"How Science Studies the Child": Arnold Gesell and The Eugenic Origins of Child Development at Yale, 1911-1948

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April 2023

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# Acknowledgements

This project is informed by the kind of questions that influential and groundbreaking scholars like Daniel Martinez HoSang, Kimberlé Crenshaw, and Roderick Ferguson are asking about colorblindness and race neutrality in the academic disciplines and teaching and learning spaces more broadly. They have deeply inspired my work and shaped my thinking. I am honored to be able to share just one small part of my thinking on this subject, which I feel has an incredibly important role in knowledge production moving forward. My deepest thanks to these thinkers and Professor Daniel Martinez HoSang especially, who also happens to be my advisor.

Professor HoSang has been an incredible resource and mentor, and allowed me to feel like there was a space for me in academia and public humanities. I'd also like to thank Dora Guo, Emme Magliato, Alejandro Ortega, Larissa Jimenez Gratereaux, Kelly Long, and Akio Tamura-Ho and others for laying the groundwork for anti-eugenic work at Yale. I admire each one of them so much. And an extra special thank you to Akio and Emme for all the thesis work sessions, editing, and sharing of ideas. Much love <3

I think research and historical exploration is truly a collaborative project and undertaking, especially within the field of HSHM, so I'd really like to point towards the implicit anti-eugenic connections of the other senior thesis works that I interacted with during my time writing, reading, and sharing: (1) Emme Magliato's "Within the walls and outside the gates: Yale's laboratory for early 20th-century eugenic knowledge production in New Haven," (2) Dora Guo's "The 'Disappearance' of Eugenics at Yale: The Institute of Human Relations (1929-1963)," (3) Larissa Jimenez-Grateaux's ""Una llamada Dra. Satterthwaite": Family Planning as Eugenics in 1970s Brazil, the Dominican Republic, and Venezuela," (4) Akio Tamura-Ho's "Haunted Horizons: Ghost Stories for the American "Psychedelic Renaissance", 1950-2023," and so many more.

Thank you also to the Branford College Mellon Grant for facilitating the opportunity to visit the Library of Congress and access Arnold Gesell's Papers, and to the Department of the History of Science, Medicine, and Public Health (HSHM) for support. This paper would not have been able to come together in the ways it did without the support of many different entities. And lastly, thank you to my mom and brother for showing ways of interacting with the world and imagining my place in it with understanding, kindness, and strength.

#### A Note on Language

Any investigation into eugenics and related systems of thought requires us to attend to language of difference, hierarchy, and violence. The rhetoric of dysgenic traits, unit characteristics, and expressions of abnormality reflect active attempts by eugenicists to naturalize difference and classification, obscuring and disavowing their constructions. The casual use of derogatory and sometimes violent language by eugenicists exposes the visceral modes of thinking about difference that eugenicists sought to scientize and make 'common sense.' Readers should aim to question these distinctions, labels, and typologies, *especially* those that seem the most familiar.

## Introduction

In October of 1913, the 76<sup>th</sup> issue of *The American Magazine* featured a lurid piece promoting the new and promising science of Eugenics by a young expert in the emerging field of child psychology, Arnold Gesell. <sup>1</sup> The logics of this pivotal eugenic work would not remain entrenched in the past and would continue to undergird Gesell's scientific advancements as he influenced how the field fundamentally regarded and observed the mental and physical growth of babies. The "father of child development," the Director of the Clinic of Child Development at Yale, and the author of a pivotal eugenic calling-in were all one and the same.<sup>2</sup>

Gesell's 1913 article "The Village of a Thousand Souls" represented a call to arms for the young professor in his pursuit of eugenics, which Gesell believed to be a vital force in addressing what he thought was a most *dire* problem posed to humanity in that historical moment— the

<sup>&</sup>lt;sup>1</sup> The American Magazine was preceded by Frank Leslie's Popular Monthly (1876–1904), Monthly Leslie's Monthly Magazine (1904–1905), Leslie's Magazine (1905) and the American Illustrated Magazine (1905–1906). It was published through August 1956. <sup>2</sup> "Child Study Center: Mission & History." Yale School of Medicine.

<sup>&</sup>lt;sup>2</sup> "Child Study Center: Mission & History." Yale School of Medicine. https://medicine.yale.edu/childstudy/about/mission/.

grade and quality of human "stock."<sup>3</sup> He believed there was great social interest in addressing "ordinary village humanity," and the ways social ills manifested from individual bodies through "breeding."<sup>4</sup> This view of eugenics mirrored the understanding of other researchers and writers in the early to mid- 20<sup>th</sup> century who claimed that human stock (lines of descent) could be improved by science and policy to discourage or eliminate the reproduction of those they deemed to be undesirable *excess*—those who fell outside the realm of high mental and moral status according to their measurements.



Figure 1: "Eugenic map of The Village of a Thousand Souls—220 families (1880-1913)" (1913) – This illustration is a eugenic map of Gesell's village survey. The absence of one of the eight possible symbols indicated a "normal" family. (Source: *The American Magazine*)



Figure 2: "Map key" (1913) – This is the symbol key for the village map. Possible symbols included: Feeble-minded, Insane, Suicide, Alcoholic, Epileptic, Criminal, Eccentric, and Tubercular (Source: *The American Magazine*)

<sup>&</sup>lt;sup>3</sup> Arnold Gesell, "Village of a Thousand Souls," in *The American Magazine* vol. 76, no. 4, (October 1913), 11-15 <u>https://hdl.handle.net/2027/mdp.39015056072443</u>.

<sup>&</sup>lt;sup>4</sup> Gesell, "Village of a Thousand Souls", 11.

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Figure 3: "Draft Eugenic Map" (n.d.) – This rendering of the eugenic village map is the original version visualized by Gesell prior to publication in *The American Magazine*. The map was found within a folder of other large-scale artistic renderings and mapping of genetic defect, including pedigree charts, Mendelian diagrams, and developmental charts. (Source: Arnold Gesell papers, Library of Congress)

Though his *American Magazine* article and accompanying visualizations, Gesell prompted readers to imagine degeneracy as an impending threat. The reader could use Gesell's maps of degeneracy and his graphic metaphors of community contamination to formulate and imagine their own visceral disgust. And in his deployment of spatial visualization, Gesell also taught the reader to think in complicated ways that related environment and heredity in the transmission of dysgenic traits.

This kind of nuanced and visual understanding of eugenics pervaded his work at the Clinic of Child Development in how he presented his 'empirical' observations of the constructed categories of normalcy and defect in infant children. And yet, Gesell's contributions to child development are remembered largely in separation from his continuing theoretical investments in eugenic paradigms.

This essay seeks to disrupt a more straightforward historical account of Gesell and the ideological evolution of his Clinical work and instead develops a nuanced understanding of Gesell's disciplinary contributions. Eugenic ideas consistently shaped and framed Gesell's work

and, as a result, the field of child development in the 20th century. The logics of his work maintained and produced frameworks upholding eugenic ideas of hierarchy and classification, while producing the infant as a subject and a social problem. My aims are to illuminate how eugenic notions were brought into Gesell's model of development and conception of the child subject. These active processes were both facilitated and obscured by his work at the Yale Clinic of Child Development.<sup>5</sup> Thus, this paper will focus on his work facilitating studies and clinical examinations of the mental and physical development of child as the Clinic's Director, a role which he held from 1911 to 1948.

The contemporary Yale Child Study Center, looking back on 100 years of research, distances Gesell's criticism and child development with just a brief phrase: "*Although some of Gesell's views have fallen out of favor*, he exerted a strong influence on American psychology in general as well as on childrearing practices."<sup>6</sup> His specific views that 'fell out of favor' remain unmentioned next to the glowing remarks about his influence.

In fact, there is a general narrative in even the more critical secondary literature that his eugenic commitments simply fall away overtime. Marchese (1995) narrates that "[Gesell's] views on the respective roles of heredity and environment on defect, and solutions to the problem, began to change."<sup>7</sup> As early as 1918, intelligence testing and special education services were recommended to 'defectives' enrolled in Connecticut public schools to assess how "feeble-minded pupils," or "subnormal youth," could succeed at some level.<sup>8</sup> His devotion to the

<sup>&</sup>lt;sup>5</sup> For most of his time as Director, the Clinic was known as the Clinic for Child Development.

<sup>&</sup>lt;sup>6</sup> Yale School of Medicine. "Child Study Center celebrates 100 years of mental health research." *Yale Medicine Magazine*. Spring 2011. <u>https://medicine.yale.edu/news/yale-medicine-magazine/article/child-study-center-celebrates-100-years-of-mental/</u> (accessed November 20, 2022).

<sup>&</sup>lt;sup>7</sup> Marchese, Frank J. "The Place of Eugenics in Arnold Gesell's Maturation Theory of Child Development." *Canadian Psychology 36*, no. 2 (1995): 89-114. <u>https://www.proquest.com/scholarly-journals/place-eugenics-arnold-gesells-maturation-theory/docview/220785161/se-2?accountid=15172</u>.

<sup>&</sup>lt;sup>8</sup> Marchese, "The Place of Eugenics in Arnold Gesell's Maturation Theory of Child Development", 89.

benevolence and charitable motivations of Progressive era reforms and social services (like special education, in particular) dominates historical narratives of Gesell and his contributions. Beyond his work with the Clinic of Child Development at Yale, he also had concurrent affiliations with the Connecticut State Board of Education as a School Psychologist (1915-1919), the Connecticut Commission on Child Welfare as a Commissioner (1919-1921), the American Psychological Association as a Director (1922-1936), the American Child Health Association as a Director (1928-1940), and the New Haven Hospital as an attending pediatrician (1928-1948).

In 1913, Arnold Gesell was already making advances in child welfare; he was an Assistant Professor of Education at Yale after serving as a Professor of Psychology from 1908 to 1910 at the Los Angeles State Normal School in California.<sup>9</sup> After accepting the assistant professorship at Yale University, he moved to Connecticut to implement his Progressive vision of child psychiatry with the Yale Juvenile Psycho Clinic. The Psycho Clinic, which would ultimately become the Child Study Center,<sup>10</sup> was the praised site of Gesell's long-standing contributions to producing knowledge about child psychology, pediatrics, and hygiene.

My essay will dissect the nuances of his contributions at the Clinic in several parts. I will first discuss background on the American Eugenics Movement, and how Arnold Gesell was implicated in foundational organizing structures of eugenic research and study. From there, I will contextualize his work in relation to Yale, Connecticut, the emerging field of child study, and the Clinic of Child Development. I then move on to how his developmental philosophy of growth

<sup>&</sup>lt;sup>9</sup> The Los Angeles State Normal School evolved into what is now known as the University of California Los Angeles (UCLA).

<sup>&</sup>lt;sup>10</sup> The Clinic evolved overtime in particular commitments and underwent several name changes. As such the name referred to for the Clinic will change with regard to what it was called at the time of discussion of a particular source or historical moment. Beyond these slight variations, the reader should recognize that, in essence, the Juvenile Psycho-Clinic, Psycho Clinic, Clinic of Child Development, and Yale Child Study Center are different names (though marked temporally) for the same institution. Offshoots of the Clinic, such as the Psycho-Clinic Laboratory or Guidance Nursery, will be specified when necessary.

fed from key eugenic logics while constructing the infant as a public health problem. My conclusion explores implications for contemporary disciplinary knowledge production and asks the question, what are the implications of such a complicated disciplinary inheritance?

# Keeping Company in the American Eugenics Movement

The American Eugenics Movement was a distinct vein of a global movement dedicated to the "science of the improvement of the human race by better breeding."<sup>11</sup> Francis Galton, English mathematician and Charles Darwin's cousin, first coined the term "eugenics" for a science which would improve the human race by selecting and prioritizing certain qualities (and, therefore, *bodies*) over others. He promoted the idea that "intelligence is linked to social class and that "the fittest" parents produce superior offspring."<sup>12</sup> Racial improvement, or "race betterment", would deal with the "inborn qualities", or "stock" that would be passed down generationally—effectively shaping the characteristics of the human population.<sup>13</sup> In a sense, eugenicists believed they could guide human evolution and engage in shaping the future of humanity. Eugenic solutions focused on both negative and positive aspects of race characteristics. This meant that degeneracy was to be filtered out (negative), and fitness was to be intentionally bred in (positive).

In the movement's peak of popularity, broader social issues like crime and alcoholism were among the concerns reduced to personal traits, or unit characteristics, that could be located in the individual body and, thus, inherited and conceptually biologized. 'Unit character' is a

<sup>&</sup>lt;sup>11</sup> Charles B. Davenport, *Heredity in Relation to Eugenics* (New York: Henry Holt & Co., 1911), 1.

<sup>&</sup>lt;sup>12</sup> Facing History. "The Origins of Eugenics." *Race and Membership in American History: The Eugenics Movement*, August 4, 2015. <u>https://www.facinghistory.org/resource-library/origins-eugenics</u>

<sup>&</sup>lt;sup>13</sup> Galton, Francis. "Eugenics: Its Definition, Scope, and Aims." *American Journal of Sociology* 10, no. 1 (1904): 1–25. <u>http://www.jstor.org/stable/2762125</u>.

notion traced back to Mendelian laws of inheritance.<sup>14</sup> It refers to a concept of heredity transmission of a given distinct trait, passed down as a 'unit' of moral, mental, and physical character.<sup>15</sup> The original scientific understanding of genetics and heredity can also be linked to "biological determinism," the idea that parental factors affect the expression of a progeny's physical and mental characteristics, and that variation in expression comes from inherent, biological characteristics. These unit characters were comprised of various labels of defect and disability, including feeble-mindedness, insanity, backwardness, subnormality, and moronity. These distinct qualities were considered 'dysgenic', or cacogenic.<sup>16</sup> The science of eugenics aimed to promote traits which were deemed valuable, in contrast to dysgenic character traits, and presented them as factors influencing quality and evolutionary trajectory of 'the race'. Many markers of degeneracy were derived from ideas of difference which came to dominate the political culture of Progressive era reform, even as they became the basis of 'benevolent' welfare efforts. In fact, the quest for "human betterment" undergirded much of the Progressive Era's social legislation.<sup>17</sup>

Eugenically-informed welfare policies were based in Progressive notions of institutional intervention to rectify social problems.<sup>18</sup> Race degeneracy, and hereditary aspects of deficiency were emphasized as social problems requiring scientific solutions. Underlying these ideas was a

<sup>17</sup> Charlene Galarneau "Eugenics in Vermont: A Chronology of 'State-sanctioned eugenics policies and practices" J.R.H. 2 as adopted by Virginia House (Updated April 19, 2021; original March 9, 2021) <u>https://legislature.vermont.gov/Documents/2022/WorkGroups/Senate%20Government%20Operations/Bills/J.R.H.2/Public%20Comment/J.R.H.2~Charlene%20Galarneau~Chronology%20Update%20-%20VT%20Eugenics~4-22-2021.pdf</u>

<sup>&</sup>lt;sup>14</sup> Peter Bowler. "How the history of genetics charts the rise and fall of eugenics" *The British Academy* (1 AUG 2019) <u>https://www.thebritishacademy.ac.uk/blog/how-history-genetics-charts-rise-and-fall-eugenics/</u>

<sup>&</sup>lt;sup>15</sup> Bowler. "How the history of genetics charts the rise and fall of eugenics" *The British Academy* 

<sup>&</sup>lt;sup>16</sup> University of Vermont. "The Eugenics Survey in Vermont: Studies" *Vermont Eugenics: A Documentary History*. Website. <u>https://www.uvm.edu/~eugenics/famstudies.html</u>

<sup>&</sup>lt;sup>18</sup> Thomas C. Leonard, 1960-. 2016. *Illiberal Reformers: Race, Eugenics, and American Economics in the Progressive Era*. Princeton, Princeton University Press.

commitment to the belief that science could guide human progress.<sup>19</sup> Considering the impact of eugenics on reproductive law, the rise of compulsory eugenic sterilization laws in the 1910s demonstrated a commitment to Progressivism: "Many Progressives shared with eugenic theorists a belief in the superior knowledge of experts, a suspicion of rights-based arguments made by the federal courts, and a conviction that the needs of individuals had to be subordinated to those of the community."<sup>20</sup> Modernized legislation appealed to the call of science, policy, and law to rectify social ills and police bodies in the name of the race as a whole, or the "community."

