proceed apace with the advancement of American liberal-democratic society in what was heralded as a perilous post-war order. Much of Europe was a rubble-field. Over 90 million people had been lost, killed, systematically murdered or displaced over the course of the war.⁸³ Now international communism—emboldened by the growth of Soviet power—was making its stealthy incursions along fronts all across the globe. American-style liberal democracy was heralded—and

⁸³ Mark Mazower, *Dark Continent: Europe's Twentieth Century*, 1st Vintage Books Ed (Vintage, 2000), 212-216.

appeared to many—as a lonely beacon of freedom and progress in a smoldering and benighted world. The newly resumed politics of democratic individualism was the cornerstone and bulwark of such a way of life. Cultivating the talents of the individual, then, was emphasized as paramount to both the continued prosperity and security of the American way of life. The Truman Commission Report noted in this regard that “the discovery, training and utilization of individual talents is of fundamental importance in a free society.”⁸⁴

This discourse obviously did not arise *de novo* out of the ashes of World War II, but it was resumed with an intensity that suggests a great deal of new weight was placed on it. This way of reasoning about the social order seemed to have purified itself of all the perils *bête noires* of group determinacy that had haunted interwar and wartime US—totalitarianism writ large: Soviet Communism, Nazi racism, even Jim Crow racism. All of these anathema were problems of the group. This new policy vision foregrounded the individual as the primary and politically explicit locus of difference. This shift in discourse then opened the way in the next decade for unprecedentedly systematic, nation-wide testing for individual “ability.”

⁸⁴ *Higher Education for American Democracy, The President's Commission on Higher Education: a Report*, 9.

In other words, as it became less acceptable to make open claims about the intelligence of a "race" group in official public and professional channels, it then became increasingly necessary to return to assumptions about the inherent nature of measured *individual differences* in intelligence. Re-stabilizing the social order in a policy environment where explicitly racist statements were increasingly proscribed would require such a shift.

This is not in any way to suggest that racism went away, or even attenuated. Racism is a metadiscourse that contains many strains and currents. Look only to white protests in 1957 in Little Rock, Arkansas following *Brown v. Board* to see the full-throated, unapologetic current of racism that ran continuous and unreconstructed from post-Civil War US well past the middle of the 20th century. Rather I seek to examine but one fascicle of the discourse of "race"—that part produced by the human and social sciences on "race" and "intelligence"—and to suggest that it had been largely thwarted and redirected into a new channel, this one with many end-users. Though this was but one strain of a much larger system of discourse on race, it was by no means an inconsequential one. It conveyed, after all, the doctrine of science and was held to be the most politically neutral of the discourses on human difference. It was the strain of discourse

that purported to float most impartially and objectively above the contorted faces and angry fists of Little Rock.

One of the arguments of this dissertation is that tracing ideologies of "intelligence" over time reveals something important about the concurrent and underlying historical evolution of racism and ideologies of "race." Historians, philosophers, and critical theorists are frequently calling for an applied and more concretely realized analysis of the social construction of "race," one that advances and actually instantiates the by now well-rehearsed observation that race is a social construct. Michelle Brattain urges in this regard that historians in particular need to "move beyond the insight—and some lament, now largely ceremonial observation—that race is a social construction, to [actually] do the neglected work of historicizing race and racism."⁸⁵ Karen Fields' and Barbara Fields' more recent work impels us in the same direction. Fields and Fields introduce "racecraft"—their guiding theoretical construct and title of their book—as a term to describe, draw attention to, and render visible the incessant and often invisible mediating process by which "race" is made and re-made out of racism. Given the acts (material, ideological and institutional) constituting 'racecraft' change

⁸⁵ Brattain, "Race, Racism, and Antiracism," 1388.

with time, with context and the logics of the particular discourses they must work within, racism and ensuing constructions of "race" need to be studied similarly—not as static social facts—but in their particulars as historical processes in motion. Racism, Fields and Fields point out, is always on the move, reshaping and making suitable, comfortable again the structures we take to demarcate biological difference and degrees of worth: the cleavages of "race," in other words, among people. Racecraft is then perhaps doubly apt as a lens through which to view the construction of "race," acquiring as it does in Fields and Fields' hands double-meaning as a modern corollary for an older form of superstition, one that enforced its own class of scapegoats: the belief in witches and witchcraft. Playing on the thaumaturgic double-entendre of their term, Fields and Fields frequently refer to the making of "race" via racecraft as a "conjuror's trick."⁸⁶

There was a kind of voodoo or religious magic at work in the particular historical metamorphosis of "race" in expert discourses that I aim to document. It was the metamorphosis of race difference into individual difference via the migration of "intelligence" (as a trait difference) from a quality allegedly

⁸⁶ Karen Fields and Barbara J. Fields, *Racecraft: The Soul of Inequality in American Life* (Verso Books, 2012), 19–20, 25, 30, quote on p. 25.

inherent in the group to a quality allegedly inherent and discernible only across individuals. Concomitantly, the science of "intelligence" was ostensibly purified in the process as it was freed for the time being of its negative history of association with eugenics and more generally with scientific racism. Intelligence testing was now (once again) heralded by many leading policy makers and educational spokesmen as the best, fairest most objective way of making discriminations in the interest of advancing the meritocracy and, in the crucible of the Cold War, of protecting national security. What little historical work has been done on intelligence testing in schools in the late 1940s and 1950s is in agreement that the practice accelerated yet again over its interwar levels, but now was dogged by little or none of the critical objections that had been raised in the 20s and 30s.⁸⁷ My own analysis confirms this trend, showing that school-place aptitude testing grew again by leaps and bounds, and was implemented across the nation in an unprecedentedly systematic fashion in the 50s and 60s.

Make no mistake, this was still about race—just as much or more so than it was about the threat of Soviet science. The real rocket of school-place aptitude testing launched just four

⁸⁷ Ackerman, "Mental Testing and the Expansion of Educational Opportunity," 280. Nicholas Lemann, *The Big Test: The Secret History of the American Meritocracy* (Macmillan, 2000), 70-108. Snyderman and Rothman, *The IQ Controversy, the Media and Public Policy*, ix.

years after one of the single most concerted efforts in the history of the United States to shift the color line in a central public institution: the *Brown v. Board* Supreme Court decision to desegregate public schools. Individualized "intelligence" was still about race for the simple fact that, following its metamorphosis, it could reproduce the same boundaries and strata of "race," just in different locations: now inside schools instead of outside of them. As the color bar of US cities fluxed with the voluntary upheaval and resettlement now referred to as white flight, so too the nation's schools secured themselves by enforcing similar shifts in the late 1950s and early 60s: a 'white flood' into the newly and much more systematically erected college prep/ high ability tracks of public high schools. This move within public education was in some sense a double assurance. The implementation of urban-suburban busing could not hope to fully compensate for entrenched patterns of residential segregation. The full promise of *Brown v. Board* would not soon be realized.⁸⁸ But "racial" integration of the public schools was viable now. It was the law of the land and a real and palpable threat and source of anxiety to many. School place testing and placement

⁸⁸ Thomas J. Sugrue, *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit* (Princeton University Press, 2005), 266-267. V. P. Franklin, "Introduction: *Brown v. Board of Education*: Fifty Years of Educational Change in the United States," *The Journal of African American History* 90, no. 1/2 (January 1, 2005): 1-8, 2, 6.

would—one individual at a time—do the work of “race” without ever having to say its name.

“ACCENTUATE THE POSITIVE”

A final word needs to be said about another major yet related metamorphosis in the ideology of intelligence from its early 20th to its mid-to-late 20th century incarnation: its growing ‘positivity.’ In the early 20th century US, the dominant rhetoric around “intelligence” had been about ‘subnormality.’ Recall the debut of intelligence tests (in institutions for the mentally handicapped like Vineland) co-emerged with and stoked a host of eugenical concerns: anxieties about an abysmally low mean national mental age, about feeble-mindedness, about the surging tides of ‘subnormal’ immigrants. In this context intelligence testing was often proposed as a negative selection tool for weeding out or quarantining the ‘subnormal’ (à la Carrie Buck). Yet, as testing expanded exponentially from its institutional origins to saturate the population at large, it was increasingly used as an instrument for *positive selection* to promote the interests of the ‘supranormal.’ Again, Terman was something of a trend-setter in this regard. While most of his contemporaries in psychometrics were concerned with the problem of subnormality, Terman’s 1921 longitudinal study of a large cohort of individuals with high IQ scores—*The Genetic Studies of*

Genius—marks a moment of early interest within psychometrics in *high* measured intelligence.⁸⁹ The post-World War II period in psychometrics and education—the subject of the next five chapters of this dissertation—witnessed a moment when this emergent interest in precocity (and in tests as positive selectors) flourished to become a nation-wide federally funded educational policy. Intelligence testing was sold to the public as a tool for positively selecting talent—specifically the “academically talented” and “gifted” in the parlance of James Bryant Conant—thereby making schools more efficient, and ultimately making the country safer and more secure, in a time of great national urgency.

This growing emphasis, in the post-World War II era, on intelligence tests as tools of positive selection was propelled again by a number of larger factors that have already been raised in this chapter. On the one hand it was tied with an increasing consciousness of our national self-image on an international stage—particularly in regard to our eugenic past and the racism of the US Jim Crow regime.⁹⁰ Quarantining or sterilizing the “subnormal” or ranking human groups according to putative genetic difference had taken on Nazi overtones. In the post-World War II moment, the United States was often at great

⁸⁹ Fancher, *The Intelligence Men*, 145; Cravens, *Before Head Start*, 24.

⁹⁰ Dudziak, *Cold War Civil Rights*.

and explicit pains to distinguish itself—the free, democratic society—from the totalitarian, fascist or communist state. We were not the sort of country that did what the Nazis or Communists did. Positively selecting talent, promoting the interests and education of the “bright,” was not biased, coercive, racist or eugencial, it was furthering the interests of democratic individualism.

The new and waxing ‘positivity’ of “intelligence” and testing was furthermore rendered acceptable by the new more serviceable and accommodating conceptualization of ‘nature-and-nurture.’ Where it was increasingly less acceptable to overtly damn the “subnormal” as the inheritor of bad genes, it was consequently much more acceptable to talk about the “nature” of ‘real smarts’ when—through the individualized imaging of intelligence tests—we saw it. At the height of the great national talent search for “academic talent,” high individual intelligence was likened to natural deposits of precious metals, minerals or ore—hidden from plain sight but scattered all across the national body.

The talented were like diamonds in the rough, already formed, just waiting to be found. Yes, measured intelligence was some unknown combination of genes and environment but when we saw *high* I.Q., that was indication aplenty of the real native inherent smarts right there. That kid had it. Obviously, in a

zero-sum game, or in an institution that carefully regulated its opportunities, positive selection accomplished the same (or similar) ends as negative selection. What seats were available were quickly filled. But now it could be done with scientific assurance, and perhaps a certificate or a special note on one's transcript.

This history aims to demonstrate just how a positive propaganda of "talent" was used to forge transformational new educational policy. As discussed in the introduction, this search for the "gifted" and "academically talented" was vigorously introduced to the nation right alongside the inauguration of a watershed piece of educational legislation: The National Defense Education Act. While the practice of ability grouping certainly preceded the NDEA, this moment marks the beginning of *systematic, widespread* tracking and ability grouping as institutional practices common to most if not all American high schools. This is the birth of the modern late-20th century American high school, organized around 'ability'-based tracks or 'teams.'

Yet, this plan had to be sold to a public that was, in many quarters, wary of federal intervention in local public education. This was a free country, not a totalitarian regime. You could not make students take courses they did not want to take. You could not make local schools take federal money if

they did not want the strings that were attached to it. Everyone had to be convinced this was the right thing—the smart and simply common-sensical thing—to do. An argument had to be made that was rooted in “nature” and in claims to natural difference among people.

Based on documents declassified in the 80s and 90s, historians and political scientists have argued that one of the defining features of the Eisenhower administration was its innovation and centralization of new propaganda strategies in response to the Cold War competition with the Soviet Union.⁹¹ Two clear tendencies have emerged from these analyses. Firstly, Eisenhower was determined to conceal the construction and behind-the-scenes coordination of such information campaigns from the public at large. Secondly, the messages that were in the end disseminated to the public took on a decidedly more factual and positive pitch and tone compared to the “rather more combative propaganda of the Truman administration’s last years in office.”⁹² Parry-Giles notes in this regard that, “The Eisenhower administration placed great emphasis on public

⁹¹ Shawn J. Parry-Giles, “The Eisenhower Administration’s Conceptualization of the USIA: The Development of Overt and Covert Propaganda Strategies,” *Presidential Studies Quarterly* 24, no. 2 (1994): 263.

⁹² Parry-Giles, “The Eisenhower Administration’s Conceptualization of the USIA,” 264; Andrew Hartman, *Education and the Cold War: The Battle for the American School* (Palgrave Macmillan, 2011), 58. Here Hartman makes particular note how fear-centric Truman’s propaganda efforts were.

posturing in both domestic and international arenas, leading the administration to...disseminate factual "news" stories that reflected more positive messages."⁹³ I argue, based on my findings, that this new positive mode of news-like propaganda included the staging, production and media coverage of a supposedly independent, impartial "scientific study" of America's public high schools: James Bryant Conant's *The American High School Today*.

The NDEA extended money - take it or leave it—strings and earmarks attached. Conant's study, never explicitly referenced the NDEA, but he supplied the reasons why every school system should embrace the very sorts of systematic and structural changes to public schools that NDEA funds would support. Conant's reasons, furthermore, were grounded in claims about nature and natural difference. Conant's *The American High School Today* was a positive, persuasive strategy mounted on behalf of the National Defense Education Act.

The decades following World War II were a period of exultation and anxiety in US public life. The world was fraught with an unprecedented array of perils, but we had accomplished great things, and would continue to accomplish great things yet if we could stay positive, not give in to fear or doubt,

⁹³ Parry-Giles, "The Eisenhower Administration's Conceptualization of the USIA," 273.

skepticism or cynicism. Famed journalist Dorothy Thompson conjured the ghost of FDR in her 1957 *The Courage To Be Happy*, reminding Americans, that as world citizens we "had nothing to fear but fear itself."⁹⁴ This was also the moment of Norman Vincent Peale. His best-selling *The Power of Positive Thinking* (1952) could seemingly defy gravity itself, hovering for nearly four years close to the top of the *New York Times Bestseller List*. Its method to success and happiness—an amalgam of religion, psychology, self-help, and salesmanship—was rooted in a persistent, daily cultivation of positivity and positive self-messaging. Its enduring catchphrase was "accentuate the positive."⁹⁵

In the chaotic months following Sputnik, Conant steeled himself in his mission with this very principle: in regard to the nation's public schools, he would "stress the positive" not "accentuate the negative."⁹⁶ Though his study of public high schools would be presented to the American public as "distinctly his own," the analysis of an eminent and impartial scientist and

⁹⁴ Dorothy Thompson, *The Courage to Be Happy* (Houghton Mifflin, 1957), 170.

⁹⁵ Norman Vincent Peale, *The Power of Positive Thinking* (Prentice-Hall, 1952).

⁹⁶ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Confidential Supplement to J.B. Conant's *The American High School Today: A First Report To Interested Citizens*," January 12, 1959, UAI 15.898, High School July-October 1958, Box 42, Harvard University Archives.

educational spokesperson, he did not do it all by himself.⁹⁷ In addition to his publically visible team of assistants, Conant—as he developed, conducted and disseminated the results of his study—also relied on cooperation and assistance from a largely hidden and powerful group of individual and institutional collaborators and co-planners.

The next five chapters examine how James Bryant Conant—who was at that point quietly embedded as a board member and paid employee of the Educational Testing Service (ETS)—worked with John Gardner (President of the Carnegie Corporation), with William Carr (Executive Secretary of the National Education Association), and with the key figures in the Eisenhower administration including President Eisenhower himself to produce *The American High School Today*. These were the positive, can-do men who would harmonize groundbreaking (“dike-breaking”) educational policy, legislation and practice out of ideologies of intelligence and individual difference.

CONCLUSION

This chapter has explored scientific controversies over “racial” intelligence and the nature and nurture of individual

⁹⁷ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, “Diary of James Bryant Conant,” January 9, 1956, UAI 15.898, Diary 1956, Box 7, Harvard University Archives.

intelligence in World War I and interwar US. Both these controversies yielded stalemates, and eventually compensatory rhetorics, that paved the way for more systematic school place intelligence testing in the late 1950s. On the one hand, serious discussion of "race" difference in intelligence was increasingly proscribed from professional literatures. Yet, this disavowal of "race" difference, at least in the language of policy-making, encouraged an intensified focus on measured individual differences as an objective criterion of worth in an educational context. On the other hand, scientific and public discussion of measured *individual* differences in intelligence was increasingly softened and nuanced with the new interactionist language of "nature and nurture."

I find this nature-nurture compromise, could however, readily default in practice to neo-hereditarianism, particularly in connection with the identification of "supranormal" intelligence. The next chapter examines just such an attempt to shape policy and school practice around "intelligence" in the post-World War II era.

CHAPTER II

STUDY DESIGN OF J.B. CONANT'S *THE AMERICAN HIGH SCHOOL TODAY*

This chapter explores how through *The American High School Today*, James Bryant Conant constructed an actionable vision of a US public high school more rationally and efficiently ordered around presumed individual differences in intelligence. I begin with examination of a *Life* article and related reader correspondence that reveal both the reach and potential impact of Conant's study. The analysis then follows with a close reading of drafts, internal memos and correspondence related to the production of Conant's study. These documents reveal that "intelligence" (operationalized as measured I.Q.) functioned as the study's central organizing variable. Moreover, Conant presumed that I.Q. constituted an inherent, *a priori* personal essence that was distributed—just waiting to be identified—with a dependable frequency across the national body. Once found, Conant argued, these talented students should be offered rigorous selective "academic curriculum" particularly in the sciences, mathematics and foreign languages. Finally, I consider several of *The American High School Today's* specific recommendations, and then how Conant sought to balance what might be seen as an elitist interest in the selection and

cultivation of "talent," with a broader gesture toward democratic inclusion within the curriculum of the "comprehensive high school."

LIFE IN MANHATTAN AND RICHMOND HILL, ONTARIO

In the middle of May in 1958, a small, but influential educational think-tank encamped on the 6th floor of a high-rise office building in downtown Manhattan received a letter from seventeen-year old Catherine Pick of Richmond Hill, Ontario. This think tank was headed by a then well-known expert and opinion-former on U.S. public education, James Bryant Conant. Catherine Pick had written these experts because she had just read a special feature in *Life Magazine*, titled "A Crisis in Education," which offered, in its fourth installment, a distillation of James Bryant Conant's new vision for the reform and reorganization of American high schools.¹ Catherine had an important story to tell about herself and then she had some questions.²

She had learned from the "Crisis in Education series" that Conant, after an exhaustive personal inspection of fifty

¹ LIFE, "Crisis in Education, Pt IV: Famous Educator's Plan for a School That Will Advance Students According to Ability," *LIFE Magazine*, *Time Inc.*, April 14, 1958.

² James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Catherine Pick," June 4, 1958, UAI 15.898, Ability Grouping, Departmentalization, Box 108, Harvard University Archives.

schools, had proposed a uniform reorganization of all American high schools around a single criterion: academic talent. High aptitude, academically talented students, Conant held, were currently often not well served by their public schools which frequently failed to identify and then provide them with adequately accelerated education. Moreover, Conant argued, identification of natural talent and then its academic cultivation was a matter of great national urgency. Our Cold War military and technological race with the Soviet Union demanded we train our future professional class, especially scientists, mathematicians, engineers, and those skilled in foreign languages, with as much focus and purpose as our public educational system could muster.³

While this project would demand restructuring of US public schools, it would not however require their whole-scale overhaul or reinvention. If only curriculum could be segmented into tiers and reorganized around individual differences in intelligence, high schools would be able to work much more efficiently with the heterogeneous grades of student material they were tasked to serve. Most importantly, once this greater structural efficiency was institutionalized, schools could devote more focused attention to the preparation of the

³ LIFE, "Crisis in Education, Pt IV: Famous Educator's Plan for a School That Will Advance Students According to Ability." 120-121.

academically talented, in particular. To this end Conant proposed that a high school's program be reorganized into three tiers corresponding to "bright, average and slow pupils" with "a stiff academic curriculum for the upper college-bound 20%" an "elementary" level for the bottom 20% and a "diversified vocational program for the rest."⁴

Conant was at pains to suggest these three basic tiers were not fixed tracks, but rather the natural outcome of an "individualizing" process. The plan depended, he explained, on teachers and guidance counselors, trained in the identification of talent, "who must help every boy and girl choose the right subjects and pressure bright students to take tough courses." These selective efforts of the teachers and guidance counselors in particular would lead to a "hand-tailored school career for each student." This hand-tailoring, Conant believed, the proper fitting of subject matter to learner, was possible now because of modern innovations in intelligence testing. This plan would even permit a young person to enroll in a smattering of classes that fell outside their general ability level, if those classes compelled their special interest or enjoined particular specialized competencies. For example, while any given "average student" would take "a largely vocational course" composed of

⁴ Ibid., 120-21.

"woodshop, simplified general studies and vocational math," he might also "join the bright pupil in biology, modern and U.S. history." What was more, some classes, music, typing and a 12th grade civics and current events, would not be grouped by ability at all.⁵

A pictorial diagram accompanied the *Life* exposition of the Conant plan, depicting the high school as a vertical triptych composed of three different zones or biomes. At the top was the "academic" cline. Life here was bedizened with globes, maps, busts of Greek philosophers, Erlenmeyer flasks and blackboards covered with sprawling mathematical abstractions. Below this was the "vocational" zone, populated with students using compasses, slide rules, drafting tables and busy about the work of various skilled trades. And finally at the bottom, there was the "elementary" strata where a young man in a dark shirt worked dutifully on his spelling at a typewriter and later composed a letter inquiring about a mechanic's position at a local garage. A yellow zigzagging line travelled through and at moments cut across these intellectual domains showing how one student might move between levels for certain courses.⁶ Of course though, a student's progress was at bottom defined by their tier: slow, average, or bright. It was these more fundamental contours that

⁵ Ibid.

⁶ Ibid., 120.

would shunt these students on to their post-high-school destinies, exemplified in this diagram as "College," "Building Contractor," or "Joe's Garage."⁷

Crucially, while Conant would scrupulously refer in equal measure to both boys *and* girls throughout his plan, *Life's* pictorial representation of it here was decidedly male-centric. With perhaps one exception, every student depicted in the 'bright' or 'average' track (as many as 56 individuals) were boys or young men. This is who *Life*, perhaps Conant too, and presumably *Life's* middle/upper-middle class white readership envisioned would enter the professions and the skilled trades. Within the 'slow' track destined for "unskilled" vocational work there was a smattering of girls, but even here they were still a stark minority.

Boys and girls—to the extent they were visible at all—seemed therefore implicitly differentiated by "intelligence" here within this depiction of the new stratified curriculum. Not only this, but by virtue of girls' striking representational absence here, it is powerfully impressed upon the historical viewer that schooling itself was in some tacit yet pervasive sense constructed here as the province of boys and young men. And given this model of schooling was so instrumentally linked

⁷ LIFE, "Crisis in Education, Pt IV: Famous Educator's Plan for a School That Will Advance Students According to Ability." 121

with post-secondary preparation for vocational life, it is again impressed upon the historical viewer that the world of work 'out there'—the next generation of scientists, electricians, translators, building contractors, doctors, plumbers, engineers, mechanics, and scholars—belonged to men.

It is no mystery on this score that Catherine Pick might wonder about, and seek some positive confirmation of, her place in this new educational order. Even so, Catherine Pick's letter to the Conant team was propelled along by the self-conscious questioning of a teenager hesitantly yet optimistically envisioning her own possible futures. She explained she was planning to enroll in University the next year to study Modern History with the hope she would then graduate to teach history to high school students. The questions she had for the Conant team emerged then from between her dual identities as both a student and a future teacher. First, was she up to par with the type of students Conant had determined should be part of a college-bound "academically talented" track? Was she smart enough? (One senses she thought she was, but then again would feel better having expert validation of her ability). Just what courses were bright students supposed to take? How did her course work stack up? She was embarrassed she seemed to be behind in her maths: ("I didn't even know what Probability and Statistics were, but I do know now!!"). She then offered a

litany of her credentials and record of her high school career. She would take nine qualifying exams at the end of that year. She spent about twenty-five hours on her homework a week. She might not have been up on her probability, but she *had* taken algebra, analytical geometry and trigonometry, as well as zoology, botany, chemistry and physics. This would-be history teacher's transcript was also richly decked with humanities courses: modern, British, American and Canadian history. She was studying French grammar and literature. Her English literature studies were "very, very intensive" but also "very interesting." They had read Milton, Shakespeare, Coleridge, Wordsworth and Austen. They had, in fact, just finished studying Shaw's *Pygmalion*, that play about self-fulfilling prophecies, whereby street urchin and flower girl Eliza Doolittle becomes, by virtue of the sustained belief of her mentor, the likeness, in erudition and elocution, of a duchess. Catherine's Pick's recitation of her credentials—in the careful minutia of its youthful self-involvement—became almost like a confession of worth to these experts, so that they might evaluate her and reassure her as to her place in their new more clearly delineated intellectual order.⁸

⁸ Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Catherine Pick."

Catherine's ensuing questions then concerned her role as a would-be teacher in determining the intelligence of her own future students and therefore what course of study they should pursue. She wrote, "I realize, as you say, that it depends on the teachers to guide the students into the right courses." She seemed clear on what in theory distinguished the clearly 'bright' from obviously 'average' in Conant's schemes, and confident that in Conant's scheme these two types would find their right place. But what she could not "quite understand," she wrote, "was that little provision seems to be made for the students in between." She trusted there would be the opportunity for them to "move from level to level," but as it stood she could not see how these in-betweeners "would get a very adequate education."⁹ Catherine sensed a large gap between the experiences and opportunities of 'bright' and 'average,' not to mention the 'slow,' and these anxieties about the gaps between categories revealed the beginning of a critique of the pedagogical categorization process itself. One might draw out her line of questioning further. What if students were misassigned? What if they could not move between 'levels'? What about her? Maybe she was really an in-betweener masquerading as "academically talented." Who should teachers

⁹ Ibid.

elect and invest their belief in? And, too, what about all the Eliza Doolittles, who with the sustained belief of a teacher or parent or some other ally, might metamorphose and vault from one category to another? If so, what might this say about the categories—bright, average and slow themselves—were they natural and stable personal essences? Or was everyone potentially an Eliza?

In spite of her concerns, one senses in the two aspects of Catherine's letter (her recitations of her qualifications as a student, and her questions about her role as a future teacher) a ready and willing 'buy in.' She was effectively asking 1) where is my place in this new academic order? And 2) how do I help enforce this new system which maintains my place in relation to others? Yet because Catherine was, like everyone else, a semi-autonomous human being, she had certain anxieties and questions to ask about the structure itself before she committed herself to its terms.

Clearly, Catherine had written the Conant team because she felt there was something at stake for her in these determinations. In fact, what was afoot was a definitive reshaping, consolidation and standardization of beliefs about individual differences in intelligence and educability. Who and what counted as 'smart' was being decided again—it had happened before—but now with renewed reach, vigor and a pan-institutional

commitment that spanned public schools, teacher's unions, citizen action groups, powerful private philanthropic organizations, large testing corporations, and remarkably, the U.S. Federal Government. And James Bryant Conant and his Study of the American High School was close to the middle of all this. One measure of the sweeping scale of Conant's proposed reforms, and the range of its audience, was that a young *Canadian* high school student had caught wind of them and felt the stirrings of imminent change. These gross categories of intellect—bright, average, or slow—were not created *de novo*. But their terms, boundaries, thresholds, import, and significance were being renegotiated. Correspondingly, the very reality of these categories was being more firmly invested with belief. Coupled with—and arguably driving—this reification of ideas about intelligence were pressing concerns about how these perceived individual differences should be cultivated, processed, or otherwise handled in an educational context. How did you measure intelligence? What sorts of courses did 'bright' high school students take? On what qualifications were they allowed to take them? What content should those courses include? Who should teach them? What about 'average' or 'slow' students? What sorts of school and later work experiences were they destined for? Catherine wanted to know how she measured up. So did everyone else who had a stake in this rapidly forming post-

World War II meritocracy, where schooling was increasingly sized to perceived differences in ability and where education was the fastest, surest elevator to status, success and professional identity.

"TALENT," "INTELLIGENCE" AND THE AMERICAN HIGH SCHOOL TODAY
(1959)

The scope, specific timing and enduring influence of *The American High School Today* combined with its relative lack of treatment as a subject of historical analysis suggest the need to reevaluate the importance of Conant's seminal school study.¹⁰ Conant's two year-long investigation and its published recommendations were well known to and much discussed by everyone concerned with education in United States in the late 1950's and early 1960s. While the name of the study, and maybe even the name of its author, have perhaps faded into obscurity today, the work itself and the larger context of its reception and implementation have indelibly shaped the structure and function of public schools in the late 20th and early 21st centuries.

In his study, Conant constructed a vision of an American high school more rationally, and efficiently ordered around

¹⁰ James Bryant Conant, *The American High School Today: A First Report to Interested Citizens* (McGraw-Hill Book Company, 1959).

presumed individual differences in intelligence. Establishing the reality of these individual differences in intelligence required the science of psychometrics, and Conant borrowed heavily from the principles and testing practices that this branch of psychology employed. Moreover, beliefs about individual differences in intelligence had such compelling applications in high schools because of the tentacular reach of those very same ideas beyond the walls of high schools. The trope of talent, and its presentation as a spectrum of individual differences, was a compelling device with a scintillating array of applications.

A close reading of drafts, internal memos and correspondence related to the production of *The American High School Today* reveal that "intelligence" (or variously, in Conant's usage, "academic talent" "aptitude" "I.Q.") functioned not only as a theoretical construct that organized the study itself and gave structure to the reforms it proposed. As already discussed in the introduction, with "intelligence," Conant had fashioned a tool that could also and all at once bridge the politics of place, and assuage anxieties about "race," Soviet scientific advance and the looming surge in baby-boom enrollments.

The breadth of this array of problems that "intelligence" or "academic talent" could solve is a measure of its power as a

political and rhetorical tool. Beyond this, Conant's version of "talent" was so readily mobilized, because it worked 'all the way down,' intimately shaping the identities of those who had a stake in it, which was, nearly everyone. Parents, teachers, guidance counselors and students, all in different ways and to different degrees either 'bought in to' or were forced to reject this criteria that purported to mark their worth. If you took academic courses, you must be smart. If you taught academic courses you must be smart. If you were the parent of a 'gifted' or 'academically talented' child you must be smart. If you counseled students on which courses they were suited to take, you yourself must be some kind of an expert on human abilities. Tara Zahra has argued that in some situations people can manage a kind of "indifference" to certain categories that might otherwise impose themselves on one's identity.¹¹ She is concerned with attempts at political conscription of national identity in case history of the Czech republic between World War I and World War II. While the historical relevance of "indifference" is a valid and important insight, I argue that because of the compulsory, and population-wide nature of schooling and ability grouping in the US, because of the

¹¹ Tara Zahra, *Kidnapped Souls: National Indifference and the Battle for Children in the Bohemian Lands, 1900-1948* (Cornell University Press, 2011).

powerful vicarious connections between parent and child, because the way the work of selecting and electing the 'talented' affected the identities of teachers, students, counselors and psychologists, and because of the way professional attainment and achievement shaped so many identities, the ideological matrix of "intelligence" is harder, perhaps impossible, to be indifferent to.

Yes, the national Hunt for Talent preceded Conant's *The American High School today* by several years. But Conant was one of the causes' primary megaphones and perhaps its most influential champion and crusader. Conant's study is a crucial locus of analysis because offers us a reading norms of the time and it also reveals in what direction and at what speed it meant to drive these norms. Conant's study was a powerful force, enjoined arm in arm with other powerful influences marshalling the reification and intensification of beliefs about individual differences in intelligence. This chapter will take up all these factors in concert to argue that we have underestimated the influence of *The American High School Today* and the role this study played as a part of its larger context and time period in shaping ideas about talent, intelligence and educability.

There is good reason why something as seemingly pedestrian as a high school study would have caught the nation's attention and piqued the interest of Catherine Pick. For one, the U.S. was embroiled throughout the 1950s in a heated debate about its system of public education.¹² Secondly, the study was led by James Bryant Conant. Conant was a modest hard-working man with a dazzling reputation and an exalted cv that seemed almost tailor fitted to this issue. The total of Conant's life work spanned a series of inter-related careers, furnishing him a variety of professional hats he could exchange one for another as needed as he traveled through a series of interlocking and politically influential circles. His long and complex work-life—one that drew him from the natural sciences to academic administration to high level policy formation and government service—is well discussed in a number of sources, most notably James Hershberg.¹³

Conant was trained as a chemist at Harvard University and became a professor of chemistry there in 1919. A respected bench scientist he produced important research leading to the

¹² Barbara Barksdale Clowse, *Brainpower for the Cold War: The Sputnik Crisis and National Defense Education Act of 1958* (Greenwood Press, 1981), 4-42. Andrew Hartman, *Education and the Cold War: The Battle for the American School* (Palgrave Macmillan, 2011).

¹³ James G. Hershberg, *James B. Conant: Harvard to Hiroshima and the Making of the Nuclear Age* (Stanford University Press, 1995).

formation of acid-base theory and to our understanding of rates of reaction and chemical equilibrium. He transitioned out of research and into administration in the late 1920s and, in 1933 became president of Harvard University. Both because of the visibility of this position and because of his efforts as university president to support a faltering School of Education, Conant was increasingly drawn into and consulted as a national level spokesperson on educational matters.¹⁴ It was during his tenure as Harvard President that Conant played an influential role in the foundation of the Educational Testing Service, an organization for which he later served as a board member in the late 1950s and early 1960s.¹⁵

In 1940 Conant was appointed to the Educational Policies Committee (EPC), a highly influential group of policy formers that Hartman has described as like a "school board for the nation."¹⁶ Conant was a member of this body throughout the 1940s and it was here that he joined and worked with William Carr, who would later serve as president of the National Education Association, and Dwight Eisenhower, then president of Columbia University, later to become 34th President of the United States.

¹⁴ Ellen Condliffe Lagemann, *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy*, 1st ed (Middletown, Conn: Wesleyan University Press, 1989), 187.

¹⁵ Lagemann, *The Politics of Knowledge*. Nicholas Lemann, *The Big Test: The Secret History of the American Meritocracy* (Macmillan, 2000).

¹⁶ Hartman, *Education and the Cold War*.

Conant's multifaceted career was also marked by periods of high security government and military service. During World War I he was involved in chemical weapons development, and in 1940, at the onset of U.S. involvement in World War II, Conant was hand-picked by President Franklin Delano Roosevelt to serve as chair of the National Defense Research Council, an administrative body that oversaw the Manhattan Project along with a number of other weapons development efforts.¹⁷ Following the war, Conant was directly involved in a diplomatic capacity in U.S. efforts at European reconstruction. In 1953, he was appointed by President Eisenhower as the U.S. Ambassador to West Germany, a post in which he served until the end of 1956.¹⁸ A faith in scientific progress and American democratic exceptionalism animated much of Conant's work following World War II. Of course, these were ideological components of a larger Cold War ideology in which he participated. Hershberg, Conant's biographer, wrote that "Conant embodied the Zeitgeist of his America—a turning toward the secular, technocratic, scientific expert to impose rationality and order on a chaotic society."¹⁹

¹⁷ Lagemann, *The Politics of Knowledge*, 197.

¹⁸ Hershberg, *James B. Conant*.; G. B. Kistiakowsky and F. H. Westheimer, "James Bryant Conant. 26 March 1893-11 February 1978," *Biographical Memoirs of Fellows of the Royal Society* 25 (November 1, 1979): 208-32.

¹⁹ Hershberg, *James B. Conant*.

One of Conant's single most important guiding visions as an educational commentator and reformer was his belief in the need for a new meritocratic social order that would undo the mounting legacy of class privilege and replace it instead with a system of educational and professional advancement based on natural talent or intelligence.²⁰ In this regard, Conant saw himself as an equalizer and leveler: stripping away unearned social advantage and instead ordering the social body around real natural differences. Conant's desire to realize this dream of an American meritocracy arguably date back to the early 1930s and his successful efforts as university president to set up a national merit scholarship program for Harvard in 1933. He continued to expound upon this vision throughout the 40s and 50s. In a piece for the *Atlantic Monthly* in 1940, Conant made perhaps his most well-known formulation of this vision in which he explicitly linked his project with Thomas Jefferson's 18th-century hope "to make an opening for the aristocracy of virtue and talent...instead of an aristocracy of wealth, [which was] of more harm and danger, than benefit, to society."²¹ Conant's new

²⁰ Lagemann, *The Politics of Knowledge*, 190-93. Lemann, *The Big Test*, 49-60.

²¹ James Bryant Conant, "Education for a Classless Society," *The Atlantic*, May 1940; quote from Thomas Jefferson, *The Autobiography of Thomas Jefferson* (Digireads.com Publishing, 2009), 30. Conant uses this language in his 1940 *Atlantic* article, see fn 81. Lemann (*Big Test*, 49) draws similar, though not identical connections, between the writings of Conant and Jefferson. He also presents a rich semi-

natural aristocracy was envisioned as a rule of experts, but would be fair, in fact *more* fair, because discrepancies in the whole educational and professional/vocational order would be rooted not in legacies of social privilege, but in nature itself. Construction of this new meritocratic vision was attended by a new meritocratic definition of "equal opportunity" that was predicated on naturalized conceptions of differential "talent and effort."²² Equal opportunity meant not that everyone would literally get the same educational opportunities, but that everyone would get an opportunity that was individually suited to his or her abilities. In this sense *The American High School Today* was clearly a continuation of Conant's much longer running project to erect and institutionally fulfill this vision of an American meritocracy.

And yet, this creation of an American meritocracy was not Conant's project alone. Clowse has noted that the post-World War II era was in general characterized by an emergent faith in the meritocratic structuring of educational opportunity.²³ This grand project would work only if its architects could pinpoint and reliably identify—across a whole population—those 'real' innate differences inside, under the layers of social advantage

biographical study of Conant and Chauncey's influence on the shape of educational testing in the post-World War II years.

²² Lemann, *The Big Test*.

²³ Clowse, *Brainpower for the Cold War*.

or disadvantage that surely otherwise clouded or confounded them. It would work, in other words, only if individual "intelligence" was an inherent personal essence, a raw native ability (or constellation of abilities), that developed distinct from and undisturbed by social factors. Therefore, if individual differences in intelligence were at the heart of the new social order, then intelligence testing was a crucial technology for Conant and others in erecting this new meritocracy.²⁴ Once achieved, the national body would be harmoniously realigned with itself, and the ranks and gradations in the social order would superimpose neatly over the seams, striations, and cleavages in the collective bedrock of our individual natures.

THE STUDY DESIGN: IQ THROUGH AND THROUGH

For reasons to be more fully explored in a later chapter, upon finishing his post as Ambassador to West Germany in 1956, Conant determined to re-engage professionally with the problem of U.S. public education, an arena then churning with a sense of crisis and attendant polemic. At the urging of William Carr (then executive secretary the NEA) and with \$350,000 from the Carnegie Foundation, Conant formulated a plan to study the state

²⁴ Lemann, *The Big Test*, 49-60. Lagemann, *The Politics of Knowledge*.

of the nation's high schools.²⁵ Conant would conduct this study from a position he immediately assumed on his return from Europe as executive staff and board member of the Educational Testing Service.²⁶ Though, again for reasons to be taken up later, Conant and his collaborators chose to completely suppress from public view the role of William Carr (NEA) in the formation of this study and to largely obscure the involvement of ETS.²⁷ This

²⁵ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Diary of James Bryant Conant," June 13, 1955, UAI 15.898, Diary 1955, Box 7, Harvard University Archives; James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Diary of James Bryant Conant," January 9, 1956, UAI 15.898, Diary 1956, Box 7, Harvard University Archives. James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner," March 12, 1956, UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives. James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner," November 14, 1955, UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives. James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Two-Year Budget Estimate, A Study of the American High School: A Proposal to the Carnegie Corporation of New York," April 19, 1957, UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

²⁶ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Minutes of the Annual Meeting of the Board of Trustees (ETS)," May 3-4, 1960, UAI 15.898, ETS-Board of Trustees, Box 113, Harvard University Archives. James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Memorandum for Mr. Hollister--Subject: Conant Project," March 25, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

²⁷ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner," December 21, 1956, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner," January 29, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Minutes of the Administrative Board Meeting (ETS)," July 16, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

was to be presented to the American public as a "personal study" of Conant, an engaged but impartial expert-researcher, free from the influence of corporate or professional lobby.²⁸

In design, the study was a simple criteria-based comparison: make a list of factors or qualities of interest, and then see how well an observed set of subjects matches that list. To this end, Conant and his collaborators carefully developed a set of criteria that defined what, in their view, a good high school was, and what type of education it provided. And then they pooled a carefully selected sample of U.S. high schools that Conant would visit to determine how well each matched these criteria. Conant's list of criteria appears in its finalized form in *The American High School Today* (1959).²⁹ It includes a checklist evaluation of twenty-two schools, anonymized A-V, which allowed not only a school visit from Conant's team, but also participated in an "academic inventory." This academic inventory was an additional level of analysis intended to determine how many "academically talented" students were in each school, and then what percentage of those academically talented were taking a rigorous "orthodox" academic curriculum. This was for Conant the 'meat' of the high school study analysis. In

²⁸ Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner," January 29, 1957.