Contemporarily, eugenics is broadly recognized as a political ideology predicated on the exclusion or elimination of groups based on ambiguous metrics like 'desirability' and 'fitness.' While we can register these qualities as subjective and biased now, eugenicists put a significant effort in making certain features or attributes into objective 'markers' which could be understood as degeneracy or abnormality. In essence, they instituted and perpetuated a sort of *common sense*. Organizations like the American Eugenics Society (AES) targeted the public conception of eugenic ideas; the AES was established in the US in 1926 to "promote eugenics education programs for the US public."<sup>21</sup> This meant the creation of committees dedicated to social issues like crime prevention, the presentation of work at local and state fairs, and the facilitation of public engagement through Fitter Family contests.<sup>22</sup> These efforts spread eugenic education in popular, mainstream ways and naturalized such logics in mundane and insidious ways.

<sup>&</sup>lt;sup>19</sup> Mark Haller, *Eugenics: Hereditarian Attitudes in American Thought* (New Brunswick, New Jersey: Rutgers University Press, 1963), 3.

<sup>&</sup>lt;sup>20</sup> Mary Ziegler, *Reinventing Eugenics: Reproductive Choice and Law Reform After World War II*, 14 Cardozo J. L. & Gender 319 (2008), Available at: <u>https://ir.law.fsu.edu/articles/338</u>

<sup>&</sup>lt;sup>21</sup> Gur-Arie, Rachel, "American Eugenics Society (1926-1972)". *Embryo Project Encyclopedia* (2014-11-22). ISSN: 1940-5030 <u>http://embryo.asu.edu/handle/10776/8241</u>.

<sup>&</sup>lt;sup>22</sup> "Contests called Fitter Family contests involved popular competitions between families and couples to determine who would produce the most <u>viable</u> offspring based on physical appearance, behavior, intelligence, and health."

One way that eugenicists validated logic about heredity and defect, while presenting it in an accessible (easy-to-digest) form, was through charts and visuals of various kinds. In fact, it cannot be overstated how preoccupied many eugenicists were by legitimating their beliefs in the form of pedigrees, diagrams, and other visual depictions of the flow of degeneracy. Arnold Gesell was no exception. A significant segment of materials in the Arnold Gesell Papers, preserved in the Library of Congress Manuscripts Division, depict charts tracking the flow of exceptional traits.



Figure 4: "1200 Jukes" (n.d.) – This image is a poster with a breakdown of the Jukes Family handwritten by Gesell in large writing. The Jukes family was one which fit the stereotype of the "cacogenic family", in particular demonstrating the hereditability of pauperism and criminality. At the bottom of the poster is an estimate of the "cost to NY" (New York) for the arrests, lost wages, and other costs of their 'deficiency'. (Source: *The LOC Arnold Gesell papers, 1870-1971*)

1394 DESCENDANTS Johnathan Edwards COLLEGE Grads. 295 Pres. >> 13 Prof. 65 >> 60 Doctors 100 Clergymen 75 Officers of A. V. 60 Authors - 135 Books 100 Lawyers 30 Judges 80 Public Office 1 Vice Pres. 3 U.S. Senate R.R. Directors 5 Convicted of Fime

Figure 5: "1394 Descendants of Johnathan Edwards" (n.d.) – This image is another poster handwritten by Gesell. It shows the fascination of Yale eugenicists, especially in the late  $19^{th}$  to early  $20^{th}$  century, with "Yale's first and foremost child prodigy"<sup>23</sup> and renowned theologian and philosopher Jonathan Edwards (spelled in the diagram as 'Johnathan Edwards'). (Source: *The LOC Arnold Gesell papers, 1870-1971*)

Evoking an implicit image about defect and familial relations, these visualizations of 'genetics'

traced the ways in which eugenicists thought about the way that the familial 'strain' could be

contaminated, defiled, or polluted. Thinking back to Gesell's "The Village of a Thousand Souls,"

we can imagine how his crude drawings and lists captured his visceral contempt for those he

thought of as 'defective' or 'backwards' Other.

<sup>&</sup>lt;sup>23</sup> Yale College. "About Us: Jonathan Edwards College" Yale website <u>https://je.yalecollege.yale.edu/about-us</u>



Figure 6: "Poor House Type of Reproduction" (n.d.) – This general pedigree shows a man without an unnamed trait, and a woman with the given trait; the flow of inheritance reflects that a female child could pass on the trait to half off her offspring, continuing the line of trait possession. Poor houses were government-run housing facilities for the dependent or needy, and associated with poverty and pauperism—both of which were seen as capable of contaminating familial lines. (Source: *The LOC Arnold Gesell papers, 1870-1971*)



Figure 7: "Pedigree Chart" (n.d.) – These general pedigree templates drawn out by Gesell suggested an inevitable 'taintedness' of a family line after a given trait is introduced. The presence of a trait is designated with a shading in of the shape. (Source: *The LOC Arnold Gesell papers*, 1870-1971)

Pedigrees, like those shown above, are charts of genetic history over generations that show the presence or absence of a trait, as indicated by a filled in shape. Charts lay out relationality and difference in a way that presented the heredity of unit characteristics as self-evident. Eugenicists

often intended to portray the tainted lineages of individual families as representatively demonstrating what was happening in mass with overall racial deterioration. Gesell's interest in these visual and sensationalized depictions did not represent a departure from a longstanding academic fascination with 'bad heredity.'

In fact, the emphasis on bad heredity was strengthened by the work of eugenics case workers of the late 1800s and first part of the 1900s. Family surveys, especially of the rural poor, targeted populations who eugenicists feared would dilute the Yankee gene pool and resulted in menacing diagrams and narratives about degenerate families and their cost to society.<sup>24</sup> One well-referenced family was the "Jukes," whom Arnold Gesell personally analyzed and sketched out repeatedly.<sup>25</sup> Other model studies included Arthur Estabrook's "Tribe of Ishmael," Florence Danielson's and Charles B. Davenport's "Hill Folk," and Henry Goddard's "Kallikak Family." Family studies were conducted in many places, but they were particularly well documented in Vermont. The Eugenics Survey in Vermont conducted family studies of the rural poor for the first three years of its existence, from 1925 to 1928, and produced detailed reports and pedigree charts as the result of its field work.<sup>26</sup> Using socially constructed notions of inherited mental incompetence, the family studies served as early efforts at data collection and 'neutral' reporting.

Gesell recreated these family lineages by hand-drawing them over and over, and he theorized about the developmental influences of heredity continuously throughout his career. Charts and diagrams as a medium evolved overtime to tools of cinematography and candid observation through one-way screens, but all of these procedures carried their own kind of veil of

<sup>&</sup>lt;sup>24</sup> Kennedy Institute of Ethics in Washington, DC. "Ch. 4: The Rise and Fall of Eugenics" *Georgetown University*. <u>https://highschoolbioethics.georgetown.edu/units/cases/unit4\_4.html</u>

 <sup>&</sup>lt;sup>25</sup> Arnold Gesell, Folder Oversize 3. Arnold Gesell papers, 1870-1971; The Library of Congress (Washington DC)
<sup>26</sup> University of Vermont. "The Eugenics Survey in Vermont: Studies" Vermont Eugenics: A Documentary History. Website. https://www.uvm.edu/~eugenics/famstudies.html

objectivity and self-evidence. He evidently continued to muse over the role of genetics in child psychology and the contamination of family lines in ways that depicted ideas about generational purity and a sort of moral and mental cleanliness. These themes can be traced out to his later work, which was largely informed by the movement for social and mental hygiene and the desire to improve mental health with preventative care methods.

Gesell's interest in social hygiene and preventative mental health care stemmed in part from some of his contact and exchange with his contemporaries. His leadership in a transdisciplinary approach to pediatrics, psychiatry, and social hygiene brought him to the attention of leaders in the arenas of psychology and intelligence testing, human biology, cultural anthropology, and, of course, eugenics. In fact, Gesell considered himself good friends with his colleagues who have now come to be known as the more well-referenced figures of American eugenics work. In particular, Gesell was well-situated within a national eugenic discourse with figures like Charles Davenport, Robert Yerkes, Henry Goddard, and Lewis Terman. These contemporaries were principal actors in 20<sup>th</sup> century developments to the fields of genetics, psychiatry, anthropology, and eugenics—furthering efforts towards genetic history records, intelligence testing, and the professionalization of psychology.

Charles Davenport (1866-1944) was a biologist and the founder of the Eugenics Record Office in 1910, which eventually became a department of the Carnegie Institution of Washington Station for Experimental Evolution at Cold Spring Harbor, New York.<sup>27</sup> The Eugenic Records Office was a place where American family genetic history records were gathered, and eugenics studies collected information about "inborn physical, mental and temperamental properties to

<sup>&</sup>lt;sup>27</sup> The Carnegie Institute of Washington opened a "station" for research in biology in 1906, called the "Station for Experimental Evolution" (SEE). In 1918, the SEE and Eugenics Record Office were combined into the Department of Genetics, and Davenport served as Director.

enable the family to trace the segregation and recombination of inborn or heritable qualities."<sup>28</sup> Though the Office was transferred to the directorship of Harry H. Laughlin, Davenport continued to support eugenic directives at the ERO and the Cold Spring Harbor Laboratory more generally through his work on human biology and genetics. Both Davenport and Laughlin were involved in the Third International Congress of Eugenics Managing Committee.

In 1927 and 1928, Davenport communicated with Arnold Gesell in a series of letters regarding his study of "race-mixing" that would become published in 1929 as *Race Crossing in Jamaica*. Gesell agreed to interpret developmental testing data collected by Davenport on one-year olds and two- and three-year olds who fell into samples of "Europeans," "Negroes," and "Hybrids," but he was hesitant to draw out the broader implications of his results.<sup>29</sup> He suggested his findings not be interpreted as definitively answering questions of intelligence of Negro children at large, and that his findings be de-emphasized as a footnote as opposed to a chapter in Davenport's published work.<sup>30</sup> Davenport's final published work took this cautious data and pronounced sweeping claims about the comparatively lower intelligence and capability of Black people and asserted concern for the disharmony and instability "race crossing" might cause.<sup>31</sup>

It's important to note Gesell's hesitance to reinforce Davenport's preconceived notions about biologically based racial inferiority. Gesell seemingly never expressed an affinity to the belief that certain racial and ethnic groups were inferior, though several of his eugenically involved peers did. He remained hesitant to generalize racial differences to biological rooting in

<sup>&</sup>lt;sup>28</sup> Cold Spring Harbor Laboratory, "Eugenics Record Office" *Institutional Archival Collections*, Cold Spring Harbor website (n.d.) <u>https://www.cshl.edu/archives/institutional-collections/eugenics-record-office/</u>

<sup>&</sup>lt;sup>29</sup> Frederic Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development", *Journal of the History of the Behavioral Sciences*, 46, (2010): 263-275.

<sup>&</sup>lt;sup>30</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development", 269.

<sup>&</sup>lt;sup>31</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development", 271.

the context of developmental advances. Gesell and Davenport moved in the same scientific and funding circles, and it is unclear whether Davenport's professional influence shaped Gesell's willingness to correspond and engage with his experimental work. Frederic Weizmann points out in "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development" that "the influence of eugenics in scientific and professional circles did not simply rest on a common set of beliefs about eugenics, but on institutional ties and on networks of personal relationships among scientists."<sup>32</sup> Gesell's milieu was informed by exchanges with eugenicists who subscribed to ideas of racial stock, fitness, and the standardization of human populations. His networks in the 1910s, 1920s, and 1930s especially were permeated with connections to leading figures of eugenicist thought and 'scientific' advancements.

Among their most noteworthy contributions, several of Gesell's close associates and friends are credited with the popularization of intelligence testing and its applications to the military, education, and justifying assumptions about innate racial or ethnic differences. Three close friends of Gesell—Lewis Terman, Robert Yerkes, and Henry Goddard—were largely responsible for the preeminence of intelligence testing and eugenics in early 20<sup>th</sup>-century psychology. The importance of one's intelligence quotient (IQ) as a reflection of their internal and immutable intelligence originated in eugenic thought. Intelligence testing became foundational to 20<sup>th</sup>-century eugenics, as the measurement of one's "mental age" had implications for the value and social place of those tested.<sup>33</sup> Generalized results of intelligence

<sup>&</sup>lt;sup>32</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development", 272.

<sup>&</sup>lt;sup>33</sup> Marilyn Brookward. *The Orphans of Davenport: Eugenics, the Great Depression, and the War over Children's Intelligence* (Liveright, 2021).

tended to be racialized—with Black people and recent immigrants scoring lowest.<sup>34</sup> In this way, the objectivity of such metrics and testing is called into question, as intelligence tests "reinforce[d] a caste system" that placed those who "lacked the means, connections, or skin color to become well educated and well employed" at the bottom.<sup>35</sup>

In 1916, Lewis Terman (1877-1956) published the *Stanford Revision of the Binet-Simon Scale* with the hopes that his Stanford-Binet intelligence test could guide social interventions curbing the propagation of those who were feebleminded and associated with crime, pauperism, and other national problems.<sup>36</sup> Robert Yerkes, along with Terman and Henry Goddard, developed the first group-administered intelligence tests for military personnel in World War I. The tests sought to measure native intellectual ability and revealed differences by officer level, race, and immigration background.<sup>37</sup> By 1924, the Stanford-Binet test had become the most widely used IQ test in the nation, and Terman had successfully popularized the field of psychology, and infiltrated it with eugenic ideals.<sup>38</sup> Both Yerkes and Terman served as presidents of the American Psychological Association (in 1917 and 1923, respectively) and influenced the agenda of professional psychologists at the national level. Yerkes (1876-1956) became a professor of Comparative Psychology at Yale in 1924 through the Institute of Psychology and later the Institute of Human Relations, two endeavors in which Gesell was involved. Further, it has been documented that Terman and Goddard were Gesell's fellow

<sup>&</sup>lt;sup>34</sup> Brookward, *The Orphans of Davenport: Eugenics, the Great Depression, and the War over Children's Intelligence*, 70.

<sup>&</sup>lt;sup>35</sup> Brookward, *The Orphans of Davenport: Eugenics, the Great Depression, and the War over Children's Intelligence*, 72.

<sup>&</sup>lt;sup>36</sup> Brookward, *The Orphans of Davenport: Eugenics, the Great Depression, and the War over Children's Intelligence*, 68.

<sup>&</sup>lt;sup>37</sup> Jean-Claude Croizet, "The Racism of intelligence: How Mental Testing Practices Have Constituted an Institutionalized Form of Group Dominion" *The Oxford Handbook of African American Citizenship*, 1865-Present, (May 2012): 769-820.

<sup>&</sup>lt;sup>38</sup> Brookward, The Orphans of Davenport: Eugenics, the Great Depression, and the War over Children's Intelligence, 72.

undergraduate students and closest friends after they studied under G. Stanley Hall, a pioneer in child psychology at Clark University and the first President of the American Psychological Association in 1892 and again in 1924.

Psychologist Henry Goddard (1866-1957) adapted the Binet intelligence test to the United States in 1908, administering it on his patients at Vineland Training School in New Jersey to classify them by their mental age and to investigate the Mendelian inheritance of feeblemindedness. <sup>39,40</sup> Vineland Training School was a well-known institution for the care and residence of the 'feeble-minded.' It also happened to be the place where Arnold Gesell spent his summers from 1911 to 1915 teaching "special class teachers" of "retarded children" and conducting research.<sup>41</sup> Significantly, Goddard also coined the term 'moron' to refer to a discrete classification of persons who could pass under the radar of normalcy but were still deemed a threat due to their inherent mental deficiency—something that Gesell showed interest in studying. The intelligence realm of "moron" corresponded to those persons who fell within the mental ages of eight to twelve years according to the Binet scale.<sup>42,43</sup>

On September 4, 1931, Arnold Gesell gave an address to attendees of the 25<sup>th</sup> anniversary celebration of the Vineland Training School's Laboratory. In his address, "The Study of Genetic Psychology," Gesell commended Vineland as one of the first laboratories "for the systematic study of the psychology of mental defectives" and describes the pivotal developments of the laboratory under Goddard.<sup>44</sup> On the promise of Vineland's work as a human laboratory and the

<sup>&</sup>lt;sup>39</sup> Croizet, "The Racism of Intelligence", 773.

<sup>&</sup>lt;sup>40</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development", 268.

<sup>&</sup>lt;sup>41</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development", 268.

<sup>&</sup>lt;sup>42</sup> Croizet, "The Racism of Intelligence", 773.

<sup>&</sup>lt;sup>43</sup> Arnold Gesell, (1932) "Study of Genetic Psychology", Box 154. Folder "Study of Genetic Psychology" Article (Sept 4, 1932) *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>44</sup> Gesell, (1932) "Study of Genetic Psychology".

future of study into human growth, Gesell pointed to the utility of the 'deficient' subject in producing experimental and clinical knowledge central to developing the field of development:

the education and development of the normal child, including the superior".<sup>45</sup>

"The work of the Vineland Laboratory has shown that the psychology of idiot, imbecile and moron may furnish us with keys for a better understanding of problems of human growth. It is well known that this work has in many ways influenced our outlook upon

This dynamic reflects the ways in which studying deviancy informed conceptions of normality and 'exceptionalism' more broadly, including those deemed gifted. The 'exceptional' and 'highgrade were deserving of specialized resources of a different kind than those that the 'inferior' deserved or were worthy of, yet the utility of this deficient population was central to the knowledge production of Gesell and his contemporaries. In this way, Gesell's contemporaries created a discursive terrain of vocabulary and frameworks which produced, defined, and validated difference. And the value of those cast out by this stratification clearly lay in their role in academic and institutional productions.

<sup>&</sup>lt;sup>45</sup> Gesell, (1932) "Study of Genetic Psychology".



Figure 8: "25<sup>th</sup> Anniversary collage" (1931) –A collage contained within the program for the 25<sup>th</sup> Anniversary of the Vineland Laboratory (1906-1931) for the Training School at Vineland, New Jersey that Gesell commemorated. The images include pictures of the laboratory building, its subjects, its administrators, and a pedigree chart.

Whether Gesell's ties were for professional capital, social relations, or support for his academic work can be argued; however, it is clear that the inspiration of Gesell's work and his admiration for psychological and developmental research and clinical work were to study defect and target variations in the infant and juvenile minds. The discourse on child development was enacted in Gesell's individual conversations with each of these figures, who grounded his foundational linkage to the American Eugenics Movement. These foundations would fundamentally affect his working schema and, by extension, impose structure on the emerging field of child development.

It is clear that Arnold Gesell was not single-handedly producing these eugenicallyaligned modes of thinking, but he was digesting and reproducing them at the site of legitimization that he created, the Clinic of Child Development. As American Eugenics has been exposed for its prejudice and "forms of discrimination, racism, ableism and colonialism,"<sup>46</sup> it is often thought of as pseudoscience, or a fringe movement. But with these charts, relationships, and knowledge exchanges, as well as tangible social legislation, that leading intellectuals and policymakers from the 20<sup>th</sup> century aligned themselves with eugenics, race science, and 'solutions' like forced sterilization, segregation, and immigration restrictions. These kinds of solutions were promoted by people in all sects, but it is especially relevant to note the role of the academic institution in constructing and facilitating eugenic logics and solutions. Eugenics "moved into the universities and there formed the basis for research in a variety of fields" by way of hereditarian ideas about intelligence, propagation, and human fitness.<sup>47</sup>

Some academic figures proudly announced their support for eugenics, while others carried on its logics in more implicit ways. Gesell diverged from many of his contemporaries' outlooks on mankind and human nature in several ways that have rendered him more palatable to contemporary histories of child development—those same histories which refer to him as the "father of child development."<sup>48</sup> His reproduction of eugenic logics in more unassuming ways, though, is still worthy of critical historicization. Gesell's approaches to social hygiene and producing developmental knowledge transformed his subjects into scientific objects which could

<sup>&</sup>lt;sup>46</sup> National Institute of Health, "Eugenics and Scientific Racism." National Human Genome Research Institute, May 18, 2022 <u>https://www.genome.gov/about-genomics/fact-sheets/Eugenics-and-Scientific-Racism</u>

<sup>&</sup>lt;sup>47</sup> Haller, *Eugenics: Hereditarian Attitudes in American Thought*, 7.

<sup>&</sup>lt;sup>48</sup> "Child Study Center: Mission & History." Yale School of Medicine. https://medicine.yale.edu/childstudy/about/mission/.

generate medical knowledge; health outcomes as a bodily and eugenic concern became more modern, precise, and unchallengeable through his academic processes.

The tendency of some historical narratives to reject certain 'unacceptable extremes' of eugenics implies the palatability of certain 'softer' commitments, and many histories reflect a 'softening' narrative of his waning ideological reliance on eugenics.<sup>49</sup> By the 1930s, the eugenics movement was losing momentum and facing challenges in the face of eugenic programming in Nazi Germany. And even as Gesell distanced his work from explicit eugenics, his network of contemporaries nonetheless invited him into the express exchange of eugenic work— such as within the Third International Congress of Eugenics. Held at the American Museum of Natural History in 1932, the event brought together an international cast of figures whose work was enhanced in some way by the academic consideration of pure and applied eugenics.<sup>50</sup> While it is unknown whether Gesell actually attended the conference, his membership card for the assembly is contained in his papers at the Library of Congress. The card was clearly intended for the access of "all privileges of its [the Congress'] meetings, exhibits and entertainment", as well as "one set of its publications."

<sup>&</sup>lt;sup>49</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development": "Although in 1923, Gesell still advocated eugenics, his views had softened; he now believed that sterilization had "only an extremely limited scope of application," (Gesell 1923, p. 4) and that "supervision and segregation" might be a better way of preventing conception."

<sup>&</sup>lt;sup>50</sup> Here is some background information on the Congress and its origins and iterations, as stated by the Third Congress' conference program/pamphlet: "The First International Congress of Eugenics, which was sponsored by the Eugenics Education Society of Great Britain, was held in London in 1912, under the presidency of Major Leonard Darwin. The Second Congress of this series met in New York in 1921, under the presidency of Henry Fairfield Osborn. The Third International Congress of Eugenics will be held in New York City in August, 1932, under the presidency of Charles B. Davenport, Director of the Department of Genetics of the Carnegie Institution of Washington and organizer of the Eugenics Record Office."; Arnold Gesell, (1932) "Eugenics Congress Announcement: Third International Eugenics Congress", Box 74. Folder Eugenics, *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

	THIRD INTERNATIONAL CONGRESS OF EUGENICS NEW YORK, AUGUST 21-24, 1932
	AMERICAN MUSEUM OF NATURAL HISTORY
	NEW YORK CITY
To whom	n it may concern:
	This certifies that Arnold Gesell
has been	duly enrolled as a Active Member of the
THIRD IN	NTERNATIONAL CONGRESS OF EUGENICS to be held in New
York City	y, U. S. A., August 21 to 24, 1932, and as such is entitled to
all privile	eges of its meetings, exhibits and entertainment, and will
receive w	rithout further charge one set of its publications?
	H man H Jaugen
	/ coord a saccept

Figure 9: A membership card for the Third International Congress of Eugenics, in the name of Arnold Gesell. It is signed by The Third Congress secretary and superintendent of the Eugenics Record Office (1910-1939), Harry H. Laughlin. (Source: *The LOC Arnold Gesell papers, 1870-1971*)

Gesell was a contact of the organizers, and he was meant to take "critical stock of eugenic progress" and imagine ways the "eugenic endeavor" could evolve and be forwarded.

While several Yale-affiliated figures like Irving Fisher and Madison Grant are directly implicated in managing this international gathering of eugenicists, others are not.<sup>51</sup> More palatable Yale figures, including Gesell, are often distanced from their eugenic endorsements, and are hardly ever referred to as 'eugenicists' even as more critical histories of eugenics have emerged. The ideological underpinnings of the work done by these figures, like Dr. Arnold Gesell, can be broken down in ways that similarly (to more explicit eugenicists) lean on assumptions about human value and the heredity of social disorder. As I will examine in the next section of this paper, these figures shifted their language and disguised eugenic logics in more

<sup>&</sup>lt;sup>51</sup> The managing committee for the Third International Congress of Eugenics was comprised by Charles B. Davenport, Chairman; Irving Fisher, Vice-Chairman; Clarence G. Campbell, Madison Grant, Frederick Osborn, Leon F. Whitney, Harry H. Laughlin, Secretary. This meant that *three* out of the Congress' seven managing committee members were Yale-affiliated.

inoffensive and subtle frameworks in response to the challenges to the eugenics movement mounted during the 1920s and 1930s. Though Gesell was directly linked to the work of the American Eugenics Movement, he imparted eugenic logics on child development in implicit and obfuscated ways.

## A Nexus of Eugenic Knowledge Production

While Yale University was fostering its elite reputation as a rigorous research center in the 1920s and 1930s, it was simultaneously becoming a locus of eugenic knowledge production. The University portrayed its duty to society as the pursuit of "light and truth." The cast of actors facilitating this truth-seeking saw themselves as uniquely capable of leading humankind in the right direction; by extension, they were charged with managing and guiding those outside of its gates—people who were too ignorant to take part. Yale, in the context of New Haven and Connecticut, was encountering what they saw as symptoms of social disorder and unsettling demographic changes. In the context of the American Eugenics Movement at large, the closing of the 19<sup>th</sup> century brought "rapid change" and "mounting tensions," with the growth of cities and slums, an influx of diverse immigrants, and racial conflicts and adjustments.<sup>52</sup> As a result, many "troubled Americans," including journalists, politicians, and professors, sought to understand the causes and solutions for poverty, tensions, and social failures.<sup>53</sup>

Eugenics took on vitality at critical "iconic institutions" which were constantly producing knowledge and popularizing modes of thinking, like Yale. <sup>54</sup> Neil Thomas Proto writes in *Fearless: A. Bartlett Giamatti and the Battle for Fairness in America*, a book on Yale

<sup>&</sup>lt;sup>52</sup> Haller, *Eugenics: Hereditarian Attitudes in American Thought*.

<sup>&</sup>lt;sup>53</sup> Haller, *Eugenics: Hereditarian Attitudes in American Thought*, 25.

<sup>&</sup>lt;sup>54</sup> Neil Thomas Proto, *Fearless: A. Bartlett Giamatti and the Battle for Fairness in America*. New York: State University of New York Press, 2020, p. 46.

University's first non-Anglo-Saxon Protestant president, about the embedded culture of Yale's eugenics and the "elect' mentality that tempered Yale from the outset."<sup>55</sup> The University's figures, research focuses and frameworks, and the physical architecture of the campus became embedded with eugenic commitments to hierarchies and typologies predicated on difference and bodily fitness.

A cast of figures actively worked during the 1920s and into the future to solidify Yale's reputation as an exclusive space with a student body of exceptional and moral characters to pursue 'light and truth'. The university brought together a network of faculty and administrators that established the kind of transdisciplinary connections needed to entrench conceptions of hierarchy and Othering into the disciplinary project. Archival sources indicate overlap during Gesell's tenure and connections with Yale President James Angell (1921-1937), Yale Medical School Dean Milton Winternitz (1920-1935), and Yale economist Irving Fisher (1895–1935). All of these prominent Yale figures were known to endorse and perpetuate the ideologies of eugenics and race science. They were also highly influential to the University at large.

In 1926, Yale Economics Professor Irving Fisher co-founded the center of public-facing eugenic work, practically embedding it on Yale's campus in the process. The American Eugenics Society, a nationwide eugenic organization, came to fruition on 185 Church Street in New Haven, CT.<sup>56</sup> Its mission was to educate the American public through eugenic educational and advocacy programs. What anchored the AES to Yale, besides its member's faculty appointments, was a common commitment to producing knowledge on difference, and mandating solutions for the 'resulting' social disorder. For this reason, Irving Fisher created the AES specifically to

<sup>&</sup>lt;sup>55</sup> Thomas Proto, Fearless: A. Bartlett Giamatti and the Battle for Fairness in America, 45.