²⁹ Conant, *The American High School Today*, 24-25.

planning documents for the study Conant wrote, "A school would be rated as excellent, good, satisfactory, or unsatisfactory in regard to its handling of talented youth according [sic] as these orthodox academic accomplishments are in fact accomplishments of the graduates of the school who have the inherent ability (perhaps an I.Q. of 115 and greater)."³⁰ And because he found that no school was prepared on the date of his visit to provide him with this essential information, he requested follow-up information from the 22 schools listed in his checklist and he included, as an appendix to *The American High School Today*, instructions for principals and administrators on how to conduct their own future academic inventory.³¹

Lagemann has noted that Conant's preconceived intent was to address some of the more alarmist critics of education at that time who were demanding a more or less complete overhaul of U.S. schools.³² Conant, as centrist mediator and pacifier, expected to find some, if not many, U.S. schools in fairly good working order. What most US high schools needed to do, he felt, was not to radically remake themselves, but to take talent more

³⁰ Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

³¹ Conant, *The American High School Today*, 20-21, 134-140.

³² Lagemann, *The Politics of Knowledge*, 200.

seriously and to make more systematic the selection and training of the academically talented portion of their student body.

In March of 1957, Conant explained the shape of his preconceptions and the gist of his approach in a memo to Eugene Youngert one of the new recruits to his study team.

I want to shape my ideas about the public high school by actual examination of certain types of schools and either fortifying my present prejudices or modifying them by what I find. I am committed to the general idea of a comprehensive high school, meaning by that a school which enrolls all the youth in a given area. I am a believer in theory of the use of various devices to break down social barriers between different types of students in such a school with the hope of engendering a spirit of democracy and a respect for all forms of honest labor. At the same time, I am aware of the difficulties of handling adequately the more talented youth in such a school; that is talented from the point of view of a university. Therefore, I wish to identify the schools which are doing a good job in preparing for college the youth with I.Q. above 115, but at the same time are handling adequately the vocational courses and schools where the academic group is not more than 50 per cent and the community is not primarily a white collar community or a suburban community.³³

It was a vision of a school that finessed a balancing act between democratic inclusion of everyone and then the selective preparation of the "talented." This was a vision that fit perfectly with his notion of a new American meritocratic order that worked to replace the privileges of class with hard work

³³ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Memo to Eugene Youngert: Regarding JBC's Ideas for His Study of the Comprehensive High School," March 21, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

and native ability. Conant felt American schools were poised to do this. They just needed a nudge.

This vision of talent balanced harmoniously against democracy depended on an ideal school that Conant was sure nonetheless dotted the landscape in plentiful numbers in the real America. He called this school the "comprehensive high school" and it was for Conant a particularly American institution, in contrast to the European high schools he had come in contact with as Ambassador to West Germany. It was the normal American high school. Whereas European school systems were often separated into two tiers—an elite academic preparatory and a normal/vocational—the American "comprehensive high school" provided "education for *all* the youth living in a town, city, or district." Such a school, he wrote, should be distinguished from various sorts of "specialized high schools which provide vocational education or which admit on a selective basis and offer only an academic curriculum."³⁴ For Conant comprehensive high schools were shaped by the local qualities and factors of the districts they served, and worked to address the needs of all the students who lived in those localities.

Because these were typical—or even archetypal—schools they embodied for Conant the quintessentially American virtues of

³⁴ Conant, *The American High School Today*, 7-8.

democracy, local autonomy, inclusion and equality: "I think it safe to say that the comprehensive high school is characteristic of our society and further that it has come into being because of our economic history and our devotion to the ideals of equality of opportunity and equality of status."³⁵ As Conant launched his school study, these "comprehensive high schools" were the very sorts of school Conant set his sites on. He wanted to show that they were out there, that for the most part they worked, and that moreover they could be tweaked to even better to address the nation's most pressing concern: the identification and training of the talented.

To conduct this Study of the American High School, Conant assembled a small and publically visible team (as distinguished from his behind-the-scenes team) that included Eugene Youngert, former superintendent of Oak Park, IL High Schools, Bernard Miller, Principal of Peekskill, NY High School, Reuben Gross, assistant professor of History, at UC Berkeley who was to serve as a "reader-historian," and Nathaniel Ober a recent graduate of the Harvard School of Education. Betty Watkins was hired as executive secretary to Conant and Jack Hollister, a salaried employee of ETS was brought on as the study's project coordinator. Yet, Hollister, while tirelessly involved with

³⁵ Ibid., 4-8, quote on 8.

every aspect of this project, was not listed on A Study of the American High School letterhead or other public documents (only on internal ETS documents), in what appears to be a concerted effort to suppress awareness of the extent of ETS involvement in the *The American High School Today*.³⁶

Conant, with Ober tagging along to help with luggage and travel logistics, personally visited 55 high schools. The other members of the team visited another 48, for a total of 103 school visits. The tour of inspection officially began in mid-September of 1957 in Elmhurst, Illinois and ended in early May of 1958 in Bennington, Vermont. The itinerary for the school inspections was impressive, an especially boggling version of the classic traveling salesman problem, run on Hertz rental cars and over endless Amtrak lines, zig-zagging through 26 states and covering tens of thousands of miles.³⁷

Other historians have noted Conant's general interest in academic talent. However, no one has examined just how single-mindedly this study was designed around academic talent, nor moreover how strictly and narrowly academic talent was defined

³⁶ Conant. Papers of James Bryant Conant, 1862-1987, "Minutes of the Administrative Board Meeting (ETS)."

³⁷ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Itinerary for James B. Conant and Nathaniel Ober," August 23, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "JBC School Visits--Itinerary," n.d., UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

in terms of the intelligence quotient or "IQ." When Conant referred to grades of academic talent in *The American High School Today*, he had in mind a series of very specific IQ thresholds that constituted for him, almost like concentric zones of electron orbitals, different domains of human intelligence. Likewise, other criteria and critical structural features of his study design that did not overtly refer to I.Q. or academic talent, were actually often deliberately worked out and implemented around assumptions about I.Q. I argue that IQ (or other readily available standardized test scores that could be used as a statistical proxy for I.Q) was the single most decisive variable in determining the sample of 103 schools that were included in the study to begin with, how they were evaluated and then lastly what overarching final recommendations Conant proposed for the reform of American high schools based on his study results.

In fact the 'typical' comprehensive high school that Conant wanted to visit was, in study planning documents, operationalized explicitly in terms of I.Q. Conant wrote to his behind-the-scenes team that included expert consultants from NEA and ETS (William Carr, Henry Chauncey, and other ETS statistician) that the sample schools should exhibit "something approaching a normal distribution of I.Q.s or at least the I.Q.

distribution curve would not be skewed toward the upper end."³⁸ This meant finding and selecting schools that presented, over their whole student body, a mean I.Q. of 100-105.³⁹ While primarily interested in the education of students with high I.Qs Conant was keen to find schools with mean normal IQs. This would, he believed, allow him to determine how well a "comprehensive" high school—one that had to serve a whole range of students from low to high ability—met, in particular, the needs of its high IQ subsegment. Identifying these schools right smack in the middle of this psychometric norm, right along the 'clapper' of the bell curve, meant placing, Conant felt, certain geographic and demographic constraints on his sample.

He excluded outright from the study large urban school districts, ostensibly because they offered special magnet schools that might draw select (i.e. high I.Q.) students away from their neighborhood districts and drive down the mean IQ of the area comprehensive schools.⁴⁰ Moreover, Conant decided to

³⁸ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools," March 11, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

³⁹ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Memorandum Concerning the Study of Certain Comprehensive High Schools," April 4, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

⁴⁰ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Information about High Schools of Value to the Project," April 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; Conant. Papers of James Bryant Conant, 1862-1987, "Revised

eliminate most affluent suburban schools from his study because he felt these schools would be more "homogenous" in ability (i.e. a greater concentration of students with above average I.Q.s and thus a higher overall mean I.Q., and outside the norm he sought). Moreover, the smaller number of low and average ability students who attended these suburban schools would undoubtedly experience greater parental pressure to take the sorts of college preparatory courses that were actually beyond their ability.⁴¹ Because of these perceived distortions both in measured I.Q. and in expectation, Conant felt suburban schools were generally not suitable for this study of quintessentially American comprehensive high schools.

Finally, Conant set a minimum threshold for how large a school needed to be for inclusion in the study: 400 students. This minimum enrollment requirement again depended on assumptions about I.Q. and its heritability and—following from population genetics and the classic psychometric bell curve—the statistical frequency with which it should occur across the national body. Conant believed that, while subject to minor

Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools;" James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Observations on the Conant Study," n.d., UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; Conant, *The American High School Today*, 12-15.

⁴¹ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner," January 2, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

vagaries and fluctuations, the number of individuals with a high native intelligence maintained a dependable frequency across a large population: "I should stress that... the distribution of academic talent on a national basis is 15-20%."⁴² If schools were large enough, they should reflect this national norm with a strong degree of statistical reliability: "The normal pattern of distribution of academic talent is such that a class of one hundred will have between fifteen and twenty academically talented students."⁴³ It followed from this that there simply would not be enough sufficiently intelligent students at small high schools. The ranks of the academically talented at any high schools with a graduating class under 100 (or under 400 total school population) were then likely too thin to cost-effectively merit the diverse and rigorous curricula that would be needed to meet their needs.⁴⁴ These sorts of schools then—the urban, the affluent suburban, and the very small—were largely excluded from Conant's study all for reasons related to Conant's and his expert panel's assumptions about I.Q. and its distribution.

⁴² James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with William Alexander," September 22, 1958, UAI 15.898, Ability Grouping, Departmentalization, Box 108, Harvard University Archives.

⁴³ Conant, *The American High School Today*, 78.

⁴⁴ Ibid., 37, 77.

It almost goes without saying then that the matter of defining "academic talent" and determining which individual students had it and belonged in this rarified category also hinged entirely on assumptions about measured I.Q. As is clear above, Conant believed that the category "academically talented" comprised the 'top' 15 - 20% of the national population. He was moreover very explicit about how this mapped onto the normal curve for I.Q. For Conant academic talent was an "inherent ability" and the number that marked its boundary was an I.Q. of 115. If an I.Q. of 100-105 was "normal," then 115 represented the first standard deviation above normal on the bell curve.⁴⁵ These students were explicitly defined by Conant as the fraction of the student body who were "able to study effectively and rewardingly a wide program of advanced mathematics, science, and foreign languages."⁴⁶ To have a measured I.Q. below this value then meant you were not able to "effectively, rewardingly" participate in these academic courses. Conant also created an additional super-category of academic talent: the "gifted." Conant asserted that "included among these academically able boys and girls, there are nationally about 3% of all youth of a given age group who are what might be called "highly gifted"

⁴⁵ Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

⁴⁶ Conant, *The American High School Today*, 20.

pupils."⁴⁷ Further special provisions, to be discussed later, were to be made for these students.

What then amounted to the quintessential criteria for evaluating the performance of schools followed from this: that any given school in question should have a rigorous academic curriculum, and its students with an IQ of 115 or over should be taking this curriculum: "The schools will be so chosen [included in the study] that there is a high probability that they are providing a good education along "orthodox" lines for pupils of high scholastic aptitude (I.Q. over 115)."⁴⁸ These schools likewise would be considered successful if "a considerable proportion of the pupils who have I.Q.s above 115 are studying a foreign language for at least three years and are studying mathematics through college algebra or at least plane and solid geometry."⁴⁹ What's more if most students with an I.Q. of around

⁴⁷ Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with William Alexander;" Conant, *The American High School Today*, 63.

⁴⁸ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Memorandum on Meeting of March 1st, 1957," March 3, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; Conant. Papers of James Bryant Conant, 1862-1987, "Memorandum Concerning the Study of Certain Comprehensive High Schools."

⁴⁹ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools," March 11, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

115 should be enrolled in the academic series then "all with an IQ above 125 should be enrolled in this course."⁵⁰

Once the basic criteria of the study had been carefully and explicitly defined in terms of I.Q., Conant's behind-the-scenes team of NEA, ETS, and Carnegie experts then puzzled over how to carry out the study 'on the ground' in these terms. I.Q. testing was widespread but sporadic in the nation's public schools. Not all schools tested at the same ages with the same tests. How could they actually find schools that matched the criteria they had established (mean I.Q. of 100-105)? Moreover, how could they determine if most of a school's high I.Q. students were taking what amounted to an 'orthodox' academic course?⁵¹ The ETS testing experts were an invaluable ally here. First of all, they quickly determined, if a school maintained and provided standardizable I.Q. data on its whole student body, the study would readily use this.⁵² Secondly, even if raw I.Q. data was not available the ETS statisticians nonetheless realized they could use scores from their own various standardized ETS tests already in wide use across the country—namely the School and College Ability Test (SCAT) and the

⁵⁰ Conant. Papers of James Bryant Conant, 1862-1987, "Memorandum Concerning the Study of Certain Comprehensive High Schools."

⁵¹ Conant. Papers of James Bryant Conant, 1862-1987, "Observations on the Conant Study."

⁵² Conant. Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools," March 11, 1957.

Sequential Tests of Educational Progress (STEP)—as statistical proxies for I.Q.⁵³ Then ETS could synchronize their data on a school's mean IQ with "the information on the IBM cards identifying all high schools in the United States which appear to be available in the United States Department of Education."⁵⁴ These Department of Education computer cards contained critical information about any given school's population, and what sorts of courses that school offered. Conant wrote the expert team that "Checking this [Department of Education] list against the information available on the achievement tests in the ETS might enable one to pick out 50 or 100 schools in various localities which correspond with most the criteria stated above." They would then be likely "to get a distribution of I.Q.s in the student body that would be either normal or at any event not skewed in the direction of high I.Q.s."⁵⁵ This synchronization of ETS data with government data was therefore a critical methodological coupling. When Conant or the various members of his public team actually visited each of their sample schools,

⁵³ Ibid. James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Henry Chauncey, Aptitude and Achievement Tests," July 25, 1958, UAI 15.898, Tests and Testing, Box 117, Harvard University Archives. James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Comments on Memorandum Prepared by Dr. Conant for Dr. Gardner -- December 21, 1956," January 3, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

⁵⁴ Conant. Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools," March 11, 1957.

⁵⁵ Ibid.

they would then be in a better position to determine if the top 15-20% of its student body (as measured by I.Q. or SCAT or STEP tests) were taking rigorous academic courses.

CONANT'S STANDING BELIEFS ABOUT IQ

Conant's views on I.Q. were part of a milieu of thought that extended directly from mainstream psychometrics before World War II. At a time when many of Conant's contemporaries were compelled more and more to engage publically in the new more politic language of nature-nurture, Conant perhaps more freely than his peers admitted his belief that individual differences in intelligence were predominantly hereditary. Certainly, this was the case for Conant in the years immediately before World War II. Yes, a wide variety of skills were trainable, but as far as high ability went, Conant believed you either had it or you did not. "In the matter of specialized brain power I am, I fear, an educational Calvinist," he explained in an address to a Harvard graduating class of 1935.⁵⁶ His post-World War II correspondence and memos reveal the scrupulous distinction he privately made between tests of achievement (a measure of learned skills) and tests of aptitude (a measure of purported inherent ability) and his desire that ETS develop more of the

⁵⁶ James B. Conant, "'Why Are Ye Fearful?,'" *Vital Speeches of the Day* 1, no. 21 (July 15, 1935): 640.

latter. Prodding Henry Chauncey, the president of ETS, Conant wrote that "you ought to be able to devise tests that are essentially tests of aptitude and others that are tests of achievement. Having done so, you should be prepared to explain this to the layman. All the professionals admit there are two types of tests..." and "...most laymen recognize that there are bright and dull pupils."⁵⁷ Native individual differences in intelligence was a universal fact that experts studied and measured, and that laymen intuitively recognized. He soon after expressed thinking very similar to this in his exposition of aptitude and achievement tests for the general lay readership of his *The American High School Today*: "If one thinks of these aptitude tests as measuring the brightness or dullness of the pupils, and the achievement tests as measuring how much pupils have learned, he is on fairly safe ground."⁵⁸

In his ideas about IQ and its specific relationship to educational opportunity, Conant was strongly influenced by his onetime Harvard colleague, sociologist William Warner, whose coauthored book *Who Shall be Educated?* put forward a definition of educational opportunity that proposed I.Q. thresholds very similar to Conant's. Lagemann notes that Conant had made

⁵⁷ Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Henry Chauncey, Aptitude and Achievement Tests."

⁵⁸ Conant, *The American High School Today*, 62.

scrupulous use of *Who Shall Be Educated* to prepare a series of lectures on education and educational opportunity at the Teachers College, Columbia University.⁵⁹ Warner had written that what he (and his coauthors) meant by "educational opportunity" would be achieved

if all children and young people exceeding a given level of intellectual ability were enabled to attend schools and colleges up to some specified level. This is the only practiceable kind of educational opportunity. For example, if all boys and girls with I.Q.'s over 100 were able to attend high school up to the age of eighteen, and if all young people with I.Q.'s over 110 were able to attend college for four years, we could say that equality of educational opportunity existed to a considerable degree.⁶⁰

Warner referred for his IQ data to a work published by the Bulletin of the Office of Education: *The National Survey of Secondary Education. The Secondary School Population* which referred directly in turn to Lewis Terman's *The Intelligence of School Children*.⁶¹ Terman's identification of the mean I.Q. for the college bound population (I.Q. 109) was nearly identical with Warner's and very close to Conant's.⁶² Thus Conant was part of a school of thought about I.Q. that extended essentially

⁵⁹ Lagemann, *The Politics of Knowledge*, 192, f.n.

⁶⁰ William Lloyd Warner, Robert James Havighurst, and Martin B. Loeb, *Who Shall Be Educated?: The Challenge of Unequal Opportunities* (Harper & Brothers, 1944), 51.

⁶¹ Grayson N. Kefauver, Victor H. Noll, and C. Elwood Drake, *National Survey of Secondary Education. Bulletin*, 1932, No. 17. Monograph No. 4: *The Secondary-School Population* (Office of Education, United States Department of the Interior., 1933), 17. Lewis Madison Terman, *The Intelligence of School Children: How Children Differ in Ability, the Use of Mental Tests in School Grading and the Proper Education of Exceptional Children* (Houghton, Mifflin, 1919), 270-86.

⁶² Terman, *The Intelligence of School Children*, 286.

unproblematic from the classic psychometrics of the early interwar period in the U.S forward into the Cold War era. Despite the battles between Iowa and Stanford, hereditarian or neo-hereditarian thinking about I.Q. and intelligence, especially as they potentially informed educational policy were, in this major context, alive and well. While the final published document, *The American High School Today* refers to I.Q. only 3 times, planning documents for the study and related correspondence refer to I.Q. in very specific, psychometrically defined ways, hundreds of times.

The bulk of *The American High School Today* is buoyed above conflict by a rhetoric of ability, talent and educational equity in the context of a meritocratically organized American democracy. For Conant, the high school formed a crucial link between smaller units of family and community and larger ones like nation and passages like these work to reassure the reader of the basic fairness of his vision:

I believe it is important for the future of American democracy to have as close a relationship as possible in the high school between the future professional man, the future craftsman, the future manager of industry, the future labor leader, the future salesman, and the future engineer. As I have often stressed in my writings and earlier in this report, I am convinced that one of the fundamental doctrines of American society is equality of status in all forms of honest labor as well as equality of opportunity.⁶³

⁶³ Conant, *The American High School Today*, 127.

Conant's "comprehensive high school" was after all structured in its essence to meet the needs of "all the youth."

Yet, peeling away these more cosmetic layers and looking at the study's implicit assumptions and at planning documents that organized the project at its inception, reveal how entirely Conant's study of the American High School was erected around this rigid scaffolding of I.Q. It was *the* stable metric that anchored the study and fixed everything to everything else. Simply browsing titles and subject lines from memoranda circulating around ETS mere months before the study began, reveal Conant's real objective and the much more narrow segment of the population that Conant intended to identify and serve: "Revised Memorandum On the Project for Studying the Education of Gifted Students in American Comprehensive High Schools."⁶⁴

CONANT'S 21 THESES: RECOMMENDATIONS FROM THE AMERICAN HIGH SCHOOL TODAY

If the criteria and basic study design were essentially structured around assumptions about I.Q., then the final recommendations that Conant put forward for American schools likewise were predicated on these very same assumptions about

⁶⁴ Conant. Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools," March 11, 1957.

individual intelligence.⁶⁵ With the publication of *The American High School Today* in 1959, Conant effectively nailed these 21 recommendations to the doors of the nation's schools.

Amster argues that 11 out of these 21 recommendations were specifically targeted to the needs of the "academically talented,"⁶⁶ and that of the 36 pages given over to discussion of the recommendations, 24 of those pages were specifically devoted to programs for the academically talented.⁶⁷ Amster's tally is short in a couple important regards. Item 12, "at least six academic periods per day," seemingly applies to everyone. It was a standardization in schedule necessary for the "academically talented" to take the full repertoire of courses that Conant felt they needed. Longer periods meant fewer courses per day, for a total fewer academic courses an academically talented student could take in the 4 year high school career. Furthermore, Amster's list ignores a meta-recommendation that Conant discussed separately because he felt it was categorically more important than any of the items here: that small high schools, under 400 students total, be disbanded wherever possible and consolidated into sufficiently large high schools. This he dubbed "a top priority" as, nationwide, more

⁶⁵ Conant, *The American High School Today*, 41-76.

⁶⁶ Presumably she means items 1, 2, 4, 9, 10, 11, 13, 14, 15, 18, 19.

⁶⁷ Jeanne Ellen Amster, "Meritocracy Ascendant: James Bryant Conant and the Cultivation of Talent" (Unpublished Ph.D. Dissertation, Harvard, 1990), 232.

than 70% of American high schools were, in his estimation, too small.⁶⁸ If you recall from analysis of the study design above, determinations of these school population thresholds were based entirely on the frequency with which high I.Q. purportedly occurred across a population and the cost feasibility of maintaining an academic program for this small segment of the nation's youth. Not only could small schools not furnish enough high-I.Q students to make an academically talented curriculum feasible, they also could not support teachers with specialized subject training. Why, Conant wondered, would a teacher trained in physics stay in a small high school where he would have to teach general science. Small schools wasted the rarified talent of both the smart teachers and students who were stuck there. This presented, in the end, a great cost to the nation: when this happened "a very scarce national asset is squandered."⁶⁹ Including Conant's unlisted recommendation to consolidate the small high school requires revising Amster's pages-devoted-to-talented estimate upward to 33 out of 45 pages.

Working through Conant's 21 recommendations would amount to an exercise in tedium, but several must be considered in some detail as they impinge on beliefs about intelligence and educability, and as some of them directly mirror developments in

⁶⁸ Conant, *The American High School Today*, 37.

⁶⁹ Ibid., 79-80.

the broader political landscape and the Federal legislative process

RECOMMENDATION: MORE SCIENCE, MATH AND FOREIGN LANGUAGE FOR THE ACADEMICALLY TALENTED

Once you had determined who the academically talented students were, then they were to be encouraged to take an academic curriculum. Conant had a very specific, well threshed-out ideas about what subjects and even sequences of coursework this curriculum should include: four years of mathematics, leading from algebra through calculus, four years of a foreign language, and three years of science. This elective set of courses for the academically talented was an augmentation to the general education requirements (4 years of English and social studies, 1 year of math and science) that everyone would be required to take.

Conant further elaborated his thinking about the relation between academic talent (or intelligence) and these primary subjects (math, science and foreign language) for the academically talented. In fact, Conant asserted, to be academically talented, you needed to be good at math and foreign language (Conant assumed that if a student was good at math, they'd also be good at science - a kind of applied mathematics). If a student was good at one but not the other, then school

administrators should reconsider that student's status as academically talented. Yet here Conant cautioned that standardized test scores, not subject grades, were the better measure of a student's inherent aptitude in this regard.⁷⁰

In this process of welding together assumptions about learners and the subjects they should take, the quality of intelligence was mutually conferred upon both the student taking the subject and the subject matter itself. Science, math and foreign language were domains of universal knowledge that not only required but embodied intelligence. They were the province of real smarts and you had to be smart to participate in them.

Furthermore, if schools failed to adopt his prescriptions for a math, science and foreign language intensive curriculum for the academically talented then the cost would be reflected as both a truncation of an individuals' development and an eventual bankruptcy of national resources. He wrote:

The loss to the individual from not electing a suitable program in high school is clear. So too is the loss to the nation. From the 15 per cent of the youth who are academically talented will come the future professional men and women.... It is in the national interest to have them develop their capacities to the full and to start this development as early as possible.⁷¹

⁷⁰ Ibid., 59.

⁷¹ Ibid.

Improved instruction of math, science and foreign language and better recruitment of "talented" students to these subjects was a matter that concerned Conant from the earliest stages of the project's inception. Conant had written John Gardner late in 1955 that "another aspect of the school problem which comes repeatedly to my attention is the demand for better training in science and mathematics, and the recruiting of more engineers and scientists."⁷² That these ideas were circulating through an atmosphere of Cold War thought in education, and circulating moreover with particular force and direction in somewhat specific currents, is a matter that will be taken up later in this chapter and the next.

RECOMMENDATION: ABILITY GROUPING

As already mentioned, ability grouping for all academic subjects was another key component of Conant's plan, and he imagined what was essentially a three tier system of ability of high ("academically talented"), middle and low.⁷³ Yet, Conant was at great pains to argue that this did not amount to tracking students, rather it was an "individualized program of instruction" where each student was, one by one, recommended for

⁷² Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner," March 12, 1956.

⁷³ Conant, *The American High School Today*, 49.

certain courses based on his or her measured ability and interest in that specific subject.⁷⁴ A student who was very good at literature (but perhaps not so good at math) might be in a high ability English course, but in middle ability groups for all other courses. In explaining his thoughts on ability grouping in unpublished communication with his behind-the-scenes planning team, Conant wrote:

To some extent, ability groupings in English, social studies, and sciences will differ, and although the differences may be slight, the change over the composition of these groups often has a social advantage.... To the extent that it is possible for the principal and teachers to maintain that there are no hard and fast groupings of students according to their vocational abilities, it encourages a good spirit in the school. If it is possible to claim that every student's program is an individual affair, so much the better. In other words, ability grouping can be accomplished without some of the unfortunate consequences which the opponents of the system claim are inherent in it, provided a certain subtlety of approach is used.⁷⁵

This institutional scheme of treating students as individuals and electing them to different subject-levels based on their personal cognitive profile likely seemed less rigid, more

⁷⁴ Ibid., 19, 24, 26, 46-47, 93, 106, 111. On page 93, Conant unguardedly rendered the link between "individualizing" and "sorting" perhaps more transparently euphemistic than he allowed in other portions of this published text. Referring to "ambitious" parents whose children intelligence test scores were nonetheless subpar, Conant wrote, "such parents must be made to realize as soon as possible the limits nature has placed on their ambition; early individualized attention is required."

⁷⁵ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)," November 11, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

democratic more receptive to the varied casts and textures of talent that any student might bring. But given Conant's preoccupation with talent defined as I.Q., a generalizable 'g' extending across all universal subject matter one senses, in his "individual affair," a rhetorical legerdemain. It was a keeping up of appearances that "encourages a good spirit in the school." He later admitted:

It will turn out that many students of similar ability and vocational interests will have almost identical programs, but a student who has elected an academic sequence may shift to a vocational sequence and vice versa.⁷⁶

So Conant foregrounded what he felt was the potential for fluidity and individuality in his scheme. Students might be promoted or demoted. Individuals presenting an asymmetrical talent profile might be allowed a one course à la carte tango with the academic elite of the school. Yet, in the background was a routinized process of selection and election that was tracking in all but name. He revealed, in a moment of candor, if his system of "individually" ability grouping students by academic subject worked, then the school's self-assessed "academic inventory should show results as satisfactory as the results in a school which has a clear-cut academic or college-preparatory track."⁷⁷

⁷⁶ Conant, *The American High School Today*, 46.

⁷⁷ Ibid., 46-47.

To maintain this harmonious democratic differentiation, Conant recommended both privately and publicly that above all "students [should] not feel they have been labeled."⁷⁸ While the "academically talented" were an elect minority in any school, "it [was] undesirable, however, to have this group of college bound students set apart from the others," again in order to "encourage a good spirit in the school."⁷⁹

"Social integration," Conant was now at pains to suggest, was really the primary goal of the "comprehensive high school," and it would be sound procedure to relabel the grouping process (as "individualized" for example) and the curriculum-at-large to better camouflage status differentials. The Conant curriculum would reveal and conceal its status differentials in a coded interplay that marked distinctions but simultaneously enforced a sense of inclusion. Course titles could subtly (or not so subtly) denote difference: "Ability grouping...[might] be partially disguised by using titles such as "biology" for the college preparatory group and "life science" for the lower, less bright group."⁸⁰ And yet the larger strata and cleavages in the

⁷⁸ Ibid., 49.

⁷⁹ Conant. Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)."

⁸⁰ Ibid.; Conant, *The American High School Today*, 50. This quote above is a partial conflation of two very similar quotes from these two sources. His published remark refers to the "lower" group as "less bright" and so I have included that qualifier along with the rest of his private remark on course titling by ability.

curriculum, between the academically talented and the others, should not for example explicitly signal the vocational endpoints they were directed toward: "the groupings according to ability in English and the social studies (and any other subjects where ability grouping may be used) should not be designated in terms of the vocational goals of the students in their programs."⁸¹ Above all, and "as far as possible, those students who are in special groups, either because of their brilliance or lack of it, should not be labelled as being apart from the others."⁸² The language here all belies unexamined assumptions about individual differences and intelligence. Conant saw real gaps between people that could readily be measured in terms of I.Q. And yet Conant was also confident that social integration, the spiritual-democratic essence of the comprehensive high school would forge togetherness out of, or in spite of, these natural differences. While talent (specifically academic talent) was the real differentiator here, beliefs about its rootedness in natural difference and its primacy as a selection criteria for educational opportunity could and should be concealed, at least in part. We had to learn to speak clearly, politely—but above all democratically, about

⁸¹ Conant. Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)."

⁸² Ibid.

intelligence above the noise of the sorting machinery in the background.

RECOMMENDATION: GUIDANCE COUNSELORS

But how to fairly manage this school-wide machinery of identification, selection and election of individual students to their various ability-grouped courses, low middle and high? And again, how to erect this machinery across all the high schools in the nation with some kind standardization and reliability? This would be accomplished in part by another core recommendation of the study: that all schools employ at least one specially trained guidance counselor. In fact the guidance counselor was a new type of professional, just coming into being. The hypothetical role of the school counselor had been discussed in various sources as early as the mid-1940s, notably in Warner's *Who Shall Be Educated?* (1944). Warner and his coauthors wrote that the best solution to the problem of establishing an equality of educational and vocational opportunity based on talent "seems to lie in establishing a scientific and honest guidance program."⁸³ But the profession was more an idea in the abstract—a critical theoretical girder

⁸³ Warner, Havighurst, and Loeb, *Who Shall Be Educated?*, 163.

in the meritocratic architecture, with very few actual trained practitioners. It was something that needed establishing. Yet, tellingly in the five years following Conant's study and the passage of the National Defense Education Act, the profession would launch and soar. This was the dawn of the guidance counselor.

Planning documents and correspondence reveal the emergence of a well thought through role for guidance counselors that Conant eventually translated directly into his published recommendations. In a September 1958 letter to William M. Alexander, Professor of Education at the George Peabody College for Teachers at Vanderbilt University, Conant wrote, "I do not believe in the tracking system. It should be the policy of the school that every student has an individualized program, tailored for him in consultation with his counselor."⁸⁴ And while the guidance counselor worked with the entire student body, he or she especially served the interests of the academically talented, defining and maintaining the boundary that separated them from the rest of the student body. This was also, fortuitously, in our national interest: "A policy in regard to the elective programs of these [academically talented] students should be adopted by the school to serve as a guide to

⁸⁴ Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with William Alexander."

the counselors in their own interest as well as that of the Nation."⁸⁵

In planning documents with his behind-the-scenes-team of Carnegie, ETS and NEA experts, Conant was more specific about the timing, framework and function of guidance counseling.

Guidance should be provided in at least the 8th grade based on a series of tests given in at least grades 7 and 8. On the basis of these tests an appraisal of each student's scholastic aptitude should be made, and this appraisal should be an important factor in determining the advice given them by the guidance officer.⁸⁶

Notably, a critical interaction between guidance counselor and each individual student should occur in the 8th grade, at the threshold of that student's high school career, and the terms of that interaction were to be dictated by standardized test scores. The guidance counselor as professional was specially trained in the administration and interpretation of standardized tests according to the established norms and standards of psychometrics.⁸⁷

This aptitude test data was the single most important criterion guidance counselors would use in determining which students belonged among the ranks of the academically talented and which did not.⁸⁸ Conant warned against the potential bias

⁸⁵ Ibid.

⁸⁶ Conant. Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)."

⁸⁷ Conant, *The American High School Today*, 57-58.

⁸⁸ Ibid., 135.

inherent in more subjective evaluations like grades or teacher recommendations:

No student should be included simply because some teachers think he is bright, or because he had a high grade average, or because he took advanced academic courses.⁸⁹

Tests themselves in the hands of the guidance counselors would be the standard gauge and objective measure for all. The great advantages of this would be the elimination of subjectivity and preference and the discovery of hidden ability—the bright but quiet, perhaps unmotivated student, who the teacher might otherwise overlook. He wrote in his letter to William Alexander, "the importance of aptitude testing in the 7th and 8th grade cannot be overestimated, for these tests can reveal talent that is otherwise hidden."⁹⁰

Once the guidance counselor had made a test-based determination of a student's ability and then helped that student select an appropriate course portfolio, there remained the problem of enforcing that decision in the face of parental resistance. Conant noted that "parents are very ambitious for their children, often to the point of wanting them prepared not only for college, but for specific colleges. In fact, parental ambitions in many cases outrun student abilities."⁹¹ This was

⁸⁹ Ibid.

⁹⁰ Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with William Alexander."

⁹¹ Conant, *The American High School Today*, 92.

especially true, Conant realized, of parents in affluent suburban communities. "Such parents must be made to realize as soon as possible the limits nature has placed upon their ambitions; early individualized attention is required," he continued.⁹² If parents were insistent, students could not be barred outright from taking academically talented courses, but if guidance staff and school administrators forged a consistent policy, the line could be drawn and held.

In a deft turn, Conant located the origins of student suffering in misplaced parental ambition. It was the parents, not the school, imposing their external rationality and agenda on students. The tireless efforts of guidance counselors in the end would serve to "defend [insufficiently able] students against the unreasonable academic demands of their parents."⁹³ The truth of Conant's perspective depended in total on his conception of individual differences in intelligence as natural, fixed, measurable, and marked by fairly well-known thresholds and limits. If this set of assumptions was true, overly ambitious parents might be causing their children to suffer needlessly and for no apparent benefit. From another perspective, though, what was perhaps occurring here was a contest of belief waged between the guidance counselor and the

⁹² Ibid., 93.

⁹³ Ibid.

family. On one side was a new type of professional armed with psychometric data and reflecting the glint of universal scientific knowledge. On the other side were parents and their children, joined by a very local, subjective set of assumptions about potential, one that grew out of the bonds of filial relation. Of course this contest only played out among that subset of parents who believed their children should have been included among the ranks of academically talented. Perhaps many parents were convinced their children did not belong there. And if your child had been invited into the ranks of the talented, well then, what was the problem?

"PROBLEMS OF THE AMERICAN HIGH SCHOOL": THE DIVERGENT EDUCATION OF BOYS AND GIRLS

In April of 1958, 9 months before the publication of *The American High School Today*, the same month as *Life's* advanced reporting, a month before Catherine Pick's letter of inquiry, Conant summarized the findings of his study in an address to that year's National School Boards Association Convention in Miami. A condensed version of the address was published a few months later as "Some Problems of the American High School."

Conant had become acutely aware of a gender achievement gap in US public secondary education. While offering a preview of all the recommendations he would make for the academically

talented in his official publication, Conant also lingered here for some time and with some concern over a striking discrepancy his study had uncovered in the schooling of "academically talented" boys and girls. Conant reported that based on returns from his academic inventory it appeared that "academically talented" boys took math and science courses in much greater numbers and for longer over their high school careers than did girls.

More specifically, Conant reported that in all schools at least 66% of the "academically talented" boys had taken at least 3 years of math, and at least 50% of these boys had taken four years of math. The "academically talented" girls, by comparison, took far fewer mathematics courses. In only 50% of the schools surveyed were at least 50% of these girls taking 3 years of math. In no school was at least 50% of the female student body taking a full 4 years of math. The picture for high school science curriculum appeared to be equally disparate by gender. In 75% of schools at least 66% of the "academically talented" boys had taken both physics and chemistry. In no schools did at least 50% of the "academically talented" girls take both physics and chemistry.⁹⁴

⁹⁴ James B. Conant, "Some Problems of the American High School (A Preliminary Report of the Conant Study)," *The Phi Delta Kappan* 40, no. 2 (1958): 50-55, 52.

Conant remained confident that his metric—"academic talent"—delivered up fixed natural ability. Here then was a pool of boys and girls who clearly had what it took. He therefore sought explanations for the discrepancy in the norms and expectations that conditioned a student's educational experience and structured his or her opportunities. He wrote:

The sharp contrast between the boys and girls illustrates how parental influence, social mores, and the advice of counselors affect the kind of education the able students receive in even the better schools. I know that one can argue that a bright girl receives a better education in high school by electing art and music and home economics instead of advanced mathematics and physics. And I know that in the past engineering has rarely offered a career to women. But chemistry—particularly biochemistry—does. And I am sure the nation is losing many good science and mathematics teachers because of the many able girls who are now choosing soft programs in many high schools—that is, soft for them.⁹⁵

But as Conant identified and drew attention to the norms, he also at the same time accepted them. Clearly for Conant, education was at last about realistic preparation for likely vocational endpoints. While pointing out a handful of opportunities for women in the sciences (biochemistry), he somewhat grudgingly allowed that, from a certain perspective, a better education for a girl might include more art, music and home economics. And in that routine epistemological demotion that implicates gender and vexes and subtly slights educators,

⁹⁵ Ibid.

Conant evoked the alleged gap between those who *do*, and those who instead *nurture* the next generation of doers. If cutting edge work for women in science and engineering was unlikely, Conant nonetheless chiefly lamented the loss of women science and math teachers from the labor force.

What Conant was discovering in his high school data about girls and their preparation for college was consistent with longer trends in women's education between 1920 and 1950. The trend for women from the last half of the 19th century to the 1920s had been by and large one of increasing access to higher education. With the steady expansion of secondary and higher education, and the incremental expansion of women's rights, there was a steadily increasing proportion of women enrolled in higher education from the middle of 19th century until 1920. By 1920, women represented close to half of the population of all college and university enrollees. Yet between 1920 and 1950 women as a percent of the entire higher education population dropped precipitously. By 1950 women accounted for only 30% of all college and university students.⁹⁶

A number of major social upheavals—chiefly the Great Depression, World War II and the post-war Baby Boom, at least

⁹⁶ Barbara Miller Solomon, *In the Company of Educated Women: A History of Women and Higher Education in America* (Yale University Press, 1985), 63; Mabel Newcomer, *A Century of Higher Education for American Women* (Harper, 1959), 46.

partially explain this striking reversal in trend. All these major disruptions to the social order arguably placed disproportionate burden—both in the home and the world of work—on women. The economic contraction of the Great Depression found women increasingly forced out of a more competitive labor market, or alternatively compelled to shortcut schooling in the interest of immediate returns from lower skilled work. And if the retooling of the economy to exigencies of war from 1940-1945 suddenly meant more blue collar and clerical work for women, these gains were temporary.⁹⁷

With the end of the war and the return of US servicemen, women found themselves increasingly devoting their time and energy to maintaining households, and especially with the post-war Baby Boom, to raising children. Historian Barbara Solomon notes a return following World War II to conservative domestic values that increasingly located women's place in the home. She writes:

Just as the war encouraged women to enter the labor force, peace made their place in it debatable. Should women keep the jobs when men needed them? Educators and economists alike perceived the immediate problem as one of wives who had taken men's job's during the war; in colleges the old line reemerged that women should be educated primarily for domesticity.⁹⁸

⁹⁷ Solomon, *In the Company of Educated Women*, 184.

⁹⁸ Ibid, 186.