<sup>&</sup>lt;sup>56</sup> Headquartered on 185 Church Street in New Haven, Connecticut, the American Eugenics Society eventually moved to 4 Hillhouse Ave, before moving to New York City in 1936 where it remained until its dissolution in 1973 to the Society for the Study of Social Biology.

educate the public and normalize hereditarian explanations for social inequality. After attending the Second International Congress of Eugenics in 1921, he was moved by the ways in which the Congress presented the capabilities of the natural and social sciences, interdisciplinary research, and techniques of observation. Fisher was inspired to build and forward a "formidable, unified American eugenics movement."<sup>57</sup>

The Second International Congress showed in its various exhibits and interdisciplinary presentations a way of cataloging, measuring, and typifying that came from a white supremacist, colonial perspective. As was necessary to counter ideological criticisms, the Congress sought legitimization from the authority of institutions and figures of academia and science. Method and data were highly important for combatting the theoretical challenges waged by those outside of the eugenics movement and evidencing the co-production of hereditarian beliefs and modern frameworks of ethnology and difference. The kind of eugenic work at the Congress, perpetuated by the American Eugenics Society and subscribed to by many Yale professors, put forth *a mode of seeing this difference*. Eugenicists coalesced around a framework of seeing and thinking about the world that stratified people into 'fit' and 'unfit' based on supposedly innate, biological, and heritable predispositions.

Yale hosted a nexus of figures who thought they were privileged in ways that made them uniquely capable of seeing 'truth' and disseminating their enlightened discoveries to guide the world outside the gates. Numerous Yale-affiliated figures considered eugenic views of hierarchy, heredity, and fitness precisely because of how easily eugenic visions of solving social crises and disorder could be transposed into the context of the university and its service to society. In the 1930s, the New Haven Committee representing the American Eugenics Society included Yale-

<sup>&</sup>lt;sup>57</sup> Emme Magliato ""Eugenically Yours": A History of the American Eugenics Society," *Sociology Between the Gaps: Forgotten and Neglected Topics*: Vol. 8. (2023) https://digitalcommons.providence.edu/sbg/vol8/iss1/1

affiliated members, such as Gesell, Dr. Winternitz of the School of Medicine, Yale President Angell, Yale geographer Ellsworth Huntington, and a later-on Yale School of Medicine clinical instructor Dr. Leon Whitney.<sup>58,59</sup> The enterprise to advance the human condition was set in motion by research mechanisms of the University and the figures who operated them. Gesell's Juvenile Psycho Clinic fit right into the patchwork of eugenic activity within Yale's network precisely for this reason, and his founding of the Clinic in 1911 set the stage for the University's administrative developments in institutionalizing eugenically-oriented research and advocacy.

Gesell saw the Clinic as an important device for truth-telling from its very inception. In 1913, Gesell wrote about how the Clinic was tasked with the problem of social prevention for the "burden" of mass feeblemindedness.<sup>60</sup> To Gesell, the quantity of the "feebleminded" in the US was "appalling."<sup>61</sup> In "The University in Relation to the Problems of Mental Deficiency and Child Hygiene," he explains that, "with about 2% of our elementary school population feebleminded, with the vice, pauperism, incompetence, inefficiency and degeneracy untold due to feeblemindedness, we have in this burden a social problem toward which a university may indeed feel a responsibility."<sup>62</sup> Crime, poverty, and social unrest were seen as symptoms of an issue that was 'of the body,' warranting a study of the bodies of the people creating these problems. Mental deficiency was rendered a community problem which complicated the realms

 <sup>&</sup>lt;sup>58</sup> Dora Guo & Garcia, "GUO & GARCIA: 100 years later: eugenics at Yale" *Yale Daily News*, Oct 1, 2021
https://yaledailynews.com/blog/2021/10/01/guo-garcia-100-years-later-eugenics-at-yale/ (accessed April 3, 2023).
<sup>59</sup> Invitation to the New Haven Committee Meeting of the American Eugenics Society, (1941) Box 80, Folders
1518-1519. MS 569 Yerkes Collection, Manuscripts & Archives, Yale Library: New Haven, CT.

<sup>&</sup>lt;sup>60</sup> The word "burden" is originally used in his article, "The University in Relation to the Problems of Mental Deficiency and Child Hygiene". In a later edit, he changes it to "mass".

<sup>&</sup>lt;sup>61</sup> Arnold Gesell, (1913) "University in Relation to the Problems of Mental Deficiency and Child Hygiene", Box 150. Folder Article, The University in Relation to the Problems of Mental Deficiency (1912/1913) *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>62</sup> Gesell, "University in Relation to the Problems of Mental Deficiency and Child Hygiene".

of education and vocation and the problems of dependency, neglect, and delinquency.<sup>63</sup> Gesell's concern with resolving the social issue of feeblemindedness through scientific study and treatment reflected how he saw certain unfit and socially incompetent populations as requiring a medical solution. This way of thinking about (un)fitness and solving social disorder came to manifest within larger structures within Yale and on different levels of the University.

In 1929, the Institute of Human Relations (IHR) was founded as an innovative and unique cross-departmental research organization charged with many of these concerns. The Institute represented the pinnacle of response to calls from within the University for a centralized entity responding to questions of social disorder and inequity with an expert-driven and highly scientized and approach. Investigations were to center on problems of human behavior, "including anthropological study of the behavior of primitive racial groups."<sup>64</sup> The research center brought together important figures from academic and applied fields to "correlate knowledge of the mind and body, and of individual and group conduct, and to study further the interrelations of the many factors influencing human actions."<sup>65</sup> The solutions to and uncovering of the innate bases for 'human actions' had important applications for the promotion of child welfare.<sup>66</sup> The initiative for a comprehensive multi-approach effort to advance the human condition was led by Yale President James Rowland Angell, who was elected in 1921 as the first non-Yale graduate to hold the presidency. Angell was "eager to implement the precepts of the mental hygiene movement at the university setting" and to realize Yale as a prestigious institution of higher education reflecting a holistic scientific study of mind, personality, and

<sup>&</sup>lt;sup>63</sup> Arnold Gesell, (1920) "The Problem of Mental Subnormality", Box 150. Folder Article, The Problem of Mental Subnormality (1920) *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>64</sup> C.G. Poore, (Feb 1929) "YALE IS NOW TO STUDY MANKIND". Box 91, Folder Institute of Human Relations: Letters, Memos, Historical Data (1927-1935], *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC, p. 6.

<sup>&</sup>lt;sup>65</sup> Poore, "YALE IS NOW TO STUDY MANKIND", p. 7.

<sup>&</sup>lt;sup>66</sup> C.G. Poore, "YALE IS NOW TO STUDY MANKIND", p. 6.

intellect.<sup>67</sup> The IHR fit into his project of making Yale into a modern research university which reflected his own ideas about the hereditarian basis of knowledge and natural or implicit hierarchies.<sup>68</sup>

The Clinic of Child Development fell into the purview of this new Institute centered on studying "man himself" and became one mechanism through which social control and guidance was tested and exercised. The IHR's inclusion of a child study group enabled it to address the problem of juvenile delinquency through an interdisciplinary but specialized approach. Collaborating with experts on economic and social conditions like "poverty, wages, unemployment, and so on," Gesell was to think of the ways in which social inequality and crime manifested as symptoms of something internal to the child's body. It is clear in this research and clinical directive that health outcomes were to be seen as a bodily eugenic concern. The IHR represented an interdisciplinary and comprehensive approach to solving social problems, and it mobilized the momentum behind child development as a new approach to medicine and social hygiene to tackle these targeted social issues. In this undertaking, Gesell was charged with a critical and applied practice of study which put academia to use in service of marshaling society according to the University's vision of "light and truth." This is just how he envisioned the Clinic's work. Because of his confidence in the Clinic's ability to discover and apply objective social truths, Gesell supported the notion that the Institute could be uniquely positioned to impose its view of mankind and to shape the character of the nation and social relations through forms of social control.

<sup>&</sup>lt;sup>67</sup> Daniel Arias "Bright Young Minds: Collegiate Mental Hygiene in Early Twentieth Century America" Senior Thesis. Yale University, 2015, https://hshm.yale.edu/sites/default/files/files/2015-arias.pdf.

<sup>&</sup>lt;sup>68</sup> Daniel HoSang and Dora Guo, "Eugenics and its Afterlives at Yale University" Gilder-Lehrman Center Annual Conference: Yale and Slavery in Historical Perspectives (Oct 2021) https://www.youtube.com/watch?v=ImV0VFmd6hA

Not only did the Clinic's incorporation into the umbrella of the IHR represent the University's welcoming climate for studies of delinquency and defect, but it also gave Gesell's Clinic an expanded working space. The unveiling of the Institute revealed that about fifty individuals could be housed in the physical space of the IHR for "investigations in psychiatry, child development and psychology" and that an entire wing of the building was to be devoted strictly to the uses of Gesell's child development research. The residential-like atmosphere of the IHR wing provided a physical space for candid behavioral expression by Gesell's child patients and corresponding observation by Gesell and his staff. The advantageous positioning of the already-existing Clinic in the new structure of the IHR gave new life into Gesell's work. It also solidified routes of exchange and collaboration with other institutional entities, like the Yale School of Medicine, which was headed by Milton Winternitz. Dean Winternitz was a proponent of social medicine and a supporter of the IHR, and the experimental rooms in the IHR building were used for joint psycho-neurological investigations."<sup>69</sup>

Altogether, Yale's campus and ambitious projects like the Institute of Human Relations served as an incubator for Gesell's eugenically-aligned work at the Clinic of Child Development. These university developments in the early 20<sup>th</sup> century laid the groundwork for the unique lens of public health and hygiene that Yale's child study had to offer. While Gesell's undergirding personal commitments to eugenics and social hygiene informed his efforts to surveil, examine, and treat the infant, they were far from unique in the context of his University.

#### The Clinic of Child Development

<sup>&</sup>lt;sup>69</sup> Poore, "YALE IS NOW TO STUDY MANKIND", p.9.

Gesell initially came to Yale as an assistant professor in the new Department of Education. That same year, he implored the Yale School of Medicine's Dean, George Blumer, for the space to open up a new, unique kind of study. This spatial allotment was just the beginning of the tethered connection of support and reciprocity between Yale's Medical School (and its deans) and Gesell as the founder of the Clinic of Child Development.

Thus, the Juvenile Psycho-Clinic was born as a single room in the New Haven Dispensary in the year 1911.<sup>70</sup> The origins of the clinic have been historicized as "for the study of retarded children" growing from a need for examination and intervention in Connecticut public schools.<sup>71</sup> Gesell's language at the time (1912) described the psychological clinic as for examining "backward and defective children" in particular, as the abnormal child was a distinct social problem.<sup>72</sup>

The New Haven Dispensary as a site of study was posed to look at patients for teaching purposes. Dispensaries were established across the 1800s, offering "free medical treatment and medicines to anyone unable to afford other means of treatment".<sup>73</sup> The School of Medicine's records show that most dispensary patents were of the working class, and it seems that many of the Clinic's early patients were majority white (32 cases indicated "race" in a statistical summary showing the types of cases seen at the Clinic July 1934 to June 1935).<sup>74</sup> While the dispensary

<sup>71</sup> Yale School of Medicine. "Child Study Center celebrates 100 years of mental health research." *Yale Medicine Magazine*. Spring 2011. <u>https://medicine.yale.edu/news/yale-medicine-magazine/article/child-study-center-</u>celebrates-100-years-of-mental/ (accessed November 20, 2022).

<sup>&</sup>lt;sup>70</sup> Notably, this is two years prior to his 1913 authorship of the eugenic article, "Village of a Thousand Souls" in *The American Magazine*.

<sup>&</sup>lt;sup>72</sup> Arnold Gesell (n.d.) "Writings from the Juvenile Psycho-Clinic" Box 121. Folder YCCD and the Juvenile Psycho Clinic, *Arnold Gesell papers*, 1870-1971, Library of Congress Washington DC.

<sup>&</sup>lt;sup>73</sup> Kerry Falvey, "The New Haven Dispensary" Yale Medicine Magazine (2010 - Autumn)

https://medicine.yale.edu/news/yale-medicine-magazine/article/the-new-haven-dispensary/

<sup>&</sup>lt;sup>74</sup> The breakdown of 1,592 patients in 1874 included as follows: housekeepers (367), people in school-related occupations (206), laborers (161), servants (103), laundresses (40), machinists (33), shop girls (25), one authoress, six blacksmiths, and two engineers, in addition to three "rag pickers" and six "tramps." (Yale School of Medicine); "Statistical Summary Showing the Types of Cases Seen at the Clinic of Child Development: July 1<sup>st</sup>, 1934 to June

specialized in addressing physical disease, Gesell facilitated an expansion of disease intervention into the mental and behavioral arena. The dispensary had already proved to serve a public health function for the city of New Haven,<sup>75</sup> but now, this prerogative was extended.

In its first year of operation, the Psycho-Clinic saw Gesell personally examine about 137 children, most of which being labeled the "feebleminded" or "moron" type. These cases ranged from addressing the "epileptic," "wayward girl,"<sup>76</sup> "incorrigible boys," "mongolian imbeciles," and children who were "deaf and dumb."<sup>77</sup> Importantly, Gesell's cases included school-age children who were considered rebellious, ungovernable or resistant to control or proper reform. These children were to be studied to ascertain how they could be handled—in a way that softened them and made them malleable—or more receptive to certain social standards, expectations of their schooling institutions, and of Gesell as a psychological professional in higher education. The initial purposes/intentions of the Clinic were to "determine the mental status and capacity of subnormal or otherwise exceptional pupils of the public schools" and "to collect and file data in regard to mentally and morally exceptionally children". In sum, the Clinic functionally served as a facilitator of isolating the defective child, providing recommendations for intervention, and aggregating the subnormal individual into a collectively scaled social trend or problem.

A decade into the Psycho-Clinic's work in the Dispensary, Gesell wrote in 1921 that, in addition to its consultation service for "exceptional mental and developmental conditions...

<sup>1&</sup>lt;sup>st</sup>, 1935" Box 118. Folder YCCD Appointments, *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>75</sup> The New Haven Dispensary's public health significance came down to its treatment of various ailments, as well as projects like providing free vaccinations to New Haven residents.

<sup>&</sup>lt;sup>76</sup> Notions of "wayward lives," such as that presented by Saidiya Hartman in *Wayward Lives, Beautiful Experiments: Intimate Histories of Social Upheaval* offer alternative imaginations of possibility for those who created their own rules of movement, behavior, and thought.

<sup>&</sup>lt;sup>77</sup> Gesell, "Writings from the Juvenile Psycho-Clinic".

includ[ing] backwardness, delinquency, and various forms of instability and conduct disorder, the Clinic had also more officially taken on "educational service" with the opening of the Psycho-Clinical Laboratory on 28 Hillhouse Avenue (the Education building).<sup>78</sup> This educational service was constrained, though, to "individual study of special cases" and "a report of mental and educational measurements."<sup>79</sup> And, even a decade later, the Clinic was conducting field work for public schools and state institutions to provide findings and recommendations on individual examinations and mental surveys. The Clinic's buildout with the new Laboratory space represented a success point in the expansion of the burgeoning science of child development as it allowed its capacity to measure and observe more children to increase.