The new GI Bill, enacted in 1944, arguably intensified this by subsidizing and prioritizing the continuing education and professional placement of *men*, the returning soldiers.⁹⁹ All these factors together made it increasingly difficult for women to sustain the advances in the worlds of school and work that they had made through the 19th century and into the early interwar years.

Mirroring Conant's findings, other contemporary research indicated that within the pool of the top 10% of all high school graduates, young men were twice as likely to go on to college as young women.¹⁰⁰ Other available statistics indicated a precipitous drop (by as much as 50%) in the number of undergraduate women majoring in physics and chemistry in the years after World War II.¹⁰¹ Solomon notes that for many women who did receive advanced education after World War II, considerations of marriage often outweighed professional pursuits.¹⁰²

Harvard economist John Kenneth Galbraith had read Conant's findings on the discrepancies in girls' and boys' high school educations reported in "Some Problems of the American High School." Likely more progressive than many of his colleagues on

⁹⁹ Ibid, 189.

¹⁰⁰ Ibid, 189.

¹⁰¹ Newcomer, *A Century of Higher Education for American Women*, 93; Solomon, *In the Company of Educated Women*, 188.

¹⁰² Solomon, *In the Company of Educated Women*, 189.

matters of gender and education, Galbraith wrote Conant to share his concern and plumb Conant's position:

Your reference to the soft courses chosen by the girls...brought up something which has been troubling me for years. I have been on the Board at Radcliffe and have also been watching the Radcliffe undergraduates in the classes. These people do good and sometimes superlative work and then promptly on graduation get married and disappear into what is called home life. This is assumed invariably to be superior to any form of organized intellectual activity. The women's colleges have endless rationalizations for this--most of them created by people whose own unmarried state has given them a sense of inferiority. I wonder if part of the problem isn't biology but simply bad propaganda. Especially since World War II all sorts of people have been extolling the conservative values of motherhood, the home, and the avoidance of the intellectual and rebellious spirit. It is a kind of brood mare doctrine, and I have discovered that even some of the girls, when you talk with them about it, are decidedly uneasy. They are not wholly enamored of a life in New Rochelle. But they feel they must conform...I favor a stern attack on home and motherhood.¹⁰³

Conant replied that the problem frequently gave him pause, too, and compelled him to be circumspect in his treatment of the issue:

I found the greatest difficulty with the problem of advising the course of study for girls with academic talent...It is much easier to argue for my wide program requiring 15 to 20 hours of homework in the high school for boys than for girls. One can tie the arguments to future careers--doctors, lawyers, engineers, scientists, scholars--but when one looks at the number of women actually involved in the learned professions, such an argument has very little weight. I find it far more difficult to argue that

¹⁰³ John Kenneth Galbraith. Papers of James Bryant Conant, 1862-1987, "Correspondence: Galbraith to Conant," January 2, 1959, UAI 15.898, G Correspondence, Box 128, Harvard University Archives.

all the academically talented girls should take four years of mathematics in the high school than is the case for boys. I am frank to admit that I treat this subject gingerly, for I know strong emotions can be aroused on one side or the other. I certainly don't wish to complicate my educational recommendations by a "stern attack on home and motherhood" such as you are contemplating! I shall be interested to see how your views are received by the ladies!"¹⁰⁴

As in his Miami address, Conant acknowledged, even wrestled with the gender inequality his data demonstrated. But again he did not press for change in the social order, but rather in the end advocated for preparing women for a pre-existent one. If there was little likelihood a young woman would go on to a career in physics, chemistry, rocket science, or theoretical mathematics, why worry her with strenuous preparations for those fields in high school? Additionally, advocating socially progressive curriculum that might project on to the social order rather than merely adapt to it, could snag his project in unwanted controversy. And yet liberal-democratic decorum required cautious, fair-minded public discussion of the problem.

OTHER "AMERICAN PROBLEMS"

All the explicit focus in *The American High School Today* on the exceptional category of the "academically talented" student

¹⁰⁴ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence: Conant to Galbraith," March 2, 1959, UAI 15.898, G Correspondence, Box 128, Harvard University Archives.

and a differentiation of the curriculum that suited their needs demanded that Conant invest rhetorical energy in strategies for "social integration," lest the student body appear fragmented by talent. Among his behind-the-scenes planning team Conant averred that the comprehensive high school depended on "a social integrating mechanism in terms of its forwarding the ideals of an American democracy." Conant worried about what a school with inadequate "social integration" would look like.

For example, a school in which the different social groups and the children with different ambitions had no contact, a school in which there were no communal activities, a school in which the tough element was out of hand and the windows were broken regularly, would clearly be a school which in terms of its success as a social unit would be rated at the bottom of the scale.¹⁰⁵

To prevent this potential disharmony, Conant advocated a non-ability grouped homeroom period and a required non-ability grouped course in "American Problems." In these homeroom classes, where places were assigned alphabetically by last name, a student would spend his or her entire four year high school career with the same teacher and classmates. Homerooms would form "significant social units,"—"heterogeneous" in ability—where students could "develop a sense of community interest and...practice in a small way in representative [school]

¹⁰⁵ Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

government."¹⁰⁶ In addition to homeroom, Conant proposed a final and capstone opportunity for students in a school to come together across the natural divides of ability: the course in American Problems.

In the senior year, the entire class should be divided into heterogeneous groupings for the study of American Problems (or other similar courses for one semester, in order to promote a better understanding between students of different backgrounds, different aptitudes, and different vocational goals.¹⁰⁷

This course in American Problems would cover civics, American government and current events. Here:

teachers should encourage all students to participate in discussions. This course should develop not only an understanding of the American form of government and of the economic basis of our free society, but also mutual respect and understanding between different types of students.¹⁰⁸

Of course though here and in the material from the planning documents above, Conant wrote with the unquestioned assumption that these differences (of type, of aptitude, of vocational goals) were all *a priori* (natural) and not in part—small or large—formed by the selective differentiating process of schooling to begin with. Among the problems discussed in American Problems, one imagines heated discussion of Sputnik and the urgency of the space race with the Soviets, or perhaps

¹⁰⁶ Conant, *The American High School Today*, 74.

¹⁰⁷ Conant. Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)."

¹⁰⁸ Conant, *The American High School Today*, 75.

domestic implications of post-war European reconstruction, or the role of the Federal government in the public schools. One doubts there was much conversation about the hidden sorting processes to which they as students might have been subject for their last 11 years of school, or how those processes could profoundly shape who played what role in the very conversation they were having.

For Conant, the structure of the school day modeled the roles and routines adult life. Here—in the homeroom and the course in American Problems—were classes that served as practice forums for democratic decision-making among people of different abilities. Here was social integration in action. The balance between talent and labor, between the leaders and the led—the balancing act of meritocracy-as-democracy itself—had been struck in the microcosm of the school day.

Yet, even Conant was still occasionally surprised by how efficiently the school he envisioned might work to guide everyone to their right place. Following a visit to one of his model schools he noted:

somewhat to my surprise, I found that almost without exception those students elected to the student council or as officers of the class were in the group of the more academically able students who were preparing to go to college.¹⁰⁹

¹⁰⁹ Ibid., 18.

If only more high schools across the country adopted his recommendations, then they too would work like this.

CONCLUSION

This chapter demonstrates that IQ was the central organizing variable of Conant's school study and the publication that came from it: *The American High School Today*. In Conant's vision, differentiating by IQ in an educational context promised to organize and systematize the functioning of schools around the country. Attention to individual differences in IQ made explicit for Conant the need for schools to develop curricula stratified by "ability," and it determined who within the school population should be taking what courses. The IQ distribution also indicated the later professional and vocational endpoints these individuals should be directed toward. IQ could moreover yield a performance measure for schools themselves—the "academic inventory"—indicating how well they were organizing their curriculum and student body around individual differences in "intelligence." IQ could even, in Conant's vision, determine which schools should remain open and which should close or consolidate if they were too small (given the spatial distribution of IQ) to maintain adequate programs for their academically talented.

Building on chapter 1, this chapter has shown how, in the post-World War II era, policy recommendation structured around "intelligence" frequently sought to disentangle itself from the controversial history of IQ. Conant scarcely mentioned "IQ" in published documents, and then only in the appendices. Instead here he relied on historically unencumbered terms like "ability" or "talent." Likewise, though he borrowed heavily from the work of Lewis Terman, Conant made no overt connection to mainstream psychometrics or its history in his recommendations, nor did he rehearse earlier World War I and interwar era preoccupations with "subnormal" intelligence. Instead Conant kept the reader of *The American High School Today* trained on the positive selection of "supranormal" intelligence, or "academic talent" via newer standardized tests.

Likewise, Conant made no mention of an alleged "hereditary" or "genetic" nature of intelligence, but instead implied the fixity of "academic talent" by referring to the alleged stability of its statistical distribution. Critically, "intelligence" in Conant's post-World War II conception, had been loosed from the group taxonomies of World War I and interwar intelligence testers. Instead "academic talent" strictly a matter of individual difference that demanded a newly "individualized" approach to curriculum, pedagogy and educational opportunity.

If Conant promised that differentiating by IQ could smooth over inequalities and bring a harmonious order to the social microcosm inside schools, he argued it would also extend this same order to the social macrocosm outside school walls. The next chapter takes up the climate of controversy about the state of public education into which *The American High School Today* was received. This chapter also begins to explore the relation between *The American High School Today* and the National Defense Education Act.

CHAPTER III

ACADEMIC TALENT, "INTELLIGENCE" AND A COLD WAR CRISIS IN EDUCATION

This chapter examines James Bryant Conant's work in the context of a Cold War debate about the quality of US public education. Conant and his network of collaborators were eager to introduce the conclusions and recommendations of *The American High School Today* into this debate. Building on the work of Ellen Lagemann and Jeanne Amster, along with previously unexamined documentary evidence, this chapter first demonstrates that Conant's study was rapidly disseminated through a meticulously orchestrated national-level PR campaign and media rollout. *The American High School Today*, published in late January of 1959, met with widespread public approval, and his recommendations were readily endorsed and adopted by school systems around the country. Debate over the content and organization of public school curricula in the mid to late 1950s had reached a fever-pitch over issues of over-enrollment, desegregation, and fears about the possible superiority of Soviet science and education.

I argue that Conant's study served as an effective anodyne for the more caustic strains of this argument, precisely because it could mobilize beliefs and about individual differences in

"intelligence" and educability. I further argue, that *The American High School Today* was intended to play a large role—not in the passage—but in the formulation and public reception of the National Defense Education Act. This claim draws on analysis of new documentary evidence and a reconsideration of extant documentary evidence that link Conant, the Eisenhower Administration and the National Defense Education Act.

PRESS JUNKETS AND PR ROLLOUTS

When the study itself was concluded, Conant embarked on a tireless seven-month speaking tour, from mid-September 1958 to March 1959, to promote his findings. The message he delivered at these engagements explicitly addressed the importance of reforming schools to better address the needs of the academically talented, the need to standardize math, science and foreign language requirements for these college bound students, and the need for each high school to have a well-established guidance program and guidance policy to facilitate this process.¹ This campaign took Conant through a multitude of towns and cities and comprised over 35,000 miles of travel by his estimate.² Conant counted the stops and tallied the attendance

¹ Jeanne Ellen Amster, "Meritocracy Ascendant: James Bryant Conant and the Cultivation of Talent" (Unpublished Ph.D. Dissertation, Harvard, 1990), 221.

² Ibid., 224.

at his speeches in a letter to President Eisenhower: "I have addressed some 70,000 people in twenty-one states this year."³

But Conant had a great deal of organizational help in this endeavor. Each speaking venue was scheduled and advertised by the National Citizens Council for Better School (NCCBS). Concerned with such broad educational issues as classroom and teacher shortages and tax revenue for public schools, the National Citizens Council for Better Schools was moreover an organization founded on the explicit mission of mobilizing action at the local level on behalf of the nation's public schools.⁴ Headquartered in New York City, NCCBS had established citizen groups in over "12,000 communities across 39 states."⁵ The NCCBS was, moreover, an organization that Conant already knew quite well. It was officially formed in 1956 out of the very similarly titled National Citizens Commission for Public Schools. This close predecessor to the NCCBS had, in fact, been the brainchild of none other than James Bryant Conant himself

³ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with President Dwight D. Eisenhower (Confidential)," February 23, 1959, UAI 15.898, G Correspondence, Box 128, Harvard University Archives.

⁴ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "National Citizens Council for Better Schools (NCCBS) Booklet: Problems Get Bigger," n.d., UAI 15.898, Correspondence--NCCBS, Box 42, Harvard University Archives.

⁵ Ibid.; James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Henry Toy (NCCBS): JBC's Speaking Schedule," June 26, 1958, UAI 15.898, High School July-October 1958, Box 42, Harvard University Archives.

who, as a member of the highly influential Educational Policies Committee, had dreamed it up and drafted plans for its formation in 1943.⁶

This speaking tour was only part of a much larger and carefully orchestrated media and PR rollout for the study. A planning document "Dissemination Campaign for the Publication of The American High School Today," from October of 1958 (the month after the passage of the NDEA) illuminates the scope, timing and vision of this multi-armed PR effort. It also reveals that this effort involved the precise coordination and intensive cooperation of the Carnegie Corporation, ETS and NCCBS along with the Conant's publicly visible team. Jack Hollister (of ETS), the document's author and Conant's project director, laid out the "basic principles of the campaign as a whole":

What we have is a major statement by a major figure in American education on a topic that concerns every household in America. The recommendations are interlocking, pointed and specific--designed for action NOW. This is news--and the hope is to offer it and play it as news, with maximum attention in newspaper and magazine space...Since the whole purpose of the campaign is to get a set of basic ideas made known, talked about and acted upon, the longer public attention and interest can be maintained the better. Therefore, after the first major release in January, the desirable goal would be to schedule as many magazine articles, radio and TV appearances, newspaper features, etc., as for possible for the succeeding weeks and months...The hope is to build the whole release structure around a cover story in Time or Newsweek...This is a top-drawer goal

⁶ John E. Corbally Jr. and Ruth E. Seeger, "The National Citizens Commission for the Public Schools," *Educational Research Bulletin* 35, no. 6 (September 12, 1956): 141.

still to be negotiated. Henry Toy [president of the NCCBS] is seeking an approach to the editors of Time through the good offices of Roy Larsen.⁷

Roy E. Larsen, the president of Time, Inc., was an acquaintance of both Henry Toy and Conant, and had also been chair and one of the original twenty-five members of Conant's National Citizens Commission for the Public Schools (the proto-organization for NCCBS).⁸

Conant's PR team eventually secured this arrangement with *Time*, who made Conant's study the cover story and dubbed Conant "The Inspector General of America's Schools."⁹ And true to their PR blueprint, a larger media effort was swiftly assembled in advance of this "top drawer" bid. Conant did television and radio interviews on Face the Nation, and with Dave Garroway for NBC's Today show, and Edward Murrow for CBS radio.¹⁰ The Conant PR team also sought and secured Associated Press wire service as a conduit for their dissemination effort, and stories of their study ran in hundreds of papers—with both large national and small local readerships throughout the winter and early spring

⁷ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Tentative Plan for Dissemination Campaign for the Publication of The American High School Today (The Conant Report)," October 28, 1958, UAI 15.898, High School--Dissemination Report, Box 42, Harvard University Archives.

⁸ Corbally and Seeger, "The National Citizens Commission for the Public Schools," 142.

⁹ "TIME Magazine -- U.S. Edition -- September 14, 1959 Vol. LXXIV No. 11.

¹⁰ Ellen Condliffe Lagemann, *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy*, 1st ed (Middletown, Conn: Wesleyan University Press, 1989), 200.

of 1959. In addition to the Life magazine coverage, discussed at the opening of this chapter, Conant's study was also featured in a Look Magazine article, which members of Conant's team estimated, over 20 million people read.¹¹

The American High School Today, featuring Conant's in-depth discussion of his study and consequent recommendations, went to press for its first printing at the end of January 1959. Over 90,000 free copies were mailed to state and federal level politicians, to National Education Association offices, and to a wide array of school boards and school administrators across the nation.¹² Amster claims that nearly every school board in the country received a promotional copy.¹³ Rack copies in bookstores and magazine stands were made readily accessible for the modest price of \$1.00. By March 15th, 1959, *The American High School Today* was already in its 4th printing and an estimated 200,000 copies had been sold.¹⁴

It can be hard to assess precisely the extent to which a massive media and publication campaign like this influences a larger culture. It is clear, though, that this extensive PR campaign helped craft a singularly captivating narrative around

¹¹ Jeanne Ellen Amster, "Meritocracy Ascendant: James Bryant Conant and the Cultivation of Talent," 235, f.n. 128.

¹² Lagemann, *The Politics of Knowledge*, 200.

¹³ Jeanne Ellen Amster, "Meritocracy Ascendant: James Bryant Conant and the Cultivation of Talent," 229.

¹⁴ Lagemann, *The Politics of Knowledge*, 200.

talent, intelligence and public education that crackled across the airwaves, and reverberated through government offices and town halls and in schools and homes across the country. It is also clear, when assessed from a variety of different angles, that Conant's *The American High School Today*, and the larger symphony of supporting media around it, had a profound effect that was both immediate and long lasting. Its effect on discourses about talent and intelligence, and the emergence and reinscription of categories of "gifted" and "academically talented" are undeniable and will be taken up in a later chapter.

There is also good evidence that Conant's report and its recommendations received strong support from principals around the country. Dr. Paul Elicker executive secretary of the National Association of Secondary School principals confirmed that Conant's report was warmly received by a broad majority of US high school principals as the best way forward. Conant's message, the association claimed, helped them muster support they needed to accomplish these important reforms. Dr. Dan Hull, director of the United States Office of Education's branch of Secondary Education Instruction said, "I think high school

principals generally are very grateful for his support. Some I've talked to almost revere him."¹⁵

Lagemann has pointed out that in the Conant team's own later self-assessment of their PR efforts, they had "done more to make the average man on the street conscious of the problems facing our high schools than perhaps any other publication in recent years."¹⁶ Amster argues that, following publication of *The American High School Today*, school systems across the nation began using Conant's academic inventory to measure how successfully they had identified and then met the needs of their "academically talented" students.¹⁷

Yet Conant had been making major media appearances related to his study, albeit more sporadically, months before the concerted PR effort began. The striking effect of one these appearances seems to have been at least partially captured in a series of exchanges that Conant's team had with educational psychologists and teacher education faculty at the notably progressive Columbia University's Teacher's College. Bernard Miller, the retired principal on Conant's public team, had been

¹⁵ Loren B. Pope, "PRINCIPALS BACK CONANT'S REPORT; Most Find His Study of High School Makes the Teaching Job Easier," *The New York Times*, January 25, 1959.

¹⁶ Lagemann, *The Politics of Knowledge*, 200.

¹⁷ Jeanne Ellen Amster, "Meritocracy Ascendant: James Bryant Conant and the Cultivation of Talent," 229, 235. Specific instructions for just how to organize a school-wide academic inventory were included as an appendix to the *American High School Today*.

consulting with Teacher's College faculty to sound out their opinion about Conant's various recommendations. He reported after a March 1958 meeting that there was a great deal of skepticism about Conant's proposals related to ability grouping, and that notably, "Professor Anderson... contends that your idea of homogenous grouping is an 'easy way out' to the present educational crisis."¹⁸ And yet a month later, at the occasion of a second meeting, there seemed to have been a sea-change in opinion among the collected faculty. Now the terms of the debate had been reversed:

Professor Anderson and others are no longer steadfast in their opposition to ability grouping—the distinction is drawn between general and special [i.e. academically talented] education. The T.C. group I spoke with favor ability grouping in the special areas of the curriculum including trigonometry, physics and chemistry, and they are now emphasizing at least 3 years of one foreign language...The feeling among at least some people at T.C. is that in the *general* education area [i.e for coursework prior to the electives for the academically talented] the students should be grouped heterogeneously. But they were not adamant even here and when I mentioned the fact that you did favor heterogeneous grouping in The Problems of Democracy class, there was a general feeling of relief.¹⁹

The game-changer seems to have been a high profile appearance Conant had made on *Face the Nation* in the interim, before the

¹⁸ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Memorandum for Dr. Conant: Meeting with Professor Anderson at Teachers College," March 11, 1958, UAI 15.898, Ability Grouping, Departmentalization, Box 108, Harvard University Archives.

¹⁹ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Memorandum for Dr. Conant from Bernard Miller," April 9, 1958, UAI 15.898, Ability Grouping, Departmentalization, Box 108, Harvard University Archives.

second April meeting. Miller reported in the same memo that, "Everyone at T.C. who saw *Face the Nation* felt that Dr. Conant did an exemplary job of presenting the educational picture in this country."²⁰

When Conant, a nationally known and respected scientist, educator and civil servant, was handed the media megaphone, he could powerfully reset the frame of a debate about education. Even when it concerned something as specific and potentially controversial as ability grouping, and even among this group of highly trained, and certainly highly opinionated educators and educational psychologists. Also note, once the dam of resistance was broken, how effective the recommendation for the non-ability grouped course in American Problems (that one-off senior year class) seems to have been. In this new, more receptive context, it was a powerful rhetorical valve through which any misgiving could be rapidly released.

It also seems that if misunderstanding—or dissent—cropped up in news coverage related to Conant's study it was quickly corrected. In mid-January of 1959, an editorial ran in Bloomington, Illinois' *Daily Pantagraph* that suggested Conant's plan amounted to a tracking that compelled different sorts of students to take different levels of courses. Betty Jane

²⁰ Ibid.

Watkins, Conant's executive secretary, was tasked with contacting Clay Tate, the editor of paper, and convincing them of their error. Conant was not suggesting tracking here, Watkins remanded, it was all a matter of freedom of choice: "ability wise, on a national average, some 15% of the youth of high school age" should be "urged to elect" the orthodox academic curriculum of four years of math, four years of foreign language, and three years of science.²¹ As the talented were free to choose, so were those with less talent:

For the majority of students who will terminate their full-time education on graduation from the twelfth grade, Dr. Conant recommends that they elect meaningful sequences in vocational subjects, in addition to the general education courses required of all...I wonder if you would be willing, in a future editorial in your paper, to correct any possible misunderstanding on this point. We would be most grateful.²²

The underlining of "elect" and "required" is Watkins' own emphasis. This was the crucial distinction: choice and obligation. What Conant recommended was liberal-democratic in its essence, she insisted. Beyond the general education requirements for everyone, no one was being forced to do anything.

Clay Tate was obliged to print a retraction in the next issue of the Pantagraph. "Thanks for your letter of Jan. 15

²¹ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence: Betty Watkins to Clay Tate," January 15, 1959, UAI 15.898, Academically Talented, Box 108, Harvard University Archives.

²² Ibid.

regarding misinterpretation of Dr. Conant's views in our editorial of Jan. 11," he wrote to Watkins.

Since you state the necessary corrections so well, I published the pertinent parts of your letter in our By the Public column which runs alongside our editorials. The column is widely read...I am sorry this misinterpretation appeared...I also am grieved by the number of talented students who avoid these [orthodox academic] courses.²³

RED, WHITE AND BLACK: A BREWING CRISIS OVER DESEGREGATION,
GLOBAL COMMUNISM, AND THE CURRICULUM OF US SCHOOLS

And there are good reasons why the PR rollout was so intentional and aggressive and why major media outlets and the public in general were so receptive to discussion of *The American High School Today*. The study had been pointedly crafted by Conant and his behind-the-scenes team to specifically address and resolve a number of key points of conflict in a debate about the state of American public education, a debate that had been escalating in pitch and tempo for the better part of the 1950s. In November of 1955, in an early exploratory letter to John Gardner, president of Carnegie, and one of the earliest behind-the-scenes collaborators on Conant's project, Conant expressed a formative interest in re-entering this very education debate on his impending return to the United States.

²³ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence: Clay Tate to Betty Watkins," January 21, 1959, UAI 15.898, Academically Talented, Box 108, Harvard University Archives.

Conant was at this point still serving as Ambassador to West Germany, but he would be finished with this post, he knew, in about a year, and he was casting around for what to do next: "It has seemed to me that somewhere in the area of the problems concerned with our public schools I could make my most effective contribution in the next few years."²⁴

As the project took shape over the next year Conant constantly held the current 'education debate' in mind as both a structuring template and a problem set requiring a solution. He realized that his ideas about "intelligence"—its selection within the "comprehensive high school"—could be beveled into a key that would perfectly fit and turn the lock. In a candid and early admission that his proposed study was really about the "talented" first and everyone else next, Conant nonetheless insisted to his confidants that his particular definition of talent could change the terms of the nationwide debate:

More than one of my educational friends will undoubtedly feel that the study I am contemplating is far too one-sided...It might be said that what was needed was a study of all the problems of the high school and not just the problem of the orthodox training of the talented and the relation of this problem to the accomplishment of the social ideals of the comprehensive school. My answer to any such friendly criticism would be that in view of the present climate of opinion in the United States I feel the study I have in mind would make the best contribution that

²⁴ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner," November 14, 1955, UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

I personally could make to the educational scene at this time.²⁵

There were a number of reasons why US schools were the subject of a nearly decade-long and anxious national conversation. The American public education system was tasked with accommodating unprecedented social and demographic changes in the decades after World War II. School construction, facilities maintenance and teacher recruitment had stagnated during the Great Depression making for a national public school system that would be by all accounts swamped by the ineluctable tidal wave of school enrollments the next two decades would bring.²⁶ The post-war baby boom had begun. According to 1970 Census figures, nationwide high school enrollment, which in 1945 had been just shy of 7 million, would reach 9.8 million students by 1959. 1963 would see 12.5 million students enrolled, nearly double the 1945 benchmark.²⁷ Compare these figures with numbers for total school enrollment (across all grades) for a similar time period. In 1950, about 28.5 million students were enrolled

²⁵ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner," December 21, 1956, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

²⁶ Wayne J. Urban, *More Than Science and Sputnik: The National Defense Education Act of 1958* (University of Alabama Press, 2010), 75.

²⁷ U. S. Census Bureau, ed., *Historical Statistics of the United States, Colonial Times to 1970 (US Department of Commerce), Part I* (White Plains, N.Y: Kraus International Publications, 1989), 370-371.

in grades k-12 in the public schools. By 1960 k-12 enrollment was nearly 40.9 million.²⁸ Quonset hut classrooms were quickly riveted together throughout the late 40s and 50s in communities around the country as an immediate short-term solution to the already pressing over-enrollment.

William Carr, president of the National Education Association, and another of Conant's behind-the-scenes collaborators delivered testimony throughout the 1950s to various Congressional and Senate Committees, expressing the urgency of the educational crisis and the need for Federal funding of the public school system. One such appearance on February 20th of 1958 before the Senate Committee on Labor and Public Welfare, found Carr again making such an appeal. He was unable here to conceal an almost weary disbelief at the disconnect between the scale of the problem, its longevity as an issue in the national consciousness, and yet the difficulty of formulating concise action to address it. "The American public school system is facing one of the gravest crises," he told the assembled senators, John F. Kennedy, Barry Goldwater, Strom Thurmond and Lister Hill (a key architect of the emerging Senate version of the National Defense Education Act) among them:

²⁸ Lawrence Arthur Cremin, *American Education: The Metropolitan Experience, 1876-1980* / Lawrence A. Cremin (Harper and Row, 1988), 545.

How many times have I appeared before this committee and said that. Senator Hill is shaking his head. He remembers. We all do. This is what is happening. The need for education is expanding geometrically while the financial sources are going up only in arithmetical proportions.²⁹

Carr then provided a more detailed picture of school resources strained to the breaking point: over 10 million more students would enroll in public schools over the next 7 years; over 65,000 elementary school classrooms in urban areas had more than 35 pupils. There was still a total shortage, he estimated of 140,000 classrooms nationwide.³⁰ The solution, Carr argued, was a legislative breakthrough that released federal money for school construction and teacher salaries.³¹ The need was so great, Carr insisted, that these federal monies should be made available even in areas where racial segregation in public schools was still enforced.³² This would have meant of course ignoring or delaying the recent 1954 *Brown v. Board* mandate, and over-riding any additional measure, such as the Powell amendment, that might be attached to education legislation to compel compliance with *Brown v. Board*.

²⁹ Statement of William Carr, *Hearings before the Committee on Labor and Public Welfare, United States Senate (85th Congress): Second Session on Science and Education for National Defense* (Washington, D.C, 1958), February 20th, 1958: 499.

³⁰ Ibid, 498.

³¹ Ibid, 502.

³² Ibid, 488.

Clearly, as Ellen Lagemann notes, the full scope of reasons for the crisis in education were not merely or only demographic, but also ideological.³³ The brief glimpse of Carr's testimony above makes this abundantly clear. Contentions around race and the role of federal government in public education immediately swirled up from an assembled pile of seemingly cold demographic data. There were indeed a number of broad and powerful ideological contours that shaped this debate and that should be at least enumerated here.

First, hand-in-hand with demographic changes, came evolving attitudes and norms about what the purpose of a high school education was and who should pursue one. The economy had changed radically with industrialization and school was becoming an increasingly important avenue for later work life. More and more people were going to school and staying in school longer. Kliebard, drawing from US Army data, notes that by World War I only 20% of soldiers had completed the 8th grade, yet by World War II this figure was nearly 70%.³⁴ Over the 20th century, the high school went from an institution for the socio-economic elite to an institution for the masses. Likewise high school

³³ Lagemann, *The Politics of Knowledge*, 195-196.

³⁴ Herbert M. Kliebard, *The Struggle for the American Curriculum, 1893-1958* (Psychology Press, 2004), 241.

transformed from an educational endpoint, into increasingly, a transitional preparation for further college education.³⁵

Secondly, while this long-trending and nationwide demographic surge seemed to demand national-level action, there was instead a long-running culture of resistance to federal funding of education dating back well into the early 19th century. A long lineage of opponents of federal involvement had mounted a definitively successful series of campaigns on the protean and ever-durable assumption that federal funding would lead to federal control of local schools and the erasure of local and state autonomy.³⁶ As of 1958 only two very limited and targeted pieces of legislation had been passed authorizing the spending of federal money on public education: the Morrill Act of 1862 that established the land-grant system of public universities and the Smith-Hughes Act of 1917 that targeted federal funds for vocational education programs.³⁷ Notably the GI Bill (The Servicemen's Readjustment Act) of 1944 managed to

³⁵ Richard A. Rehberg and Evelyn R. Rosenthal, *Class and Merit in the American High School: An Assessment of the Revisionist and Meritocratic Arguments* (Longman, 1978), 8-12.

³⁶ Carl Kaestle and Marshall Smith, "The Federal Role in Elementary and Secondary Education, 1940-1980," *Harvard Educational Review* 52, no. 4 (1982): 384-387.

³⁷ *Ibid.*, 388-389.

release federal dollars for education because it was not explicitly an 'education' bill.³⁸

Third, beliefs about "race" and a deeply embedded and longstanding culture of American racism had been determining—since the emergence and centralization of a public school system in the 19th century—who should go to school, and more pointedly who should go to what school. Thus, the 1954 *Brown v. Board* mandate to racially integrate all public schools had immediate and forceful implications for educational policy in the 1950s and served in many quarters, particularly among middle class whites, to redouble the perception of competition for resources. The Supreme Court decision did not bring about immediate unproblematic desegregation, but rather provoked in many school districts across numerous states, protest, outrage and dilatory foot-dragging.

This stubborn, enduring refusal to integrate is perhaps epitomized at its extreme by "Massive Resistance" efforts in Virginia, spearheaded by US Senator Harry Byrd (VA) which led to public school closures in many VA counties. Notably, in what can only be seen as a bald refusal among whites to share educational resources with African Americans, Prince Edward

³⁸ Barbara Barksdale Clowse, *Brainpower for the Cold War: The Sputnik Crisis and National Defense Education Act of 1958* (Greenwood Press, 1981), 4.

County, VA closed its entire school district for nearly five years. Historian Kara Turner notes that most white children were quickly reassigned to area private schools, while most African American children largely went without formal education for the five-year hiatus.³⁹ Many other districts in other states, while less openly defiant, were no more compliant. While a follow-up court decision in 1955—known as *Brown II*—urged that schools nation-wide accomplish integration with “all deliberate speed,” no clear dates or benchmarks were set. This loose timeline gave integration opponents ample opportunity for foot-dragging. Many states were not goaded into real action until the federal government finally threatened to withhold aid in the mid 60’s.⁴⁰

Historians Franklin and Klarman have shown that as late as 1960 in the states of Arkansas, Louisiana, North Carolina, Tennessee and Texas under 2 percent of the public schools had desegregated. South Carolina, Alabama, and Mississippi were even slower to act. As of 1963, there were no desegregated public schools in any of these states.⁴¹ As can be seen from

³⁹ Kara Miles Turner, “‘Getting it straight’: Southern black school patrons and the struggle for equal education in the pre- and post-civil rights eras,” *The Journal of Negro Education* 72, no. 2 (Spring 2003): 217, 224.

⁴⁰ V. P. Franklin, “Introduction: *Brown v. Board of Education*: Fifty Years of Educational Change in the United States,” *The Journal of African American History* 90, no. 1/2 (January 1, 2005): 1-8, 2-4.

⁴¹ Ibid.

William Carr's testimony above, the brambles of 'race' and 'role of federal government' quickly entwined. The passage of federal legislation depended on the cooperation of many politicians, not just southern, who might be unlikely, depending on their personal beliefs and those of their constituency, to support a bill that included measures to enforce desegregation.

As already mentioned, the post-World War II international rivalry with the Soviet Union gave rise to yet another set of governing beliefs that impinged on, and indelibly shaped the education crisis of the 1950s. It is important to recognize that Cold War thinking penetrated all aspects cultural life in the US in the late 40's and 50's. It was more than geopolitical brinksmanship and cloak and dagger diplomacy. John Harper notes that it was also "a contest to prove the superiority of contending political and economic systems in generating power and well-being, and as 'models of development' for the post-colonial and non-developed nations."⁴² Political and educational leaders in the US were aware of the rapid industrialization and radical transformation of society underway in the USSR. They feared the Soviet Union might surpass the US not only in economic and cultural, but also in scientific and technological, achievements.⁴³ If we relaxed our vigil,

⁴² Harper, *The Cold War*, 1.

⁴³ Mazower, *Dark Continent*, 250-285.

communism would spread and democracy erode away in every corner of the globe, even within the national body itself.

When it became clear to many U.S. observers in 1955 that the Soviet school system was training and graduating more scientists than the U.S., all these flocking anxieties of the Cold War came stubbornly to roost on the doorstep of US schools.⁴⁴ Rather than examining the norms that constrained and defined this crisis in education, it was easier to attack the schools themselves. Barbara Clowse has noted that "public dissatisfaction with the results of schooling is a hardy perennial in American History," but there was, in the 1950s, the growing perception among critics that schools were not academically rigorous enough, that students were graduating unprepared for the new (and decidedly more treacherous world-order) and that national security as a whole would suffer as a result in the long run.⁴⁵

The Life Adjustment curriculum, a then-dominant trend in US education came under an increasingly intense fusillade of criticism. 'Life adjustment' was a distant offshoot of the Progressive educational philosophy of John Dewey. And while Dewey lived to openly disagree with many of its claims and practices, Life Adjustment nonetheless borrowed aspects of

⁴⁴ Clowse, *Brainpower for the Cold War*, 29.

⁴⁵ Ibid., 30.

progressive education's spirit of instrumentalism and child centric pedagogy.⁴⁶ Schools, Life Adjusters argued, could help students achieve better social and emotional adjustment by making space in the curriculum for things that were more interesting and useful to them. This process of instrumental social-emotional development would be then in itself *de facto* a preparation for democratic life and would help students develop the psychological maturity they needed to resist the sway of communist ideology or other noxious political rhetoric.⁴⁷

Yet this approach, opponents argued, surrendered far too much of the school day to classes in "co-educational cooking," "boy-girl relations," and even (as one critic sarcastically quipped) "basket weaving," and left entirely too little space in the curriculum for the fixed content and standards of the canonical academic disciplines.⁴⁸ Critics also felt that in its perceived anti-intellectualism, Life Adjustment amounted to a "leveling down" egalitarianism that yoked the brightest students to the dimmest.⁴⁹ One of the most well know critics of the Life

⁴⁶ Andrew Hartman, *Education and the Cold War: The Battle for the American School* (Palgrave Macmillan, 2011), 135-136.

⁴⁷ Ibid., 58, 135-136. Clowse, *Brainpower for the Cold War*, 28-32.

⁴⁸ *Statement of Lee Dubridge, Hearings before the Committee on Labor and Public Welfare, United States Senate (85th Congress): Second Session on Science and Education for National Defense* (Washington, D.C, 1958), January 23rd, 1958; *Statement of Selma Borchardt, Hearings before the Committee on Labor and Public Welfare, United States Senate (85th Congress): Second Session on Science and Education for National Defense* (Washington, D.C, 1958), March 5th, 1958.

⁴⁹ Clowse, *Brainpower for the Cold War*, 31-32.

Adjustment movement, historian Arthur Bestor, argued in his 1953 *Educational Wastelands* that, by capitulating to Life Adjustment, contemporary schools were not cultivating the full intellect of students. Therefore, the traditional academic disciplines, subjects that in his words constituted a "basic education," should be re-ensconced unchallenged as the curriculum *in toto*.⁵⁰ All students should be required to take this same orthodox curriculum, he argued. He couched his critique of Life Adjustment here and elsewhere more generally in the context of an American democracy under siege: "genuine knowledge, critical understanding, and responsible thinking provide, in a democracy, the most powerful weapon there is against subversive tendencies."⁵¹

Another well-known and outspoken critic of public education and of life adjustment, but a critic with a solution different from Bestor's, was Admiral Hyman Rickover. Now widely memorialized as the "father of the nuclear submarine," Rickover was an outspoken technophiliac, Cold War doomsayer and a champion of the need for more highly trained US scientists in this world-determining competition with the USSR. Indeed it seemed as if democracy in sum was to Rickover a submarine in

⁵⁰ Arthur Eugene Bestor, *Educational Wastelands: The Retreat from Learning in Our Public Schools* (University of Illinois Press, 1953).

⁵¹ "Statement to the Commission to Study School Problems of the State of Illinois," March 6, 1952, p. 14, personal files of Arthur E. Bestor, Jr., quoted in Clowse, *Brainpower for the Cold War*, 32.

deep and perilous waters. In a widely broadcast interview with Edward Murrow of CBS, Rickover stressed that education

was more important than atomic power or the navy, for if our people are not properly educated in accordance with the terrific requirements of this rapidly spiraling scientific and industrial civilization, we are bound to go down.⁵²

While Bestor proposed a return to a "basic education" that comprised academic courses ranging in equal measure across the sciences and humanities, Rickover's proposals for curricular reform decidedly emphasized the sciences. It was the training of mathematicians, scientists and engineers that would keep the nuclear arc afloat. And while Bestor urged one curriculum, his orthodox basic education for all high school students, Rickover insisted that the present crisis demanded a more complete overhaul of the public education system. The entire U.S. public high school system, Rickover argued, should be split into two separate schools, like the European model: one tier for normal vocational training, the other tier would train students of "superior intellect" for careers in the professions - especially in the sciences and engineering. Such a massive restructuring of public education would obviously require equally massive federal intervention. Rickover doubted the effectiveness of local control of schools and was distrustful of the inexpertise and provincialism of local school boards. He called instead for

⁵² Quoted in Hartman, *Education and the Cold War*, 179.

large scale federal funding of public education, and a federalized testing program to identify students with "superior intellect."⁵³

THE RED COMET

And then, right as Conant's school visits got underway, the Soviets launched the first human-made satellite into space. On October 4th, 1957 Sputnik I vaulted over the great US education debate and momentarily stunned the critics into silence. It weighed 184 pounds; it was the size and shape of a largish metallic basketball. Four fixed antennae flared out behind its spherical body, like the tail of a comet. It fell into a stable orbit that lapped the earth every 96 minutes. HAM radio enthusiasts could pick up its clockwork pinging every time it swam over the horizon and into radio range. And then, on November 3rd, not even a month later and three days shy of the 40th anniversary of the Bolshevik revolution, the Russians launched another, Sputnik II. The name, "Sputnik" a Soviet neologism, sounded friendly. It meant "artificial fellow traveler around the earth." Comrade in space. Yet, the satellites seemed to many on US soil a harbinger of a faceless, collectivist future.

⁵³ Clowse, *Brainpower for the Cold War*, 35.

Eisenhower struck a posture of calm, demoting the first Sputnik to "one small ball in the air...something which does not raise my apprehensions, not one iota."⁵⁴ Much of the rest of the nation, however, gradually worked itself into a fever. Barabara Clowse writes that "the Russian achievement produced in America a peculiar and definite mixture of depression and panic that lasted for months."⁵⁵ Senator Henry Jackson—sensing collective self-flagellation was in order—urged Eisenhower and the nation to observe "a week of shame and danger."⁵⁶ If the Sputniks were felt as a moral defeat, they were was also perceived as a particularly alarming failure of US science.

Eisenhower's scientific advisory committee met in mid-October of 1957 and urged the president to address what they felt was the nation's clear "shortage of scientific manpower" relative to the Soviet Union.⁵⁷ Writer George Bereday reasoned that the problem could be summed up as kind of trade deficit of imported scientific brainpower: "They have their Germans, and we have our Germans, and our Germans are behind their Germans. That's all there is to it."⁵⁸ Senate Majority Leader Lyndon Baines Johnson saw this as a potential historic shift in world

⁵⁴ Hartman, *Education and the Cold War*, 175; Paul Dickson, *Sputnik: The Shock of the Century* (Bloomsbury Publishing USA, 2009), 119.

⁵⁵ Clowse, *Brainpower for the Cold War*, 6.

⁵⁶ Quoted in *Ibid.*, 8.

⁵⁷ *Ibid.*, 11.

⁵⁸ George Bereday, "American and Soviet Education at Midcentury," *Wisconsin Journal of Education* 92 (January 1960), 19.

order that could be compared to the technological reach of past dynasties. The Romans had criss-crossed Europe and circled the Mediterranean basin with their roads, the British navy ruled the seas, and now the Soviets "have established a foothold in outer space...Soon, the Russians will be dropping bombs on us from space like kids dropping rocks onto cars from freeway overpasses!"⁵⁹

Of course a crisis—and the directions it takes—is often as much, sometimes more, about perception than it is about the immutability of its defining events. Carl Kaestle has noted in hindsight that what appeared as a yawning sci-tech gap was not so very cavernous at all. The US followed Sputnik with Explorer in 4 months and with far less research and development time, suggesting perhaps that our technological resources were deeper and more readily mobilized.⁶⁰ Nonetheless, crisis it was, and one of its vectors directed vituperation back onto US public schools. If this was a failure of US science then it must also surely implicate our mobilization of scientific brainpower and how we trained our current and future scientists and engineers. The critics of American schools were reanimated with a special vigor and sense of eschatological urgency.

⁵⁹ Quoted in Hartman, *Education and the Cold War*, 176.

⁶⁰ Kaestle and Smith, "The Federal Role in Elementary and Secondary Education, 1940-1980," 392.

Even Eisenhower, who was stoic about the Sputnik threat and no special advocate of a radical educational overhaul that might entail large-scale federal intervention, nonetheless joined in the general anti-progressive education, anti-life adjustment sentiments of the moment.⁶¹ In a memo to a White House staffer, Eisenhower held Dewey responsible for the neoprogressive dry rot in the curriculum and urged everyone to take a hard look at the public schools:

Educators, parents, and students alike must be continually stirred up by the defects in our educational system. They must be induced to abandon the educational path that, rather blindly, they have been following as a result of John Dewey's teachings. I quite agree that, so long as he was striving to improve methods, his work was of the greatest possible value. But when he, or his followers went freewheeling into the realm of basic education they, in my opinion, did a great disservice to the American public.⁶²

It is clear that Sputnik accelerated the debate about the public schools and made federal aid to education appear that much more urgent and necessary. Just what to do was still unclear, though, and bound up in a kind of paradox with our own national imaginary. According to *Life* magazine, the Soviets were off to a head start in the Space Race because theirs was a system "which draws or forces all human knowledge into the service of the state."⁶³ If we responded in kind with aggressive

⁶¹ Urban, *More Than Science and Sputnik*, 75.

⁶² Quoted in Hartman, *Education and the Cold War*, 178; and Clowse, *Brainpower for the Cold War*, 106-107.

⁶³ "Common Sense and Sputnik," *LIFE Magazine*, October 21, 1957, 35.

general federal aid to education, would that be a step down the road to totalitarianism?

CONANT AND *THE AMERICAN HIGH SCHOOL TODAY* TO THE RESCUE

If Sputnik brought the debate to a head, then Conant had in hand a ready-made plan that matched, in relief, the very specific form the crisis had taken, and he was able to respond to its febrile rhetoric with what appeared to be a sober common sense solution. He reflected, a decade later in *My Several Lives: Memoirs of a Social Inventor* that "the timing was perfect." Just as Sputnik whipped the wave of criticism and questioning about public schools to a crest, the Conant team stepped forward with their plan and "supplied the answers boldly and categorically."⁶⁴

Yet in a confidential memo to his study team soon after the satellite launches and without the benefit of much hindsight, Conant was both more guarded and specific about what the Sputnik crisis meant for his school study: "It is interesting to speculate what would have been the outcome of my study if it had taken place a year earlier, or if the Russian success with Sputniks had come a year or two later."⁶⁵ Of one thing he was

⁶⁴ James Bryant Conant, *My Several Lives: Memoirs of a Social Inventor* (Classic Textbooks, 1970), 621.

⁶⁵ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Confidential Supplement to J.B. Conant's *The American High School Today: A First Report To Interested Citizens*," January 12, 1959, UAI

sure: his results were the more objective appraisal of the current education situation. He maintained to his team that his findings were insulated from the hysteria surrounding the Sputniks which had "loosed a torrent of unintelligent and uninformed criticism of the public schools." His conclusions were drawn from "academic inventories"—his metric that joined what he felt was the hard data of IQ with enrollment figures for a school's academic curriculum.⁶⁶ What was more, these academic inventories were for students who had graduated in the spring of '57, before the satellite launches. Sputnik, he admitted, had compelled him to shore up some latitude left in his curriculum for the academically talented. Where the pre-Sputnik version had allowed a choice between intensive math or doubling up on intensive foreign language for those students who were not good at math, now post-Sputnik he had "come out strongly for all the youth in the upper fifteen percent studying both mathematics and one foreign language for four years."⁶⁷ Moreover he had decided to increase the minimum years for foreign language for the academically talented from 3 years to 4.

By these new even more rigorous standards, he soberly and privately observed to his team, it was perhaps harder to claim

15.898, High School July-October 1958, Box 42, Harvard University Archives.

⁶⁶ Ibid.

⁶⁷ Ibid.

that many of the schools he had visited were doing an adequate job. Nonetheless he would continue to publicly accentuate the positive:

A decision to stress the positive was made here last Spring. It would have been quite easy by accentuating the negative to have taken my findings and produced a document more nearly like the articles written by Bestor and Mortimer Smith; though I must say these gentleman usually attack the schools for the wrong reasons since they fail to understand the need for vocational programs for those who do not have the ability to handle mathematics and foreign language.⁶⁸

Conant had been, since the early inception of his study, closely attuned to positions of critics like Bestor and Rickover. Communications very early in the project reveal, for example that he hoped his plan would provide substantive opposition to "proposals [such] as that put forward by Admiral Rickover on Nov. 20, 1956 in which he advocates the establishment of separate schools for talented youth and a separation at the age of ten or eleven."⁶⁹

Others have noted that Conant's plan struck a middle ground between the positions of Bestor and Rickover.⁷⁰ But what has gone unexamined was how essential Conant's ideas about talent

⁶⁸ Ibid.

⁶⁹ Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

⁷⁰ Clowse, *Brainpower for the Cold War*; Urban, *More Than Science and Sputnik*; Hartman, *Education and the Cold War*.

and individual differences in "intelligence" were to this compromise. It was precisely through his specific conception of talent—the beating heart of his whole study, actually—that he was able to mediate the debate and bridge its gaps and impasses. As can be seen in the quote above, the failure of Bestor's position, in Conant's eyes, was Bestor's misunderstanding of the nature of individual differences in intelligence. Bestor, the champion of a rigorous academic curriculum, wanted all students to take the same orthodox curriculum.

What Conant believed he knew was that some students, actually most of them, simply did not have the ability—as measured by I.Q.—to succeed in such an academic curriculum. They lacked the basic equipment for that sort of work. Yet, these "normal" students were quite well suited to vocational, technical, mechanical, and clerical professions, and should continue have the opportunity for this type of training in high school. The failure of Rickover's position in Conant's estimation was not that he wanted to identify individual differences in intelligence and then elect the "academically talented" for an academic curriculum, but rather that he proposed a complete and streamlined segregation of students by "intelligence" into two different schools systems. To Conant this smacked of elitism. It was undemocratic and potentially nudged us toward the totalitarian talent sorting machine that

was Soviet education, or toward a return to the aristocracy of the old world. Indirectly referencing Rickover's plan which was enjoying wide circulation in the media, Conant asserted,

For many reasons, I do not think it necessary or wise to adopt the European scheme of education one hears so much about these days. Our pattern of free public schools reflects our unique history and, indeed is the very backbone of our society.⁷¹

Instead Conant was intent on demonstrating:

that it was possible to provide a satisfactory orthodox academic training for students of high I.Q. in several different geographic sections of the country, in communities that were not high income suburban communities, in schools where there was a wide spread of intellectual ability and above all in schools which were organized on a comprehensive basis.⁷²

It was the comprehensive high school, managing students of different abilities all under one roof that was the democratic heart of Conant's plan. "The comprehensive high school is the proper framework for the education of American Youth" as it would "keep together in one school youth from one city or section of a city...irrespective of their talents and vocational

⁷¹ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with William Alexander," September 22, 1958, UAI 15.898, Ability Grouping, Departmentalization, Box 108, Harvard University Archives.

⁷² James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools," March 11, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

goals."⁷³ This was how a democratic society treated natural differences—particularly natural differences in intelligence—apart and yet together. "Social integration" would be achieved across difference and the microcosm of school culture would mirror and reinforce the macrocosm of the larger society.

Thus "individual differences in intelligence" and how to manage and structure schools around them allowed Conant to resolve the poles of the education debate. Moreover, it was seen as an elegant solution because it required altogether less radical restructuring than either Rickover or Bestor's solution. It would be cheaper. Vocational, middle tier and some degree of academic curricula were already in place in many if not most American public high schools. All that was needed was a shoring up, standardization, and stratification of the curriculum for the academically talented, and more and wider testing to determine who belonged where under the one roof of the comprehensive school.

CONANT, IKE, AND THE EMERGENCE OF THE EISENHOWER ADMINISTRATION VERSION OF THE NDEA

Not only did Conant's plan for high school reform saturate media outlets in the year before and after its release, Conant

⁷³ Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

also had the ear and goodwill of some of the most powerful people in the country. On November 10th, 1957, a week after the second Sputnik, Conant sent a high priority telegram to President Eisenhower, care of the president's chief of staff, Sherman Adams. Conant had been friends and worked closely with Eisenhower at least since their days together on the Educational Policies Committee as high profile university presidents in the 1940s. Also recall, that Conant had just finished serving as Eisenhower's appointee as Ambassador to West Germany. Conant sent his pithy telegram to Eisenhower days before Eisenhower was scheduled to begin a series of emergency speeches on the state of education, science and national security in light of the Sputnik launches. Eisenhower's aim was to quell the sudden panic that had erupted and calmly propose a way forward for American public schooling. Conant, armed with early conclusions from his study, wrote:

In connection with your forthcoming speeches on science and education [I] venture to call your attention to following points based on my two months intensive study [of] public high schools in five states [in the] middle west.⁷⁴

Conant stressed the importance of local leadership of schools through the work of competent school boards, superintendents and

⁷⁴ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Telegram to President Eisenhower (via Sherman Adams)," November 10, 1957, UAI 15.898, A-Correspondence: 1957-1964, Box 127, Harvard University Archives.

principals. And while more tax revenue and some form of overarching plan forward was warranted, Conant warned that "drastic reforms and crash programs put forward in recent days [i.e. those of Bestor and especially Rickover] may cause damage to schools by confusing school boards and undermining confidence of communities." Things were not nearly as bad as these alarmist critics suggested: "In my opinion, if all public high schools in the US were doing as good a job as some I have visited in large and small cities, we should have little concern with quality secondary education."⁷⁵

Conant then underscored the importance of selecting and electing the "academically talented" within the context of the comprehensive high school: in schools that had passed his muster, he observed that the top tier of "boys with high academic ability are being identified in the 7th and 8th grades and urged to take mathematics and science adequate as basis [for] further higher education. In these schools only instruction of foreign language [is] weak." The "chief obstacle to improvement in many [other] schools appears to be...[the] failure of school authorities to recognize national interest in early identification of academic talent and adequate development [of] such talent by hard work in solid academic curriculum."⁷⁶

⁷⁵ Ibid.

⁷⁶ Ibid.

It is noteworthy that in his private correspondence with the president, Conant forgot about girls of high academic ability, but in his more carefully edited published report, these girls are reinstated. Finally, this call for greater emphasis on and attention to talent and individual differences in intelligence was expertly mitigated by Conant at the end of the telegram. He concluded that what this nation ultimately needed in this "age of intercontinental ballistic missiles" was not just a professional elite of scientists and engineers, but "a people who will not panic and political leaders of wisdom courage and devotion with capacity for solving intricate human problems. Not more Einsteins but more Washingtons and Madisons."⁷⁷

This telegram was basically a thumbnail *précis* of the recommendations of his school study, clearly already largely formed in November of 1957. It was anti-alarmist and presented, clear achievable and positive goals that did not entail radical overhaul of public schools; it matched in pitch and tenor, almost note for note, the very argument Eisenhower needed and would soon make. Sherman Adams, the president's chief of staff, quickly replied to Conant:

Dear Jim, I had a chance to take your telegram in to the president personally. He read it carefully and said, "That represents my thinking exactly." In addition, I showed it

⁷⁷ Ibid.

to Marion Folsom [Secretary of Health, Education and Welfare] and others of the staff, all of whom agreed.⁷⁸

Conant responded that he was "delighted to learn that the president agreed with [his] thinking and that the others on the staff shared the same views."⁷⁹

Urban has also examined Conant's telegram to Eisenhower and the ensuing exchange, though he has not explicitly contextualized it in relation to Conant's high school study or the subsequent speeches Eisenhower would make. Urban indicates these communications between Eisenhower and Conant were widely circulated throughout the Eisenhower administration and that Elliot Richardson, the Assistant Secretary of Health, Education and Welfare was quick to take note of the stipulations and implications and this exchange.⁸⁰ Richardson, a recent Eisenhower appointee, worked closely with the Office of Education (a subdivision of HEW) and had been tasked with "translating the programs and plans of the professionals in various federal agencies into legislation that addressed real problems."⁸¹ This marks in a very real sense the beginning of concrete efforts on the part of the White House administration

⁷⁸ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Sherman Adams," November 12, 1957, UAI 15.898, A-Correspondence: 1957-1964, Box 127, Harvard University Archives.

⁷⁹ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Sherman Adams," November 19, 1957, UAI 15.898, A-Correspondence: 1957-1964, Box 127, Harvard University Archives.

⁸⁰ Urban, *More Than Science and Sputnik*, 84.

⁸¹ Ibid., 78.

and its subordinate departments (Health Education and Welfare and the Office of Education) to assemble and advance a legislative proposal for federal aid to public education. The executive branch proposal that would later emerge would be debated against similar measures from the House and Senate. The compromise bill would be voted into law in September of 1958 as the National Defense Education Act.

On November 13th 1957, three days after Conant's telegram and a little over a week following the launch of the second Sputnik, Eisenhower delivered the second of four addresses on "science and security" from Oklahoma City. These speeches, broadcast nationally on television and radio and addressed to an "American people... aroused about the earth satellites," were intended to diffuse the mood of panic and collective self-castigation that had swept the country in the wake of the Sputniks. This second speech from Oklahoma City focused more intensively than the others on the state of American public education, its relation to national security, and Eisenhower's formative plans for its improvement. It moreover reveals to historical analysis that Eisenhower and Conant were very much on the same page.⁸²

⁸² Dwight D. Eisenhower, "Radio and Television Address to the American People on 'Our Future Security,'" (November 13, 1957): accessed May 5, 2015, <http://www.presidency.ucsb.edu/ws/?pid=10950>.

Eisenhower opened his address by acknowledging that the defining characteristic of this American epoch—"one of the great ages in the story of mankind"—was its scientific achievements. Moreover, he held, this scientific approach to the world had become an essential element in the fabric our particularly American democracy:

Drawing on all the cultures of the past, and on the rapid growth of science, we worked out a way in which every person can be his own competitive self, and at the same time be a dedicated member of a harmonious community.⁸³

This American scientific democracy presented stark contrasts to the Soviet system which despite its "rigorous educational system and technological achievements...postpones again and again the promise to each man that he will be allowed to be himself, and to enjoy, according to his own desires, the fruits of his own labor."⁸⁴

Eisenhower then discussed defense spending and summarized recent advances in military technology before turning to what, he argued, was the greater and more pressing problem: the "strengthening of our scientific education." This of course was not just a problem for right now, but an issue with long-term consequences that would play out on a generational scale: "it takes time for a tree to grow, for an idea to become an

⁸³ Ibid.

⁸⁴ Ibid.

accomplishment, for a student to become a scientist."⁸⁵ Making use of recent sociological data on the state of Soviet education, Eisenhower noted,

The Soviet Union now has—in the combined category of scientists and engineers—a greater number than the United States. And it is producing graduates in these fields at a much faster rate. This trend is disturbing. Indeed, according to my scientific advisers, this is for the American people the most critical problem of all. My scientific advisers place this problem above all other immediate tasks of producing missiles, of developing new techniques in the Armed Services. We need scientists in the ten years ahead. They say we need them by thousands more than we are now presently planning to have.⁸⁶

In light of what appeared to be a growing scientist and engineer gap, which would in turn lead to a science and technology gap in the next generation, Eisenhower signaled his intentions to develop and support some form of federal program to aid and accelerate the education of future American scientists and engineers. It would be an effort that demanded cooperation between all levels of government and communities themselves, but nonetheless federal involvement was a necessary component: "The Federal government can deal with only part of this difficulty, but it must and will do its part."

He then made a number of specific recommendations for educational reform that crisply echoed those Conant had laid out in the telegram from three days before. In particular,

⁸⁵ Ibid.

⁸⁶ Ibid.

Eisenhower reiterated Conant's proposals for testing and a math, science and foreign language intensive curriculum designed for the academically talented:

We should, among other things, have a system of nation-wide testing of high school students; a system of incentives for high aptitude students to pursue scientific or professional studies; a program to stimulate good-quality teaching of mathematics and science; provision of more laboratory facilities; and measures, including fellowships, to increase the output of qualified teachers...Remember that when a Russian graduates from high school he has had five years of physics, four years of chemistry, one year of astronomy, five years of biology, ten years of mathematics through trigonometry, and five years of a foreign language.⁸⁷

Eisenhower then concluded this education-related portion of his speech with a reinstatement of the value of wise, sober statesmen and a citizenry not easily swayed by ideology or alarmism. This was the very same trope with which Conant concluded his telegram. It borrowed the very same phrasing as it similarly worked to mitigate, soften and make more democratic what otherwise might seem an elitist call for the selection and election of just a few for special educational opportunities.

Young people now in college must be equipped to live in the age of intercontinental ballistic missiles. However, what will then be needed is not just engineers and scientists, but a people who will keep their heads and, in every field, leaders who can meet intricate human problems with wisdom and courage. In short, we will need not only Einsteins and Steinmetzes, but Washingtons, and Emersons.⁸⁸

⁸⁷ Ibid.

⁸⁸ Ibid.

Though Eisenhower was a republican, a party then largely opposed to federal spending on domestic programs like public education, he was a moderate republican and "not a rigid ideologue."⁸⁹ He had voiced support for federal aid for school construction as a part of his successful 1952 campaign, but had been reluctant about, though not opposed to, federal aid for education during his first term as president.⁹⁰ Urban argues that the Eisenhower administration sought short term "categorical" aid to education, targeted for specific purposes, rather than the more general and long term federal spending that organizations like the NEA hoped for.⁹¹ Here, then in this Oklahoma City speech on science and education, Eisenhower announced his intention to develop and support federal legislation that would authorize spending for public education, but spending targeted specifically to the identification and training of "high aptitude students," and to the improvement of math, science and foreign language facilities and curricula for those students. This was a template for reform that harmonized nearly note for note with Conant's emergent conclusions from his high school study. And while recommending new policy that would identify and promote those with high measured IQ, Eisenhower, following Conant, concluded

⁸⁹ Urban, *More Than Science and Sputnik*, 75.

⁹⁰ Ibid.

⁹¹ Ibid., 7, 75, 129.

with a gesture to "wisdom," a fair-minded democratic quality of thought that could be cultivated in anyone, that was not just the province of those special few of high intelligence, aptitude or scientific ability. All of this was situated, made reasonable, even urgent within the context of the mounting importance of scientific knowledge and the threat of Soviet scientific and technological supremacy.

After the Oklahoma speech Eisenhower tasked Secretary of Health, Education and Welfare Marion Folsom with drafting and formalizing the executive branch proposal now referred to within the White House as the "Educational Development Act of 1958." It is now clear, through the discovery of new documentary evidence, that Conant consulted with Folsom during this process and helped further shape this emerging bill. Conant and Folsom met on at least one occasion—November 29th, 1957—to review Folsom's bill-in-progress, a bill which was intended "to strengthen our education system in its capacity to meet critical national needs."⁹² Then on the 2nd of December, Conant relayed his comments and reactions to Folsom's plan to Sherman Adams, the president's chief of staff. Conant's letter to Adams is

⁹² James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Sherman Adams (regarding Meeting with Secretary Folsom)," December 12, 1957, UAI 15.898, A-Correspondence: 1957-1964, Box 127, Harvard University Archives.

revealing, and does not appear elsewhere in the historiography, therefore portions of it deserve to be quoted at length.

It is important to note that while both Conant and Eisenhower preferred limited and targeted federal intervention to more liberal, general aid to schools, this letter suggests that Conant advocated more total expenditures than the administration had, at least initially, in mind. Conant wrote to Adams:

In general I liked the program, though whether it goes far enough or involves anything like enough money may be questioned (and certainly will be by many educators, if the total proposed expenditures are no greater than now contemplated).⁹³

What is clear is that the emerging administration plan continued to advocate for the selection and election of "academically talented" for an academic curriculum, and that this, unsurprisingly, had Conant's undivided support. He noted:

I am enthusiastic about the scheme for identifying the academically talented youth by a testing program. This will require careful explaining to the public and to some educators if it is not to be misunderstood. Such a process of explanation, however, would in itself accomplish an important purpose. For the idea that we must distinguish between the academically able and those who are not and give them different types of high school education is fundamental to an improvement of the present situation. A push from the Federal Government here can accomplish a great deal without raising the spectre of "Federal Control of Education."⁹⁴

⁹³ Ibid.

⁹⁴ Ibid.

As we have already seen, intelligence testing and stratified curricula were at the heart of Conant's reform, and "fundamental to an improvement of the present situation." It was the necessary step in Conant's eyes for the rationalization and modernization of the public high school in the context of the Cold War. What is interesting to note here—beyond Conant's continued direct involvement with the Eisenhower Administration education bill—is that in Conant's estimation, this selection of talent was still a norm-in-flux, on the cusp of, but not yet universally accepted as a norm-in-practice. "Careful explaining" to the public at large and to educators—a concerted PR effort for which we have seen Conant was already preparing—was in order.

Clearly institutionalizing a nationwide "testing program" through federal legislation would, from Conant's perspective, efficiently and effectively address the problem of the schools. But from our historical perspective, it also becomes more apparent how this institutionalization—if preceded with sufficient "explaining"—would go a long way toward stabilizing this norm-in-flux into a norm-in-practice. Belief would reify into a seeming-fact that made possible all manner of organizational revision, simplification, and streamlining. Likewise of interest here is the degree to which Conant felt the Federal Government was specially suited to this task. Federal

involvement in this context--the selection of natural talent--would not seem intrusive, would not summon the "spectre of 'Federal Control of Education,'" would not invite the sort anti-government resistance that had blocked previous efforts to pass federal level educational legislation. This powerfully suggests, in the eyes of Conant and his contemporaries, the apolitical, inherent and uncontestable nature of talent or individual differences in "intelligence." Talent in Conant's hands took a highly political question--what should be taught and how? (a question against which Bestor and his allies railed) and transmuted this into an essentially apolitical one: who should be taught what? Yet, this remained an apolitical question only to the degree it capitalized on and reinforced beliefs about individual differences in intelligence. It located the concerns of the social order in the individual--smart or not-so-smart. It recast the problem of equality of opportunity as a matter of sorting individual differences in perceived worth and ability.

It also had political wheels. It struck at so many points a near pitch-perfect harmony with Eisenhower's agenda. Sherman Adams posted a rapid reply to Conant: "Many thanks for writing at such length about the science proposals. They will be very helpful in our consideration of this vital question."⁹⁵

⁹⁵ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with Sherman Adams (regarding Meeting with Secretary

This closer look at the emergence of an Administration bill, and Conant's close involvement in the process, still does not definitively resolve the historiographical dispute concerning the role of Sputnik in the initiation and later passage of the National Defense Education Act. Was Sputnik merely an accelerant--everyone agrees it was at least this--or was it also an event that was *necessary* (but not sufficient in its own right), for the mobilization of federal education legislation? There is good evidence, explored in the next chapter, that suggests legislative momentum had been growing at least since the first White House Conference on Education which Eisenhower initiated in 1955. NDEA still might have happened without the Sputniks. However, the specific chronology of these exchanges documented above (between Eisenhower and Conant a week after Sputnik II, the echoing of Conant's telegram in Eisenhower's speech three days later, the consultations between Conant, Folsom and Adams over the next month), strongly suggests how effective a catalyst the Sputnik launches were. The unfolding of these events also illuminates and how timely, and perfectly honed Conant's nascent recommendations were for this particular political moment.

Folsom)," December 10, 1957, UAI 15.898, A-Correspondence: 1957-1964, Box 127, Harvard University Archives.

As I have already argued, Conant's efforts played a large role—not in the passage—but in the formulation and public reception of the National Defense Education Act. Recall, too, how controversial federal funding of schools had been, historically. Public reception needed to be managed. Conant and Eisenhower were very much on the same page and in regular and close communication during this critical time period. Both were resistant to large general federal aid packages that ignored the role of local and state government and school communities. Their response was to advocate for more targeted recommendations that relied chiefly on selection and sorting, and an intensification of math, science and foreign language curricula for select students. This did in the end ask that schools make some changes: hiring guidance staff, implementing more standardized testing, providing a more intensive academic curriculum for the academically able. Yet these changes amounted to not so much the wholesale reorganization of schools-as-institutions so much as it was the re-organization of individuals within schools. Critically, this re-ordering and segmentation of individuals occurred within one building, under the auspices of an institution that everyone entered into one and the same.

In a sense, where Bestor could be characterized as a conservative voice in the education debate (stumping for the

revitalization of the curriculum of yesteryear and its canonical arrangement of classical disciplines), Rickover then in this configuration—despite his hawkish national security state conservatism—was in fact radically progressive; he advocated for the more efficient, federally governed ordering of a population (or at least of opportunities afforded to a more clearly segmented population), and for this ordering to be carried out based on a well-defined scientifically operationalized criterion: I.Q. And this is precisely where Rickover's plan went 'beyond the pale' for the majority of his American audience. The two-schools model gave off a decidedly European cast which could evoke, depending on the context, the elitism of an Old World aristocracy or the totalitarianism of a rapidly modernizing Soviet Union.

If Conant split the difference here between Bestor and Rickover, it seems to me he charted closer to Rickover. The plans of Conant and Rickover depended at their core on identifying and ordering perceived natural individual differences in the social body. Though Conant, far better than Rickover, appreciated the democratic symbolism of the 'one roof' of the comprehensive school. Conant's ideas about talent and public education were consonant with the political needs of the moment. As much as Sputnik brought the education debate to the threshold of legislative action, Conant's crafting of beliefs

about natural differences in intelligence brooked the curriculum debate and provided a precise path forward.

Conant had struck a compromise that united a broad white middle-class consensus around the "common sense" of individual differences. Voices of dissent seemed few and far between, but those that did emerge discernible against the background sometimes offered trenchant criticism. Irving Gersten, assistant executive secretary of the Council for Basic Education thought Conant's plan lopsidedly favored the gifted, a category that was somewhat suspect to begin with. "Whoever derived that 15 percent figure? What's left by way of college preparation programs for the others going to college? It seems to me that there's a European-like, but gentler, tendency to vocationalize the kids too early for their own good."⁹⁶

CONCLUSION

If Chapter 2 demonstrated how central "IQ" was to the design and production of *The American High School Today*, Chapter 3 has shown how Conant's plan to organize schools around individual differences in intelligence helped resolve a national debate over curriculum in the public schools. It is crucial to note here, that while the Sputniks certainly brought this

⁹⁶ Loren B. Pope, "PRINCIPALS BACK CONANT'S REPORT; Most Find His Study of High School Makes the Teaching Job Easier," *The New York Times* (January 25, 1959).

controversy to a head, Conant had laid out the blue print of his study long before the unanticipated satellite launches.

Furthermore, the close timing of *The American High School Today* with the National Defense Education Act, and the close overlap of their recommendations strongly suggest the intentional coordination. Documentary evidence connecting the agendas of Conant and the Eisenhower Administration further substantiates the intentionality of this congruence.

I argue that not only was Conant an *ad hoc* contributor to the Eisenhower Administration version of the bill, but that *The American High School Today* was designed to function as the persuasive arm of the National Defense Education Act, conditioning public, state, and local reception to and implementation of this Federal initiative. If Chapter 3 has examined how *The American High School Today* was perfectly positioned to resolve a national debate about public school curriculum, Chapter 4 demonstrates how the terms of Conant's plan could appeal to its audience in relation to unstated, beliefs about "race," nation (and its political geography), and the differential value of different kinds of knowledge.

CHAPTER IV

"INTELLIGENCE" AND ACADEMIC TALENT: RESOLVING THE POLITICS OF PLACE AND "RACE"

This chapter explores how James Bryant Conant's ideas about individual differences in "intelligence" worked, often implicitly, as a political, rhetorical and symbolic tool that could be used to 1) weaken long-standing rural-conservative resistance to increased federal involvement in local and state-run school systems, and 2) ease white middle class fears about "race" and school integration in the early years after the *Brown v. Board* decision. To accomplish this Conant sustained an allegory about native "intelligence" and nation that purported to unite the diverse political geography of the country. Ideas about talent could be used to forge an apparent compromise between the poles of "rural" and "urban," "federal" and "local," and "black" and "white." Conant positioned the "local" as a generative source of natural talent, thereby honoring it in relation to the "national/federal." Likewise the disparities of "race," of White and Black, would fall away, if we kept our attention on the only difference that mattered: individual "intelligence." Reconciling these poles was particularly important given the landmark developments in public education that contextualized this moment: the National Defense Education

Act's extension of federal influence into the local sphere, and *Brown v. Board's* mandate to desegregate the schools.

The first half of this chapter will examine Conant's metaphorical construction of the small-town American locality, and its local comprehensive high school, as part of an idealized historical narrative of American democratic exceptionalism. This will include a close reading of portions of *Education For All American Youth*, an EPC authored document from the 1940s that Conant was closely involved with and deeply influenced by. I will then consider how this depiction of the local was balanced against Conant's conception of a dependable natural distribution of talent that arose out of the local and yet spanned the entire national body. I argue that by harmonizing these two points of view (local and national) through the trope of "intelligence," Conant honored the generative power of the local while suggesting a check to its provincializing forces. By the same stroke he furnished a persuasive vision that urged the comingling of national and local agendas in the interest of the better training of scientists.

The second half of this chapter will examine how scrupulously Conant avoided, in *The American High School Today*, any mention of "race," racism, or issues related to the desegregation of public schools: this a mere four years after the revolutionary *Brown v. Board Supreme Court* decision. I

argue that Conant worked to redefine the diversity that schools must accommodate as an intellectual one: the normal distribution of academic talent that occurred within any comprehensive school. This for Conant was the difference that mattered. In tandem with this redefinition of diversity, Conant then worked to redefine the meaning of "integration" itself. The integrated school was not necessarily one that successfully bridged racial or ethnic divides, but rather one that successfully accommodated a natural diversity of intellectual ability. This race-free or race-neutral conception of diversity and integration I argue, suggested to sympathetic readers that reorganizing public education around individual differences in "academic talent" offered a way to "fix the schools" that nonetheless escaped the contested politics of "race."

INDIVIDUAL DIFFERENCES IN INTELLIGENCE AND THE POLITICS OF PLACE

Conant's plan worked explicitly to resolve conflict at the more overt levels of discourse involved in the contemporary curriculum debates involving Bestor, Rickover and others. Additionally, I argue that a key to the success of Conant's vision was that it also resolved much deeper more latent conflicts related to public education. One such latent conflict involved the perceived dichotomy between "federal" and "local" in American politics and the longstanding resistance to federal

funding of public education that this dichotomy generated. I argue that the vision of educational reform that Conant crafted in *The American High School Today* effectively deployed "talent" or "individual differences in intelligence" in such a way that it harmonized the relationship between the "federal" or "national" and the "local" and suggested a way forward for the federal funding of America's locally governed public high schools. As mentioned earlier, this metaphorical use of "talent" takes on heightened interest in light of the contemporary political and legislative context around the emergence of the National Defense Education Act.

In some sense, Conant's NDEA-era use of "intelligence" to bridge a perceived gap between the interests and roles of the "federal/national" and "local/provincial" can be traced back to the National Scholarship Program he inaugurated soon after becoming president of Harvard University in the early 1930's. With the consultation of intelligence testers Carl Brigham and Henry Chauncey, Conant crafted an examination (in fact the forbearer of the SAT) that could be cast wide across the nation in search of academically talented individuals from regions of the country typically underrepresented in Harvard admissions. In setting up this scholarship fund for high scoring graduating high school seniors, Conant sought to break the hold of class privilege at Harvard, and add scholastic diversity to what was

otherwise a the pipeline for wealthy, but perhaps somewhat academically disinclined students, that continuously fed from elite east coast preparatory schools. Conant's scholarship students would be of high intelligence, as measured by standardized tests, and from off-the-beaten path sorts of places; students who in Conant's estimation had the talent but otherwise would not have had the means to attend an Ivy League school like Harvard. This scholarship program would help these worthy, otherwise-overlooked individuals toward leadership positions in the sciences, academia and the professions more generally. Conant's scholarship program drew its first pool of students in 1934 from schools largely in the Midwest, west of the Alleghenies. By 1937, this Harvard Scholarship examination (the prototype for the modern SAT) was being administered in 150 sites all over the country.¹

Crucially, though, if Conant's scholarship plan worked at least ostensibly to undo legacies of class privilege and even to equalize the sprawling politics of place, stark gender disparities would be quietly, effortlessly reinscribed by this selection process. This was of course a testing program explicitly intended for scholarship and admissions at Ivy League schools, institutes of higher education which were almost

¹ Nicholas Lemann, *The Big Test: The Secret History of the American Meritocracy* (Macmillan, 2000), 27-30, 38-40.

exclusively male for much of the 20th century.² All-women's affiliate Ivies, like Radcliffe, likely would not have participated in the same way or to the same degree, if at all, in this new test-driven scholarship program. Even if Conant did not make distinctions by gender here, young men were the implicit beneficiaries of these programs, and the implicit future leaders of their professions.

Casting wide the net of testing to find hidden talent in all manner of forgotten corners on the American map was a project that animated Conant's career as an educator from the 1930s onward. As *The American High School Today* took shape, it increasingly depended on particular characterizations of what was the federal/national and what was the local/provincial.

THE LOCAL COMPREHENSIVE HIGH SCHOOL

Central to Conant's depiction of the "local" was the local comprehensive high school—an institution that was in his definition inextricably shaped by the culture, economy, and the particular sensibility of its place. The local comprehensive high school was both of the community it served, and in turn it served the entire range and diversity of high school aged

² Anne Fausto-Sterling, *Myths Of Gender: Biological Theories About Women And Men, Revised Edition* (Basic Books, 2008), 17; Barbara Miller Solomon, *In the Company of Educated Women: A History of Women and Higher Education in America* (Yale University Press, 1985), 78-103.

students that lived there. Critically, for Conant diversity meant, more than anything else, hierarchized differences in natural ability. The comprehensive high school then was tasked with "providing good and appropriate education, both academic and vocational, for all young people within a democratic environment."³ Across its stratified range of curricula, then, the comprehensive high school became an "intellectual meeting ground for all the students" in its community "irrespective of their talents and vocational goals."⁴

In its forging unity out of intellectual difference at the local level the comprehensive high school was thus for Conant an engine of democracy in its own right, and more, an exceptionally and particularly American institution:

I believe it accurate to state that a high school accommodating all the youth of a community is typical of American public education. I think it safe to say that the comprehensive high school is characteristic of our society and further that it has come into being because of our economic history and our devotion to the ideals of equality of opportunity and equality of status.⁵

³ James Bryant Conant, *The American High School Today: A First Report to Interested Citizens*, 1st ed., Carnegie Series in American Education 1 (New York: McGraw-Hill, 1959), ix.

⁴James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner," December 21, 1956, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

⁵ Conant, *The American High School Today*, 1959, 8.

AN IDEALIZED HISTORY: AMERICAN DEMOCRATIC EXCEPTIONALISM

During his service as ambassador to West Germany, Conant had talked to many Europeans about US public education. He found that French and Germans—long-accustomed to more centralized management schemes—were boggled by what they saw as the United States' crazy-quilt local governance of a public institution of such national importance as public education. But Conant explained, the American approach to its schools grew out of the rugged individualism of our bootstrapping pioneer history. It was also moreover fortified by a healthy distrust of an overweening and potentially anonymizing federal authority that might not represent the particular interests and needs of particular places:

The doctrine of local responsibility and community independence can be related to our pioneer history without difficulty. Parish and county autonomy in the South, the seventeenth-century independence of New England church congregations, and suspicion of centralized government are among the factors that shaped the present political structure of our school systems in many states.⁶

For Conant then the local comprehensive high school's origin—and its locus support and the ambit of its service—was its immediate community. It was moreover, the place where human difference met and then organized and resolved itself in cooperation toward the larger interests of the community. It

⁶ Ibid, 9.

was an inextricable part of its particular place and as such it was the essence and ongoing crucible of a particularly American form of democracy. This American democracy was perhaps more authentic than any other because it arose in grassroots fashion from the countless communities—each with their own comprehensive high school—that dotted the land.

Conant's idealization of the local school and local community as a democratic pastorate drew from particular Educational Policies Committee work he was involved with in the 1940s, work that led to the publication of the widely read *Education for All American Youth*.⁷ Published in 1944 under the supervision and coauthorship of William Carr, *Education For All American Youth* was in Conant's estimation, "the most important book published about public schools" in his lifetime.⁸ Conant actually played a role in the production of the book and its reissue in 1951, and wrote of his involvement: "of one thing I am sure: if I had not participated in the production of *Education for All American Youth* my life would have been quite different."⁹ *Education for All American Youth* would come to

⁷ Conant, Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

⁸ James B. Conant, "An Autobiographical Fragment," in *Leaders in American Education: The Seventieth Yearbook of the National Society for the Study of Education, Part II*, ed. Robert Havighurst, vol. 70 (NSSE; distributed by the University of Chicago press, 1971), 122.

⁹ Ibid.

shape how Conant would define and determine the extent to which democratic "integrating forces" worked within schools to join students together in a sense of common purpose, despite their differences in ability. It came also to shape his *American High School Today* characterization of the local school within local community as a foundational pillar of American democracy.

Education For All American Youth followed the broader philosophical contours of the Life Adjustment movement and offered a prescriptive treatment of educational policy for the post-World War II era. Further, it accomplished much of its purpose by situating a descriptive analysis of schooling-in-action in a composite fictional bucolic Smalltown, USA which the text named "Farmville." In fictional Farmville, the local public high school was the center of a colorful community life. The town's plays, festivals, folk dancing, seasonal pageants, and (since the end of the war) an annual armistice festival, all relied on the high school as a civic and cultural forum.¹⁰ And while the school gave in countless ways to its community, Farmville rededicated its own local resources—both in times of scarcity and abundance—back to its schools.

Farmville, a narrator explained, had to pull together to weather the vicissitudes of market and nature. The depression,

¹⁰ Educational Policies Commission, *Education for All American Youth* (National Education Association, 1944), 124-125.

drought and dustbowls of the 30's had taken their toll. Denizens of Farmville had never had as much money as their city cousins either. And while a distant and bureaucratic Federal government rather impersonally dumped New Deal money into agriculture, none of these funds were earmarked for Farmville school infrastructure or educational needs. Nonetheless, Farmville worked together democratically, cooperatively, as a community to solve its problems. It made its schools better—even in lean years and despite lack of Federal funding for education. These improved schools in turn redoubled their dedication to "the betterment of the life of all the people of their communities."¹¹

This reciprocal and interactive nature between the life of the school and the life of the community again suggested that the origins of American democracy was inculcated in and arose out of the local schools: "Here, in a society which is familiar and relatively simple, pupils learn the meaning of democracy and the methods of democratic action through direct experience in face-to-face relations."¹²

Moreover, the democratic culture that arose out of the local school was part of a larger and much more grandiose teleology; it was ultimately linked with—and rejuvenated—the

¹¹ Ibid, 24-25.

¹² Ibid, 78.