Overtime, the Clinic served as a more theoretical laboratory as well, in the sense that it workshopped new conceptions of public health. In trying out new modes of observation and classification, clinical care interacted with social control and modes of mental and physical hygiene. Such was the case with the New Haven Hospital's Well Baby Conference (beginning in 1932). Aligning with the Clinic's capacity to provide the medical teaching and learning apparatus for the University, the Well Baby Conference gave opportunity to focus examination and inquiry on the level of the infant. From the period of November 30, 1932, through July 1934, 100 infants under six months of age were subjected to repeated examination beyond their typical level of required care at the New Haven Hospital Dispensary.<sup>80</sup> While I did not find the data from the 1932 Well Baby Conference, a summary of YCCD appointments from 1934 through 1935 indicate that Gesell looked for special research or clinical features, and classified children

 <sup>&</sup>lt;sup>78</sup> Arnold Gesell, (1921). "Psycho-Clinical Service of Yale University". Box 121. Folder Psycho-Clinical Service of Yale U (1921) *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.
<sup>79</sup> "Psycho-Clinical Service of Yale University" (1921) [box 121]

<sup>&</sup>lt;sup>80</sup> Gesell, Arnold (1934). "Well Baby Conference". Box 117. Folder Well Baby Conference (1932) *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

according to mental status (superior, average, borderline, or defective), guidance problems (such as general guidance, parent-child relation, masturbation, temper, social adjustment, and "defective child"), social factors (including adoption, institutional environment, dependent child, heredity, illegitimate), and even more dimensions of cataloging.<sup>81</sup>

- 13	3	TATISTICAL SUMMARY	
SHOWING THE TYP	ES OF CASE	S SEEN AT THE CLINIC OF CHILD DEVE	
an and a distance of the	Tulm 1.	THE CLINIC OF CHILD DEVE	OPMENT
	JULY LET	, 1934 to June 1st, 1935	
OUDANCE PROBLEMS:			
General	61	SOCIAL FACTORS:	DELINQUENCY:
Speech	8	Adoption 58	General 7
Fooding	27	Foster Home	Court Case 3
Behavior Problem	11	Institutional Envir-	Stealing 8
Educational	5	Onment 72	Automay seconder -
Dressing	1	Family Situation 51 Dependent Child	Truancy Z
Parent-Child Relation	4		
Enuresis	6		
Masturbation	6		
Temper	6		
Social Adjustment	2		DEVELOPMENT :
Defective Child	11		General 65
- 7598 - 7034 Fain			Retarded 26
PSYCHOPATHIC:			Accelerated 1
Convilsions	80.00		Variation in I.Q. 5 Motor (accelerated)1
Convulsions	15		" (retarded) .7
Psychopathic Personality			Language (retd.) 10
rey despatrice reischartey	1 1	Physical Complications 16 Motor Co-ordination 2	Danguage (revue)
		Crippled 1	
CLINICAL VARIETIES:		Complex Physical	BIRTH:
Mongolian	5	Deviations 1	Premature 2
Cretin	3	Underweight 1	Postmature
Microcephalic		Overweight 2	Multiple Birth . 1
Hydrocephalic	4	Neurological Compli-	Birth Injury 1
Puberty Preacox	1	cations 1	With the second s
Institution for		Congenital Physical	
Defectives	1	Abnormalities 2	
Secondary Retardation	1		
7204			
SPECIAL RESEARCH or CLINIC.	AL FRATURE	8: 35	
		T WAR	
and the second s			
SPECIAL PROBLEMS:		SCHOOL PROBLEMS :	
Reading	52	Behavior 3	
Handedness	34	Maladjustment 22	
Arithmetic (accelerated)	1	Special Class 7	
Drawing ( " )	1	Nursery School 44	
Speech, stammering, etc.	16	AN AN ANALY AND AND AN ANALY AND ANALY ANA	
Visual Defect	8		
Hearing Defect	4	Race: 32	1
Heat me		200.025	
		Photographs 5	-
		Motion Pictures 5	,

Figure 10: "Statistical Summary Showing the Types of Cases Seen at the Clinic of Child Development" (1935)—Breakdown of cases by guidance problems, psychopathic qualities, clinical varieties, special problems, social factors, physical factors, school problems, delinquency, development, and birth. (Source: *The LOC Arnold Gesell papers, 1870-1971*)

In a summary report of the Well Baby Conference, Gesell alluded to the nuanced

dimensions of consent and communication with parents for this kind of data collection. He

<sup>&</sup>lt;sup>81</sup> "Statistical Summary Showing the Types of Cases Seen at the Clinic of Child Development: July 1<sup>st</sup>, 1934 to June 1<sup>st</sup>, 1935" Box 118. Folder YCCD Appointments, *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.
describes how the mothers consenting for their children were intentionally given "practically no explanation" for the examinations, yet he speculated that those mothers who objected to examination or reexamination of their babies were acting in "a defensive move."<sup>82</sup> We can imagine that the mothers who consented to extraneous examination of their babies may have felt pressure to allow for close inspection and cataloging of their baby, as it was implied that the exams were for their babies' health and well-being, rather than the collection of data. Despite their hesitance to examination and Gesell's withholding of its purposes, Gesell saw the potential utility of mothers of his infant subjects insofar as they could be recruiters of subjects and reporters of deviancy, and he accordingly allotted them the facility of neutral observation.

His authority as a removed and empirical observer was temporarily granted to the mother within the bounds of *his* ultimate supervision. This meant that Gesell observed the mothers too. While he permitted the mother to act as witness to abnormal child behavior, he also utilized her as an informant. He actively worked to persuade mothers to make observations and criticisms of their children, and to report abnormalities, by bringing the children into the Clinic. To do this, Gesell needed a "device for the observation and guidance of young children; and also for the guidance of parents who are perplexed with the behavior problems which their children present."<sup>83</sup>

The Guidance Nursery was "established as an adjunct of the service division of the clinic" by a 1926 funding grant from the Laura Spelman Rockefeller Memorial.<sup>84</sup> The Nursery had no fixed enrollment and guidance work occurred on a dispensatory basis where mothers would bring their babies by appointment for 'perplexing' behavioral problems. Of the physical

<sup>82</sup> Gesell, "Well Baby Conference".

 <sup>&</sup>lt;sup>83</sup> "The Guidance Nursery of the Yale Psycho-Clinic", n.d., Box 63. Folder 2, "Gesell's publications" "Institute of Human Relations, Yale University, records", Manuscripts and Archives, Yale University Library.
 <sup>84</sup> "The Guidance Nursery of the Yale Psycho-Clinic", n.p.

arrangement of the Guidance Nursery, Gesell depicts a picture of the observer/ observee arrangement that the physical space and its equipment's arrangement facilitated:

"The mother also may get a fresh and more wholesomely detached point of view by observing his behavior through the segregative screen of the observation alcove. This screen is so constructed that the mother can see her child at close range, while she herself remains invisible. Of course she may take a station in the nursery itself; but there is a distinct psychological advantage in the more detached view of the child's behavior, which she gets from her special observation post."<sup>85</sup>

This quote importantly reveals key insights into the elements of observation at the Clinic's Guidance Nursery: the segregative screen, the invisible observer, the detached view, and the psychological advantage of the observational set-up. The subject had to be separated and differentiated from the observer through active processes of depersonalizing and de-relating. Further, candid monitoring and distancing procedures enabled Gesell to de-situate the ideologies of his truth-claims by presenting his direct observations as impartial and self-evident. His innovative observational technologies, like one-way viewing screens and the Gesell Observation Dome, as well as cataloguing technologies, like photographic sequences of growth, and motion picture compilations, contributed to the visual isolation and targeting of characteristics indicating normality or defect. His ideas of development and normality were implicit in the application of these visual instruments.

<sup>&</sup>lt;sup>85</sup> "The Guidance Nursery of the Yale Psycho-Clinic", n.p.



Figure 11: "Photographic dome with Gesell and baby" (1947)— Image of Gesell and an infant subject in his photographic dome, surrounded by a camera operator, stenographer, clinical observer, and photographer. (Source: *Life Magazine*, photographer Herbert Gehr)

Gesell's investment in visual technology for research and intervention reflected how these devices were central to knowledge formation at the Clinic of Child Development.<sup>86</sup> These technologies, like the eugenic charts, pedigrees, and diagrams, presented normalcy and deviancy as discernible and legible to a commonsense notion of eugenic hierarchy. These tools, as mechanisms of surveillance, documentation, and clinical functions, trained parents and all observers to take on an overall detached perspective on neutral reporting of discrete and self-evident qualities of character.

Gesell maintained an ideal of objectivity and detached expertise in his Clinic in the name of science, betterment, and human optimization. His candid observational style, paired with his

<sup>&</sup>lt;sup>86</sup> Carola Ossmer. "Normal Development: The Photographic Dome and the Children of the Yale Psycho-Clinic." *Isis 111*, no. 3 (2020). Accessed April 2, 2023. https://doi.org/10.1086/711127.

filming procedures led to simple equipment like the one-way mirror becoming the cornerstone of child study tools. Not only is the simplicity and clinically precise nature of the equipment and physical arrangements emphasized, but he is also clearly constructing an ideal observer. Credible and 'unbiased' observations, from Gesell's perspective, were the only way to provide clear and reliable insights on child development. In bringing the children's parents into the fray, he effectively trained them to be clinical, methodical, and precise in looking for variation and signs of degeneracy in their child's development.

Through employing these kinds of distanced and 'neutralizing' postures, the Clinic of Child Development became a site of legitimization and praxis for the 'high-grade' and dignified institutional approaches that Progressive administrators at the time (like President Angell and Dean Winternitz) were attempting to implement at Yale on a broader level. The idea of the Ivory Tower at the University level thus translated to the enlistment of the parent as a reporter of deficiency (which meant they had to be empowered to recognize *it* in their child). Gesell and the Clinic latched onto the Progressive idea that the University had a responsibility to understand and guide the population. For him, this meant mobilizing the parent as a unit of guidance for the infant, making both the infant and the parent subjects of intervention simultaneously. The Clinic, as an arm of the modern American university, represented a what Thomas C. Leonard refers to as the 'progressive paradox': "The progressives combined their extravagant faith in science and the state with an outsized confidence in their own expertise as a reliable, even necessary, guide to the public good. They were so sure of their expertise as a necessary guide to the public good, so convinced of the righteousness of their crusade to redeem America, that they rarely considered the unintended consequences of ambitious but untried reforms."87 Gesell's commitment to

<sup>&</sup>lt;sup>87</sup> Leonard, Thomas C., 1960-. 2016. *Illiberal Reformers: Race, Eugenics, and American Economics in the Progressive Era*. Princeton, Princeton University Press.

Progressive values linked his benevolent intentions to help community and nation solve its mental health crises and various levels of social disorder with the medical and pediatric expertise he had acquired. By exercising his institutional affiliation, he used his standardized procedures of examination and measurement, the Clinic of Child Development, and Yale University at large as device of legitimization for a field of child study which could address society's problems in a new, expansive way for the scientific study of the child.

# The Emergence of a Child Study

"Why this new concern for the very young child?"<sup>88</sup> As Arnold Gesell mapped out a new scientific study, he was distinctly aware he was carving out a new study subject—one that required the expertise of a pediatrician, geneticist, and psychologist all in one. The nexus of study that child development represented constituted a new transdisciplinary discourse that posited the infant child as a worthy site of study.

Child development as a discipline foundationally depended on precise procedures and metrics assessing (and correcting) early physical growth and developmental mechanisms. These scientific ideas were derived from the discourse about child welfare and the concept of a healthy childhood in the Progressive Era—a period from the 1890s to around the 1920s. During this period, social and political reformers took interest in using the state or other institutional actors to intervene in social problems.<sup>89</sup> One cause was "child saving" (saving children from moral and physical harm) and rethinking of the role of the child in family and society.<sup>90</sup> The transformation of child life was predicated upon the eugenic premise that fundamental aspects of widely-

<sup>&</sup>lt;sup>88</sup> Arnold Gesell (1929), "The Early Year of Mental Growth" Box 152. Folder Article, The Early Year of Mental Growth (1929) *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>89</sup> Leonard, Illiberal Reformers: Race, Eugenics, and American Economics in the Progressive Era.

<sup>&</sup>lt;sup>90</sup> Greer Martin, ed. *Children in Progressive-Era America*. Location: Digital Public Library of America, Online. Exhibition catalog. Accessed Mar 9, 2023 <u>https://dp.la/exhibitions/children-progressive-era</u>

accepted (and eugenically-linked) categories of social disorder such as war, crime, poverty, adult dependency, social unrest, and insanity could be eradicated by perfecting the physical and mental well-being of the child. A course of healthy development would prevent the later burdens of social incompetence and adult insanity.

Gesell's psycho-biological perspective posited that "problems of human personality have a genetic or developmental aspect which traces back to infancy."<sup>91</sup> Gesell particularly believed that the course of early mental development "precede[d] and determine[d] maturity," predicting lifetime trajectories of character, productivity, and value to society.<sup>92</sup> An understanding of the fundamental laws of human growth enabled constructive and preventative developmental supervision: this approach of mental hygiene was the foundation for a scientific movement in infant psychiatry. In this way, concern for the mental welfare of the infant had an element of "self preservation" for human culture and society.<sup>93</sup> Once reformers began to see the value in studying and treating the infant subject, a "movement both humanitarian and scientific in temperament" commenced to confer "altogether new social status upon the early period of childhood."<sup>94</sup> For this reason, the twentieth century has been widely been pronounced "the century of the child."<sup>95</sup>

<sup>95</sup> Theresa Marianne Rupke Richardson. "The Century of the Child: The Mental Hygiene Movement and Social Policy in the United States and Canada." Order No. NL41991, The University of British Columbia (Canada), 1987. <u>https://www.proquest.com/dissertations-theses/century-child-mental-hygiene-movement-social/docview/303541202/se-2</u>. ; Ellen Key, 1912. *The century of the child*. New York: G. P. Putnams sons

<sup>&</sup>lt;sup>91</sup> Arnold Gesell (1932), "Yale Clinic of Child Development" Reprinted from Childhood Education, May 1932, Box 154, Folder Yale Clinic of Child Development Article (1932), *Arnold Gesell papers*, 1870-1971, Library of Congress Washington DC.

<sup>&</sup>lt;sup>92</sup> Arnold Gesell (1929), "Child Psychology", Box 152, Folder Article, The Early Year of Mental Growth (1929), *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>93</sup> Gesell, "The Early Year of Mental Growth".

<sup>&</sup>lt;sup>94</sup> Gesell, Arnold (1929). "Present Status of Research on Child Development". Box 208. Folder Yearbook of the National Society for the Study of Education, *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

https://hdl.handle.net/2027/hvd.rsljcj; Peter B. Neubauer, "The Century of the Child," in Charles Rolo, *Psychiatry in American* Life (Freeport, N.Y: Books for Libraries Press, 1971). Pp.133-41.