Spirit of Democracy that was the legacy of Western Civilization. Recapitulating a mythic narrative of national progress and American exceptionalism typical for the era, *Education For All American Youth* asserted that the United States, following World War II, now bore the torch for this democratic *Spiritus Mundi*:

We are inheritors of freedom-loving people, liberal ideas, and spiritual ideals from all of western civilization. Our national history is marked by the achievements of men and women of high purposes, prophetic vision, and indomitable courage, and by ever-widening diffusion of the blessings of liberty among the people. Of all the nations in all of history, we now have the means and opportunity to achieve the freedom and security for which mankind has struggled through the ages.¹³

And again, as in Conant's later *The American High School Today*, one of the defining characteristics of this school-centered democracy was how it accommodated difference in native ability through curricular stratification. The typical classroom in the typical Farmville school had to deal with students with a diversity of interests and life-plans, and even more fundamentally a difference in raw intelligence: "Add to this variety of interests a range of I.Q.'s from 85 to 135, and the need for diversification of instruction is evident."¹⁴

It was clear to Conant though that this vision of the local as a democratic pastorate—transplanted from *Education for All American Youth* and repurposed in *The American High School Today*—

¹³ Ibid, 92.

¹⁴ Ibid, 53.

had to be reckoned against a new and intensified national-level need in this new Cold War order. And while Conant was publically far less alarmist than most Sputnik-era commentators, he did readily allow that this was now a "highly constricted and deeply divided world" and that the tempo and urgency of the American endeavor was now hastened and intensified around the globe by a "grim competition with the Soviet Union in newly developing countries."¹⁵ The local was the source and continuing crucible of our democratic spirit, but the nation was experiencing a new acuity of need. This of course was what the rigorous and more standardized search for academic talent was purportedly all about. If the local was the source of our democratic spirit, it was also the origin of academic talent. Recall, Conant's clearly hereditary assumption that the frequency of real academic talent followed the laws of population genetics and would occur with a stable, dependable frequency (15 - 20% of high school aged youth) across the country. Talent glittered among the dross from sea to shining sea, and—on a per capita basis—it was just as likely to wink into existence in an Anytown or a Farmville as it was to emerge in the big city.

¹⁵ Conant, *The American High School Today*, 1959, 71-72.

In the context of international struggle, then, the identification of this naturally occurring national-caliber talent became much more important, essential in fact. In Conant's estimation, the academically talented were the province of the nation. Getting the "top 15-20% of the student body on the basis of academic aptitude" into a curriculum that matched their abilities was as much "in their own interest as well as that of the Nation."¹⁶ In fact, if high schools followed the recommendations for the talented that Conant laid out, they were *de facto* making "their contribution to the national effort."¹⁷ If they did not, they were perpetuating a pattern of intellectual wastage that bore consequences for the country:

The loss to the individual from not electing a suitable program in high school is clear. So too is the loss to the nation. From the 15 per cent of the youth who are academically talented will come the future professional men and women. These people ought to have as wide and solid an education as possible. It is in the national interest to have them develop their capacities to the full and to start this development as early as possible.¹⁸

High schools that were too small to support specialized curricula for the academically talented and that nonetheless still refused Conant's call to consolidate, might trap those few talented students and teachers who lived there in a cul-de-sac

¹⁶ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence with William Alexander, September 22, 1958," UAI 15.898, Ability Grouping, Departmentalization, Box 108, Harvard University Archives.

¹⁷ Conant, *The American High School Today*, 1959, 84.

¹⁸ *Ibid*, 59.

of mediocrity. When this happened "a very scarce national asset [would be] squandered."¹⁹

Thus, in more trying times that forced matters of national security into the foreground, the idyll of the local, and the meandering, unsystematic patterns of local life, was not enough. The interests of the national must also be secured. In order to bridge the difference between these two spheres or domains of American life, the local had to be standardized against, and made commensurate with the national. Of course talent, real natural individual intelligence was the very rhetorical device and scientific measurement that could accomplish this. Conant was careful, for example, to remind school administrators that when sizing up real academic talent at their local school they must only use psychometric measures of aptitude that were normed against a national (not a local or state) baseline. Doing this would ensure that the locally identified academic talent measured up to national-level standards.²⁰ In this way the national and the local could be made to concentrically and sympathetically align.

¹⁹ Ibid, 79.

²⁰ Ibid, 58, 135.

"INTELLIGENCE" AS A CHECK TO LOCAL PROVINCIALISM

Crucially though, not everyone could be as objective as Conant and his collaborators. People had their predilections and the *attitudes* of any particular locality must be encouraged to align with the national interest and what the science of psychometrics told us about this national (nigh universal) distribution of intelligence. Conant noted that:

Probably one of the most important factors in determining whether a high school is providing adequately for the education of the academically talented is the attitude of the community.²¹

In fact, Conant was somewhat "dismayed" over the course of his school-study visits by the amount of time extracurriculars occupied in lives of students he talked to.

I have been in some cities where boys and girls said that they were out of their homes after the evening dinner hour more often than they were in them. There was nothing wrong, *per se*, with what they were doing—club meetings, junior lodge meetings, dramatics and music rehearsals, athletic events sponsored by community organizations. But their home study time was interfered with.²²

In Conant's estimation, there was the very real danger that the priorities of parents and the communities at large did not sufficiently elevate orthodox academic pursuits like math,

²¹Ibid, 39.

²² Conant, *The American High School Today*, 1959, 39.

science and foreign language. In an early, pre-project letter to John Gardner, Conant wrote:

As you will see, I have already constructed a hypothesis to explain some of the troubles with the training of scientists in the United States, this hypothesis being that the spirit of the community and above all the attitude of the parents are such as to make it difficult for the young people to devote the time and energy necessary into their school work to master "hard" subjects. If this hypothesis were confirmed by such inquiries as I have suggested, clearly steps for improvement of the situation would involve more than changing pedagogic methods.²³

This insufficiency of pedagogy (*how* a subject was taught) to address "troubles with the training of scientist" was in large part surmounted for Conant, as we have already seen, by answering the question of *who* was to be taught *what*?: the sorting of individuals by "intelligence." You could not just take a hard subject and render it easy—open up its intricacies to everyone—by fiddling around with how you taught it. This was the error of Life Adjusters and other progressive pedagogues who invested perhaps too much hope in the *interaction* of learners, teachers and content. The result was a dumbing down of that content. Knowledge itself was not democratic. Some subjects could be learned by everyone. Other subjects—the hard ones—could not. Recall that in Conant's estimation, to be "able to

²³ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner, March 12, 1956," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

study effectively and rewardingly a wide program of advanced mathematics, science, and foreign languages," one first had to be "academically talented"—that top 15% of the national norm, I.Q. 115+—to begin with.²⁴ And of course, as Conant's use of quotation marks indicate above, "hard" was relative to ability. The "hard" subjects were not insurmountably so, *if* you first had the native ability and then were encouraged to work at them.

Reciprocally, then, the other and often unstated side of the scientist training issue was the problem of getting everyone to avow and value not only the superior "intelligence" of select individuals, but also the superiority of the "intelligence" or knowledge inherent in select subject disciplines: the hard ones. This is captured above in Conant's worry that "the spirit of the community and above all the attitude of the parents are such as to make it difficult for the young people to devote the time and energy necessary into their school work to master "hard" subjects."

With the publication of his study, Conant expressed this sentiment or guiding hypothesis in a way that even more explicitly linked "bright" individuals with "bright" or "difficult" subjects:

In most of the schools I visited, there was little pressure on the part of parents to have less-than-average students

²⁴ James Bryant Conant, *The American High School Today: A First Report to Interested Citizens* (McGraw-Hill Book Company, 1959), 20.

take *difficult* subjects. More often the counselor's main task was to persuade parents that their *bright* offspring should elect such subjects as eleventh and twelfth grade *mathematics, physics and foreign languages* [my italics].²⁵

Communities needed convincing that "bright" students should be in difficult math, science and foreign language courses.

Moreover, the locally embedded guidance counselor, equipped with objective and nationally-normed psychometric standards, was perhaps in the best position to intervene. Of course Conant routinely acknowledged the importance of all traditional subject disciplines. But lest there remains any doubt about what for him were the truly hard (and predominantly valuable) subjects, recall his emphasis throughout *The American High School Today* on the need especially for more rigorous science, math and foreign language for the academically talented [see Chapter 2].²⁶ These were of course also, and not coincidentally, the subject disciplines singled out by NDEA legislation for particular attention and development.

As superior intelligence was inherent in select learners, these hard subjects then were also the province and demesne of "intelligence." This illuminates a dual sense in which "intelligence" was understood: these subjects were where intelligent individuals then belonged, and also then, the

²⁵ Conant, *The American High School Today*, 1959, 45-46.

²⁶ *Ibid.*, 33-37, 57-62.

disciplines themselves embodied—as ways of knowing—true or proper modes of reasoning about the world. In this process, “intelligence” as both an individual difference and universal attribute was mutually conferred from discipline onto the individual and from individual back onto discipline, one by and upon the other.

Resolving this ‘attitude problem’ within communities then would require a validation (or perhaps in some cases even a realigning and reordering) of priorities to ensure that academics—specifically math, science and foreign languages—took precedence over athletics, and other school-related activities like plays, shows, clubs and social events. What people needed to realize, Conant stressed, was that academic talent—particularly mathematical and scientific talent—was rare and remarkable and something that reflected back on the community that produced it. Scholarships were currently awarded nationally on the basis of performance on aptitude tests like the SCAT. These aptitude tests, Conant emphasized, were measures of inherent ability, not merely accrued achievement. “Since only the very top students in terms of aptitude can obtain high scores on these tests” winning a scholarship based on a test like the SCAT was a remarkable event, indicating a rare degree of talent, and reason for pride within the community: “The school can indeed be proud if a student wins one

of these awards, and the community should pay at least as much tribute to academic as to athletic talent."²⁷

Yet a small town that worshipped its home-coming king and quarterback, and ostracized their slide-rule-wielding future engineers was moving in the wrong direction, was indulging in an unregulated celebration of provincialism that was almost a kind of tribalism. Homecoming parades and pageants and colorful local rivalries were fine, but these were concerns that must be subordinated to more pressing priorities. The local would be expected to invest more in the training of their talented and then to gracefully relinquish this cohort in service of the nation.

If community pressures constrained the talented and sought to bind them in the local sphere, the school and particularly the guidance counselors, Conant held, must intervene. In a steel mill town, the steel industry might be all the town really knew or cared about. In such a place, community pressure might push "some boys with high academic ability" toward a "vocational program such as tool and die-mak[ing]...[At the very least] the guidance officer should urge such boys to take enough advanced mathematics to qualify for admissions to an engineering

²⁷ Ibid, 62.

school."²⁸ So here, in cases like this, the school and guidance staff must work against the provincializing forces of the small town, in the interest of the nation, and on the basis of academic talent as assessed by standardized aptitude tests.

The ideas that Conant developed and promulgated about individual differences in intelligence and its differential training functioned in these specific sorts of ways as a rhetorical bridge that joined and harmonized (or mediated and regulated) the seemingly disparate spheres of "local" and "national." The current concerns about national security, only heightened by the Sputniks, certainly provided, as others have suggested, the animus and urgency to impose the concerns of the national/federal on the local, but Conant's crafting of "intelligence" or "academic talent" offered the precise way in which these domains, like gears, might be fitted together. Conant's "academic talent" established clear linkage points between the federal and the local and also clear limits on the sorts of influence either sphere could have over the other.

"Academic talent" offered a way of harmonizing the local and federal that did not anonymize the local but rather acknowledged, even exalted each town, each comprehensive high

²⁸ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)," November 11, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

school for producing its share of such singularly able and useful individuals. These young people would do great things for their nation and their glory would be reflected back on the town, the village, the pristine and unhurried local democracy from which they hailed.

Thus finally, Conant's "intelligence" and its presentation as a normal distribution of individual differences could be used to forge or reimagine unity. While talent was limited by the frequency with which it occurred across a population (the top 15% of high school aged youth) it was not limited by place. It could appear anywhere across this great land of ours and in this way it drew the concerns of the urban, suburban and rural, the small town and the metropolis and the sticks together. In so doing it reinvigorated the sense of a coherent national body—that continually re-imagined community—and provided a justification for greater federal involvement in locally run schools.

Why was it important or even interesting to worry over how to harmonize the local and the federal at this particular time? Recall that Conant's use of "intelligence" to re-envision the relationship between the local and the national came at the moment of the National Defense Education Act, a historic and watershed moment in the federal funding of local school

systems.²⁹ While *The American High School Today* took no official public stand on federal support of local public schools (indeed it did not dare across its pages to tread within a country mile of the issue), nonetheless Conant's recommendations harmonized succinctly and effortlessly with key NDEA title mandates [see Introduction & Chapter 2]. This was not about mustering support within the legislature and brokering the NDEA's passage through House and Senate from bill to law. *The American High School Today* was published at the end of January, 1959, five months after the NDEA had been passed and signed by Eisenhower. This was about justifying and forming, among a broader public, an actionable common sense around the mandates and funding initiatives of the new law. It was about selling the law, once passed, to the American public, to all its "interested citizens."³⁰

Recall, this was a period of debate in US public education that not only featured acute comparisons with the European other, but one that proceeded from a long history of local and state-level opposition to the federal funding of public schools

²⁹ Barbara Barksdale Clowse, *Brainpower for the Cold War: The Sputnik Crisis and National Defense Education Act of 1958* (Greenwood Press, 1981), 162-167; Wayne J. Urban, *More Than Science and Sputnik: The National Defense Education Act of 1958* (University of Alabama Press, 2010), 9, 129.

³⁰ Conant, *The American High School Today*, 1959. See full title page. The subtitle of *The American High School Today* is "A First Report to Interested Citizens."

[see Chapter 3].³¹ *The American High School Today* worked cooperatively with the NDEA then around an unspoked calculus that went like this: We were not a totalitarian society. We were a democracy. We did not allow an overbearing federal government to dictate policy to local authorities. The National Defense Education Act could *authorize* money for public schools to use in certain ways—for giving the “able student” more rigorous science, math and foreign language—but it could not *make* schools do anything. Local school boards had to be convinced for themselves.

This, I argue, is precisely the role *The American High School Today* played: convincing everyone of the common sense of selective curriculum for the “able” or “academically talented” student. This provides further evidence and from another angle that *The American High School Today* functioned as a persuasive strategy in tandem with the National Defense Education Act. Moreover, Conant’s particular construction of “academic talent” as a natural difference that nonetheless united or drew the national body together was perhaps his study’s most effective inducement in this regard. It was in this very sense that, just

³¹ Clowse, *Brainpower for the Cold War*, chapter 2; Mary L Dudziak, *Cold War Civil Rights: Race and the Image of American Democracy* (Princeton, N.J.; Woodstock: Princeton University Press, 2011), 115–151; Carl Kaestle and Marshall Smith, “The Federal Role in Elementary and Secondary Education, 1940–1980,” *Harvard Educational Review* 52, no. 4 (1982): 384–408, pp. 384–389.

a few weeks after the publication of *The American High School*
Today Conant assured Eisenhower, in the tone almost of vizier to
monarch:

I think I can say with all due modesty that the response to
my report and my speaking around the country (I have
addressed some 70,000 people in twenty-one states this
year) has demonstrated that I am in a rather unique
position, because the public school people will listen to
me and the citizens will also.³²

Conant and his study would bring everyone—from all regions, all
states, the cities and the sticks—together around the common
sense of individual differences and selective curriculum.

This tension around local and federal authority over
schooling played out at one level as a contest over policy, and
political autonomy and representation. It played out at another
level as a contest over knowledge: what kinds of knowledge, what
ways of knowing counted. While patterns of local knowledge and
relations formed on the one hand a crucible for local
democracies, they were on the other hand tainted by a
parochialism that could border on tribalism. Yet, the universal
knowledge of science appeared to be untainted by politics in the
way that either local or even federal frames of reference could
be. The laws of gravity—be they Einsteinian or Newtonian—were

³² James Bryant Conant, Papers of James Bryant Conant, 1862-1987,
"Correspondence with President Dwight D. Eisenhower (Confidential),
February 23," 1959, UAI 15.898, G Correspondence, Box 128, Harvard
University Archives.

presumably the same here as in other every part of the known universe. Atoms fissioned and fused on earth just as they did in distant stars, and the forces they unleashed could be harnessed by the very same principles and practices here and in the USSR.

At this moment of national crisis, amid calls from all quarters for more and better science, the interests of the federal/national in this case appeared to be closer to the universal, nomothetic decrees of science. This then was the direction in which the curriculum and school organization should move. Avowing the preeminence of scientific ways of knowing and then recognizing and identifying the "academically talented" as repositories for and practitioners of this universal knowledge became essential for both uniting and safeguarding the nation.

"TALENT" AND RACE: EASING WHITE ANXIETIES ABOUT DESEGREGATION

Conversations in this era about individual differences in "intelligence" also drew "race" together with space, place and nation in complexly coded ways. Just as Conant's specific construction of "intelligence" served to harmonize the relation between the "federal" or "national" and the "local," it also, I argue, worked silently—through unstated (and often racist) assumptions about merit, social equality and natural inequality—to assuage white anxieties about "race" and public education in

the years immediately following the *Brown v. Board* Supreme Court decision. Conant's specific definition of "academic talent" offered an apparent solution to the "race problem" that freed him of the obligation of ever having to mention race, or to examine the deeply entrenched and historically evolving patterns/ contours of racism that the Civil Rights movement was beginning to vividly illuminate. Conant's conception of "academic talent" appeared to plot a fair, objective, even scientific and race-neutral way forward for schools as democratic-meritocratic institutions as they processed and managed difference in the post-*Brown v. Board* social order. The following sections of this chapter will explore how "race" worked as a powerful and defining absence in Conant's thought and the larger post-World War II, NDEA-era conceptual milieu.

This section begins with an example of Conant in a less-guarded communication that reveals the complex ways in which "race" and place could be coded together, in fact substituted for one another. I will then examine the general absence of explicit discussion of race or racial prejudice or racial equality in the context of educational opportunity, in *The American High School Today* or any of its planning documents. This is an absence that is all the more striking given its proximity--in chronology and context--to the *Brown v. Board* Supreme Court Decision. I will then proceed to examine how, in

these documents, Conant actually replaced a discussion of "race" (and potentially how to realize racial equality within schools) instead with a discussion of talent and individual differences in intelligence. This analysis of Conant's substitution of individual "academic talent" for "race" will turn on examination of his specific conceptualizations of diversity (i.e. "homogeneity" and "heterogeneity" within the student body) and his rebranding and repurposing of the idea of "integration."

CONANT IN PRIVATE COMMUNICATION: IQ AND THE SPATIAL CODING OF "RACE"

While Conant was entirely more circumspect than many of his contemporaries concerning his beliefs about "race" and education, he clearly was not at the forefront of civil rights advocacy, or the struggle for racial equality and integration. This status quo position was buttressed by a middle-of-the-road technocratic rationality and seems consonant with a larger tendency among Conant's contemporaries in education. Hartman notes that in the years immediately after *Brown*, "few of the nation's educational leaders gave the impression they were in a hurry to see the schools desegregated."³³ As has already been shown, Conant advocated capitulating to Massive Resistance

³³ Andrew Hartman, *Education and the Cold War: The Battle for the American School* (Palgrave Macmillan, 2011), 158.

tactics in Virginia. If public schools in some counties in Virginia remained closed (as in fact they did), and if any other states followed suit, Conant urged that those federal monies authorized for public schools through the NDEA should then be redirected to lifeboat private schools. Conant specified in correspondence with Lyle Ashby, Deputy Executive Secretary of the National Education Association:

I would be inclined to think that if the worse comes to the worst the Federal Government ought to be prepared to support with Federal money private schools completely desegregated in any portion of the country where the state has refused to provide free public education.³⁴

Though he was at pains not to record it explicitly, it seems likely that he shared with many of his white contemporaries the belief that African Americans were—as a group—less intelligent than whites. Again, in these documents, place served Conant as a seemingly race-neutral code for “race.” When considering the demographics of I.Q., to the extent it clumped anywhere in pockets of homogeneity, Conant consistently believed that it would be higher than the national norm in the suburbs (predominantly white) and lower than the national norm in large cities (much higher concentration of African Americans). In fact, his frequently expressed reason for

³⁴ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, “Correspondence: Conant to Lyle Ashby, September 3, 1963,” UAI 15.898, A. Personal File in NY, Box 127, Harvard University Archives.

excluding *suburban* school districts from his study was that they would trend toward homogeneity with a higher than average I.Q.

He was, of course, looking for schools with a large degree of heterogeneity in I.Q, and an aggregate mean I.Q. of 100-105. Conversely, his *stated* reason for avoiding large urban school districts was that selective specialized magnet public schools like the Bronx High School for Science or Boston Latin School would draw away high I.Q. students from neighborhood comprehensives, thus driving down the mean I.Q. of these schools, rendering them more homogeneously low.³⁵ This ostensible explanation for excluding urban school districts from his study stands rather shakily under scrutiny however, given how relatively miniscule this flux of elite students (to this handful of selective public schools) must have been in proportion to the total school population of any major urban school system.

Private correspondence reveals less varnished statements of Conant's beliefs about the educability of students on average in large city school districts. J. J. Dempster, The Deputy Chief

³⁵ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Information about High Schools of Value to the Project," April 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; Conant, Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools"; Conant. Papers of James Bryant Conant, 1862-1987, "Observations on the Conant Study"; Conant, *The American High School Today*, 12-15.

Education Officer from Southampton, England, on leave to study how the US public schools dealt with "below average adolescents, that is children with I.Q. between 85 and 95" wrote Conant to inquire where he might find school districts that specialized in working with such students. Dempster surmised that, "In the United States there must be a vast pool of experience in developing curricula and programmes for boys and girls of this calibre up to the age of 18."³⁶

Conant acknowledged that his study did not address the problem of a population skewed homogeneously low in I.Q., nor did he think US suburbs would be a fruitful place for the UK Deputy Chief of Education to look: "I do not think that the schools listed in my book would be particularly suitable for the purposes you have in mind, nor do I believe you would find the suburban schools particularly satisfactory from this point of view." Instead, Conant pointed Dempster directly toward large urban school districts—"Chicago, St, Louis, New York, and Philadelphia" in particular. Conant explained: "It is our feeling here that in these large cities you will find the best

³⁶ J.J Dempster, Papers of James Bryant Conant, 1862-1987, "Correspondence: J.J Dempster to Conant, June 2, 1960," UAI 15.898, D-Correspondence, Box 128, Harvard University Archives.

programs which have been developed for taking care of the children with I.Q.s between 85 and 90."³⁷

It seems more probable, then, in light of private statements like this that Conant had originally excluded large city school systems from his study not because of the subtle statistical bias of selective, specialized public schools, [SEE CHAPTER 2] but rather because he felt the urban school demographic at large (re: black and other students of color) presented on average a mean I.Q. lower than the national average.

NO "RACE" IN *THE AMERICAN HIGH SCHOOL TODAY*

In the entire 167 page *The American High School Today*, written in the last half of 1958 and published in early 1959, "race" is not mentioned once, nor is there any substantive discussion of how schools might work to better accommodate the racial, or ethnic, cultural and linguistic diversity that *Brown v. Board* demanded. This is striking given this was a mere four years after the Supreme Court decision that ruled unconstitutional the practice of "separate but equal" codified by *Plessy v. Ferguson* in 1896. In 1957, the American public was

³⁷ James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence: Conant to J.J. Dempster, June 27, 1960," UAI 15.898, D--Correspondence, Box 128, Harvard University Archives.

captivated by widely televised images of militarized racial conflict in Arkansas at Little Rock High School. They would also soon witness the organized Massive Resistance campaigns intended to halt desegregation of public schools in Virginia. How could Conant, in his recommendations for improving public education for "all young people within a democratic environment" have avoided mention, much less discussion of "race," with *Brown V. Board* knocking on the door? In another sense it is not surprising given the long-standing tradition among US whites at large of seeing "race" but denying the existence of racism in the institutional past and present of American society.³⁸

This blindness to "race" and racism—however intentional or unaware—was I argue further enabled at this particular moment by a renewed faith that current technological and scientific practices—psychometrics in particular—reached beyond culturally-bound prejudices to a plane of objective knowledge about *individual* nature. It was from this vantage that fair decisions based on natural differences could be made in the interest of establishing and preserving a meritocratic order. Of course what is discussed on nearly every page of Conant's published recommendations (and nearly every page of the planning documents for the study) is the importance of identifying and then

³⁸ Karen Fields and Barbara J. Fields, *Racecraft: The Soul of Inequality in American Life* (Verso Books, 2012), 2-24.

according certain educational opportunities to the "academically talented" a category of person defined by IQ or any number of its statistical proxies. It was as if the matter of "race"—or more properly the problem of racism, the systematic oppression of a *group* of people—had been rendered unimportant, defunct even, in light of the discovery of natural *individual* differences in talent. This perspective was of course not unique to Conant, but (as discussed in Chapter 1) part of more widely held sensibility in professional and policy discourses whereby "individual difference" could be substituted for "race" and considerations of racial disparity.

DIVERSITY REDEFINED: HETEROGENEITIES OF TALENT

What is apparent in reading planning documents related to *The American High School Today* study is that Conant developed a carefully coded, deproblematized, and very narrowly defined way of talking about diversity within schools. It was moreover a mode of discourse that was cleansed of any hint of social prejudice or injustice and it turned on the terms "heterogeneity" and "homogeneity."

In very early planning documents, such as the 1956 "Proposed study of Certain Problems Connected with the American Comprehensive High," Conant used these terms—homo- and heterogeneity—to refer, at this point, somewhat loosely to

either the social composition of a student body (here primarily SES, but also in one instance "racial") or to the range of measured IQ within the school population.³⁹ William Carr of the NEA provided early criticism of the study plan and raised concerns about the ambivalent usage and potential polysemy of "homo/heterogeneity" in these contexts.⁴⁰

In a follow-up conversation with Carr, which Conant discussed in a letter with John Gardner, Carr again warned Conant to avoid talking imprecisely about "homogeneity or heterogeneity as mentioned in my memo. For he said you will find yourself landed in the segregation issue if you don't look out!"⁴¹ Into the "segregation issue" seems to be precisely where Conant did not want to go. "Talent" would light the way along the high road above this quagmire. While Conant continued to employ these demographic descriptors ("hetero/homogeneity"), from this point on in the planning documents, their usage and meaning were made much more systematic. They were to refer exclusively to the range and diversity of academic talent—or

³⁹ Conant, Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

⁴⁰ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Observations on the Conant Study," n.d., UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

⁴¹ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner, January 29, 1957," UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

measured IQ—within the student body. Conant then subsequently used these terms as short hand for his small group of behind-the-scenes planners who knew just what he meant, but the contemporary reader can faithfully append "in IQ" as a fortune-cookie suffix to his every use of homo/heterogeneity.

The first clear separation and standardization of their usage comes immediately after Carr's pointed warning. Conant, puzzling over how to assemble his initial list for school visits, wrote

As I have thought over the sociological criteria, it seems clear that there must be a twofold rating of the school. First as to the homogeneity of the student body and second as to the spread of socioeconomic status of the parents...The three or four hundred schools which I would like to see on the first list should be schools serving communities in which the average socioeconomic status is anywhere from average to low and the homogeneity was average to low.⁴²

In other words Conant was looking for schools for his study which were not exceptionally well resourced and that served a student body that presented a large range of IQ. This of course would establish the stable demographic baseline that Conant needed to demonstrate that the average comprehensive high school in Anytown, USA could serve the academically talented along with

⁴² James Bryant Conant. Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner, January 2, 1957," UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

everyone else, and that in fact there were a number of such model schools doing just that.

This precise sense of heterogeneous and homogenous to refer only to talent or IQ is the stabilized usage the terms took in the final publication of *The American High School Today*. For example, when discussing the grouping of students within classes by measured aptitude, Conant wrote:

I have met competent teachers who argued vigorously for heterogeneous grouping in all classes— that is to say, they argued that students of widely different academic abilities and reading skills should be in the same class.⁴³

This of course was precisely the sort of pedagogy that Conant disagreed with, but the more specific point is that for Conant the terms heterogeneity and homogeneity--terms meant to denote degrees of difference or diversity within a given population--meant, very specifically--degree of sameness or difference across the measured intelligence of all its constituent members. I argue, based on this, and his scrupulous avoidance of the topic of race and "racism," that in Conant's estimation should matter for the modern forward looking public high school was diversity by IQ or measured individual intelligence. Countless statements from his study planning documents and from his published recommendations express this

⁴³ Conant, *The American High School Today*, 1959, 49.

underlying assumption. The following explication of his study aims, while dropping verbatim use of "heterogeneous" and "homogeneous," captures nonetheless this very limited and precisely defined sense of salient difference:

It would be understood that the identification of such schools and a report on them would enable me to make a statement that it was possible to provide a satisfactory orthodox academic training for students of high I.Q. in several different geographic sections of the country, in communities that were not high income suburban communities, in schools where there was a wide spread of intellectual ability and above all in schools which were organized on a comprehensive basis (the last two criteria are essentially the same.)⁴⁴

'Comprehensive' and 'heterogeneous' by IQ were "essentially the same." So, for Conant, the "comprehensive school"—that touchstone of democratic inclusion and plurality—referred to an institution that bridged differences not so much in class, culture, or background, and certainly not in "race," but rather in intellect, or measured intelligence. How did schools with a broad and natural spectrum of individual IQs deal with this difference and still manage to provide a good education for those with high IQ? This for Conant was the only relevant question that we needed to keep our eyes on, and was of course entirely consonant with the overarching aims of the emerging

⁴⁴ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Revised Memorandum on the Project for Studying the Education of Gifted Students in American Comprehensive High Schools," March 11, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

meritocracy. It would cut through the subjective bias of racial prejudice. It would also identify—across all “races,” colors and creeds—real indisputable worth and deservingness in the form of measured intelligence. This clarity of criteria would steer schools through the dense thicket of race post-*Brown v. Board*.

INTEGRATION REBRANDED: DEMOCRATIC COEXISTENCE OF THE BRIGHT AND NOT-SO-BRIGHT

In this light, Conant’s use of the word “integration” in the context of his high school study and eventual recommendations becomes particularly revealing. Just as Conant standardized the usage of hetero/homogeneity and yoked them to talent, he similarly recalibrated the meaning and usage of “integration.” It was a word on everyone’s lips in the context of race, racial equality and public education in the years after 1954, but Conant transplanted this term from its *Brown v. Board* context, cleansing it of its highly politicized and racialized overtones in the process, and used it to refer solely to how well comprehensive schools achieved an observable degree of social harmony in spite of the broad spread of intellectual difference they straddled (or perhaps created). Conant noted that in the sort of school that he was recommending, only a fraction of the graduates would be going on to college. It would be “undesirable, however, to have this group of college

bound students set apart from the others."⁴⁵ Once the talent had been sorted from the dross it would be important to show that schools still nonetheless functioned as cohesive, democratic social units where equality of educational opportunity was justly proportioned to natural difference.

In repurposing integration in this way, Conant could be assured that schools that rigorously trained their academically talented still functioned as "a social integrating mechanism in terms of its forwarding the ideals of an American democracy."⁴⁶ Interestingly, this "social integration" was a "non-academic" function of schools that was to be achieved and assessed after schools had been stratified by academic talent. The business of being smart, a natural fact, was a different category of activity than the business of social integration, interaction and transaction that swarmed through the rest of school life. The domains of the social and the academic, in Conant's conception were held to be causally independent, or rather the "social" was downstream from and secondary to the "academic." Stratification by intellect, if mishandled, could conceivably fragment the school population and contribute to a decline in

⁴⁵ Conant, Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)."

⁴⁶ Conant, Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

the social climate of the school. Yet this social fragmentation could be readily guarded against, mitigated, or perhaps wholly nullified if students were offered opportunities to better understand their place in the meritocratic order (*c.f.* homeroom and the course in "American Problems" [see Chapter 2, pp. 183-185]. The "social" in Conant's conception, however, did not have the power to work back upstream and in any way alter the status of the real natural differences that defined the zones of "academic" difference in the first place.

This concern with the extent to which "integrating forces" functioned in schools to join its students purposively, cooperatively, and democratically together surfaces in countless places (and with more or less this verbatim usage of "integration") in his planning documents and in his published recommendations.⁴⁷ Homeroom and the course in "American Problems" served a critical function in this regard.⁴⁸ Homeroom was held for one period every day across all four years of a high school students' experience, and "American Problems" was a semester long senior year course. Crucially—while amounting really to just a small fraction of a student's total instructional time—both these classes would be grouped heterogeneously. In other words neither were grouped by

⁴⁷ Ibid; Conant, *The American High School Today*, 1959, 111.

⁴⁸ Conant, *The American High School Today*, 34-35, 41.

academic "ability." Both would function as "instruments for social integration" and would thus foster the "development of mutual respect and understanding between students with different abilities and different vocational interests."⁴⁹

Repurposing "integration" into just this context of academic or intellectual difference allowed Conant to describe his opponent reformer, Admiral Hyman Rickover, as a species of segregationist. Conant noted that if his study succeeded it would provide powerful opposition to the arguments "put forward by Admiral Rickover on Nov. 20, 1956 in which he advocates the establishment of separate schools for talented youth and a separation at the age of ten or eleven."⁵⁰ In this light, Rickover was proposing to *segregate by* talent, whereas Conant would *integrate across* talent.

By repurposing "integration" within the context of individual differences in intelligence, Conant was, on the heels of *Brown v. Board*, re-envisioning (or reasserting the vision of) the diverse school, the integrated school, as one that achieved social harmony while preserving a heterogeneity of *intelligence*, without regard to race. One obvious though unspoken implication

⁴⁹ Conant, Papers of James Bryant Conant, 1862-1987, "J.B. Conant's First Thoughts on Criteria for a Satisfactory Public High School (Confidential)"; Conant, *The American High School Today*, 74.

⁵⁰ Conant, Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

of this sort of race-neutral integration was that a school could be "integrated" (across talent) while still being all white, or for that matter all black. Or it could be stratified intramurally by "ability" (or really by test performance) in a way that ostensibly replicated segregation by "race" but was protectively justified in the race-neutral language of individual "intelligence."

Moreover, his definition and celebration of the "comprehensive high school" as the "proper framework for the education of American Youth" tacitly supported this redefinition of integration by talent rather than by race. The bounds of inclusion of the comprehensive school were centered around place, on locality. In one of his only uses of the word "race" or "racial" in the planning documents for the study, Conant noted:

It would be assumed that it was important to keep together in one school youth from one city or section of a city irrespective of their racial, economic or social backgrounds and irrespective of their talents and vocational goals.⁵¹

This was consistent with a reiteration of Conant's championing of local autonomy of public schools. By idealizing the local community as somehow natural, already untampered with, and a crucible for democracy in its own right, this position

⁵¹ Ibid.

offered a comfortable default to patterns of *de facto* racial residential segregation already in place. The *real* diversity these localities naturally served, and should continue to serve, was in Conant's conception a diversity in intellect (I.Q.), not a diversity in race, or for that matter class. All of Conant's interrelated definitions and propositions worked to powerfully reconfirm that individual differences in IQ were the underlying natural separator. This was real difference and what we should base our selective criteria on. Given the precision with which it had been scientifically defined, and the reliability with which it could be identified, organizing and stratifying by intellectual difference would represent a clear advance toward the modernization of public education. It would accomplish another decisive step forward, away from out of our more racist, and classist past where decisions about selection and election of individuals for differential educational opportunity had perhaps been based on subjective and prejudicial beliefs and perceptions.

Conant's entire system of educational reforms related to talent powerfully demonstrate measured individual differences in IQ had precipitated into the foreground (as a supposed natural fact, a supposed non-belief) out of a cloud of other beliefs and markers of individual worth. The importance of race and class were de-emphasized. Race was hardly explicitly alluded to in

Conant's plan. Talent was elevated here as the objective criteria of worth on which selection and separation could and should occur. But it would be a democratic, soft, intramural separation that preserved a sense of community in harmonious, mutually respectful dialogue with itself across its intellectual differences.

Of course, this is not at all to say that beliefs about race or class (or gender for that matter) had actually been rendered defunct. These norms still worked vigorously away out of the spotlight, behind the curtain of "talent," perhaps now relieved—at least temporarily, in this context, from these certain angles—of the inconvenience of scrutiny and the burden of having to justify their old habits, their customary ways.

The timing is perhaps most telling. This push to reify individual differences in intelligence and elevate them as the primary selective criteria for schools as engines of the emerging meritocracy pulsed like a wave almost perfectly in phase with the command to racially integrate schools. It was so synchronized that it seems to historical analysis almost like a social-reflexive response. This perception is born out through further analysis in Chapter VI.

CONCLUSION

This thorny and hotly contested political problem—how to fix the nation's schools, and how to spend recently authorized NDEA funds—was at once racial, spatial, national and epistemological. It was a problem that was in some sense as sprawling, heterogeneous and decentralized as the nation's schools themselves. Yet crucially, all the dimensions of this problem could be solved—at least at the levels of discourse that regulated "common sense"—all together through Conant naturalistic conception "intelligence." "Intelligence" explained what subject-disciplines were of greatest importance, what individuals should be selected to participate in what disciplines, and as well how the national body should cohere and unite around its topographies of talent. Moreover, and perhaps most importantly, Conant's "intelligence" could do the work of race without ever having to say its name.

Moving from this public rhetoric and a national imaginary around talent, Chapter 5 will return to a behind-the-scenes look at the network of individuals and institutions that organized the production of *The American High School Today* and helped synchronize its recommendations and the timing of its release with the National Defense Education Act. With Conant at the helm, this network drew together resources and personnel from

the Carnegie Corporation, the National Education Association,
and the Educational Testing Service.

CHAPTER V
UNDER THE CLOAK OF THE EXPERT: ETS, NEA, CARNEGIE,
CONANT AND THE NATIONAL DEFENSE EDUCATION ACT.

Testing and guidance as we know it does not exist in Russia. I think that American testing and guidance techniques could be our own "secret weapon" in education, if we develop and use them properly.¹

- Henry Chauncey, president of ETS, 1958.

This chapter explores the organizational, institutional and political networks that supported the production of *The American High School Today*. So far it has been shown that *The American High School Today* was structured around IQ, promoted the interests of the "academically talented," and was timed with the release of the National Defense Education Act to help resolve a complex and multilayered debate about the politics of public education in the late 1950s. This chapter will expand on this argument by looking in more detail at the institutional alliances and networks that were integral to the production of Conant's study and published recommendations.

As I have already noted, my findings suggest that *The American High School Today* should be viewed less as a "personal study" by Conant himself (as Conant projected and existing analyses have assumed), and more properly as an inter-

¹ Educational Testing Service, "Report of the President," *Annual Report to the Board of Trustees - Educational Testing Service: 1957-58* (Princeton, N.J: Educational Testing Service, 1958), 28.

institutional collaboration between the Carnegie Foundation, the Educational Testing Service and the National Education Association, with Conant serving as the project's highly visible executor, leader and spokesperson. This was a complex collaboration that worked to the political advantage of the NEA, and for the decided financial gain of ETS.

Moreover, this collaboration was linked with the passage of the NDEA. Chapter 3 has shown that while Conant conducted his school study, he and Eisenhower were in close communication over their shared ideas about educational reform, and that Conant reviewed and commented on drafts of the White House administration's version of the bill. Chapter 5 will extend examination of Conant and Eisenhower's collaboration and consider how it was supported by this inter-institutional network that included the Carnegie Corporation, NEA, and ETS. This additional analysis here advances the argument initiated in previous chapters: that while *The American High School Today* emerged as a seemingly independent and coincidental endorsement of the very reforms recommended by the National Defense Education Act, the legislative act and the school study were actually conceived in quiet collaboration. I will show that there was a clear and for the most part coordinated desire among these interested parties to suppress public awareness and visibility of their cooperation. *The American High School Today*

depended for its effectiveness on its apparent independence from such networks of influence, public and private. Yet, *The American High School Today* was far more than a purportedly impartial scientific study of US high schools; it was I argue, a persuasive strategy intended to condition public reception and implementation of the National Defense Education Act.

I will first examine private correspondence between Conant, William Carr (executive secretary of the NEA) and John Gardner which helps establish the cooperative relations between these individuals and the institutional entities they represented as shared stake-holders in the inception of *The American High School Today*. I accompany this with a more comprehensive consideration of William Carr and NEA's motives and reasons for participating in *The American High School Today*. I will then examine Conant's more extensive and complicated relationship with ETS. Using internal memos and correspondence, I trace how, coincident with Conant's school study project, the ETS implemented new testing technologies, developed whole new suites of tests that neatly matching the needs of new NDEA initiatives, and forged new inter-institutional networks to manage educational data at state levels. This third effort—forging state-level networks for the collection of educational data—specifically met an additional NDEA title mandate (Title X).

Finally, I will demonstrate, through analysis of annual financial declarations, that ETS profited a great deal from new allocations of funds mandated by the National Defense Education Act. This was thanks in large part to the advantage ETS gained from its close participation—largely concealed from the public—in the production of Conant's *The American High School Today*.