In 1926, "the experimental investigations of biological and medical science" were "revealing bit by bit the mechanisms of growth."<sup>96</sup> Investments in early work on genetics undergirded biological investigations into the physical and mental growth of both people and animals. By the early 1930s, the scientific study of child development was expanding at a very rapid rate, according to Gesell.<sup>97</sup> The field's investment in social factors imbued the emerging area of medical science with a distinct social responsibility, and a responsiveness to eugenic conceptions of individual difference and value. Importantly, researchers were paying attention to social behavior and social adjustment, not just physical disease. Gesell's dedication to his child subject revealed that "even the infant [had] a mind."<sup>98</sup> The integration of the realm of psychological investigation through the lens of child hygiene enabled developmental psychology and pediatrics to come into closer relation, as well as for the medical sciences to take the scientific study of child development seriously. Child development effectively bridged the gap between psychology and pediatrics that existed up until the early 20<sup>th</sup> century.

Gesell was at the forefront of an emerging movement that was interdisciplinary and both scientific and humanitarian in nature. Never before had such focus been narrowed in on infancy and the early period of childhood—in part because it was not seen as relevant to social problems. This new movement exposed how young children and infants followed growth patterns which directly related them to adults, and showed that early intervention could be a course of action for addressing societal ills that could be located within individual infant or juvenile bodies.

<sup>&</sup>lt;sup>96</sup> Arnold Gesell (1926). "Normal Growth as a Public Health Concept". Box 151. Folder "Normal Growth as a Public Health Concept", 1926, *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>97</sup> Arnold Gesell (1932). "How Science Studies the Child: A Science Service Radio Talk". Box 154. Folder "How Science Studies the Child", *Arnold Gesell papers*, 1870-1971, Library of Congress Washington DC.

<sup>&</sup>lt;sup>98</sup> Arnold Gesell (1927), "The Mental and Physical Welfare of the Child" Box 208. Folder Mental Hygiene of the Preschool Child, *Arnold Gesell papers*, 1870-1971, Library of Congress Washington DC.

With child study as a legitimate field, children became individual laboratories which could be used to explore adult social problems. Gesell and his contemporaries asserted that part of their interest in the study of infants and children was to track the growth patterns and development that led to high-functioning, well-adjusted adults (and sometimes, how this growth could go 'wrong'). By the time he left his role as Director for the Clinic of Child Development in 1948, Arnold Gesell had solidified the importance of children, and specifically infants, to notions of mental and physical hygiene, psychiatry, medicine, and beyond.

### The Infant as the Subject (of Public Health)

In the 1920s and 1930s, Arnold Gesell penned a series of articles and public addresses which distinctly produced, molded, and validated the conception of the infant child as an object of scientific study. With this, the idea of individual difference as an intervenable unit of public health could be applied to children and infants. His writings and accompanying public addresses were circulated broadly so as to reach popular media, like the *New York Times*, as well as programs like the Science Service Radio Talks, presented over the Columbia Broadcasting System.

In 1923, Gesell published "Preschool Child as a Health Problem," which transforms the child into a unit of health to be addressed and *solved*. As Gesell goes on to explain, the preschool age child had become fertile ground for clinical oversight, public health measures, and the institution of social control. The child as a distinct domain for scientific-based social problem-solving had finally begun its transformation– from a "No Man's Land' in the field of public endeavor" to a promising "frontier settlement."<sup>99</sup> And Gesell would be a pioneer in settling this

<sup>&</sup>lt;sup>99</sup> Arnold Gesell (1923). "The Preschool Child as a Health Problem". Box 151 Folder Preschool Child as a Health Problem (Gesell, 1923), *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

promised land of professional capital, academic achievement, and clinical practice. The infant became a subject in and of himself, a fully self-contained vessel of difference. With his clinical apparatuses, Arnold Gesell created an infant subject to be observed as a projection of larger health and social issues, and he positioned himself to be the authorized observer.

The subjectification of the infant can be complicated by thinking about how Gesell as the observer actualized his role as a legitimate authority to make observations which carried meaning. As a sometimes-invisible observer, he employed an overall detached view of the children he examined. As what Donna Haraway calls the "conquering gaze from nowhere", he was part of a hierarchy between the observer and the (child) subject who was transformed into an object of his study.<sup>100</sup> The infant as a study object was essentialized into an assemblage of measurable or quantifiable traits which contained his difference.

Within this construction of observer and observed, Gesell authorized and rendered himself as a legitimate observer because of a certain innate quality about his subjectivity partially to do with his credentials and social role. As a sort of 'supreme subjectivity', he posed himself as a figure specially equipped for that authority—uniquely capable of skillfully observing, recording, and measuring. As many articles reported at the time, his ability to read the infant subject and foresee the future truths of the children he worked with was seen as a profound ability:

"What does it mean if a two-year-old is able to build a tower of ten blocks or a sixmonth-old infant disregards a proffered rattle? Like any scientist, Doctor Gesell would not venture an explanation on so little evidence, but if he had examined the babies under what he calls a sample life situation, if he had studied the case histories and medical

<sup>&</sup>lt;sup>100</sup> Donna Haraway. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988): 575–99. https://doi.org/10.2307/3178066.

reports, he might tell you that the two-year-old would become an unusually gifted adult and the baby was a mental defective."<sup>101</sup>

The foresight and innate skill required to diagnose a baby's future was palpable. What bestowed this authority upon Gesell was a combination of things—his credentials as a pediatrician and medical doctor, his positionality as an elite academic at Yale University, his directorship of the Clinic of Child Development, and his adherence to the strict procedures of 'neutral' and 'invisible' observation.

Intimate observation was indeed the cornerstone of child development and study since babies had no way to communicate their interiority. Gesell saw no other way for the field to operate but to rely on the direct observation of behavior: "There is no possibility of observing the consciousness of an infant in any immediate way."<sup>102</sup> By structuring the field's foundational study procedures, observation was central to the ways detachment and objectivity foundationally produced the modes of thinking that pervaded Gesell's work and the field's theoretical skeleton.

<sup>&</sup>lt;sup>101</sup> Vernon Pope (n.d.). "Yale University's Clinic of Child Development shows How a Baby's Mind Grows" Article, *Saturday Evening Post*. Box 121, Folder - Yale YCCD History - Epitome (1923-1951), *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>102</sup> Gesell, Arnold (1929). "Child Psychology". Box 152. Folder Article, Child Psychology (1929), *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.



Figure 12: Dr. Arnold Gesell introduces a source of stimulation for an infant patient to gauge and measure response at the Yale Clinic of Development. (Source: *Yale Medicine Magazine*)

As Gesell writes in "Mental Development in Infancy: Its Measurement and Hygiene," the Juvenile Psycho-Clinic was to "soon be ready to calibrate the baby brain with mathematical deterministic accuracy. <sup>103</sup> It is evident that Gesell relied on scientific processes and quantitative data collection. In a sense, he possessed the infant's mind– containing it within the umbrella of developmental knowledge. What thus emerged was a broader dynamic of knowledge acquisition which was perhaps not so inherently neutral. Gesell's work is productive in this way—his intervention in the emerging field of child development is the creation of a discourse that turns people into subjects, from which medical (clinical) observations and quantifiable, trackable 'evidence' empower and perpetuate the discourse. His vast collection of data (infant observations and measurements) and motion-picture films cataloged the babies he studied in calculated,

<sup>&</sup>lt;sup>103</sup> Arnold Gesell (n.d.). "Mental Development in Infancy: Its Measurement and Hygiene". Box 151. Folder Mental Development in Infancy: Its Measurement and Hygiene, *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

purposeful ways. In this dynamic, we can see a certain sort of productive power in inquiry, data collection, and psychiatric intervention. Michel Foucault says this of the productive nature of power:

"The individual is... a reality fabricated by this specific technology of power that I have called discipline. We must cease once and for all to describe the effects of power in negative terms: it excludes, it represses, it censors, it masks, it conceals. In fact, power PRODUCES; it produces reality, it produces domains of objects and rituals of truth. The

individual and the knowledge that may be gained of him belong to this production."<sup>104</sup> Liat Ben-Moshe expands on the idea of the production of power with regard to psychiatry, explaining that Foucault's idea of power shows how subject formations serve to constrain and reify the discourse that creates them. Power is "not a centralized external force controlled by a limited view but is inside us, making us operate in particular ways, often by benevolent means, that is, 'for our own good."<sup>105</sup>

Through child development, Gesell's production of the infant subject simultaneously worked to produce himself as a *subjectifier*. This process of producing and orienting power implicates Gesell's active objectification of subjects in his deployment of official scientific inquiry. Dynamics of professionalism and observer authority dictated the discourse while perpetuating their own importance in child study through the exam metrics and tangible measurements gained from the process. Producing the subject required a subjectifier, or an expert worthy of and positioned to study that subject, with all of the associated valences like

<sup>&</sup>lt;sup>104</sup> Michel Foucault, *Discipline and Punish: The Birth of the Prison*, (London: Penguin 1991): 194.

<sup>&</sup>lt;sup>105</sup> Liat Ben-Moshe, *Decarcerating Disability: Deinstitutionalization and Prison Abolition*. (Minneapolis: University of Minnesota Press, 2020), 349.

intelligence, subjectivity, moral judgment, and so on. In a sense, a certain epistemological hierarchy was created and maintained.



In a relaxed and homelike atmosphere, Dr. Catherine Amatruda examines infect and a relaxed and homelike atmosphere, Dr. Catherine Amatruda examines infect and a relaxed and of child enjoyold Cisca Duran-Reynal while a hidden observer records proceedings. Cisca is thoroughly enjoyold cisca Duran-Reynal while a hidden observer records proceedings. Cisca is thoroughly enjoying herself. At the same time she is revealing to the examiner's trained eye what kind of child she is.

Figure 13: "Observer examines Cisca Duran-Reynal" (n.d.)—The image of an observer looking through a one-way screen into a separate room of candid behavior and interaction with a child is captioned so that it draws attention to the self-evidence of character to the "examiner's trained eye." (Source: *Arnold Gesell papers*, 1870-1971, Library of Congress)

Scholars from various disciplines have suggested that the performative labor of science and the hierarchy of studier and the studied can render subjects as objects and disarticulate the subject from the object of science. Such is the case with Kamari Maxine Clarke (University of Toronto) as she applies what she calls the "disciplinary distancing of personhood" to anthropology and the geopolitics of Black people's remains.<sup>106</sup> The academy as an ultimate possessor of knowledge gets to cultivate what counts as relevant development knowledge in its

<sup>&</sup>lt;sup>106</sup> Kamari Maxine Clarke, 2022. "The Geopolitics of Black Bones that Matter" *American Anthropologist* website (Vital Topics Forum on "Geopolitical Lives"). <u>https://www.americananthropologist.org/geopolitical-lives/clarke</u>

subjects outside of the academy. In this same way, Gesell actively set the boundaries of the field of child study. We see from his published contributions and personal notes that he does not simply detach himself from his subject, but actively creates difference. And the bounds between the subject's 'objective' difference and his production as a blank slate for solving and fixing become blurred: "differences become contaminated with a menacing otherness, an otherness that threatens the promise of an ideal egalitarian future. People with problems thus become identified as problems...".<sup>107</sup> The subject of study thus becomes the subject of solutions.

# Science In Service (of Welfare and Hygiene)

Creating variation, difference, and points of intervention in the infant subject allowed for social problems to be individualized. The infant became eligible as a recipient of public health intervention, and a concern of public welfare. Arnold Gesell promoted the notion that child development had a legitimate place in the practice of 20<sup>th</sup> century science, which was already becoming imbued with a feeling of social responsibility.<sup>108</sup>

The more recent institutional prerogative of science to respond to the needs of the community and the nation was significant, especially given that Progressive academics of the biological and medical sciences like Gesell believed only science could adequately and objectively answer the intensely subjective problems of social disorder: "It is well to remind ourselves that significant advances in the hygienic regulation of growth can come only through science and more science."<sup>109</sup> Many scientists, including Gesell, believed heavily in their own authority to guide the community, and that their expertise was derived from their scientific and

<sup>&</sup>lt;sup>107</sup> Kimberlé Crenshaw, L Harris, D HoSang, and G Lipsitz, *Seeing Race Again: Countering Colorblindness Across the Disciplines.* (Univ California Press, 2019), 3.

<sup>&</sup>lt;sup>108</sup> Ludmerer, Kenneth M. "American Geneticists and the Eugenics Movement: 1905-1935." *Journal of the History of Biology* 2, no. 2 (1969): 337–62. http://www.jstor.org/stable/4330522.

<sup>&</sup>lt;sup>109</sup> Arnold Gesell (1926). "Normal Growth as a Public Health Concept". Box 154. Folder "Normal Growth as a Public Health Concept", 1926, *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

medical prowess. The clinical laboratory became a site of revelation for the fundamental laws of growth, so that public health reform could apply scientific lessons. From this perspective, child study could be considered a science of human welfare—one that improved the infant's life, but more so the population at large whose collective mental and physical health were being measured, guided, and treated.

Gesell saw the aims and prerogatives of developmental study as being intricately connected with human welfare: "The scientific attack upon problems of growth has become so systematic and far flung that we may consider it as one of the constructive adjustments by which society is working toward a better control of human welfare."<sup>110</sup> Gesell's approach to clinical examinations and special education and parental consults at the Clinic of Child Development showed that precise science had the authority to guide and harness the mechanisms of prediction and social control. With a social hygiene approach to child development work, Gesell transcended traditional disciplinary boundaries and reflected a eugenic incentive to perfect society by treating the infant, specifically by addressing "the most tangible problem in the field of child welfare," mental deficiency.<sup>111</sup>

In "Normal Growth as a Public Health Concept", a paper read at the American Health Conference in 1926, Gesell asserts the applications of the scientific study of infant growth to public health. He asserts that even the "layman" should have a "dim respect for those technical studies of the laboratory" and appreciate the role of standardizing mental growth in protecting

<sup>&</sup>lt;sup>110</sup> Arnold Gesell (1929). "The Early Year of Mental Growth". Box 152. Folder "Article, The Early Year of Mental Growth", *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>111</sup> Arnold Gesell (1920), "The Problem of Mental Subnormality". Box 150. Folder Committee on Defective Children. *Arnold Gesell papers*, 1870-1971, Library of Congress Washington DC.

the welfare of American children.<sup>112</sup> The scientific study of growth and development, Gesell posited, would be an integral part of addressing social disarray through the infant.

The infant became a scientific object for social problem-solving because Gesell saw the child as a projection, or microcosm, of social problems plaguing the adults of New Haven, Connecticut, and the nation. In fact, the significance of the child in an adult man's social world could not be understated for Gesell: "Each generation must rear a stronger army of children, mentally fit to carry forward an increasingly complex culture. As a measure of self-protection and of survival, the race must learn new methods for improving mental stamina and psychological adaptability in the young."<sup>113</sup> The imagery of the militarizing power of children, as being the manpower of a movement to advance culture and the race, demonstrates Gesell's commitment to mobilizing an infant science for the aims of a more 'fit' society. The protection of the infant's mental and physical interests, in turn, would simply be an investment into the betterment of adult, actualized humans at large– those who would work, think, and create.

The book *Science in the Service of Children, 1893-1935* classifies Gesell's "hereditarian views" and his spokesmanship "for social welfare programs for poor and mentally handicapped children" as a cohesive commitment to the "twin goals of science and service."<sup>114</sup> This book's representation of Gesell frames his hereditarian and eugenic views and his approaches to development and child welfare as compatible, and not opposed. Though Gesell fundamentally believed in innate human difference and inferiority, his belief in the utility of intervention reflected a more nuanced understanding of the links between eugenic ideology and charity, as well as his population-level hygienic aspirations. His perceived benevolence or humanitarianism,

<sup>&</sup>lt;sup>112</sup> Gesell, "Normal Growth as a Public Health Concept".

<sup>&</sup>lt;sup>113</sup> Gesell, "How Science Studies the Child: A Science Service Radio Talk".

<sup>&</sup>lt;sup>114</sup> Alice Boardman Smuts. *Science in the Service of Children, 1893–1935*. (New Haven, CT: Yale University Press, 2006).

though, was fundamentally based on eugenic assumptions about individual human value, normalcy, and intelligence.

His exploitation of individual observation and treatment allowed his clinical work to live up to the promise of actualizing a population-level mental hygiene program to respond to perceived social disorder. Solutions oriented to the individual infant could be harnessed as public health intervention through a preventative social hygiene approach. Modern public health practice constituted prevention and the need to anticipate when an individual would grow up to be a burden to society. As such, the core value behind Gesell's imposition of a public health approach to his new field of scientific study was an institutional commitment to bettering the nation and the race by pursuing science. Mental hygiene was considered a large-scale and pervasive problem. In 1949, in a writing for the *Pediatrics* journal, Gesell cited that the United States Public Health Service estimated that over 30 million people in the US required "some form of mental hygiene attention."<sup>115</sup> Gesell saw the challenge but the necessity of a preventative and constructive program of mental hygiene, starting with the child. A new kind of scientist, one who could combine pediatric care and psychiatric practice, could fill the gaps and present an innovative social application of medical science.

Gesell aligned his formation of child study with the idea that medical science in the 20<sup>th</sup> century was charged with making progress towards addressing social incompetence through a comprehensive medical and social approach. The future of child development would capture the totality of a hygiene program to identify, streamline, and treat the exceptional child:

"If scientific progress continues at the present rate, it will be possible for later generations to detect individual variations from the normal at very early ages. That will lead to

<sup>&</sup>lt;sup>115</sup> Arnold Gesell (1949). "Pediatrics and Child Psychiatry" Box 67. Folder Pediatrics and Child Psychiatry (Gesell, *Pediatrics*, 1949). *Arnold Gesell papers*, *1870-19*71, Library of Congress Washington DC.

prevention and cure of many behavior disorders. It may some time [sic] also be possible to discover gifted individuals of the community in the cradle and the nursery. Indeed, it will become necessary for future society to greatly perfect the education of all children in the first fundamental years of life. *Science alone* can determine the scope and the hygiene of that fundamental education."<sup>116</sup>

By centering "normal growth," Gesell produced an ideal subject and created accompanying paradigms to track and predict his subject's future development. The 'normal' infant would serve as the baseline for a developmental paradigm of growth, which trajected individual divergence to deficiency. In his work, Gesell not only produced difference, but produced the precise metrics through which to quantify and encapsulate difference. Then, difference was able to be subjected to comparison against a 'normal' standard. Normality was created through the production of abnormality, even as Gesell's observational and visual technology obscured this active process.

## A Developmental Philosophy of Growth

The focus on identifying deficient, exceptional, or abnormal individuals that exhibited difference so that they could be subjected to intervention was distinctly tied to Gesell's model of growth and normative development. Gesell endorsed what he called a "developmental philosophy" of growth, and of supervision and care in response: "A developmental outlook recognizes the lawfulness and the certainties of growth progressions. It places a long range [sic] emphasis on growth as an organizing process... As with a plant, so with a child; his muscle control, his mind, his morals, his spirit, grow by natural stages and sequences. To guide him

<sup>&</sup>lt;sup>116</sup> Gesell, "How Science Studies the Child: A Science Service Radio Talk".

alright, to enjoy him alright, we need to acknowledge the mechanisms of growth"<sup>117</sup> His emphasis on sequence and the succession of predetermined, universal stages of growth provided a normative basis for comparison of individual infant growth progressions. Using the concept of a developmental schedule, the derived insight made for awareness and measurement of individual differences.

Gesell was deeply invested in classification and measurement to record "the radical inequalities which naturally exist between children."<sup>118</sup> Gesell naturalized difference in his subjects— transforming it into something not socially produced, but innate and to an extent, self-evident. Gesell formulated through his maturational theory that "in a psychobiological sense, problems of human personality have a genetic or developmental aspect which traces back to infancy."<sup>119</sup> Further, this immutable difference could be empirically observed and recorded. From this perspective, the integration of various scales and classifications into his philosophy of growth was vital. In his aims to build a "yardstick" of infant development, classification was necessary, and only when knowledge was "duly classified" would it become "scientific."<sup>120</sup> His recording of the 'objective' observations for each patient, for each appointment at the Clinic, captured the dimensions and categories constructed to catalog his infant supervision. For Gesell, [eugenic] "classification [was] almost an instinct."<sup>121</sup>

<sup>&</sup>lt;sup>117</sup> Arnold Gesell (n.d.), "Some Advantages of a Developmental Philosophy of Child Care", Box 154, Folder "Yale Clinic of Child Development" Article (1932), *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

<sup>&</sup>lt;sup>118</sup> Arnold Gesell (1913), "Child Classification and Child Hygiene, Box 150, Folder Article, Child Classification and Child Hygiene (1913), *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

 <sup>&</sup>lt;sup>119</sup> Arnold Gesell (1932), "Yale Clinic of Child Development", Box 154, Folder "Yale Clinic of Child Development" Article (1932), *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC. <a href="https://www.tandfonline.com/doi/abs/10.1080/00094056.1932.10723749?journalCode=uced20">https://www.tandfonline.com/doi/abs/10.1080/00094056.1932.10723749?journalCode=uced20</a>
 <sup>120</sup> Gesell, "Child Classification and Child Hygiene".

<sup>&</sup>lt;sup>121</sup> Gesell, "Child Classification and Child Hygiene".

Gesell's metrics of infant growth were representative of what he thought of as innate, internal developmental capacity. Unlike the Binet intelligence test, his methods of examination and measurement did not just 'reveal' one dimension of intelligence, but catered to recording and describing all aspects of behavior and character, including personality, physical ability, language, judgement, and social adaptability.<sup>122</sup> Much like his eugenically-committed contemporaries in the advances of social hygiene and intelligence work, however, he was engaged in a process of discernment—whereby he uniquely empowered himself to make certain distinctions and judgments about deficiency and normality that lay people would be incapable of perceiving.

During World War I, Gesell "began the study of 'normal' development in infants and young children" which prompted the establishment of specific developmental norms, schedules, and scales measuring adherence to those norms.<sup>123</sup> In 1932, he explained that the Clinic of Child Development's investigations of its infant subjects functioned to divulge "an objective delineation of the characteristics and norms of early mental growth." <sup>124</sup> The establishment of such norms would serve as the basis for bounding the expression and causation for individual differences. Thus, the formation of norms of growth was directly related to the production of deviance.

While his exact developmental schedules and maturational theory have been discounted, a notion of internally-guided individual development undergirds ideas of developmental progression and abnormality more generally. Arnold Gesell's maturational theory and developmental schedules remain the subject matter most actively critiqued and acknowledged as problematic by contemporary historians and practitioners of child development. These paradigms

<sup>&</sup>lt;sup>122</sup> Pope, "Yale University's Clinic of Child Development shows How a Baby's Mind Grows".

<sup>&</sup>lt;sup>123</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development".

<sup>&</sup>lt;sup>124</sup> Gesell, "Yale Clinic of Child Development".

of development may not be currently in use by experts in the field, but the underlying philosophy of growth that they propped up was fundamental to child study as a concept and undergirds conceptions of development today. As of July 2018, the National Association for the Education of Young Children 'proudly' displayed their reliance on Gesell's enduring contributions to the field of child development and differentiated instruction (special education), stating, "the norms Gesell established are still used today by psychologists, educators, and pediatricians to predict developmental changes (and to note when follow-up evaluations of development may be warranted)".<sup>125</sup>

# Conclusion

The contemporary Child Study Center (CSC) is the Department of Child Psychiatry for the Yale School of Medicine and Yale New Haven Hospital.<sup>126</sup> It provides clinical services, facilitates research on topics ranging from autism and neurodevelopment to innovations in health care delivery, provides education and training, runs community-based initiatives, and supports policy work. Its range of work makes it an extremely influential entity and broad in its reach into various disciplines and types of knowledge production. Dr. Linda Mayes is the current Director of the CSC and the Arnold Gesell Professor of Child Psychiatry, Pediatrics, and Psychology.<sup>127</sup>

Arnold Gesell was one of the biggest theorists of child development in the 20<sup>th</sup> century, alongside figures like Jean Piaget, Erik Erikson, and Benjamin Spock. He is a figure in a not-sodistant past that shaped how the field of child development actualized in the 20<sup>th</sup> century, and

<sup>&</sup>lt;sup>125</sup> Peg Oliveira. "Our Proud Heritage. True Then, Truer Now: The Enduring Contributions of Arnold Gesell" National Association for the Education of Young Children (July 2018). https://www.naeyc.org/resources/pubs/yc/jul2018/enduring-contributions-arnold-gesell

 <sup>&</sup>lt;sup>126</sup> "Child Study Center" Website home page. Yale School of Medicine. https://medicine.yale.edu/childstudy/
 <sup>127</sup> "Linda Mayes, MD" Yale School of Medicine. <u>https://medicine.yale.edu/profile/linda-</u>mayes/#:~:text=Dr.,the%20Yale%20School%20of%20Medicine.

how Yale standardized its clinical procedures of observation and measurement. The technologies Gesell pioneered, like the observation dome, one-way mirror, and guidance nursery, influenced the production of his knowledge and its underlying ideologies. Gesell cultivated the very notion of infant study and subjecthood in public health and reified ideas of set fitness and value.

Examining the way Gesell's deployment of child development and study wielded and created a productive, and benevolent, scientific power has implications for how the field potentially thinks about certain populations as unfit or socially incompetent and requiring of medical solutions. Clinical responses to social problems were ultimately imbued with eugenic ideas of individual level differences—which had to be targeted, studied, and fixed. Further, the Yale CSC is ultimately a training/teaching and learning institution at an educational institution, a university, and that lens shapes its function and the implications of its work product.

His developmental work did not simply have "sympathies" with eugenic ideas that fell away<sup>128</sup> or misleading "contradictions"<sup>129</sup> either. Rather cohesively, he activated academics to respond to the perceived social issues of their time by patterning growth to isolate defectiveness, due to heredity and individual deviation. His eugenics is not a 'soft' or 'mild' eugenics, but eugenics all the same. To reduce eugenic thought to these two categories is reductive and fails to recognize the ways in which more palatable ideologies have laid the groundwork for certain modes of thinking and procedural norms in the field of child development.

Can we discern the eugenic from the non-eugenic parts of his work and praxis? Is this even possible? The eugenic origins of the disciplines and knowledge production at Yale have influenced the way that power, classification, and method operate in the University today. This

<sup>&</sup>lt;sup>128</sup> Marchese, "The Place of Eugenics in Arnold Gesell's Maturation Theory of Child Development."

<sup>&</sup>lt;sup>129</sup> Weizmann, "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development".

paper poses a more critical history of eugenics, one in which I examine things people might hesitate to call 'eugenics,' and that eugenicists themselves kept distance from in naming. In logic, though, the origins of the Child Study Center at Yale fall within a paradigm of creating, diagnosing, and naturalizing difference.

This project fits into a broader interrogation of what it means for the foundations of an academic discipline to be founded on eugenic grounds or initiated by eugenicist thought. How do we grapple with these histories, and how do they remain embedded even as explicit eugenic language seems to disappear?

One of my most brilliant peers, Akio Tamura-Ho, describes in their History of Science, Medicine, and Public Health thesis that histories can be 'haunting' in that new knowledges are plagued by historical lineages and the *apparitions* of larger power structures.<sup>130</sup> With such an understanding, we can imagine the underlying ideology of eugenics as haunting the academic disciplines, institutions like Yale, and our common sense through carceral logics, typology, and social hierarchy. Contextualizing the history of eugenics is one step to validating contemporary criticisms of fields like genetics and psychiatry. These fields, as shown by the interdisciplinary nature of child study, transcend traditional disciplinary bounds all the time to inform each other in significant ways.

#### WORD COUNT: **12,658**

<sup>&</sup>lt;sup>130</sup> Akio Tanura-Ho is an amazing fSTS scholar and a soon-to-be graduate of the HSHM program at Yale. They do amazing work on psychedelic histories and educational surveillance during remote learning and can be found on Twitter at @reluctantlyhere. The metaphor of the 'haunting' comes from their idea of 'psychedelic hauntings'– referring to a fragmented narrative of the 'psychedelic renaissance' that is troubled by its omissions of histories of colonialism and whiteness.

# Bibliography

# **Primary Sources**

Davenport, Charles B., Heredity in Relation to Eugenics. New York: Henry Holt & Co., 1911.

- Galton, Francis. "Eugenics: Its Definition, Scope, and Aims." American Journal of Sociology 10, no. 1 (1904): 1–25. <u>http://www.jstor.org/stable/2762125</u>.
- Gesell, Arnold (1913). "Child Classification and Child Hygiene, Box 150, Folder Article, Child Classification and Child Hygiene (1913), Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1929). "Child Psychology". Box 152. Folder Article, Child Psychology (1929), Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1932). "Eugenics Congress Announcement: Third International Eugenics Congress", Box 74. Folder Eugenics, Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold. Folder Oversize 3. Arnold Gesell papers, 1870-1971; The Library of Congress (Washington DC)
- Gesell, Arnold (1932). "How Science Studies the Child: A Science Service Radio Talk". Box
  154. Folder "How Science Studies the Child", *Arnold Gesell papers*, 1870-1971, Library
  of Congress Washington DC.
- Gesell, Arnold (1929). "Infant Behavior in Relation to Pediatrics". *The American Journal of Diseases of Children*, Vol 37: pp.1055-1075

- Gesell, Arnold (n.d.). "Mental Development in Infancy: Its Measurement and Hygiene". Box
  151. Folder Mental Development in Infancy: Its Measurement and Hygiene, Arnold
  Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1926). "Normal Growth as a Public Health Concept". Box 151. Folder "Normal Growth as a Public Health Concept", 1926, *Arnold Gesell papers*, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1949). "Pediatrics and Child Psychiatry" Box 67. Folder Pediatrics and Child
   Psychiatry (Gesell, *Pediatrics*, 1949). Arnold Gesell papers, 1870-1971, Library of
   Congress Washington DC.
- Gesell, Arnold (1929). "Present Status of Research on Child Development". Box 208. Folder Yearbook of the National Society for the Study of Education, Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1921). "Psycho-Clinical Service of Yale University". Box 121. Folder Psycho-Clinical Service of Yale U (1921) Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (n.d.). "Some Advantages of a Developmental Philosophy of Child Care". Box
  67. Folder Developmental diagnosis and child psychiatry, 1949-1954, *Arnold Gesell papers*, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1932) "Study of Genetic Psychology", Box 154. Folder "Study of Genetic Psychology" Article (Sept 4, 1932) Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.