BEHIND THE AMERICAN HIGH SCHOOL TODAY: DRAMATIS PERSONAE

When *The American High School Today* was published, it was presented to the public as primarily the labor of one man, James Bryant Conant, "one of the nation's great chemists" and "president of Harvard University at forty."² Its findings and recommendations—the conclusion of his diligent investigation—were his expert opinion, and constituted his plan for the reform the nation's public schools. In the introduction to *The American High School Today*, John Gardner, foregrounding Conant and stressing the reform's feasibility hailed that "when a man like James Conant says it can be done, the nation must take notice."³

In fact, while Conant, the concerned scientist-educator-expert, commanded the public gaze as author, executor and helmsman of the study, *The American High School* today was very

² James Bryant Conant, *The American High School Today: A First Report to Interested Citizens* (McGraw-Hill Book Company, 1959), x.

³ Ibid.

much a cooperative effort that drew heavily on the resources of numerous other interested individuals, and private and public institutions whose contributions remained largely hidden from public view. These silent collaborators, or 'behind-the-scenes team,' as I have referred to them in earlier chapters, included 1) John Gardner, president of Carnegie Corporation, the funders of Conant's study, 2) William Carr, the executive secretary of the National Education Association, the national union for the public school teachers, and then, as now, the largest labor union in the country, and lastly 3) The Educational Testing Service (ETS), a private non-profit organization for educational testing that Conant had helped found in 1947.⁴

ETS devoted numerous statisticians, and administrators, and extensive testing resources and educational data to assist with the study. And all these parties—ETS, John Gardner (Carnegie) and William Carr (NEA) gave Conant extensive critical feedback that helped shape the design, methods and aims of the project during its inception and early planning. ETS was on record in both the *New York Times* and the published version of *The American High School Today* as the grant-administering body for the Conant project, but this was a carefully controlled and in

⁴ Ellen Condliffe Lagemann, *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy*, 1st ed (Middletown, Conn: Wesleyan University Press, 1989), 197; Nicholas Lemann, *The Big Test: The Secret History of the American Meritocracy* (Macmillan, 2000), 53-69.

many ways limited depiction of ETS' role in study. In reality the relations between Conant, his project and the Educational Testing Service were far more complex and intertwined and will be examined in detail below.

CONANT, CARR AND GARDNER

Early correspondence between Gardner and Conant reveals that Gardner had tapped Conant as a likely recipient for Carnegie funding for a study of US public education. It seems that Gardner had targeted teacher education and professionalization as a top priority topic for investigation, but Conant, even as early as 1955, had already hatched a plan with William Carr for his post-ambassadorial return to the US educational scene. Conant's diary reveals meetings with Carr in the summer of 1955. Conant's entry for the 13th of June reads: "Lunch with Carr (NEA). Wanted me to be his deputy! But made favorable counter-suggestion of working with NEA on Carnegie payroll. Perhaps in 1957."⁵ Conant recounted to Gardner later in November '55 that,

It has seemed to me that somewhere in the area of the problems concerned with our public schools I could make my most effective contribution in the next few years...It is at

⁵ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Diary of James Bryant Conant: June 13, 1955," UAI 15.898, Diary 1955, Box 7, Harvard University Archives.

this point that Carr's ideas and mine came together as a basis for discussion.⁶

Gardner had met with William Carr independently in late October and reported back to Conant that he thought it would be possible to "work out some arrangement along the lines which you and he [Carr] discussed."⁷ Gardner also thought the Carnegie trustees would support the plan that Conant, Carr and now Gardner were formulating.

By the end of November, 1955 it was clear to Conant that he would be leaving his post as West German ambassador within the year. He began to map out his post-ambassadorial future more deliberately and with a more specific timeline. On a return visit to the United States in early January of 1956 Conant met with a variety of dons and doyens in academia who presented Conant with a dazzling array of new potential career directions. According to Conant's diary entry for the 9th of January, a number of presidents from Midwestern Universities tried to tempt Conant with a range of offers. He penned his private assessment of this sumptuous array: "Wrong." But Conant had had another

⁶ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence: J. B. Conant to John Gardner, November 30, 1955," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

⁷ John Gardner, Papers of James Bryant Conant, 1862-1987, "Correspondence: John Gardner to J. B. Conant, November 14, 1955," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

meeting that day. "Talked with Gardner who offered me a blank check! Good."⁸

The arrangements Conant had made with Carr to do a study of the public schools now had the official support of Gardner and Carnegie. It moved decisively to the forefront of Conant's list. Gardner later wrote to Conant that when next they were both back in the States a meeting between the three of them should be arranged: "I hope that you and I and Bill Carr can have a good chat. I am still much interested in the idea we talked about earlier."⁹ The plan that was to form in dialogue between these three men over the next year would have a tremendous and continuing impact on public education in the United States. It was already taking on a recognizable shape, around a particular question: whether or not students were being adequately trained in mathematics and science: Conant had explained to Gardner in an earlier letter that: "Another aspect of the school problem which comes repeatedly to my attention is the demand for better training in science and mathematics, and the recruiting of more engineers and scientists."¹⁰ He further

⁸ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Diary of James Bryant Conant: January 9," 1956, UAI 15.898, Diary 1956, Box 7, Harvard University Archives.

⁹ John Gardner, Papers of James Bryant Conant, 1862-1987, "Correspondence: John Gardner to J. B. Conant, June 29, 1956," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

¹⁰ Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence: J. B. Conant to John Gardner: November 30, 1955."

noted that his past experience as a chemist would bolster him with a particular authority in this endeavor:

My past gives me a certain amount of background for a special study of this problem. Possibly through this route I could approach the whole subject of the public schools under the cloak of being an 'expert.'¹¹

It is interesting to wonder, as Conant's plan emerged, just how it grew so harmoniously in-step with and came to resemble so closely federal level efforts to craft legislation for public education. The 1957 planning stages of Conant's study already endorsed an augmented role for guidance counselors in schools, and the selection and election of academically talented for an enhanced science, math and foreign language curriculum [see Chapter 2]. These recommendations corresponded with remarkable specificity to the core titles of NDEA that later passed in 1958: (science, math and foreign language education (title III), training of guidance (title V), selection of academically talented (title V). Conant seemed well-attuned to the pace and timing of current legislative cycles, and appeared to have synchronized his watch to the motions of the National Defense Education Act, considering both its passage and the need to condition the public for its later reception. In a confidential late 1956 memorandum to his behind-the-scenes team, he warned

¹¹ Ibid.

his collaborators of an effective expiration date for this work: "to be useful the project must be completed, including publication, in two years."¹²

Just how was it that Conant was able to make independent recommendations that so closely forecast and anticipated the content and timing of this watershed act of educational legislation? Was he lucky? Was he prognosticating? Were legislators and policy formers following his lead? Was he following theirs? Rather it is surely likely that these similarities between his agenda and theirs suggests the importance of these networks of influence that criss-crossed public, private and philanthropic sectors, and various branches and levels of government. These networks established institutional channels through which very specific ideas related to educational reform were communicated, and around which consensus was gradually formed. In the three years from the convening of the White House Conference on Education in 1955 to the eventual passage of the NDEA in 1958, everyone within certain circles of power had come more or less to sing in round from the same songbook.

¹² James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner," December 21, 1956, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

It appears Conant was perched in a privileged position in relation these networks. He commanded a highly influential and privileged set of intersections in this policy-forming nexus. His close personal connection with Eisenhower has already been discussed. Conant also maintained a number of other direct personal, professional and institutional connections—to be considered below—that fed directly to the heart of this policy forming process. Likewise, he had a number of hats to swap among and versatile sources of authority from his own professional history to call on. Finally, If Conant performed his part well, the study would appear to come from outside these densely intersecting circles of influence, as an independent, objective even scientific endorsement of the very same measures and reforms that the NDEA would later codify as law. By virtue of this apparent independence and its scientificity, it would appear to transcend not only public debate, but also the meshes and machinations of political process.

To anticipate the NDEA it meant that Conant was continually apprised of fomenting legislative and political developments and intentions. Of course, Conant had many connections in government. As has already been demonstrated in Chapter 3, one such conduit of communication and influence was President Eisenhower himself, who in 1955 had shown a more intentional interest in the federal role in public education by convening

the first ever White House Conference on Education. Urban has noted that the convening of this committee represented early White House administration action taken toward the looming crisis in education, and that its recommendations—particularly its call for the identification and cultivation of individual differences in intelligence and for the training of scientists and engineers—provided a foundation for and anticipated the specific stipulations of the National Defense Education Act.¹³

Another possible liaison linking Conant to emergent educational policy discussions was his acquaintance, and former president of Carnegie Corporation, Devereux Josepfs. Josepfs had been appointed by Eisenhower as chairman of The President's Committee on Education Beyond High School, a follow-up committee to the White House Conference on Education, intended to address emerging concerns in post-secondary education.¹⁴ Josepfs' committee's final report to Eisenhower warned that, in this new post-World War II Cold War era, "America would be heedless if she closed her eyes to the dramatic strides being taken by the Soviet Union in post-high school education, particularly in the development of scientists, engineers, and technicians."¹⁵ As

¹³ Wayne J. Urban, *More Than Science and Sputnik: The National Defense Education Act of 1958* (University of Alabama Press, 2010), 83, 109.

¹⁴ Erwin V. Johanningmeier, *Equality of Educational Opportunity and Knowledgeable Human Capital: From the Cold War and Sputnik to the Global Economy and No Child Left Behind* (IAP, 2009), 61.

¹⁵ Ibid, 62.

Conant set up preliminary meetings with Carr and Gardner for his new school study, he also reached out to Josephs. In a follow-up letter to Gardner, Conant wrote, "I should very much like to have a chance of talking with you along the lines of our previous conversation. I am also dropping a note to Dev Josephs and Roy Larsen along the same lines."¹⁶ This mention of Roy Larsen, vice president of Time, Inc. and former Harvard alum, also suggests that Conant was, even at this early stage, already considering avenues for media coverage and dissemination of his study results.

A third likely conduit for Conant for information about the emergent shape of Cold War education reform was co-collaborator William Carr himself. Carr was a longtime acquaintance of Conant and had been a powerful and visible force in the realm of educational policy for well over a decade. He, alongside Conant and Eisenhower, was a member of the highly influential Educational Policies Committee throughout the 1940s and, as has been discussed in Chapter 4, was also the primary author of the seminal *Education for All American Youth*. In 1952, Carr was appointed executive secretary of the National Education Association (NEA), the national level labor union of k-12 public

¹⁶ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence: J.B. Conant to John Gardner, November 23, 1956," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

school teachers, and the largest labor union in the United States. It was from this professional vantage point that Carr began his NDEA-era collaborations with Conant.

For the better part of the 1950's Carr had doggedly campaigned before various congressional and senate committees as leader of the National Education Association for general federal funding of public education. As the education debate boiled over in the aftermath of Sputnik, NEA pitted itself against critics of the schools like Bestor and pointed instead to the general lack of federal funding. And as Urban and Kaestle have noted, the NEA, as a part of its organizational mission to improve the funding of public schools while fostering solidarity among teachers, sought *general* federal aid to education, not targeted or categorical funds earmarked for specific policies or curricula. The most specific NEA got in their requests was to call for money for school construction and teacher salaries. Moreover, they had been campaigning for this sort of general non-categorical federal aid for decades.¹⁷

NEA kept close tabs on the proceedings of the White House Conference on Education. NEA leaders, Carr included, attended the conference and some actually served on various White House

¹⁷ Carl Kaestle and Marshall Smith, "The Federal Role in Elementary and Secondary Education, 1940-1980," *Harvard Educational Review* 52, no. 4 (1982): 384-408, 389.

Conference committees.¹⁸ Carr saw the assembly as a potential "turning point in the history of American education" and an auspicious moment to press for greater federal funding of the public schools.¹⁹ Carr reported back to the NEA two months after the conference's conclusion that of the 1,800 total attendees, over 1,200 favored increased federal funding of the schools, particularly in the area of school construction.²⁰ Carr also had close contacts within the Office of Education (namely Elliot Richardson), the subdivision of the department of Health Education and Welfare which had received and been tasked with implementing the specific recommendations that grew out of the 1955 White House Conference on Education. Carr would have been closely apprised of these recommendations and had a good sense for which were gaining legislative momentum.²¹

Carr's (and the NEA's) hopes for general federal aid was frustrated again in the summer of 1956 when Congress voted down the Kelly Bill, a measure which would have authorized federal money to finance school construction. A primary reason for the failure of the bill was near unanimous opposition from Southern Democrats. They were staunchly opposed to the measure because

¹⁸ Urban, *More Than Science and Sputnik*, 110.

¹⁹ William Carr, "The Opportunity of the White House Conference," ed. National Education Association, *NEA Journal*, November 1955, 473; Qtd in Urban, *More Than Science and Sputnik*, 111.

²⁰ Urban, *More Than Science and Sputnik*, 111.

²¹ Ibid, 88, 110, 127.

it would have invoked the "Powell Amendment," a new legal and political strategy developed by Congressman Adam Clayton Powell (NY) which required any district or jurisdiction to desegregate its public schools in compliance with *Brown v. Board* in order to receive federal money. While not a formal constitutional amendment, the "Powell Amendment" was nonetheless codified as a part of title VI of the Civil Rights Act (1964).

After the defeat of the Kelly Bill, Urban notes that Carr and the NEA, went "back to drawing board," now working under the assumption that the Powell Amendment and the desegregation issue in general was one of their chief impediments to securing a federal legislation for the schools.²² Lobbying for general aid to the schools might have been a doomed enterprise to begin with. Urban and Kaestle point out that the only successful precedent for federal funding of public schools in the 20th century, The Smith-Hughes Act of 1917, was categorical - targeted specifically for vocational training programs. Plans for categorical aid federal aid, they argue, were more likely to pass. Though targeted programs necessarily came with "strings attached," and thus potentially appeared to open avenues for greater federal oversight and control, they also promised more

²² Ibid, 113.

accountability which seemed an insurance against graft and waste of tax-payer money.²³

Carr, given his proximity to the Office of Education, the White House Conference on Education, and the Cold War era legislative process in general was in a good position to read the writing on the wall: with much of Washington's political momentum already trending toward targeted aid for education in the interest of national defense, NEA's more idealistic mission for general federal aid to schools was not likely to succeed. My analysis strongly suggests that Carr faced this dilemma by hedging his bets. While the NEA continued to lobby publically for general, non-categorical funding, part of Carr's revised strategy was to team privately with Conant to craft a recommendation for targeted aid, essentially for the academically talented. Carr would work behind the scenes with Conant to produce what would become *The American High School Today*, an "independent" report agitating for targeted categorical reforms, the very sorts of measures that already seemed to be gaining momentum within White House administration and Congressional circles.

Carr was adamant that his contributions to the study remain behind the curtain and out of public view and that Conant take

²³ Ibid, 7. Kaestle and Smith, "The Federal Role in Elementary and Secondary Education, 1940-1980." 389-394.

all recognition and credit for the project. Soon after a planning meeting with Carr, where it was agreed that the NEA would pull together an initial master list of "comprehensive schools" for Conant's study, Conant wrote to Gardner cautioning against publically revealing Carr or the NEA's contributions to the project. Conant and Carr recognized that a public statement about the project would have to be made before too long but that this statement should not disclose any direct connection or cooperation with Carr or the NEA. "We [Carr and JBC] agreed that it was important to leave in the public mind the impression that I was not hostile to the NEA but that I was also not in their pay or committed to them in any way. Carr fully agrees that the inquiry and report should be my own personal affair."²⁴ Conant was already in the habit of affirming for his collaborators that the study would be presented to the public as his own personal project: "I would propose to be responsible for the findings and the conclusions. Any recommendations would be put forward under my own name and on my own responsibility."²⁵

²⁴ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence: J.B. Conant to John Gardner, January 29, 1957," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

²⁵ Conant. Papers of James Bryant Conant, 1862-1987, "Proposed Study of Certain Problems Connected with The American Comprehensive High School: Confidential Memorandum Prepared by James B. Conant for Mr. John Gardner."

It seems, however, that the press had already extracted a public statement from Gardner about Conant's next step and his possible involvement with Carnegie. Gardner wrote Conant the very next day explaining, "The newspapers tracked down Carnegie Corporation's role in your future pretty promptly, and I had to make some sort of statement. I had no idea how explicit you wished to be so I was fairly guarded in my own comments."²⁶ Gardner had given the *New York Times* just the sparest of details about this chimerical supposed study. The article reported that Conant had resigned from his post as Ambassador to West Germany, and that his return to "private life" might possibly include plans for a study of the public schools funded by the Carnegie foundation. Discussions of this plan, an unnamed Carnegie source stressed, were still in "an exploratory stage."²⁷ Gardner had made no mention of any of the other interested collaborating parties, neither NEA and William Carr, nor ETS. Instead, Conant's role at the helm as private, unaffiliated impartial citizen-expert had been foregrounded.

Conant quickly reassured Gardner but reiterated that at this point the less that was publically known about the study

²⁶ John Gardner, Papers of James Bryant Conant, 1862-1987, "Correspondence: John Gardner to J. B. Conant, January 30, 1957," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

²⁷ New York Times Correspondent, "Conant Quits Post As Envoy To Bonn; Will Return to Private Life Feb. 15--President Voices His 'Personal Regret,'" *The New York Times*, January 29, 1957.

the greater their room to maneuver: "I thought the way you handled the newspaper inquiries about the Carnegie Corporation was just right. I have avoided mentioning any details of my plans as I did not wish to embarrass you or to in any way hamper our freedom of action for the future."²⁸

In this way Carr and NEA's involvement with the planning of Conant's study were effectively swept from the public record. No mention of their collaboration was made in any press release following the study, nor in the published monograph itself. Carr himself went to additional lengths to ensure this erasure, anonymizing his lengthy and detailed contributions to the series of critical evaluations that Conant's project underwent. All other collaborating parties (from ETS and Carnegie) signed and dated their critical responses and submitted them on their affiliated institutional letterhead. Carr's were neither signed nor submitted on letterhead, presumably in an attempt to conceal both his and NEA's involvement. It is possible to attribute Carr's authorship of these document by virtue of very specific aspects of their content and context: very particular, indeed uniquely identifiable, threads of discussion carry over from Conant's private correspondence with Carr into Carr's unnamed

²⁸ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence: J.B. Conant to John Gardner, February 13, 1957," UAI 15.898, High School June 57- March 1958, Box 42, Harvard University Archives.

critical evaluations of Conant's study drafts. This included critical feedback on Conant's use of terms "heterogeneity" and "homogeneity" in anonymous documents, and then Conant's mention in other correspondence that this was Carr's line of critique [see Chapter 4].²⁹ Moreover, Carr's authorship of these anonymous documents is particularly clear as all other named collaborators from whom Conant solicited feedback have been accounted for. Thus, additionally, by process of elimination, anonymized, de-identified contributions then were in all probability Carr's.

This *sub rosa* partnership with Conant allowed Carr to privately diverge from his NEA missions and mandates, while still publically maintaining them in his role as executive secretary of the NEA. He would continue to openly stump for general non-categorical aid to public schools, aid that would not be earmarked for any specific subset of the curriculum or any particular facet of the student population. Yet in the privacy of this behind-the-scenes partnership with Conant, Carr could—without fear of public contradiction—throw his weight behind the more specific measures and recommendations that

²⁹ James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Observations on the Conant Study," n.d., UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; James Bryant Conant, Papers of James Bryant Conant, 1862-1987, "Correspondence with John Gardner, January 29, 1957," UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

closely matched the trending agenda of the White House and Office of Education (i.e. the advocacy of more funding of math, science and foreign language curriculum, and the selection and election of the "academically talented"). Clowse has similarly noted that while Carr publically opposed the targeted aspects of the NDEA, he privately admitted that if it passed, the NDEA would likely open the door to future federal funding of education and lead to more liberalizing expansions.³⁰

CONANT, ETS AND *THE AMERICAN HIGH SCHOOL TODAY*

The Educational Testing Service (ETS) was the other major entity whose partnership with Conant on *The American High School Today* amounted to a behind-the-scenes collaboration. Conant's relationship with the Educational Testing Service was long-running and complex. As discussed earlier, Conant was actually closely involved in the founding of the organization. Lagemann and Lemann note that Conant was a key architect of the Carnegie-backed, negotiated merger of the American Council of Education and the College Board to form the Educational Testing Service in 1947.³¹ In Conant, the ETS saw something of a founder figure, the *pater institutionalis*; in ETS Conant beheld an organization

³⁰ Barbara Barksdale Clowse, *Brainpower for the Cold War: The Sputnik Crisis and National Defense Education Act of 1958* (Greenwood Press, 1981), 73.

³¹ Lagemann, *The Politics of Knowledge*, 197; Lemann, *The Big Test*, 62-65.

capable of bringing his vision of a meritocracy rooted in differences in natural ability to fruition.

Even before work on Conant's project began, there was a sense of optimism within ETS about Conant's return from West Germany with his Carnegie funding and planned study of the American high school. Conant was promptly elected to ETS' Board of Trustees in May of 1957, a development that "delighted" Henry Chauncey and prompted the ETS president to reflect on where the corporation stood and where it was going.³² Chauncey wrote to Conant:

Many thanks for your kind letter from the steamer. I am glad you had a good trip and hope that it included a real rest...Things are still humming, always with more things on the horizon than can possibly be done. I look forward to discussing our plans and problems as well as your own project with you in the fall.³³

This was a moment of passages, transits and reunions. The future was a steamer on the horizon. The direction was clear, the throttle wide open and Chauncey sensed good things ahead.

Yet with ETS' founding many critics of testing and some testers themselves had expressed concern over the monopolistic—even hegemonic—potential of a consolidated national-level educational testing service. Carl Brigham, World War I army tester, SAT developer and later convert to the dangers of

³² Henry Chauncey, Papers of James Bryant Conant, 1862-1987, "Correspondence: Henry Chauncey to J.B. Conant, May 8, 1957," UAI 15.898, ETS-Board of Trustees, Box 113, Harvard University Archives.

³³ Ibid.

standardized testing, worried that the formation of the ETS would amount to the "creation of a powerful machinery to do more widely those things that are now being done badly" and could lead to the "inevitable distortion of education in terms of tests."³⁴ Wary of these sorts of dissenting opinions, ETS and Conant proceeded quietly in their collaboration then, and in a decided effort to avoid such criticism or accusations of conflict of interest. Many factors suggest that Conant and ETS went out of their way to organize the project in such a way as to conceal the active nature of the partnership.

Initial press coverage did establish that ETS was the institution that would officially administer the Carnegie grant, but much was subsequently done to de-emphasize ETS's role on the project. In a confidential July 1957 meeting of the ETS administrative board John Hollister (the project director for *The American High School Today*) laid out in simple terms Conant's official position and wishes in this regard: "ETS as such probably will not be emphasized as directly associated with the project or its publications."³⁵

The intention and effect of this strategy was to create the impression of a passive institutional structure through which

³⁴ Carl Brigham quoted in Lemann, *The Big Test*, 40.

³⁵ O.K. Bray, Papers of James Bryant Conant, 1862-1987, "ETS Administrative Board: Minutes of the Meeting on July 16th, 1957 (CONFIDENTIAL)," July 16, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives.

grant funds were administered and accounted for, not an active, cooperative, interested entity that helped shape the structure of Conant's study. A myriad of seemingly minor maneuvers on a variety of accounting and administrative fronts then proceeded from this stance, adjustments which all meshed together in coordinated fashion to effectively maintain this apparent separation between (or rather non-affiliation of) ETS and the American High School Today.

For example, while ETS continually disbursed rent for the Conant team's 5th Ave office space, the Carnegie Corporation actually paid the first month in order to "bind the lease" with landlords in the Carnegie name.³⁶ The brass faceplate in the building's first floor lobby was replaced to read "A Study of the American High School" with no mention of ETS, and the project was listed under this same title, similarly independent and unaffiliated, in the New York City telephone directory.³⁷ Project letterhead, dispersed widely, rapidly and in great volume over the course of the study, listed the study title and

³⁶ John S. Hollister, Papers of James Bryant Conant, 1862-1987, "Memorandum for Accounting: Rental Payments for Sixth Floor, 588 Fifth Avenue (Conant Project)," June 7, 1957, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

³⁷ John S. Hollister, Papers of James Bryant Conant, 1862-1987, "Memorandum for Conant Study Team: Progress Report on Dr. Conant Study," May 13, 1957, UAI 15.898, High School March - June 1957, Box 42, Harvard University Archives; Betty Watkins Weatherby, Papers of James Bryant Conant, 1862-1987, "Correspondence: (Mrs.) Betty Watkins Weatherby to Pease and Elliman, Inc.," February 5, 1960, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

all the project staff including its fulltime ETS employees, but likewise made no mention of the study's institutional foundation in the Educational Testing Service.³⁸

Accounts with local utilities and area equipment suppliers (e.g. Wisdom Press for stationery, IBM for a fleet of rented typewriters) were either established or re-listed under the name *The American High School Today*.³⁹ Even the Eagle Spring Water Company, a supplier of office water coolers for metro NY, was apprised of a rebranding and asked to change the name on their accounts. ETS secretary Margaret Dickel, who negotiated many of these transactions, wrote to Eagle Spring: "Dear Sir, We are renting a water cooler from you. We are now listed in your records as follows: 'Educational Testing Service.' Would you please change this to 'A Study of The American High School.'" She reassured them though that despite the renaming, the revenue ultimately came from its same source: "delivery of your bills

³⁸ Betty Jane Watkins, Papers of James Bryant Conant, 1862-1987, "Correspondence: Betty Jane Watkins to Louis Springstein, October 27th, 1959," UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

³⁹ Betty Jane Watkins, Papers of James Bryant Conant, 1862-1987, "Electric Typewriter Maintenance Agreement," October 1, 1957, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives; Wisdom Press, Inc., Papers of James Bryant Conant, 1862-1987, "Invoice from Wisdom Press, Inc.," September 15, 1961, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives; Betty Jane Watkins, Papers of James Bryant Conant, 1862-1987, "Memorandum for Mr. McCulloch (Accounting): A Study of the American High School," August 8, 1957, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

will be facilitated by this change, though our bills will continue to be paid by the Educational Testing Service."⁴⁰

As a private non-profit organization, ETS could have applied for tax exempt status for expenditures related to the Conant project, a process which would, however have required detailed and transparent declarations of affiliation. ETS grant administrators instead determined to "let sleeping dogs lie," and pay taxes on all of the project's expenses.⁴¹

All credit cards and credit expenses for the project, while eventually settled through specially designated ETS accounts, were nonetheless billed directly to the seemingly independent A Study of the American High School. Conant's secretary (and ETS employee) Betty Jane Watkins noted in this regard that, "I am ordering all credit cards in the name of the Study rather than in ETS' name." It was agreed by all that this substitution--and indeed complication of accounting--would nonetheless somehow "reduce the number of accounting tangles."⁴² As this process diverged from standard ETS direct billing/accounting for the

⁴⁰ Margaret Dickel, Papers of James Bryant Conant, 1862-1987, "Correspondence: Margaret Dickel (Sec.) to Eagle Spring Water Co., Inc., September 3, 1957," UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

⁴¹ Unknown, Papers of James Bryant Conant, 1862-1987, "Memorandum: New York City Sales Tax," June 1957, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

⁴² Betty Jane Watkins, Papers of James Bryant Conant, 1862-1987, "Memorandum for Mr. McCulloch (Accounting): A Study of the American High School," August 8, 1957, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

other various projects it oversaw, special circuitous protocols had to be put in place. Watkins noted in this regard that "our study is something of an exception to the procedures."⁴³

While all these sorts of maneuvers demanded extra layers of accounting and administration, they clearly served to deemphasize—even to largely conceal—the relation between ETS and *The American High School Today*. Just as Carr played a ball and shell game among his roles and identities in relation to *The American High School Today* and his public educational lobby efforts, Conant and ETS played their own game of shuffling affiliations and demarcating between public and private identities, creating in the process as much apparent distance between ETS and *The American High School Today* as possible. Conant, the embodiment of expertise—Harvard president, renowned chemist—held the public's attention from center stage with a copy of *The American High School Today* in his hand. ETS—interested partner—kept off stage, lingering in the wings. And in a barely audible fugue of accounting from the orchestra pit, money passed back and forth until the ledgers were balanced.

⁴³ Betty Jane Watkins, Papers of James Bryant Conant, 1862-1987, "Memorandum: Credit Cards," July 2, 1958, UAI 15.898, ETS-Directives, Memos, Data, Box 113, Harvard University Archives.

CONANT, ETS AND THE NDEA

When looking at the ETS's projections for company growth and their plans for future research and development one senses that everyone was reading from the same memo that had made its way through Eisenhower's White House, through the offices of William Carr at the NEA, and the Office of Education, across Conant's desk and so on to Carnegie and the ETS and through the chambers of Congress and the Senate as they hashed out the National Defense Education Act.

Conant was clearly a central component in this circuitry. He did not steer the course of events to his pleasing, but instead was a strategically located node of agency that connected a variety of crucial networks in government, labor, the private sector and public relations. It was also his particular emphasis on individual differences in academic ability that helped propel and justify this consonant shift in educational policy.

The centrality of Conant's position in this policy-making network helped the Educational Testing Services position itself to maximal advantage in relation to the new policy sweeping through and the waves and channels of new funding this policy generated. In fact, Conant's leadership position within ETS helped generate some of these wave that ETS rode. With Conant's

strategic help the organization was able to more effectively create the sorts of conditions most amenable to its success in this new educational order: a marketplace for the testing of teaching and learning.

ETS RESEARCH AND DEVELOPMENT: COOPERATIVE PLAN FOR GUIDANCE AND ADMISSIONS

ETS worked assiduously to exploit new opportunities that Conant's report and the NDEA legislation would usher in. Guidance counseling, and all the ability testing that guidance decisions demanded, was a central part of Conant's recommendations and a clearly delineated title mandate of the National Defense Education Act. It was also now at the top of ETS's list of research and development priorities.

In a May 1960 meeting of the ETS Board of Trustees the trustees concluded that the future of ETS was in large part linked to the trajectory of guidance counseling and that the corporation should redouble its efforts to develop links with the emergent profession as it ensconced itself in the public schools. The trustees urged in summary that:

ETS and College Board could make a fundamental contribution to American education by giving vigorous and aggressive leadership in the area of guidance and counseling from school to college, focusing attention on services to be

rendered by present tests for other than entrance purposes.⁴⁴

The bulk of ETS's test market had been College entrance exams, taken toward the end of a student's high school career (i.e. the SAT). The mention above of "tests for other than entrance purposes" referred to the new demand for ability group testing in the post-NDEA high school reformed in Conant's image, where the "academically talented" were more systematically selected and elected by more frequent routinized interval testing. As ETS strove to broaden its "base of operations" with this more frequent ability-group testing, it should also "explore better administrative arrangements for the use of the instruments within institutions and develop more meaningful relationships between tests at successive educational levels." This interest in the interdigitation of tests across grade level indicates a drive for a closer meshing of assessment and curriculum, and in turn suggests how testing and assessment measures could grow to drive subject curricula. And lest any of this sound too profiteering or market-driven, the trustees concluded their exhortations and prognostications with a more beneficent commandment: "ETS should be aware of competition but

⁴⁴ Catherine G. Sharp (Sec.), Papers of James Bryant Conant, 1862-1987, "Minutes of the Annual Meeting of the Board of Trustees (ETS)," May 3, 1960, UAI 15.898, ETS-Board of Trustees, Box 113, Harvard University Archives.

at no time diverted from its stated purpose of maximum service to education generally.⁴⁵

This mandate for more and more frequent testing throughout junior and senior high years was accompanied by a plan to introduce ETS even more intimately into the daily administrative functioning of public schools. The "Cooperative Plan for Guidance and Admission" first announced in December 1959 Board meeting, sought to work with schools state by state and under the auspices of state departments of education, to provide an ETS-developed academic record-keeping system that schools could use to systematically track the progress of all their students as individuals. ETS researchers reported that this advancement in "pupil personnel record keeping...has resulted in the design of a set of materials that will simplify academic record-keeping as well as reduce its cost--and provide a machine readable input document for electronic summarization."⁴⁶ John Dobbin, the senior researcher on this pilot program noted that this innovation amounted to a:

new method of improving communication between schools and colleges whereby schools could convey to colleges on one comprehensive report form the important information about an individual student that had been gathered during his years in high school. The plan provided a method by which high schools and colleges within a state could cooperatively develop a common system of collecting

⁴⁵ Ibid.

⁴⁶ Henry Chauncey, Papers of James Bryant Conant, 1862-1987, "Memorandum for the Board of Trustees (ETS)," September 29, 1960, UAI 15.898, ETS-Board of Trustees, Box 113, Harvard University Archives.

recording summarizing and transmitting information about each student.⁴⁷

This mass processing of student performance information was, moreover, facilitated by new technology: "The information would be collected by schools in such a way that electronic document readers and computer systems could read, transcribe, interpret and summarize it onto a single report form printed in multiple copies." This new standardized ETS report would replace the now-current and "cumbersome high school transcript." It could be sent on to colleges or employers and it gave schools more systematic data which they could use to evaluate their curriculum and their ability grouping decisions. Finally, in a gesture toward individualization and state and local autonomy, Dobbin pointed out that the roll-out and implementation of this new record-keeping system was "flexible." "ETS would develop the principles" and provide the materials and analytical services, but states and regions would adapt these principles to their particular needs. Committees composed of school administrators, state officials, college educators and ETS representatives would decide together what categories of data were most useful for high school guidance decisions and college admissions.⁴⁸

⁴⁷ Sharp, Papers of James Bryant Conant, 1862-1987, "Minutes of the Annual Meeting of the Board of Trustees (ETS)."

⁴⁸ Ibid.

Between its initial discussion in December 1959 and subsequent evaluations in September of 1960, ETS's Cooperative Plan for Guidance and Admission had moved rapidly toward realization, particularly in the state of Georgia where the pilot plan was being tested. ETS president Henry Chauncey announced:

The Georgia Department of Education has approved the forms and plans will conduct a try-out of the whole system in a number of schools. The try-out will be a simulation of three years of active use of the materials, during a three week period in November. On the basis of this try-out, final forms, with appropriate manuals of instruction, will be produced for operational use by Georgia schools beginning in March.⁴⁹

The comic imagination takes flight over just how three years of academic record keeping might have been accelerated and condensed into a three week simulation. One envisions overheated scanning machines fed by equally exhausted student-assistant score sheet bubblers. But interest in the new record keeping program was real and coming in from all quarters. Georgia, the first state on board, officially adopted ETS record keeping system on a state-wide basis in 1961, and even as early May 1960 West Virginia, Michigan, Washington, Illinois, Florida, Virginia, and California had expressed decided interest to ETS in this new Cooperative Plan for Guidance and Admission.⁵⁰

⁴⁹ Chauncey, Papers of James Bryant Conant, 1862-1987, "Memorandum for the Board of Trustees (ETS)."

⁵⁰ Ibid.

Likewise, hoping to secure new funds made available by NDEA earmarked for the collection, organization and analysis of educational statistics (NDEA, title X), Stanford University had very recently approached ETS with plans for a cooperative venture to create and "Educational Data Processing Institute" for the State of California.⁵¹ Thus, ETS was not only testing students at an unprecedented rate and in new educational contexts, it was also inserting itself and accepting invitation into a record-keeping and data gathering function in school systems and state-level education departments around the country.

This staggering new volume of scoring, number generation, and number crunching was greatly facilitated by the implementation of new technologies. ETS engineers were working round the clock at their Princeton headquarters to couple an automated scoring machine (an early version of bubble sheet optical scanner) with a RCA 501 electronic data processing system, a new solid state transistor computer that debuted in 1958 with a \$600,000 price tag.⁵² Chauncey reported for the Board that:

A major job during the spring and summer has been the conversion of our procedures for the "automation" made possible by the scoring machine and the RCA 501 computer.

⁵¹ Sharp, Papers of James Bryant Conant, 1862-1987, "Minutes of the Annual Meeting of the Board of Trustees (ETS)."

⁵² Ibid.

This has proved to be a tremendous undertaking and will not be completed for some months yet, but so far we have been able to maintain our schedule. The computer was delivered the first week of September, is now being put in running order, and should be in use in a few days.⁵³

This computer driven automated scoring made possible the acceleration and cost effectiveness of mass-testing at this new volume of practice that the expanding market for testing now allowed.

ETS RESEARCH AND DEVELOPMENT: NEW TESTS FOR THE PHYSICAL SCIENCES STUDY COMMITTEE AND OTHER NDEA CURRICULUM DEVELOPMENT EFFORTS

Not only was ETS testing exponentially more students and setting up high school-college networks and state-level repositories for the collection and analysis of educational data, they were rapidly developing new categories of tests that targeted new NDEA funding initiatives. The first of these efforts was the innovation of standardized tests to assess new NDEA stimulated subject area curriculum development in high school level natural sciences, mathematics and foreign languages.

This project was linked to a larger multi-institutional effort funded and initiated by the National Science Foundation since 1953 to revise and standardize the way the sciences were

⁵³ Chauncey, Papers of James Bryant Conant, 1862-1987, "Memorandum for the Board of Trustees (ETS)."

taught to American high school students.⁵⁴ And yet while originally an NSF project, these funds for curriculum development were [soon] fed and sustained in large part by monies released by the National Defense Education Act. According to varying estimates, between 1958 and 1959 alone the budget for NSF curriculum development was radically augmented with the passage of the NDEA by 300% to 700%.⁵⁵

And ETS had favorably positioned itself to collect generously from this new fount of funding. Since 1957, ETS had worked closely with the Physical Sciences Study Committee (PSSC), a team of MIT scientists and high school teachers responsible for developing a new high school physics curriculum. Henry Chauncey, ETS president noted in a report for the ETS Board of Directors that "ETS had collaborated with the Committee [the PSSC] in development of tests which would serve for evaluation of the new curricula." He further reported that this relationship had been so successful that other subject matter curriculum development groups were seeking out ETS's services: "The pioneering success of the PSSC [has] made the project a model for curriculum revision groups and, because of ETS'

⁵⁴ John L. Rudolph, *Scientists in the Classroom: The Cold War Reconstruction of American Science Education* (Palgrave Macmillan, 2002); Ellen Condliffe Lagemann, *An Elusive Science: The Troubling History of Education Research* (University of Chicago Press, 2002), 168-170.

⁵⁵ Rudolph, *Scientists in the Classroom*, 109; Lagemann, *An Elusive Science*, 169.

substantial participation in the program, other curriculum groups [are] approaching ETS for assistance in test development and evaluative procedure."⁵⁶ These other subject discipline groups included the Chemical Bond Approach Project, Chemical Education Material Study, the Biological Sciences Curriculum Study, and the School Mathematics Study Group. ETS was also cooperating with the Modern Language Association to develop a host of new teacher and student assessments for various foreign language curricula including French, German, Spanish, Italian, and Russian.⁵⁷

Here were all the national security subject area curricula targeted by the National Defense Education Act (and echoed in Conant's independent report) for emphasis and development: the sciences, mathematics and foreign languages. And here was ETS, working as special consultants in the development of standardized assessments for this new curriculum.

ETS RESEARCH AND DEVELOPMENT: THE NATIONAL GUIDANCE TESTING PROGRAM (NGTP)

ETS's second major initiative in novel test development in this immediate time period was the innovation of standardized assessments for guidance and placement decisions in junior and

⁵⁶ Sharp (Sec.), Papers of James Bryant Conant, 1862-1987, "Minutes of the Annual Meeting of the Board of Trustees (ETS)."

⁵⁷ Ibid.

senior high. This suite of tests debuted in the 1958/1959 academic year, were all designed to assess sequential progress across grade levels and were marketed all together as the "National Guidance Testing Program."⁵⁸

The new School and College Ability Test (SCAT) and Sequential Tests of Educational Progress (STEP) series, tests to which Conant frequently referred in his report, were among the new instruments included in this National Guidance Testing Program.⁵⁹ The SCAT tests were intended to assess supposed differences in underlying ability, while the STEP tests measured accrued learning and acquired skills across different subjects. Like the other NGTP instruments the SCAT and STEP were not in fact single tests for use in an a la carte or piecemeal fashion, but rather actually each a test-series designed for implementation across multiple grade levels. School systems that purchased the entire National Guidance Testing Program suite would also get a reduced rate for the scoring and statistical analysis of all these tests through ETS. Clearly this was a new guidance testing system, developed in the wake of *The American High School Today* and the NDEA, and designed to encourage schools not only to adopt a durable, comprehensive

⁵⁸ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1958-59* (Princeton, N.J: Educational Testing Service, 1959), 28-30.

⁵⁹ Ibid, 29.

guidance and placement program, but also a guidance program normed and structured around ETS assessments.

ETS advertised its new tests in just these terms, claiming the NGTP had "great potential for school systems seeking up to date batteries of tests for a continuous testing program."⁶⁰ They accompanied these sorts of claims with a 'boots-on-ground' roll-out campaign similar to Conant's speaking tour for *The American High School Today*. By their own estimate ETS staffers traveled over 100,000 miles that year to accomplish work "related to programs implementing the National Defense Education Act."⁶¹ Moreover, they directly involved themselves in the nascent professionalization of guidance counseling, attending "by invitation, more than half of the NDEA counseling and guidance institutes held in the summer of 1959."⁶²

For purposes of clarity and emphasis, its important to note that two major structural changes to American public education had occurred almost simultaneously and were already beginning to blend indistinguishably together. 1) Public schools across the country had been encouraged to—and in fact were state by state—implementing guidance programs in their schools in an entirely more comprehensive and systematic fashion. 2) ETS had moved

⁶⁰ Ibid.

⁶¹ Ibid, 28.

⁶² Ibid.

quickly to create and ensconce its own proprietary tools and instruments that would in large part shape just how those guidance and placement decisions would play out.

The National Guidance Testing Program debuted with direct sales to school systems, and immediately became ETS's fastest growing market segment). ETS sold 115, 600 NGTP tests for the 58/59 academic year, the first year the program was available for purchase. By the end of the first academic year ETS was able to proudly announce that the state of Virginia had purchased the entire test suite for use in all its public school systems.⁶³ By the 1959/60 academic year NGTP test sales had rocketed to around 420,000, a 3.6 fold rate of growth over one year.⁶⁴ It now surpassed the PSAT in total test sales, and was second only to ETS's College Entrance Exam Board series (the SAT and ACH, long its staple products and primary earners year). As of the 1963/64 academic year, ETS's National Guidance Testing Program reported total test sales of 713, 361, for a total 6.2 fold rate of growth over five years.⁶⁵ ETS stopped reporting figures for National Guidance Testing Program tests sold/administered by the mid-1960s

⁶³ Ibid, 29-30.

⁶⁴ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1959-60* (Princeton, N.J: Educational Testing Service, 1960).

⁶⁵ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1963-64* (Princeton, N.J: Educational Testing Service, 1964).

It is useful to compare these NGTP numbers with the ETS's College Entrance Exam Series (the SAT and ACH achievement tests), the flagship test suite that had been ETS's most profitable testing product since the company's start in 1947. ETS's College Entrance Exam division reported 618,000 tests sold/administered in 1958/59. This figure surged to 1,786,184 by the 63/64 academic year for a 2.9 fold rate of growth over the same 5 year period.⁶⁶ Thus while the SAT and ACH tests clearly accounted for more overall tests sold and administered, the growth rate of the new NGTP tests was more than double (6.2:2.9) the College Entrance Examination Board leviathan.

The SAT as profitable and widely used as it was, nonetheless was a single threshold exam that helped regulate entrance from high school to college. The NGTP suite sought to delve much more deeply into the testable educational demographic offering a "continuous testing program" that potentially extended from grades 4-14 and could be administered as many times per grade level as guidance might deem necessary.⁶⁷

⁶⁶ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1958-59*, 58; Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1959-60*, 52; Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1964-65* (Princeton, N.J: Educational Testing Service, 1965), 79.

⁶⁷ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1964-65*, 81.

The National Defense Education Act, and Conant's supporting recommendations for the reform of the American High School, had helped crack open what was by far the largest educational testing market available, and had helped assure an exclusively advantageous position for ETS as first entrants into this new field. All told, Conant's study—which ETS quietly helped engineer—and the cascade of developments the study helped usher in were a boon to ETS.

RECORD GROWTH: TRENDS IN ETS NET WORTH IN THE NDEA ERA

ETS's own reports of their net worth from the mid-1950s through the early 1970s—discussed in board meetings and tabulated in their annual reports—paint a clear picture of their rapid growth and ascendance over the educational testing market.⁶⁸ Their reported net worth for 1957 was just over \$2.5 million.⁶⁹ This was a year before NDEA and the publication of the American High School today, and serves as a good baseline for plotting their financial trajectory over the next decade and a half. By 1959, a year after NDEA and Conant's supporting recommendations, their declared net worth was nearly \$7.2 million, marking a tremendous nearly 3 fold growth rate over two

⁶⁸ Sharp, Papers of James Bryant Conant, 1862-1987, "Minutes of the Annual Meeting of the Board of Trustees (ETS)."

⁶⁹ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1956-57* (Princeton, N.J: Educational Testing Service, 1957), 68.

years.⁷⁰ By 1967, a decade after our 1957 baseline, ETS's reported net worth was just over \$17 million, and by 1972 it was \$27.7 million establishing a stunning eleven-fold growth over 15 years.⁷¹ In 1959, the year after NDEA and the American High School Today and the first year of ETS's remarkable growth spurt, William Carr, executive secretary of the NEA and Conant's silent collaborator, was elected to the ETS board of trustees. There he joined longtime board members Conant and Gardner. Conant, himself, that same banner year, was elected to serve as Chairman of the Board.⁷²

ETS had grown with such remarkable rapidity over the course of just few years by working much more closely and cooperatively with public schools on a number of fronts. It was not simply a matter of testing more and at more grade levels. Through their work with the PSSC and other NSF/NDEA funded bodies for subject area curriculum development, ETS was helping to design curriculum that could be more readily assessed by ETS tests. Through their pioneering Cooperative Plan for Guidance and

⁷⁰ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1958-59*, 73.

⁷¹ Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1966-67* (Princeton, N.J: Educational Testing Service, 1967), 65; Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1971-72* (Princeton, N.J: Educational Testing Service, 1972), 75.

⁷² Sharp, Papers of James Bryant Conant, 1862-1987, "Minutes of the Annual Meeting of the Board of Trustees (ETS)"; Educational Testing Service, *Annual Report to the Board of Trustees - Educational Testing Service: 1958-59*, 5.

Admissions, ETS also assisted schools in organizing and processing their academic records—via standards, procedures and materials ETS had itself developed. Additionally, through this same program ETS was coordinating with (and even helping to create) state-level centers for the collection and analysis of educational data. Finally through its new National Guidance Testing Program, ETS was generating more test data and helping guidance counselors make more efficient and systematic use of this test data in guidance decisions.

Of course, this was about more than profit, net worth and the opening up of new market sectors with new practices, it was about the reaffirmation and intensification of old—and to some extent the instantiation of—new institutional norms and broader cultural beliefs that would sustain those new practices. ETS was reshaping public education to make it more amenable to testing culture.

CONCLUSION

This chapter has traced the coordinated activity of networks of individuals and institutions that linked together James Bryant Conant, *The American High School Today*, ETS, the National Education Association, and the Carnegie Corporation with the National Defense Education Act. This network functioned in a largely *sub rosa* fashion, thereby positioning

The American High School Today as a seemingly independent, coincidental endorsement of NDEA initiatives on behalf of "academically talented" or "highly able" students.

This seeming-independence enhanced the apparent objectivity and political neutrality of both *The American High School Today* and the National Defense Education Act. Both documents could then advance, as "common sense," matching sets of recommendations to more systematically structure educational opportunity around "natural" individual differences in "intelligence." Finally this chapter has demonstrated that the Educational Testing Service recouped enormous financial gain as a result of their privileged position within this network. With Conant at the helm of his study and a salaried member of the board, ETS was several steps ahead of their competitors in anticipating the new educational testing markets that the National Defense Education Act would create.

While Chapter 5 has examined the behind-the-scenes politics of this network, Chapter 6 will turn outward in its focus to examine ensuing public reaction to the recommendations of the National Defense Education Act and *The American High School Today*. Of course, this subsequent public reception had been intimately and indelibly shaped by the combined activities of this network.

CHAPTER VI
A "PRECIOUS MINORITY": CONSTRUCTING THE "GIFTED" AND
"ACADEMICALLY TALENTED" STUDENT IN THE WAKE OF *THE*
AMERICAN HIGH SCHOOL TODAY AND THE NATIONAL DEFENSE
EDUCATION ACT

This chapter examines a profusion of lay and specialist literature on education for the "gifted" and "academically talented" that emerged in the late 1950s and early 1960s. This new and highly visible discourse on giftedness was propelled most obviously in the wake of the Sputnik crisis and the passage of the National Defense Education Act (NDEA). It was also shaped--immediately after the NDEA--by the publication of *The American High School Today*, James Bryant Conant's widely disseminated study of public high schools. Conant's independently released study recommended a set of school reforms in the interest of the "gifted" and "academically talented" that were indeed highly consonant with recent NDEA title mandates.

Indeed, in this post-NDEA explosion of new literature constructing "giftedness/academic talent" there were abundant references to Conant and his findings. Psychologist Miriam Goldberg, co-director of the new Talented Youth Project at Teachers College, Columbia University, noted "*The American High School Today* has helped alert educators to the importance of taking care of the nation's intellectually gifted boys and

girls."¹ Conant's study was not the single originary source for these common ideas, but it was nonetheless a crucial organizing text and touchstone. There is little existing literature specific to the history of education for the "gifted" and "talented." As such this chapter makes an important original contribution.

First, I turn to an examination of this new lay and specialist literature itself, paying particular attention to the terms of the discourse, and themes and argumentative strategies common to its representation. I find "gifted/academically talented" was posited a) as a natural category of person, long neglected, but recently rediscovered, b) that intelligence testing was the best way to identify this "precious minority," that c) once identified, the public schools should group these individuals separately and provide them with advanced curricula, that d) such measures were vital to national progress and security, and finally that e) such measures were also in the interest of the social and psychological well-being of the "gifted"/"academically talented" themselves. Secondly, I explore the timing of this new advocacy of the "gifted." While associated in its moment almost exclusively with the Sputnik crisis and its sequelae, I demonstrate the emergence of this

¹ Benjamin Fine, "U. S. Treasure Hunt on for Talented Students," *Daily Boston Globe* (1928-1960), June 14, 1959.

intensified interest in gifted education was actually closely coterminous with *Brown v. Board*, and should be understood in the context of early efforts to desegregate the public schools. I argue, finally, that the new gifted and talented movement repurposed and recoded a key argumentative strategy derived from the landmark Supreme Court case: namely that a certain subset of the population was subject to neglect and therefore at risk of various forms of psychological damage.

ISOLATED GIFTEDNESS

Meet Barry Wichmann, from the small town of Rockwell City, Iowa: 11 years old, I.Q. 162. In terms of measured intelligence, Barry was an exceedingly rare specimen, the top .005% of the population as scored on the Stanford-Binet I.Q. scale. Though he might have looked to the casual observer like any other kid, he was in fact, according to psychometric theory, one in 20,000. In April 1958, *Life Magazine* ran a photo essay on Barry and other children like him called "The Waste of Fine Minds" as a way of introducing to the American public the gifted and academically talented. Who were they? What sorts of lives did they lead? What special needs did they have and what exceptional challenges did they face?²

² Grey Villet (photographer), "Crisis in Education, Part III: The Waste of Fine Minds," *LIFE*, April 7, 1958, 44 no. 14:89-97, on p. 89.

The article opened with a full page picture of Barry in scholarly repose: bespectacled, tow-headed, gaze inclined in quiet contemplation. The caption read: "his thoughtful face reflecting complete absorption, student Barry Wichmann, 11, pays attention during music class."³ In fact most all of the pictures in this photo-biography of a gifted child, captured Barry in moments of what appear to be either dreamy introversion or rapt attention. In either attitude, Barry seemed to be seeing something unavailable to the ordinary person.

The narrative organizing these snapshots summoned a tantalizing vision of what Barry and other rare people like him offered: "Behind the alert and steady gaze of the 11-year old schoolboy lies a mind of truly thrilling potential--a mind that, properly attuned, might someday pierce labyrinthine complexities and reach profound conclusions."⁴ There is something oddly generic about this optimistic prediction. What sorts of labyrinthine complexities and why were they worth piercing? Reach profound conclusions about what? But if no specifics were forthcoming, the reader was nonetheless assured: ours was a timeless cosmic order and it was the very rare mind like Barry's that was built to plumb its depths.

³ Ibid.

⁴ Ibid.

But in a society that could not see or understand his exceptionalism, Barry's genius was also the source of many of his problems, most notably a potentially profound isolation. The article reported: "isolated by his intelligence, unchallenged at school, unable even to respond much to the loving but uneasy efforts of his parents to guide him, Barry is virtually forced to spend a great deal of time all by himself." Barry seemed almost fatalistically resigned to this unbridgeable gap between himself and others: "I am prepared for loneliness. That's what my books and records are for."⁵

In fact, *Life* impressed upon the reader that Barry was categorically different from other children and therefore had a range of special intellectual needs currently not being served. Barry was not stimulated by his schoolwork and, despite--or perhaps because of--his great intelligence, he actually was not doing very well in a number of his subjects, notably arithmetic. But, the article insisted, it was perhaps no surprise his grades, unscientific assessments of his academic potential, did not match what objective I.Q. testing had revealed.⁶

Importantly, these gaps between potential and achievement were not Barry's fault, but rather his school's. His teachers were used to working with students of normal intelligence and

⁵ Ibid, on p. 95.

⁶ Ibid, on p. 90.

their methods generally did not challenge Barry or encourage his process of discovery. Because schools were ill-prepared to work with the academically talented:

The odds [were] against his ever realizing the extraordinary possibilities inherent in his superior intelligence...The great danger for this lively and strangely lonely boy lies in the chance that, his talents wasted by disuse, he will end his isolation by becoming an utterly ordinary person.⁷

Of course this was not just about Barry, but all the other children like him who faced the same struggle, neglect and potential isolation.⁸ "Waste of Fine Minds" held these children could come from anywhere: large cities, rural backwaters or towns like Barry's Rockwell City, IA, population 2,333. Yet, small population centers like Barry's home town were, the article explained, unlikely equipped to deal with this caliber of intelligence. Special programs needed to be implemented or families would have to seek advanced curricula in larger school systems.⁹ "Waste of Fine Minds" thus evolved into a broader critique that drew its sites on public schools, and a social order that did not recognize giftedness. The potential consequences of this ignorance and neglect posed, moreover, a threat to national progress and security, for "it is the gifted of this young U.S. generation who must be counted on to provide

⁷ Ibid, on p. 89.

⁸ Ibid.

⁹ Ibid, on p. 96.

the nation's future leadership, especially in creative scientific thinking."¹⁰

Life's, "Waste of Fine Minds" is a near perfect exemplar of a new strain of discourse, produced in great volume across a range of literatures and media in the US in the late 1950s and early 1960s that worked to construct--or at least reconstruct and reinvest with belief--the category of the "gifted" and "academically talented" child. Like *Life's* photo essay on Barry Wichmann, the whole register and approach of most of this literature was to introduce giftedness to a readership, a culture, not acquainted with it, or not yet properly equipped to recognize it. The emergence of this new type of person was accompanied by an affirmation of their special needs and a reinforcement of beliefs about the natural origins of individual differences in "intelligence."

GIFTEDNESS: A NATURAL CATEGORY REDISCOVERED

Popular representations of giftedness like the one of Barry Wichmann in *Life Magazine* emerged contemporaneously with a fleet of new research attempting to define, construct and impress the importance of this category of student on an unacquainted public. A primary goal of much of this specialist discourse on

¹⁰ Ibid, on p. 89.

giftedness and talent was to set the quantitative thresholds that defined this category and, as well, to establish giftedness itself as a *natural* category, rooted in inherent and more or less fixed individual differences.

A. Harry Passow, Professor of Education and the other co-director of Teachers College's Talented Youth Project noted that "academic talent"/"giftedness" was a category still undergoing some degree of flux as it took a scientifically functional form. Its boundaries were staked out by overlapping linguistic descriptors such as "gifted, talented, superior, bright, exceptional" which in turn could be accompanied and modified by qualifiers specifying different domains of aptitude, e.g. "mentally, academically, artistically" etc.¹¹ Given the shifting semantic sands blurring the edges of this category, Passow noted then that operational, quantitative boundary markers--i.e. measures of I.Q.--were the most useful, and that the work of Terman and Conant were clear landmarks in the field in this regard.¹² While Terman's longitudinal Genetic Studies of Genius had established an I.Q. of 140--the top 1% of the normal curve--as a minimum threshold for the category, Passow offered that "more recently Conant described the academically talented as the

¹¹ A. Harry Passow, "Education for Gifted Children and Youth," March 1960, 1 in Papers of James Bryant Conant, UAI 15.898, Gifted Child (Program B), Box 113, Harvard University Archives.

¹² Ibid.

top 15-20% in scholastic aptitude and the highly gifted as the top 2 per cent."¹³ While Terman had been interested in only the highly "gifted," Conant's new and much broader sub-tier, the "academically talented," was now an important new plateau in the topography of giftedness.

Outside the specialist literature under Passow's review, there was a broad effort underway to acquaint educators with Conant's updated and expanded thresholds. Following a February 1958 NEA conference chaired by Conant, the NEA published a pamphlet designed for mass distribution among teachers.¹⁴ This brochure, "The Academically Talented Student in the Secondary School," presented a spectrum of supranormal IQ thresholds that hewed to the liberal margins of Conant's benchmarks:

The Gifted.--The upper three percent of a normal distribution of school population - IQ range of approximately 130 and above.

The Academically Talented.--The upper twenty per cent of a normal distribution of school population--IQ range of 120 and above.

The Superior Student: The upper twenty-five percent of normal distribution of school population - IQ range of approximately 115 and above.¹⁵

¹³ Ibid, 2; Lewis Terman et al., *Genetic Studies of Genius: Mental and Physical Traits of a Thousand Gifted Children*, (Palo Alto: Stanford University Press, 1925).

¹⁴ Conference report published as Conant, *The Identification and Education of the Academically Talented Student in the American Secondary School* (Washington, D.C.: National Education Association, 1958).

¹⁵ The National Education Association, "The Academically Talented Student in the Secondary School," 1958, in Papers of James Bryant Conant, UAI 15.898, Academically Talented, Box 108, Harvard University Archives.

This additional category, the "superior student," registered Conant's allowance of diminishing but, to varying degrees, reclaimable talent in the next lower band of the national norm [see Chapter 2].¹⁶ Popular news coverage following the NEA conference and publication of *The American High School Today* generally reiterated Conant's norms. The Boston Globe for example cited Conant, reported these very same NEA/Conant thresholds, and then noted "this breakdown is generally accepted."¹⁷

I.Q thresholds aside, those who conjectured more explicitly about the actual development of "gifted" intelligence were careful to couch their argument, post-World War II, in the flexible and seemingly fair-minded language of nature-nurture interactionism, the normative outcome of the nature/nurture compromise of the interwar era.¹⁸ Yet, this was a conception of development that nonetheless saw nature and nurture as, at some level, separable and differentially responsible for individual differences.¹⁹ Professional estimates often weighted the relative contributions of nature and nurture to individual "intelligence." For example, Robert Woodworth, in 1941, held

¹⁶ Conant, *The American High School Today*, 20.

¹⁷ Benjamin Fine, "U. S. Treasure Hunt on for Talented Students," *Daily Boston Globe* (1928-1960), June 14, 1959.

¹⁸ Cravens, *Before Head Start*, 215.

¹⁹ Evelyn Fox Keller, *The Mirage of a Space between Nature and Nurture* (Durham: Duke University Press, 2010), 6.

individual variance in I.Q was 50% genetic, 50% environmental.²⁰ On the other hand in 1969, Arthur Jensen, after a literature review reaching back decades (and including the research of Cyril Burt) put the figure at 80% genetic and 20% environmental.²¹ But these seemingly decisive (though shifting) ratios concealed a great deal of ambiguity. What hidden, as-yet-unidentified genes? What numberless, trackless features of a person's environment? Notwithstanding the controversial findings twin studies, how could one even presume to pull these 'types' of cause cleanly apart? What did this interactionism really mean as it was applied to the question of how fixed or malleable a person's capacities were, how educable a person was? It could mean, I argue, whatever its moment and its particular explicators required it to mean.

For example, Ruth Strang, an educational psychologist along with Goldberg and Passow at Teachers College, set out best practice thinking on the nature and etiology of giftedness thus:

Gifted children are lucky. Theirs has been a particularly fortunate combination of heredity and early childhood experience...They are endowed with a certain organizing quality of mind that is able to see relations and to make deductions and generalizations.²²

²⁰ Robert Woodworth, *Heredity and Environment: A Critical Survey of Recently Published Material on Twins and Foster Children*, vol. X (New York: Social Science Research Council, 1941).

²¹ Arthur Jensen, "How Much Can We Boost IQ and Scholastic Achievement," *Harvard Educational Review*, 1969, 39, no. 1:1-123, on p. 51.

²² Ruth Strang, "The Psychology of Gifted Children," *Journal of Teacher Education*, 1954, 5 no. 3: 215-217, on p. 215

While opening with the flexible apologetics of nature-nurture interactionism (heredity and experience), Strang's argument proceeded nonetheless in a variety of revealing ways to construct giftedness as a more or less finished or complete personal essence. It was for one, in her language, a 'lucky endowment.' Moreover, to the extent environment was allowed a role in development, this was concluded by "early childhood." By such a turn of argument the effect of environmental factors could be rendered--soon enough--fixed.

Moreover the "organizing quality of mind" that allowed its gifted possessor to see the true logical and empirical relations among phenomena was positioned as pre-existent. Strang noted this:

organizing quality of mind influences their development from the first weeks of life. It enables them to select from their environment the experiences they need for their physical, intellectual and social development.²³

That spark that defined giftedness then actually conditioned, structured and limited what kinds of environmental exposures the gifted child sought out. An argument that began with an ecumenical, agnostic preamble on 'nature-and-nurture' concluded by discovering an inherent personal essence that dictated development *a priori*.

²³ Ibid.

Taking "nature-and-nurture" at face value, then, ignores the spaces the discourse could preserve for an older more established--challenged but un-disproved--hereditarianism. In making this argument, I have followed Michelle Brattain and Hamilton Cravens who have observed that scientific stalemates over the nature and nurture of "racial" difference, and "racial" and individual intelligence between the 1930s and early 1950s reverted to older assumption.²⁴ This reversion was, I find, often a rhetorical maneuver that paid lip service to nature-and-nurture but thereby arrived, via this politeness, at a conclusion consonant with classic pre-World War II hereditarianism: what made the gifted gifted was some putatively *a priori* organic factor inherent in the individual. I refer to this maneuver, ubiquitous in the discourse, as 'interaction-default.'

Another way experts could suggest the fixity of giftedness--without resorting to the overtly hereditarian language of interwar eugenics--was to suggest it occurred across the population with a dependable natural frequency. This left the putative genetic causes of giftedness unstated, and rather implied the category's naturalness as function of its

²⁴ Michelle Brattain, "Race, Racism, and Antiracism: UNESCO and the Politics of Presenting Science to the Postwar Public," *The American Historical Review*, 2007, 112 no. 5: 1386-1413, on p. 1404; Cravens, *Before Head Start*, 215.

statistical and demographic stability. Wherever you went, there you would find them, providing you looked carefully enough: diamonds scattered randomly but with a dependable frequency among the dross. This was a common trope in Conant's writings and readily employed by others.²⁵ Central to this mode of representation was the reminder that the gifted could emerge from anywhere and from within any subpopulation within the national body: all races, classes, regions, religions, boys or girls were eligible to produce their elect representatives. "Intelligence" had been individualized and was no longer bound up in the old tribalism of groups.

If giftedness was a natural category, was there a recognizable gifted type? Did giftedness come packaged with certain dependable temperamental, behavioral, or even physical qualities? Many specialists in the late 1950s seemed to be in close agreement with Terman and Leta Stetter Hollingworth's assertion from two decades before that, contrary to classic stereotypes, the gifted were neither physically feeble, nor neuroaesthetically bookish. Psychologist Paul Witty noted the gifted were actually "superior to classmates...in size, strength and general

²⁵ Conant, *The American High School Today*, 78. James Bryant Conant, Papers of James Bryant Conant, "Correspondence with William Alexander," September 22, 1958, UAI 15.898, Ability Grouping, Departmentalization, Box 108, Harvard University Archives. Willard Abraham, "Is There a Gifted Child in Your Family?: 12 Signs of A Gifted Child," *Los Angeles Times*, January 1, 1961.

health."²⁶ An NEA special journal feature on "Boys and Girls with Special Abilities"--employing what were by now the standard Conant IQ cutoffs for the category--channeled almost verbatim Terman's earlier assessment of gifted physique and constitution: "Physically they tend to be healthier, stronger, taller and to have more stamina than their age-mates."²⁷ Unsurprisingly, this typology extended beyond physical identifiers to include associated cognitive, social and emotional traits. The gifted and academically talented were "able to generalize at a relatively high level," and were also "imaginative, curious, creative, and persevering." Socially, they were more "self-confident, friendly and honest, critical of self and others, charitable and good leaders."²⁸ They were, in this typology, veritable repositories of protestant virtue and civic responsibility.

One theme common to popular literature was the worthy challenge of spotting giftedness in one's own children or students. To this end, news and magazine coverage often featured diagnostic checklists which conceivably fostered public--and specifically parental--interest in the nature and identification of giftedness. Journalist, Benjamin Fine, for

²⁶ Paul Witty, "Current Practices in Educating the Gifted Child," *D.C. Heath and Company Education Monograph* (Fall, 1957), 1.

²⁷ NEA, "Boys and Girls with Special Abilities," *NEA Journal*, 1958, 47 no. 7:469.

²⁸ *Ibid.*

example, enumerated ten discreet identifying qualities a layperson could use to spot a gifted child: an "extraordinary memory," a "high level of abstract thinking," the "ability to apply knowledge and illuminate experience," "persistent goal directed behavior," a "facility of expression and discriminating vocabulary," "intellectual honesty," "intellectual curiosity," a "variety of interests," "physical well-being," and a "pattern of sound values." Fine noted that discovering six or more meant "you might have a superior youngster to worry about."²⁹

Psychologist Willard Abraham's "Is There a Gifted Child in Your Family: 12 Signs of a Gifted Child" was another typical example of the diagnostic subgenre. Its pithy lay index included:

"Learns easily, seeks answers, collects things, is physically advanced, enjoys complicated games, is highly creative, has a sense of humor, likes school, understands the elements of time, analyzes himself objectively, prefers older children, may be 'difficult.'"³⁰ It was generally agreed by Fine, Abraham and others that a parental hunch should be certified by a psychologist trained in administering intelligence tests.

Even Margaret Mead entered the conversation with her own slightly unorthodox take on gifted typology. A staunch inter-war critic of claims of differential "racial" intelligence, Mead

²⁹ Fine, "U. S. Treasure Hunt on for Talented Students."

³⁰ Abraham, "Is There a Gifted Child in Your Family?"

was nonetheless during the 1950s a vocal proponent of the hereditary nature of *individual* differences in "intelligence."³¹ In an NSF sponsored address to science teachers gathered from a coalition of 13 southern states, Mead expounded on the nature of gifted children and the importance of accommodating them with specialized curriculum, particularly in the sciences. Yet notably for Mead, the gifted child was not "physically advanced" but instead bore a closer resemblance to Piggy from Golding's *Lord of the Flies*: "He is near-sighted, too fat, or maybe left-handed and he makes up for his physical short comings by showing off his knowledge."³²

Yet, Mead's slight divergence from the dominant narrative only reinforced the common underlying patterns her typology shared with others. For Mead giftedness was still very much a natural individual essence--best demarcated by I.Q.--that transcended race, class and gender. Yet, because her gifted individual was physically vulnerable, Mead seemed particularly attuned to how such a person might be bullied. To this effect, she recounted a story about a "Negro child who was found to have an IQ of 190." He was routinely beaten up for being smarter than his classmates, then left school and became a "delinquent."

³¹ Degler, *In Search of Human Nature*, 133-135.

³² "Dr. Margaret Mead Tells Needs of Gifted Children," *The Chicago Defender (National Edition) (1921-1967)*, August 1, 1959.

This amounted to "a tragic waste of a child who was probably one in a million persons."³³

This vulnerability of Mead's gifted child was more than just a cosmetic inflection on the standard type. By coupling her fragile-type to a particularly Darwinian-selectionist turn of argument, Mead could situate this type of person as a still green and tender phylogenetic offshoot in very recent human evolutionary history. These gifted, she held, came from a subset of the population which, until recently:

was never permitted to live. For two million years, diphtheria and all sorts of other things have killed off the vulnerable persons allowing only the toughest people to survive. In some areas 20 years ago half of your children were dead before maturity.³⁴

Yet thanks to 20th century medical science now the "vulnerable ones--are in a position to thrive." It was these individuals, Mead hypothesized, who stood an excellent chance of excelling in mathematics and the natural sciences. In a self-validating circulation of individuals-among-disciplines, the age of science heralded a new subspecies of person, one particularly good at science. Mead's selectionist argument conveyed the belief--elevated here to the pitch almost of science-fiction--that giftedness was a natural kind, and that the gifted, fragile but

³³ Ibid.

³⁴ Ibid.

imbued with stunning creative and intellectual potential, had arrived.

This conviction the "gifted" were special, naturally so, and moreover either emergent or recently rediscovered, was ubiquitous in the popular presses of the time. In 1959, Fine, under sponsorship of the North American Newspaper Alliance, conducted an exhaustive study of news coverage of the "gifted" and "academically talented." In his review, Fine determined that, likely thanks to the Sputnik crisis, "more attention is now paid to the needs of the gifted youngsters than ever before in our history."³⁵ Whether or not Sputnik was primarily responsible for this surge in interest, countless articles on the "gifted" and "academically talented" ran in U.S. newspapers and weekly magazines from the mid-50s through the early 60s.

While most of this material sought to impress the plain facts of giftedness on an unacquainted public, some coverage actually observed changing beliefs. This meta-commentary provides another picture of the emergent quality of this category. Journalist Dorothy Barclay noted, with allusions to Conant ("university president"/"scientist"), that experts were bringing educators and parents around to the reality and special

³⁵ Fine, "U. S. Treasure Hunt on for Talented Students."

needs of the gifted. Even non-gifted students were coming to accept the importance of special education for the gifted:

Now they [statements of experts] are beginning to produce repercussions in an unexpected quarter--among high school students themselves. In a growing number of schools today, parents may be reassured to know, it is fast becoming respectable to be 'a brain.'³⁶

Barclay suggested this "shift in attitude among average students" (originally discovered by Strang) should ease the fears of parents of the "gifted" and "academically talented." Their children would not be picked on for receiving educational advantages.³⁷ Though Barclay recognized this new attitude as both a discovery and a reevaluation of a natural fact, the observation, from a historical vantage point, depicts a category-in-flux, as it became more durable, more invested with belief.

Buzz about the "gifted" swarmed, conspicuous and omnipresent, through public conversation. It was on the tip of many a professional and parent's tongue. For some it was wearing thin. The coinage could convert to jargon, and if spent too liberally, transmute again to grating cliché. Charles Keller, director of CEEB's newly established Advanced Placement program, could not help but insert parenthetical annoyance when

³⁶ Dorothy Barclay, "Schoolmates Now Accept Gifted Child," *The New York Times*, May 12, 1958.

³⁷ Ibid.

reporting (to Conant's School Study team) the venues he had headlined in support of gifted and talented education. "Where have I recently spoken this year?...at a Working Conference on Meeting the Needs of Gifted Children (ugh! that phrase!) in Albany." ³⁸

TESTING AND GROUPING

If "gifted"/"academically talented" was its own distinct natural category of person, best delineated by IQ thresholds, then clearly IQ tests, or new equivalents, were the best way of identifying it. Proponents in this era promised that tests could scan the nation with laser-like precision and natural talent—the uncut diamond in the rough—would glint back.³⁹

Even critics seemed to question not the naturalness or rarity of talent, but only where it should be sought. Horace Mann Bond, African American sociologist/historian and staunch opponent of interwar intelligence testing, nonetheless affirmed

³⁸ Charles Keller, Papers of James Bryant Conant, "Correspondence: Keller to Reuben Gross," December 20, 1957, UAI 15.898, Advanced Placement Program, Box 108, Harvard University Archives.

³⁹ Conant, *The American High School Today*, 43-47, 57-66; Henry Chauncey, "Measurement and Prediction--Tests of Academic Ability," in *The Identification and Education of the Academically Talented in the American Secondary School* (Washington, D.C.: National Education Association, 1958); *Statement of Roger Russell and Lee Cronbach, Hearings before the Committee on Labor and Public Welfare, United States Senate (85th Congress): Second Session on Science and Education for National Defense* (Washington, D.C., 1958), sec. Committee on Labor and Public Welfare.

by the late 50s that "There is 'gold in them thar hills'." ⁴⁰ Essential for Bond was that the search should not be allowed to contract around the white middle class, but instead expanded consistently to "the underprivileged races and regions of the nation" in a search for an "emerging Negro elite."⁴¹ But still in Bond's conception, if there was gold out there, there was a superabundance of dross too that needed separating out for the gold to shine.

Indeed, members of the white expert and middle classes avowed the very same thing. Abraham noted the gifted were distributed evenly across all segments of the national body, all races and creeds, all walks of life: "They're in every city and town, in all kinds of neighborhoods. They can be of any skin color, and be born of parents in any occupation or economic group."⁴² Based on estimates that "half of the most gifted pupils in the United States live in relatively small cities, towns and rural districts," Witty demanded a truly comprehensive testing program that spanned the entire national body.⁴³ Embedded guidance programs, moreover, were now widely touted as

⁴⁰ Urban, "The Black Scholar and Intelligence Testing," 323-324; Horace Mann Bond, *The Search for Talent*, Inglis Lectures in Secondary Education 1957 (Cambridge: Harvard University Press, 1959), 57.

⁴¹ Ibid. 46.

⁴² Abraham, "Is There a Gifted Child in Your Family?"

⁴³ Witty, "Current Practices in Educating the Gifted Child," 6.

a crucial for in-school testing and enforcement of placement decisions.⁴⁴

Yet, the controversies of World War I I.Q. testing were not forgotten and often a perfunctory caution was made that delineated some limit to the power of testing and that reasserted tests as a specialized technology and the province of experts. Writing for teachers, New York City Schools superintendent J. Wayne Wrightstone, noted that:

Intelligence tests are very specialized aptitude tests that answer questions about learning ability. I.Q. is a useful concept if we remember that no single test tells the whole story about a child. We must be cautious, therefore, in using the I.Q. test to predict achievement in specific school subjects although it is a good guide to general school learning.⁴⁵

Wrightstone's gesture at prudent usage nonetheless did not question the fundamental power of the test to measure native "ability." Indeed, testing practices were intertwined with assumptions about the nature of intelligence itself. These sorts of caveats or disclaimers about I.Q., amounted to a display of circumspection that once performed, revitalized the authority to test and left intact testing's most fundamental assumptions.⁴⁶

⁴⁴ NEA Research Division, "Programs for the Education of Gifted Children," February 1954, 5 in Papers of James Bryant Conant, UAI 15.898, Gifted Child (Program B), Box 113, Harvard University Archives.

⁴⁵ J. Wayne Wrightstone, "Tests and What They Test," *NEA Journal*, April 1958, 47:221-223, on p. 222.

⁴⁶ *Ibid.*

Once the nature and status of the "gifted" had been determined and their identification accomplished, specialists took up the pressing question of how to teach them. 'Separately,' seemed to be the answer. While ability grouping had perhaps been more controversial in previous decades, most now seemed in general agreement that this was the way forward.⁴⁷ Whether this meant unapologetic tracking or Conant's purportedly more flexible--yet clearly ability-grouped--"individualized" curriculum:

One thing seems clear: the academically gifted must be grouped together and given a stimulating curriculum if they are to make maximum accomplishment.⁴⁸

Whatever the curricular content, however, a range of experts and educators argued generally that the gifted should not be bound too rigidly to a timetable or lesson plan. The gifted needed time to explore topics more thoroughly, and likewise their exposures to content should be open-ended so that they would be encouraged to practice and develop more creative and analytically powerful modes of thought.⁴⁹

⁴⁷ Passow, "Education for Gifted Children and Youth," 3, 7; Bess Furman, "Schools Prodded On Gifted Pupils; N.E.A. Urges That Talented Youth Get Special Study After the Eighth Grade," *The New York Times*, October 5, 1958.

⁴⁸ Carl Hansen, "For the Able Student--What?," *NEA Journal*, 1958, 47 no. 7:478-481, on p. 480.

⁴⁹ NEA Research Division, "Programs for the Education of Gifted Children," 4; Passow, "We Must Multiply Our Efforts," *NEA Journal*, 1958, 47 no. 7:470.

Passow even argued that while grades and more quantitative rankings might suffice for the broad majority of normal students, the gifted--because they "experiment[ed] with ideas and things" and showed a "love of learning for its intrinsic rewards"--should be judged by a more fluid, rarified, idealized set of standards that encompassed multidimensional and affective aspects of learning.⁵⁰ Passow's high I.Q. Lycaeum was a place for the individual pursuit of genuine academic interests and for the synthesis, exchange, and creative play of ideas. The ruled gradebook, tedious lesson plans and rote drills and exercises could be left at the edge of the grove.

TALENT AND NATION

Once giftedness had been erected as a measurable, knowable natural category, most expositors turned to the pressing need for its selection. These broader political arguments first fused together notions about talent, individuality and democracy. Such a cluster of ideas was then easily wedded to the interests of nation. In most depictions, this nation was situated on the brink of a world crisis where the very soul of

⁵⁰ Passow, "Basic Issues in the Education of the Academically Talented," 2, n.d. in Papers of James Bryant Conant, UAI 15.898, Academically Talented, Box 108, Harvard University Archives.

democracy was at stake. As might be expected, these arguments drew overtly on ideologies that fueled the Cold War generally.

Even from its first stirrings, the national project to cultivate the gifted could be construed as a guard against pernicious and undemocratic belief systems. Literature from the American Association for Gifted Children (AAGC) held, "interest in the gifted...affords one of the greatest opportunities to safeguard our present world leadership against destructive ideologies which threaten democracy."⁵¹ Witty, deploying the 1st person plural to resounding effect, likewise argued:

We need the abilities of our brightest persons for more than material progress. We are in a struggle to determine by which goals and ideals the people of the world will live. We believe that democracy and freedom offer the best answers for man today...We need the resourcefulness and the imagination of the gifted to create a better world.⁵²

Passow, finding similar consensus, noted a:

general agreement that: 1) these critical times call for an ever increasing number and variety of talented persons...2) whatever its other functions, the school must give highest priority to the identification and cultivation of each individual's potential to its fullest degree of excellence.⁵³

Once these powerful metaphors of nation, democracy, individual liberties and natural individual differences had been welded

⁵¹ Pauline Williamson, "The American Association for Gifted Children: Objectives and Growth," *Understanding the Child*, 1953, 22 no. 4: 121-124, on p. 124.

⁵² Witty, "Current Practices in Educating the Gifted Child," 6.

⁵³ Passow, "Education for Gifted Children and Youth," 1.

together into a protective bulwark against the anti-individualism of global communism, it was an altogether straightforward matter to argue for the inherently democratic nature of separate and specialized education for the gifted and talented. We might be equal in rights, that fulfillment of the Enlightenment social contract, but we were not equal in natural abilities.

For Passow and many others, whatever debate had lingered over the ethicality of special accommodations for the gifted was now resolved and defunct:

There is no real issue as to whether schools should make provisions for the gifted or whether such special programs are democratic. Our public schools must provide for their gifted for...the welfare and progress of our culture depend on the success with which citizens attain the goal of maximum self-fulfillment.⁵⁴

If it seemed we were investing our resources disproportionately in a small segment of the population, this was justified by the disproportionate power of real talent to safeguard and rejuvenate a free nation. Passow held that:

All society gains from the creative efforts of relatively few gifted persons. If we are to survive as a nation, then we must multiply our efforts to identify and develop our talent resources. Only thus will there be insurance that the lifeblood of our culture will be invigorated.⁵⁵

⁵⁴ Passow, "Basic Issues in the Education of the Academically Talented," 1.

⁵⁵ Passow, "We Must Multiply Our Efforts," on p. 470.

Yes, everyone was an individual but the gifted were the most perfect and most essential embodiment of our democratic individuality.

NEGLECTED GIFTEDNESS, DAMAGED MINDS

Yet despite the national need, many schools stubbornly still seemed to overlook the gifted. Fine held that "schools have been negligent too long in the development of adequate programs for gifted, talented and creative children." He bolstered this claim with alarming data: "less than 5 per cent of the 2,000,000 academically gifted children in school get an education suited to their special abilities."⁵⁶

Under the mounting weight of common sense--that 15-20% of us were decidedly more intellectually capable than the rest--naysayers or those ignorant of or indifferent to this new category of person seemed increasingly obstructionist. *The Chicago Tribune* found that in spite of a recent surge in interest in the gifted and academically talented:

Many principals, teachers, and school systems ignore--or resent--the idea that gifted young people have their special educational needs. In some school districts even attempts to identify bright youngsters meet with opposition.⁵⁷

⁵⁶ Benjamin Fine, "Neglect of Gifted Children," *The Sun* (1837-1989), October 1, 1961

⁵⁷ Joan Beck, "Plight of the Gifted Student: He Works at Less than Capacity--and Resents It," *Chicago Daily Tribune* (1923-1963), February 19, 1959.

An anonymous teacher at an affluent suburban school sarcastically quipped, "We have no gifted children in this town; it's a matter of educational policy" where by "administrative decree, all the youngsters are average--and receive average educations."⁵⁸ Such resistance amounted to an egalitarian, anti-individualism that benefited the mediocre, not the bright. Hidebound--even ideological--institutional resistance like this needed to be swept aside. For, "once the bright students are identified, schools can easily and inexpensively do much to encourage and challenge them. Most obvious of these methods is ability grouping."⁵⁹

The gifted and academically talented themselves, long-suffering and overlooked, seemed to cry out in assent. The *Chicago Tribune* reported that Conant's findings were "echoed--with varying degrees of disgust, resignation, and irritation--by many gifted young people who resent what they feel is their lost opportunity during their high school years.":

'We're supposed to be an accelerated class,' snorted a junior. 'But we use the same textbooks and go at the same speed as the regular classes. The only difference is we have to do twice as much homework.'⁶⁰

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ Ibid.

Indeed such coverage often explicitly referred to *The American High School Today*. The anonymous author of "Neglected Talent" relayed:

As Dr. Conant points out, the nation looks to the 15 per cent of our youth who are academically talented for its future professional men and women. If this precious minority fails to get, for example, enough mathematics and science in high school, its members find it difficult to enter an engineering school or take a premedical college course and impossible to begin a scientific career at a university.⁶¹

In fact, it was becoming increasingly clear to most observers that neglect of the gifted posed not only a great risk to the nation but also to gifted individuals themselves. This was often expressed as a fear the gifted would atrophy, waste their talent, or experience particular kinds of social isolation, or even psychological damage. Passow reported a "consensus that 'the gifted have been neglected'" and that as a result their "academic achievement is far below measured potential."⁶² Witty likewise observed "a great waste of [gifted] pupil's ability" and noted serious moral, emotional and social sequelae:

Many gifted pupils are still not identified in our elementary schools; and in high school, many other such students languish in idleness through the four years and fail to develop the ambition or work habits essential for profitable college careers.⁶³

⁶¹ "Neglected Talent," *The Sun* (1837-1989), January 28, 1959.

⁶² Passow, "Education for Gifted Children and Youth," 1, 10.

⁶³ Witty, "Current Practices in Educating the Gifted Child," 2.

And for all their remarkable abilities, the gifted were also marked by a particular set of vulnerabilities. If Mead saw in them a physical weakness that needed protecting (a child from bullies, a frail subspecies of human from disease), most everyone else couched the vulnerability as more specifically mental, social, or psychological. It was not uncommon even to find the "gifted" figured as the natural opposite of the "retarded." An anonymous expert in "Waste of Fine Minds" reported: "the gifted are the most retarded group we have. Their achievement in relation to their ability seems to be smaller than that of any other group."⁶⁴ This locution asserted the "gifted" were naturally different at the same time it established their vulnerability and candidacy for special care. Perhaps the "gifted" were *even more* vulnerable than the "retarded" for "many communities oppose special programs as being too expensive. Yet the same communities will often spend generously on much more costly schooling for the retarded."⁶⁵

Often this psychological vulnerability was held to produce an isolation or social-emotional dislocation if gifted children went unidentified. Abraham noted:

⁶⁴ Villet, *The Waste of Fine Minds*, on p. 89.

⁶⁵ Ibid, 96. See also Conant, *The Identification and Education of the Academically Talented Student in the American Secondary School*, 11; *Statement of William Carr, Hearings before the Committee on Labor and Public Welfare, United States Senate (85th Congress): Second Session on Science and Education for National Defense* (Washington, D.C, 1958), sec. Committee on Labor and Public Welfare, 525.

[The gifted] cannot play the normal roles expected of them, and a role more fitting to their potential has never been suggested to them. They don't know what or how to act. They become aimless.⁶⁶

In such cases of neglected giftedness, it was the task of the psychologist or school counselor, equipped with an intelligence test, to discover and properly place the student, thereby restoring them to healthy social and intellectual functioning. Abraham offered, as a case in point, the story of "Maria" who was:

one of 14 children of a railway worker. In school she was sullen and often seemed confused. She didn't get along well with teachers or other children. Then one day she took a standard mental test given to all freshmen in her high school. Maria produced the highest score ever recorded.

Her counselor couldn't believe it, but a few talks with Maria opened his eyes. In a short space of time he changed Maria's whole situation and with it her whole life. He had her assigned to helping other kids learn. At home Maria began using her brains to help her family--she set up schedules of household duties for her brothers and sisters. Her parents, who had trouble speaking English, were overjoyed at the order and beauty Maria brought into their lives.⁶⁷

First, note this narrative works almost intentionally against the criticisms of World War I army I.Q. testing to reassure the reader that tests did not just benefit white middle class children with white middle class linguistic norms. Here,

⁶⁶ Abraham, "Is There a Gifted Child in Your Family?"

⁶⁷ Ibid.

presumably, the child of non-English-speaking immigrants had been justly singled out. The IQ test had pierced the nebulae of social stigmas to diagnose Maria's true nature.

This discovery of a hidden gifted child featured at its heart a Cinderella-like transformation of the protagonist. Before testing, Maria experienced an isolation that inhibited her development. In school she was "sullen," "seemed confused," and "didn't get along." The intelligence test, however, recognized Maria's true nature, rare though it was, and revealed it to those around her. Interestingly, if a mind like Barry Wichmann's could "pierce labyrinthine complexities and reach profound conclusions," Maria's genius had the power to reorder and beautify the social fabric around her. Regardless, her position in the social orders of school and home was, as a result, radically and favorably adjusted.

While Abraham's account of 'Maria' had a positive outcome, more commonly there was worry (à la Barry Wichmann) about the frustration, isolation and potential damage for which the gifted were at special risk. As if only the gifted were less than thrilled--and sometimes stultified--by the routines and repetitions of classroom life, Strang found that "gifted children are bored and disappointed by many of their school experiences." "Many," for example, "have expressed their dissatisfaction with the practice of taking turns around the

class, reading aloud."⁶⁸ This boredom or frustration could, over time however, cut short development. In Strang's expert opinion: "lack of suitable experiences may prevent the gifted child from attaining full intellectual and social stature."⁶⁹ Perhaps unsurprisingly, all this boredom, frustration, waste, loss, atrophy, and isolation could ultimately eat away at the heart and soul of a person. One NEA survey found a "distressingly large number of gifted pupils who were seriously maladjusted." This could be remedied, analysts held, by special classes for these gifted students and sometimes by referral to "psychologists for more intensive study."⁷⁰

The 1958 *Life Magazine's* "Waste of Fine Minds" worried children like lonely prodigy Barry Wichmann (I.Q. 162) might be in great jeopardy. The article pleaded:

Across the U.S. today brilliant youngsters are growing up in an isolation almost as profound as Barry Wichmann's. These children should be getting the best education that the nation can provide. But because of ignorance, prejudice and a paralyzing inflexibility in the whole public school system, tragically little is being done to help them.⁷¹

It seemed clearer than ever here that the roots of the problem were lodged in the public schools and embodied in a set of prejudicial attitudes arrayed against these gifted children.

⁶⁸ Strang, "The Psychology of Gifted Children," on p. 216.

⁶⁹ Ibid, on p. 215.

⁷⁰ NEA Research Division, "Programs for the Education of Gifted Children," 4.

⁷¹ Villet, *The Waste of Fine Minds*, on p. 96.

Indeed "prejudice" was underscored. The section heading introducing this argument ran: "Around the U.S., old prejudice and too little effort to help."⁷² But prejudice was not just narrow-mindedness. It could cause injury. *Life* advanced—as a matter of expert judgment—that "bright pupils" should be selectively accelerated and that "it does far more psychological damage to hold them back."⁷³ Here, *Life* had fairly bluntly laid out a case that so many other observers had coded perhaps with more nuance: neglect of the gifted grew from "prejudice" and could result in "psychological damage."

TIMING

Certainly Sputnik had much to do with the sudden amplification of calls for gifted education in the final years of the 1950s. What the satellite launches suggested about the growth of Soviet science "has shaken many American citizens out of their indifference and lethargy."⁷⁴ Also clearly, Conant's study, and its carefully coordinated post-NDEA reception was undoubtedly a consensus-building call to action. But the planning of Conant's school study started several years before Sputnik. Indeed the slow political and legislative gears driving NDEA itself began

⁷² Ibid, on p. 96.

⁷³ Ibid, on p. 97.

⁷⁴ Fine, "U. S. Treasure Hunt on for Talented Students."

grinding well before Sputnik, too, and are traceable to the inaugural White House Conference on Education in 1955.⁷⁵ Something else was energizing calls for selective education for the "gifted" before the Sputnik crisis. Clearly the *Brown v. Board* decision of 1954 to desegregate public schools was another momentous event in the history of education in that era, and could have played a powerful role in shaping subsequent educational policy.

Given the decentralized nature of US public education, it can be hard to get a nationwide picture of the post-World War II growth and timing of school-place ability grouping practices for the "academically talented." Some sources, though, shed light, however broken, on what was happening. A 1959 North American Newspaper Alliance (NANA) survey of 23,000 US high schools--nearly all of the high schools then operating --found that in 1954 "programs for the gifted students were virtually unknown." By 1959 however, almost 50% of high schools had begun some sort of program for "talented pupils."⁷⁶ The striking scarcity of systematic ability grouping before 1954 depicted in the NANA data is confirmed by a separate large scale survey conducted by the NEA in 1953. The NEA contacted superintendents of 554

⁷⁵ Urban, *More Than Science and Sputnik*, 76, 83, 109-110.

⁷⁶ NANA survey conducted by Fine and summarized by him in "U. S. Treasure Hunt on for Talented Students."

school districts across the country, requesting information about what kinds of programs these school systems had for gifted or talented students. As of 1953, only 14 of those 554 school systems responded that they had any distinct formalized curriculum in place for "superior" students.⁷⁷

Examination of a more narrow but analogous set of data from the newly inaugurated College Entrance Exam Board's Advanced Placement (AP) program (included in Charles Keller's correspondence with Conant), offers yet another suggestive estimate of the rate of growth of selective curricula for "talented" and "gifted" students across the country during the second half of the 1950s. Notably, it is clear from these documents that AP curriculum debuted for instruction in 1954 [Tables 1 & 2].⁷⁸ The figures presented in these tables are in absolute numbers.

TABLE 1: Number of Students Taking AP Examinations (1954-1957)

1954	500
1955	900
1956	1200
1957	2100

⁷⁷ NEA Research Division, "Programs for the Education of Gifted Children, NEA Research Division," 1.

⁷⁸ Charles Keller, Papers of James Bryant Conant, "Correspondence: Keller to Reuben Gross," December 20, 1957, UAI 15.898, Advanced Placement Program, Box 108, Harvard University Archives.

(A 4.2-fold rate of growth over these 4 years).

TABLE 2: Number of Schools (Public and Private) Providing AP Curriculum Leading to Examination (1954-1957):

1954	18
1955	38
1956	104
1957	212

(An 11.8-fold rate of growth over these 4 years).

This AP data tells us only what a small fraction of the nation's high schools and students were doing in this specific regard. At the same time, however, it offers another angle from which we can fathom the broader trend in implementation of various selective curricula for academically talented and gifted students during this time. The AAGC held that 1947 marked a nadir in interest for the gifted.⁷⁹ Combining these snapshots above--the NANA and NEA surveys, with early AP numbers--it seems interest in selective education of the "gifted" and "talented" was likewise not a priority in the early 1950s. Yet, systematic ability grouping practices appear to have gained momentum around 1954, and accelerated through the Sputnik crisis, the passage of NDEA and Conant's supporting study and campaign. Of course,

⁷⁹ Williamson, "The American Association for Gifted Children: Objectives and Growth," on p. 122.

with the NDEA, the implementation of systematic testing and additional curriculum development now also received unprecedented federal support.

Yet the early and mid-50s are important in the history of education, indeed US history writ large, for other reasons. Indeed, this growing interest in "gifted" education emerged contemporaneously with increasing public awareness of an impending judicial decision on the desegregation of public schools, a decision that had the potential to radically shift the 'color line' and reshape the political and educational landscape. *Brown* was handed down as the law of the land in 1954. 1954 was the year that saw the humble launch of CEEB's Advanced Placement program, and the year, according to NANA, when "programs for the gifted were virtually unknown." It was the year after NEA conducted its nation-wide exploratory survey on gifted education. Of course though *Brown* was actually filed with the Supreme Court in 1951 and speculation about its outcome was increasingly prominent in news coverage in the years leading up to the decision. Indeed, charged discussion of racial segregation of public schools had percolated since the mid-1940s, and numerous court cases related to racial segregation of public institutions were submitted in advance of *Brown*. Discussion of the likelihood of the Supreme Court's involvement in the segregation issue surged in 1950 with widespread coverage

of hearings on Elmer Henderson's suit over segregated seating on trains and the nearly simultaneous suits over segregated instruction in Texas and Oklahoma Universities.⁸⁰

Most high-profile educational professionals who entered, after the mid-50s, into this fast flourishing discussion of "gifted" education did so, like Conant, with great discretion, scrupulously avoiding explicit mention of the desegregation issue.⁸¹ A few educational leaders were more candid in the connections they drew, or simply less skillful at technocratic dissembling. Such a figure was Carl Hansen, superintendent of the Washington, DC public schools. In a 1960 article for the *Atlantic Monthly*, Hansen made a case for tracking in the nation's public schools in a way that--he must have felt--tactfully leveled with the "problem" of desegregation post-*Brown*.

Hansen opened with a preamble on the democratic virtues of a high school that accepted all students in its district, but quickly qualified: admitting everyone without providing curricula differentiated by ability would produce "tragic consequences."⁸² Tellingly, the superintendent followed this

⁸⁰ "Segregation Cases Argued Before Court: Attorney General Urges End of 'Separate But Equal' Doctrine," *The Sun* (1837-1989), April 4, 1950.

⁸¹ See Hartman, *Education and the Cold War*, 158.

⁸² Carl F. Hansen, "Ability Grouping in the High Schools," *Atlantic Monthly*, Nov. 1960: 123-127, on p. 123.

point with an anxious reckoning of the new post-*Brown* educational landscape:

...With the desegregation policy adopted in 1954, Washington's ten comprehensive high schools are open to any student residing in a defined community, irrespective of race or social or economic status or achievement level...⁸³

Hansen noted that following this new policy, Washington DC high schools implemented, in 1956, a four-track curriculum based on ability.⁸⁴

The superintendent then shocked the reader with recent analysis of standardized test scores showing many DC 10th graders "at or below the 6th grade level in reading." Without explicitly naming the low-scoring group, Hansen nonetheless made it clear to which community he referred. Possible causes he adduced for these low scores included: "the denial of necessary educational opportunity under the segregated system, unsatisfactory home and community conditions, and inherent intellectual incapacity." Two messages lurked among these coded and not-so-coded descriptors. On the one hand, here was the by now standard, allegedly fair-minded deference to nature-and-nurture interaction: home, neighborhood, community, opportunity (nurture) and capacity (nature) were balanced like a spinning plate. On the other hand, both the nurture and nature sides of

⁸³ Ibid.

⁸⁴ Ibid.

this equation were simultaneously pathologized: the former with a "culture of poverty" argument soon to be scientized by sociologist and Senator Daniel Patrick Moynihan, the latter simply by assuming an "inherent incapacity."⁸⁵

Hansen then relayed the unfortunate remarks of a colleague: "These kids don't belong in high school. In my school they soon flunk out." Hansen, however, reassured the reader of his own fairness: "Forcing them to leave school is incredibly stupid and inhumane."⁸⁶ What was needed was a carefully tailored academic program that could accommodate both the college-bound and those whose "innate endowments limit the range and difficulty of their learning."⁸⁷ Note here, with the now unmitigated "innate endowment," the standard pattern of interaction-default. What could be more delicately treated as nature-and-nurture, collapsed--where action was called for--to mere nature, ineluctable, resolute. Nonetheless, that a student "seems unable to learn to read beyond a sixth-grade difficulty" was no reason to flunk them out of school:

He needs the fullest capability he can muster in the use of the printed word, so that he can avoid the despair felt by the functional illiterate. I have in mind a painter who was afraid he would lose his job as soon as his employer found out he couldn't read the directions on the paint can.⁸⁸

⁸⁵ Ibid, on p. 126.

⁸⁶ Ibid.

⁸⁷ Ibid, on p. 125.

⁸⁸ Ibid.

We could be different but together under the same roof. Some of us were born to do stoichiometry and calculate the rate at which pigments separated out in a sitting can of paint. Some of us were born to paint. If certain barriers outside schools were falling in the interest of democracy, a new system of braces, baffles, sieves, and retaining walls would have to be erected inside in the interest of common sense, and the ordered shepherding of different individuals onto their different destinies.

PSYCHOLOGICAL DAMAGE AND BROWN VERSUS BOARD

If Hansen and others like him stepped across an invisible line, drawing connections between "race" and ability grouping that were at least close to explicit, others were more skillful at recoding their calls for educational reform in the race-neutral language of individual differences. Of course, Conant and a host of other advocates for the top 15-20% of the bell curve all stressed that academic talent arose with a predictable frequency from across all social groups and was based on objective individual merit as determined by an IQ test. But even the seemingly apolitical rhetoric around giftedness reveals attachments that are perhaps more evident to historical analysis than they were to many historical actors. Chiefly, I argue the timing of this rediscovery of the gifted--along with the

argument they were neglected and at risk of isolation, atrophy even 'psychological damage'—reveals such linkages and that they lead directly back to the upheavals of *Brown*.

Both a general and scientific interest in psychological trauma had arguably intensified during World War II as psychiatrists and clinical psychologists mobilized *en masse* to help US servicemen scarred by their wartime experiences.⁸⁹ Yet, operationalization of various forms of 'psychological' or 'personality' damage had taken on a specifically racial dimension during the 1940s and 1950s through the work of social psychologists like Kenneth Clark and Mamie Clark, who became well known for their doll and coloring tests. The Clarks' numerous experiments demonstrated a clear preference among children of color for the 'white' over the 'black' doll, and a tendency to depict themselves during the coloring test as significantly lighter in skin tone than they actually were.⁹⁰ The Clarks concluded that racism--and the fraught process of racial identification that ensued from it--produced in African American children a "tremendous burden of feelings of inadequacy

⁸⁹ Herman, *The Romance of American Psychology*, 82-123.

⁹⁰ K. Clark and M. Clark, "Skin Color as a Factor in Racial Identification of Negro Preschool Children," *The Journal of Social Psychology*, 1940, 11: 159-69. Kenneth Clark and Mamie Clark, "Emotional Factors in Racial Identification and Preference in Negro Children," *The Journal of Negro Education*, 1950, 19 no. 3: 341-50.

and inferiority" and "introduce[d] a fundamental conflict at the very foundations of the ego structure."⁹¹

This new scientific discourse on psychological damage and racism took a specifically legal turn when, in 1951, NAACP attorneys Robert Carter and Thurgood Marshall sought the counsel of social scientists like Kenneth and Mamie Clark to mount a legal argument in the state-level desegregation cases preceding *Brown*.⁹² Thurgood Marshall later recalled formulating his legal strategy:

I told the staff that we had to try this case just like any other one in which you would try and prove damages to your client...When Bob Carter came to me with Ken Clark's doll test, I thought it was a promising way of showing injury to these segregated youngsters.⁹³

During the Supreme Court case, the NAACP maintained this strategy of claiming psychological damage to segregated children, relying again on the same body of scientific expertise. The Society for the Psychological Study of Social Issues (SPSSI), led by the Clarks and Gordon Allport, submitted as testimony to *Brown* an official statement drafted and signed by thirty-two well known social scientists. Drawing on a range of research, including the Clarks' studies, the SPSSI statement

⁹¹ Ibid, on p. 350.

⁹² Herman, *The Romance of American Psychology*, 196.

⁹³ Richard Kluger, *Simple Justice: The History of Brown V. Board of Education and Black America's Struggle for Equality* (New York: Knopf, 1987), 316. Quoted in Herman, *The Romance of American Psychology*, 196.

held that, in the opinion of a "large majority" of social scientists, "enforced segregation is psychologically detrimental to the members of the segregated group."⁹⁴ The statement noted this psychological damage manifested in educationally marginalized individuals as "conflict," "confusion," "self-hatred," a diminution of "ambition" and "morale," a persistent "defeatist attitude," and "depression of the educational aspiration level among minority group children."⁹⁵

Herman notes this scientific operationalization of "psychological damage" was crucial to the outcome of *Brown*.⁹⁶ The Court's decision, written by Chief Justice Earl Warren, closely echoed the SPSSI statement, finding that segregation produced in African American children a "detrimental effect" marked by "a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone." This "sense of inferiority affects the motivation of a child to learn. Segregation...has a tendency to retard the educational and mental development of Negro

⁹⁴ Kenneth B. Clark, Isidor Chein, and Stuart Cook, "The Effects of Segregation and the Consequences of Desegregation, A Social Science Statement in the *Brown v. Board of Education of Topeka* Supreme Court Case," (September 1952), *American Psychologist*, 2004, 59 no. 6: 495-501, on p. 497.

⁹⁵ Ibid, 496.

⁹⁶ Herman, *The Romance of American Psychology*, 195-198.

children..." This conclusion, Warren noted, rested on the strength of modern "psychological knowledge."⁹⁷

Following the judicial revolution of *Brown*, the idea of "psychological damage" developed a durably tacit association with desegregation and even schooling in general. Questions about where it did and did not apply rippled outward. Consider this exploration of implications of *Brown* in the *American Bar Association Journal*, as typical of the rapidly routinized use of "psychological damage" in relation to desegregation. Here, the authors explained why the *Brown* decision did not extend to "public bathing and swimming facilities." In the Court's opinion:

the psychological damage to Negro children resulting from segregation in public schools where attendance is compulsory...would not be present where recreational facilities, the use of which is voluntary, are involved.⁹⁸

Note here, in a clean separation of the cognitive from the socio-affective (the school from the pool), the assumption that recreational (non-academic) segregation allegedly caused no harm—or at least no harm of the sort that might "retard the educational or mental or any development of Negro children and adults."⁹⁹

⁹⁷ "Opinion of the Supreme Court," *Brown v Board of Education*, 347 U.S., 494.

⁹⁸ George Rossman and Richard Allen, "What's New in the Law," *ABA Journal*, 1954, 40: 872-876, on p. 872.

⁹⁹ *Ibid.*

"Psychological damage" had already entered the discourse as pivotal to and fundamentally associated with the matter of segregation and schooling immediately after the Court decision, in 1954. With this assumption closed under the hood, the question now took to the road. It began to shift and move, explore boundaries, make for new environs, new neighborhoods: where and in what contexts did this damage occur and where did it not? It happened to African American children in the school. Did it happen in the pool? If not, then where else might this damage occur? The emergent concern, evidenced above, over the psychological health of the "gifted" and "academically talented"--the nation's newly discovered "precious" (and distressingly "isolated") "minority"--suggests a compelling answer.

PSYCHOLOGICAL DAMAGE AND THE NDEA

The worry about various forms "psychological damage" threatening the "gifted" and "academically talented" was not confined to popular print media and specialist literature. It had also, by 1958, been taken up where laws were made. Indeed this topic abounded in expert testimony on the floor of the House and Senate during hearings prior to passage of the NDEA. One such

example--a dialogue between rocket scientist and Senator--
epitomizes these many other conversations.¹⁰⁰

Dr. Wernher von Braun--a former Nazi rocket scientist turned NASA engineer--testified before the NDEA committee in late January of 1958. von Braun's prepared comments hovered at length over topics related to science education, but also orbited back time and again to the perception (as a comparative observer of schools in the US and Europe) that the US system taught to the slowest children in the class. Thus "at the very age when children are particularly receptive and want inspiration...the interest of the brighter children in the class is blunted."¹⁰¹ On the other hand, in Europe, von Braun maintained, the selection by examination of the most qualified students for the sciences and other professions amounted simply to "a question of survival of the fittest. Nothing else."¹⁰² Indeed, the Soviet Union in particular, seemed entirely more capable of wringing available bio-power from its population. von Braun noted, "Our opponents in Soviet Russia adhere to

¹⁰⁰ See for example *Statement of William Carr, Hearings before the Committee on Labor and Public Welfare*, 524-525; *Statement of Morris Meister, Hearings before the Committee on Labor and Public Welfare, United States Senate (85th Congress): Second Session on Science and Education for National Defense* (Washington, D.C, 1958), sec. Committee on Labor and Public Welfare, 108, 117, 126.

¹⁰¹ *Statement of Wernher von Braun, Hearings before the Committee on Labor and Public Welfare, United States Senate (85th Congress): Second Session on Science and Education for National Defense* (Washington, D.C, 1958), sec. Committee on Labor and Public Welfare, 68.

¹⁰² *Ibid*, 73.

communism, and communism is one of those isms that go after the entire human being and not just for a part of him."¹⁰³ This more systematic—even total--harnessing of collective brain-power, von Braun felt, had given the Soviets an alarming scientific edge in the space-race.¹⁰⁴

Following von Braun's prepared statement, Senator Gordon Allott of Colorado opened up cross-talk, first making another reference to the truism of meritocratic educational opportunity: "We must recognize that although we are equal in law we are not always equal in mental abilities."¹⁰⁵ Allott then summarized and drew out the implications of von Braun's statements about the slighting of the gifted in US schools:

Children who are gifted and subjected to such a school system have personal damage to their minds by constantly being slowed down and surrounded in a state which can never hope to stimulate them or given them an opportunity to improve their minds.¹⁰⁶

This was for Allott and von Braun the heart of the matter: the risk of psychological damage, "personal damage to [the] minds" of gifted individuals. von Braun replied, "Precisely, sir. I think nothing is more dangerous to a bright child between the ages of 8 and 15 than a boring school. They try to learn. They are eager to learn. If we blunt their senses, that is the most

¹⁰³ Ibid, 68.

¹⁰⁴ Ibid, 79.

¹⁰⁵ Ibid, 74.

¹⁰⁶ Ibid, 75.

dangerous thing to do." Allott led further: "So you can have damage both ways. There is a real damage to the brighter gifted child who cannot adjust himself to mediocrity or less." von Braun replied, "That is the real issue, in my opinion."¹⁰⁷

This dialogue is on one level a fairly simple, straightforward conversation. Both men are making statements about hypothetical individuals who happen to be bright, slow and mediocre, about the inherent pedagogical immiscibility of these kinds of individuals, and about the damage that can occur when they are cooped together in a single classroom. But just what does Allott mean here by damage "both ways"?

Here is where meaning expands to quietly include the inferential. Allott's comment expresses that while damage in 'one way' (to the allegedly "slow" or disadvantaged learner) had already been established, damage the other way--to the bright--could also happen, and that this kind of damage was largely unrecognized. Again, though, multiple possible meanings proliferate. This was a conversation that assumed a familiarity with conservative complaints that the "Life Adjustment" curriculum coddled the "slow." Yet, at the same time Allott also referred to something else everyone in the room would have understood, at least implicitly, and "damage" is the key to this

¹⁰⁷ Ibid.

other code. When--in what unnamed recent legal context had this specific idea about psychological damage been effectively deployed? Thus, "damage," ("mental damage," "damage both ways") also had an implicit, specific, and still highly resonant connection with the scientifically and legally effective claim mounted four years earlier in *Brown*: that African American students were psychologically damaged by segregated schooling.

This conversation between Allott and von Braun was no isolated idiosyncrasy. Concern about various forms of damage to the gifted and talented pullulate through these NDEA hearings. Moreover, as can be seen from the many other texts and contexts drawn forward here as examples, the threat of psychological damage (or any of its analogues: isolation, atrophy, maladjustment, blunting, etc.) to the "gifted" was a systematic part of the discourse on educational opportunity at this time. It was a trope that threaded through a range of literatures--popular and professional--and across a range of institutions: legislative, judicial, educational and scientific. These conversations assumed a common reference point of science and techno-scientific output as the greatest product of democratic individualism, and the greatest safeguard to democracy. They shared a common set of assumptions about the heritability of individual differences in intelligence, the need to sort people by those perceived differences, and the need to draw the

"smartest" of those individuals into the sciences. These conversations most often explicitly emphasized the threat of Soviet scientific advance. While there was no explicit mention of "race," or the recently mandated desegregation of US public schools, nonetheless there were surely worried tracks here that connected together these 1958 NDEA hearings--and the ensuing profusion of literature on giftedness--together with the 1954 *Brown* decision: tracks that restlessly paced these discursive byways under the half-light of "psychological damage."

CONCLUSION

Six months after von Braun's testimony, the NDEA would be law--with its title mandates for more systematic testing and selection of the academically talented and for "strengthening" curricula in the sciences, mathematics and foreign languages for those academically talented. Six months after the passage of the NDEA, *The American High School Today*, Conant's school study, would hit the shelves of bookstores and arrive on the desks of teachers, school board members and superintendents across the country. Its clarion recommendation: that the nation's public schools identify the top 15%, the "gifted" and "academically talented," for advanced (college-prep) curricula in the sciences and mathematics. Then would begin this blizzard of ancillary media announcing the "gifted"--heretofore unrecognized and

underserved--who idled and languished among us. *Life Magazine* would even transparently insist they were victims of an "old prejudice" and at risk of "psychological damage." But we knew what to do now. The way forward was clear. The call to action urgent even: exceptionally fine minds were wasting away, senses were growing blunted, psyches damaged even as we frittered and argued about it.

Yes, the idea of "giftedness" is an old one, but it was repurposed in ways specific to this time period, and reimpresed at this moment with striking force and visibility upon the national imagination. As this category of person was reinvested with belief, it was also systematized and made actionable in an educational setting in a way and to a degree it never had been before. This nation-wide call to identify and selectively educate the "academically talented" explicitly focused on the science race with the Soviets, but white anxieties about "race" and desegregation were a powerful tacit driver. This concern about psychological damage among neglected "gifted" and "academically talented" students--marks, I argue, an attempt by members of the white middle and professional classes to seize hold of an argument that had been so effective in a civil rights context and reappropriate it for socially diametrical ends.

Crucially, this new post-World War II construction of giftedness managed, itself, (in the words of Senator Allott no

less) to have it 'both ways.' It established there was a quality of mind among a "precious minority" which was at the same time both durable, but also fragile. It was durable enough to serve as a dependable, natural demarcator between people. It was fragile enough to require for its maintenance its own special attentions and blandishments. Given the cultural bias of tests--and the narrow, essentialist underlying conception of "intelligence" that supported their use--I argue the construction of this new category of student amounted to a repositioning and safeguarding of whiteness following *Brown v. Board*.

That efforts on behalf of this new category of student were ultimately effective in this regard has been amply established by sociological study of tracking and ability grouping in schools.¹⁰⁸ The legacy of this moment--the dawn of the "gifted" and "academically talented" student, and the powerful complex of policy developments it corroborated--was the late 20th century US high school organized around tracks (or more politely: 'teams') with disproportionate numbers of whites enrolled in college preparatory curricula.

¹⁰⁸ See for example: Leonard Beeghley and Edgar W. Butler, "The Consequences of Intelligence Testing in the Public Schools before and after Desegregation," *Social Problems*, 1974, 21 no. 5: 740-54; Jeannie Oakes, *Keeping Track: How Schools Structure Inequality* (New Haven: Yale University Press, 1986), 40-60, 65-67, 150-171; Karolyn Tyson, *Integration Interrupted: Tracking, Black Students, and Acting White after Brown* (New York: Oxford University Press, 2011), 35-78.

CONCLUSION

This dissertation has demonstrated how the passage of the National Defense Education Act, accompanied by supporting argumentation from *The American High School Today*, helped to ensconce a post-World War II science of "intelligence" as a part of public educational policy in the late 1950s US. Beginning with interwar controversies over individual and "racial" IQ [Chapter 1], this argument has demonstrated how scientific stalemates helped to produce a compensatory language about "intelligence" that sought to disentangle IQ from its political liabilities. After World War II, advocates of testing most always 1) used historically unencumbered terminology in place of "IQ" (i.e. "academic talent," or "ability"), 2) stressed the positive selection of supranormal "intelligence," 3) employed the language of nature-nurture interaction, and/or 4) obscured IQ's associations with an earlier race-science by insisting on its "individualized" applications in an educational context. Despite these ameliorative gestures, this argument finds that this was a new rhetoric of "intelligence" that could readily default to a neohereditarianism, and even racism, in practice.

This analysis then undertakes a close examination of James Bryant Conant's *The American High School Today* (1959) [Chapter 2], a study of US public high schools which recommended

systematic national "ability" testing and the restructuring of curriculum around "academic talent." Though structured single-mindedly around IQ, I find this study employed almost all of the new post-World War II compensatory rhetoric of "intelligence" in a successful effort to disentangle itself from the controversial history of psychometrics.

I then take up a consideration of just how Conant's recommendations addressed a raging contemporary crisis over public school curriculum [Chapter 3]. This was a crisis fueled explicitly by the Sputnik launches and surging baby boomer over-enrollments, and propelled tacitly by white anxieties about desegregation following *Brown v. Board*. Moreover, this volatile moment in public education accelerated the passage of the National Defense Education Act. In fact, I find that the recommendations of *The American High School Today* (1959) were strikingly congruent with the initiatives of the National Defense Education Act (1958). On the basis of new and reexamined primary source evidence, I demonstrate that Conant was closely involved with the Eisenhower Administration concerning the NDEA, as it was drafted. I argue that *The American High School Today* was actually a politically adroit effort to condition public reception to potentially controversial federal legislation.

If *The American High School Today* could help resolve a debate about curriculum, I then explore how Conant's recommendations concerning "individual ability" and educational opportunity could also work at less explicit levels of this late 1950s crisis over public education [Chapter 4]. Namely, "individual ability" could be used to smooth over educational inequalities in regard to "race" post-*Brown v. Board*, and to brook geopolitical divides between "rural" and "urban," and "federal" and "state" in relation to the federal funding of state and local education post-NDEA.

This dissertation then demonstrates the coordinated actions of a *sub rosa* network of individuals and institutions that worked to produce *The American High School Today* and synchronize its reception with the passage of the National Defense Education Act [Chapter 5]. These institutional actors, among which Conant was a central node, included the Carnegie Corporation, the Educational Testing Service, and the National Education Association. This analysis further illuminates the submerged politics of the National Defense Education Act. *The American High School Today* was not an unaffiliated and scientifically objective set of recommendations about "individual intelligence" and educational opportunity, but rather an important part of a much larger political strategy. Through their involvement, the National Education Association helped ensure implementation of

long-sought federal funding for public schools. The Educational Testing Service recouped enormous financial gain from expanded testing markets created by the National Defense Education Act.

The final chapter examines the combined effects of this network, along with *The American High School Today*, and the National Defense Education Act, on the public imagination. The final years of the 1950s saw the emergence of a remarkable volume of lay and specialist literature concerned with the education of the "gifted" and "academically talented." This literature worked to establish "academic talent" as a natural difference, and to advocate (with numerous references to Conant and his study) for the identification and selective education of these "highly able" individuals. Moreover, I argue that this advocacy for the "academically talented" actually took impetus from the 1954 mandate to desegregate schools. In fact this educational movement repurposed (but for socially diametrical ends) a key argument derived from the *Brown v. Board* decision: namely that "isolated" subsets of the school population were at special risk of various forms of "psychological damage."

* * *

These particular post-World War II discourses have immediate bearing on our 21st century debates over "intelligence" (or perhaps now more politely "achievement" or "ability"), standardized testing and educational opportunity. In many ways

we live out the educational legacy of the NDEA. Since the adoption of No Child Left Behind (NCLB), a legislative grandchild of the NDEA, our nation's educational system is more dependent on and driven by standardized testing than ever before. With its passage in 2002, NCLB mandated that all states conduct standardized tests yearly in Grades 3-8, and that all schools attain specified levels of reading and math proficiency by 2014. By 2006, it was estimated that an additional 45 million standardized tests were being administered annually to meet new NCLB mandates.¹ A more recent large-scale study of 66 large urban public school systems found that any given student now takes nearly 112 standardized tests over the course of her or his public school experience from pre-kindergarten to 12th grade. This amounts to, on average, more than eight tests per student, per year.² Many teachers have reported that over 25% of their instructional time is devoted to standardized testing.³ Tests themselves cost the nation's schools billions of dollars, paid to proprietary educational testing companies.⁴

¹ Michael Winerip, "Standardized Tests Face a Crisis Over Standards," *The New York Times*, March 22, 2006.

² Lyndsey Layton, "Study Says Standardized Testing Is Overwhelming Nation's Public Schools," *Washington Post*, October 24, 2015.

³ M. Fine and et al., *New Jersey's Special Review Assessment: Loophole or Lifeline?* (Education Law Center, 2007), Appendix C; Sharon Lynn Nichols and David C. Berliner, *Collateral Damage: How High-Stakes Testing Corrupts America's Schools* (Harvard Education Press, 2007), 7-8, 123.

⁴ Diane Ravitch, "The Common Core Costs Billions and Hurts Students," *The New York Times*, July 23, 2016.

While this increased testing has been heralded as a way of raising educational standards for all, a substantial Black-White test score gap has stubbornly persisted from the 1950s into the 21st century, through the term of NCLB.⁵ If gaps by "race" or ethnicity have failed to close, the achievement gap by socioeconomic status has consistently widened, showing a startling 40% increase over the last 50 years.⁶ All this testing does not seem to be solving educational inequity, but rather re-inscribing and even augmenting it. Likewise, not only is educational policy historically contingent, shaped by its own past, so are beliefs and assumptions about "intelligence" as a human difference. There are many who would rather attribute these disparities in performance to purported underlying organic factors, thereby justifying and naturalizing the disparity of opportunity and social mobility that then often follows.⁷

⁵ Nicholas Mackintosh, *IQ and Human Intelligence* (Oxford University Press, 2011), 332-344; David Card and Jesse Rothstein, "Racial Segregation and the Black-white Test Score Gap," *Journal of Public Economics* 91, no. 11-12 (December 2007): 2158-84; Diane Ravitch, "Time to Kill 'No Child Left Behind' - Education Week," *Education Week*, June 10, 2009; National Center for Education Statistics and Institute of Education Sciences, *Trends in Academic Progress: National Assessment of Educational Progress (2012)* (U.S. Department of Education, 2012), 16-18.

⁶ Sabrina Tavernise, "Education Gap Grows Between Rich and Poor, Studies Show," *The New York Times*, February 9, 2012; Greg J. Duncan and Richard J. Murnane, *Whither Opportunity?: Rising Inequality, Schools, and Children's Life Chances* (Russell Sage Foundation, 2011).

⁷ Mackintosh, *IQ and Human Intelligence*; Arthur Robert Jensen, *The G Factor: The Science of Mental Ability* (Praeger, 1998); Rushton, Phillippe and Arthur R. Jensen, "Thirty Years of Research on Race Differences in Cognitive Ability," *Psychology, Public Policy, and Law*

Of course, this era following "No Child Left Behind" finds standardized tests used increasingly not only for the norming and sorting of students, but also in making determinations about school structure, organization and governance. By NCLB mandate, "failing" schools that do not reach 100% student proficiency on target tests are subject to an increasingly stringent series of sanctions including restructuring, privatization/charterization, or closure. Such "emergency management" actions have caused significant disruption to the communities these schools serve, and moreover affect lower socioeconomic communities and communities of color with striking disproportion.⁸

Despite the fact that testing seems to replicate and even intensify patterns of cultural difference and disadvantage, standardized tests (only one way of assessing a particular construction of intelligence), still serve—and are still vigorously advocated—as selective thresholds to regulate entrance into STEM fields and other professions, and to higher education in general.⁹ Thus, democratizing and diversifying access to a wide range of professions should involve, in part, a renewed appraisal of the gate-keeping functions of standardized

11, no. 2 (2005): 235–94. Nicholas Wade, *A Troublesome Inheritance: Genes, Race and Human History* (New York: Penguin Press HC, 2014).

⁸ Journey for Justice Alliance, "Death by a Thousand Cuts: Racism School Closures and Public School Sabotage," May 2014, 1–4.

⁹ David Lubinski, "Spatial Ability and STEM: A Sleeping Giant for Talent Identification and Development," *Personality and Individual Differences* 49 (April 2010): 344–51.

tests. *This is not to say that specific competencies do not matter. Nor is it to say that standardized tests have no place in education.* Rather it suggests the need to question anew how they are and ought to be used. Are tests employed as diagnostics to determine which students need additional resources to meet their educational goals? Or are tests rather used to determine who has the right "stuff" and who does not? Such uses are arguably predicated on different views of what intelligence is. Of course, reopening these basic questions about intelligence and educational opportunity ultimately requires rethinking how we allocate resources and fund our public educational system. These are the very same questions and underlying assumptions that energized the post-World War II debates I study. The time period I study is close to our own in its norms, values and institutional structures. Thus this research—and the politics of "intelligence" it reveals—serves as a strong point of comparison for evaluating our current assumptions and practices and for informing our own potential interventions.

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