- Gesell, Arnold (1929). "The Early Year of Mental Growth" Box 152. Folder Article, The Early Year of Mental Growth (1929) Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1927). "The Mental and Physical Welfare of the Child" Box 208. Folder MentalHygiene of the Preschool Child, Arnold Gesell papers, 1870-1971, Library of CongressWashington DC.
- Gesell, Arnold (1923) "The Preschool Child as a Health Problem". Box 151 Folder PreschoolChild as a Health Problem (Gesell, 1923), Arnold Gesell papers, 1870-1971, Library ofCongress Washington DC.
- Gesell, Arnold (1920). "The Problem of Mental Subnormality", Box 150. Folder Article, The Problem of Mental Subnormality (1920) Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1913). "University in Relation to the Problems of Mental Deficiency and Child Hygiene", Box 150. Folder Article, The University in Relation to the Problems of Mental Deficiency (1912/1913) Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1934). "Well Baby Conference". Box 117. Folder Well Baby Conference (1932) *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.
- Gesell, Arnold "Village of a Thousand Souls," in *The American Magazine* vol. 76, no. 4, (October 1913), 11-15 <u>https://hdl.handle.net/2027/mdp.39015056072443</u>.

- Gesell, Arnold (n.d.). "Writings from the Juvenile Psycho-Clinic" Box 121. Folder YCCD and the Juvenile Psycho Clinic, Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- Gesell, Arnold (1932). "Yale Clinic of Child Development" Reprinted from Childhood
   Education, May 1932, Box 154, Folder Yale Clinic of Child Development Article (1932),
   Arnold Gesell papers, 1870-1971, Library of Congress Washington DC.
- "The Guidance Nursery of the Yale Psycho-Clinic", n.d. Box 63. Folder 2, "Gesell's publications" "Institute of Human Relations, Yale University, records", Manuscripts and Archives, Yale University Library.
- Invitation to the New Haven Committee Meeting of the American Eugenics Society, (1941) Box 80, Folders 1518-1519. MS 569 Yerkes Collection, Manuscripts & Archives, Yale Library: New Haven, CT.
- Poore, C.G. (Feb 1929). "YALE IS NOW TO STUDY MANKIND". Box 91, Folder Institute of Human Relations: Letters, Memos, Historical Data (1927-1935], Arnold Gesell papers, 1870-1971, Library of Congress Washington DC, p. 6.
- Pope, Vernon (n.d.). "Yale University's Clinic of Child Development shows How a Baby's Mind Grows" Article, *Saturday Evening Post*. Box 121, Folder - Yale YCCD History -Epitome (1923-1951), *Arnold Gesell papers, 1870-1971*, Library of Congress Washington DC.

"Statistical Summary Showing the Types of Cases Seen at the Clinic of Child Development: July 1<sup>st</sup>, 1934 to June 1<sup>st</sup>, 1935" Box 118. Folder YCCD Appointments, *Arnold Gesell papers*, *1870-1971*, Library of Congress Washington DC.

# **Secondary Sources**

Arias, Daniel. "Bright Young Minds: Collegiate Mental Hygiene in Early Twentieth Century America" Senior Thesis. Yale University, 2015, https://hshm.yale.edu/sites/default/files/files/2015-arias.pdf.

- Ben-Moshe, Liat. Decarcerating Disability: Deinstitutionalization and Prison Abolition.Minneapolis: University of Minnesota Press, 2020.
- Boardman Smuts, Alice. *Science in the Service of Children, 1893–1935.* (New Haven, CT: Yale University Press, 2006).
- Bowler, Peter. "How the history of genetics charts the rise and fall of eugenics" *The British Academy* (1 AUG 2019) <u>https://www.thebritishacademy.ac.uk/blog/how-history-</u> <u>genetics-charts-rise-and-fall-eugenics/</u>
- Brookward, Marilyn. The Orphans of Davenport: Eugenics, the Great Depression, and the War over Children's Intelligence (Liveright, 2021).
- "Child Study Center" Website home page. Yale School of Medicine. https://medicine.yale.edu/childstudy/
- "Child Study Center: Mission & History." Yale School of Medicine. https://medicine.yale.edu/childstudy/about/mission/.

- Clarke, Kamari Maxine. 2022. "The Geopolitics of Black Bones that Matter." *American Anthropologist* website (Vital Topics Forum on "Geopolitical Lives"), August 4. <u>https://www.americananthropologist.org/geopolitical-lives/clarke</u>
- Cold Spring Harbor Laboratory, "Eugenics Record Office" *Institutional Archival Collections*, Cold Spring Harbor website (n.d.) <u>https://www.cshl.edu/archives/institutional-</u> <u>collections/eugenics-record-office/</u>
- Crenshaw, Kimberlé, Harris, HoSang, and Lipsitz, Seeing Race Again: Countering Colorblindness Across the Disciplines. Univ California Press, 2019.
- Croizet, Jean-Claude, "The Racism of Intelligence: How Mental Testing Practices Have
   Constituted an Institutionalized Form of Group Domination" (*The Oxford Handbook of African American Citizenship, 1865-Present* 2012) DOI:
   10.1093/oxfordhb/9780195188059.013.0034
- Facing History. "The Origins of Eugenics." Race and Membership in American History: The Eugenics Movement, August 4, 2015. <u>https://www.facinghistory.org/resource-library/origins-eugenics</u>
- Falvey, Kerry. "The New Haven Dispensary" Yale Medicine Magazine (2010 Autumn) <u>https://medicine.yale.edu/news/yale-medicine-magazine/article/the-new-haven-</u> dispensary/

Foucault, Michel. Discipline and Punish: The Birth of the Prison, (London: Penguin 1991): 194.

Galarneau, Charlene. "Eugenics in Vermont: A Chronology of 'State-sanctioned eugenics policies and practices'" J.R.H. 2 as adopted by Virginia House (Updated April 19, 2021; original March 9, 2021)

https://legislature.vermont.gov/Documents/2022/WorkGroups/Senate%20Government%2 0Operations/Bills/J.R.H.2/Public%20Comment/J.R.H.2~Charlene%20Galarneau~Chrono logy%20Update%20-%20VT%20Eugenics~4-22-2021.pdf

Gross, Miriam Zeller (1953) MEN OF Medicine, *Postgraduate Medicine*, 13:2, 179-184, DOI: 10.1080/00325481.1953.11708145

Guo, Dora & Garcia, "GUO & GARCIA: 100 years later: eugenics at Yale" *Yale Daily News*, Oct 1, 2021 https://yaledailynews.com/blog/2021/10/01/guo-garcia-100-years-latereugenics-at-yale/ (accessed April 3, 2023).

Gur-Arie, Rachel, "American Eugenics Society (1926-1972)". *Embryo Project Encyclopedia* (2014-11-22). ISSN: 1940-5030 <u>http://embryo.asu.edu/handle/10776/8241</u>.

Haller, Mark. *Eugenics: Hereditarian Attitudes in American Thought* (New Brunswick, New Jersey: Rutgers University Press, 1963).

Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988): 575–99. https://doi.org/10.2307/3178066. HoSang, Daniel and Guo, "Eugenics and its Afterlives at Yale University" Gilder-Lehrman Center Annual Conference: Yale and Slavery in Historical Perspectives (Oct 2021) https://www.youtube.com/watch?v=ImV0VFmd6hA

Kennedy Institute of Ethics in Washington, DC. "Ch. 4: The Rise and Fall of Eugenics" Georgetown University.

https://highschoolbioethics.georgetown.edu/units/cases/unit4\_4.html

Key, Ellen, 1912. The century of the child. New York: G. P. Putnams sons

- Leonard, Thomas C., 1960-. 2016. Illiberal Reformers: Race, Eugenics, and American Economics in the Progressive Era. Princeton, Princeton University Press.
- "Linda Mayes, MD" Yale School of Medicine. <u>https://medicine.yale.edu/profile/linda-mayes/#:~:text=Dr.,the%20Yale%20School%20of%20Medicine</u>.
- Ludmerer, Kenneth M. "American Geneticists and the Eugenics Movement: 1905-1935." Journal of the History of Biology 2, no. 2 (1969): 337–62. http://www.jstor.org/stable/4330522.
- Magliato, Emme. ""Eugenically Yours": A History of the American Eugenics Society," Sociology Between the Gaps: Forgotten and Neglected Topics: Vol. 8. (2023) https://digitalcommons.providence.edu/sbg/vol8/iss1/1
- Marchese, Frank J. "The Place of Eugenics in Arnold Gesell's Maturation Theory of Child Development." *Canadian Psychology 36*, no. 2 (1995): 89-114. Accessed March 12,

2023. <u>https://www.proquest.com/scholarly-journals/place-eugenics-arnold-gesells-</u> maturation-theory/docview/220785161/se-2?accountid=15172.

- Martin, Greer., ed. *Children in Progressive-Era America*. Location: Digital Public Library of America, Online. Exhibition catalog. Accessed Mar 9, 2023 <u>https://dp.la/exhibitions/children-progressive-era.</u>
- National Institute of Health, "Eugenics and Scientific Racism." National Human Genome Research Institute, May 18, 2022 <u>https://www.genome.gov/about-genomics/fact-sheets/Eugenics-and-Scientific-Racism</u>
- Oliveira, Peg. "Our Proud Heritage. True Then, Truer Now: The Enduring Contributions of Arnold Gesell" National Association for the Education of Young Children (July 2018). <u>https://www.naeyc.org/resources/pubs/yc/jul2018/enduring-contributions-arnold-gesell</u>
- Ossmer, Carola. "Normal Development: The Photographic Dome and the Children of the Yale Psycho-Clinic." *Isis* 111, no. 3 (2020). Accessed April 2, 2023. https://doi.org/10.1086/711127.
- Proto, Neil Thomas. *Fearless: A. Bartlett Giamatti and the Battle for Fairness in America*. (New York: State University of New York Press, 2020).
- Richardson, Theresa Marianne Rupke. "The Century of the Child: The Mental Hygiene Movement and Social Policy in the United States and Canada." Order No. NL41991, The University of British Columbia (Canada), 1987. <u>https://www.proquest.com/dissertations-</u> <u>theses/century-child-mental-hygiene-movement-social/docview/303541202/se-2</u>.

University of Vermont. "The Eugenics Survey in Vermont: Studies" Vermont Eugenics: A Documentary History. Website. <u>https://www.uvm.edu/~eugenics/famstudies.html</u>

Weizmann, Frederic. "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development", *Journal of the History of the Behavioral Sciences*, 46, (2010): 263-275.

Yale College. "About Us: Jonathan Edwards College" Yale website https://je.yalecollege.yale.edu/about-us

Yale School of Medicine. "Child Study Center celebrates 100 years of mental health research." *Yale Medicine Magazine*. Spring 2011. <u>https://medicine.yale.edu/news/yale-medicine-magazine/article/child-study-center-celebrates-100-years-of-mental/</u> (accessed November 20, 2022).

Ziegler, Mary, *Reinventing Eugenics: Reproductive Choice and Law Reform After World War II*, 14 *Cardozo J. L. & Gender* 319 (2008), Available at: <u>https://ir.law.fsu.edu/articles/338</u>

# **Bibliographic Essay**

My research originated from my exploration into how benevolence, charity, and special education intersected with eugenic thought through the course "Eugenics and its Afterlives" with my now-advisor Professor Daniel Martinez HoSang. This class really encouraged me to think through the quotidian and unassuming ways that eugenics, race science, and hierarchical thinking have foundationally influenced knowledge production in all kinds of disciplines. In this class and through my work on my capstone project, I was drawn to how historians wrote about these eugenic legacies in profoundly different ways— often, histories would separate the progressive contributions of figures from their eugenic beliefs. But I thought that there must be some way to reconcile the ways people had ideas about their fields and about eugenics beyond distinguishing a "soft" and "hard"/harsher eugenics. At the end of the day, the logics remained the same regardless of whether the figure believed in charity or sterilization. How was this possible?

From this, I started looking into Arnold Gesell, the founder of the Yale Child Study Center in its original form, the "Clinic of Child Development" (directed by Gesell 1911-1948). Proclaimed as "the father of child development", his contributions were groundbreaking for the emerging field of child study, and he was integral to advising on matters of special education and adoption in the state of Connecticut. From the Yale Child Study Center's Reference Collection, I began to situate Gesell in the milestones and structures of social welfare and services, pediatrics, medicine, and psychology during the decades he was Director. The Reference Collection consists of short, published works on topics related to child welfare that were used by Arnold Gesell and the staff of the Yale Child Study Center as reference. The collection in total includes pamphlets, reprints, newsletters, newspaper clippings, and reports published between 1886 and 1958, with the bulk of materials published between 1910 and 1950. I looked to 24 folders in Box 24 of

Gesell's compilation of documents relating to New Haven and Connecticut organizations from 1922 to 1949. I used this collection to write, "How Eugenic Frameworks Intersected Special Education and Child Welfare Services: A Case Study on Arnold Gesell and his Reference Collection," which transformed into my now-thesis project after a summer of additional anti-eugenic exploration with the Anti-Eugenic Collective at Yale (website plug for all the work we did: <u>https://point-red-mybk.squarespace.com/</u>).

Returning to the focus of my thesis, I wanted to narrow in on how the "father of child development" cohered his ideas of child study and eugenics. The more I read on Gesell, the more I found praise and his foundational contributions to child development as a field at a pivotal point of emergence in the 20<sup>th</sup> century. Narratives on the Child Study Center website and the Gesell Institute of Child Development reflected this dynamic.

To connect the contemporary Child Study Center and the historical context of the Clinic (with the ideas and exchanges that informed Gesell's clinical and research operations), I realized I needed to hear more of Gesell's direct voice and track his particular and exacting vision for the mapping of infant physical, mental, and emotional growth. This led me to the Arnold Gesell Papers (1870-1971) at the Library of Congress. The first day that I viewed some of his boxes in Washington D.C., I found a huge "box" of oversized materials labeled "Genetics." This box as an entry point for my direct assessment of Gesell's work was pivotal. Giant oversized charts, drawn in charcoal, crayon, and pen tracked Gesell's brainstorming and visualizing of various conceptions of heredity, environment, mechanisms of social control, and formations of 'defect.' I saw charts, pedigrees, diagrams, hand-done drawings, and more. Another oversized box contained his picture sequences of infant development stages, reflecting his theory of developmental schedules and normative patterns of growth. In combination with my readings of

secondary sources on his eugenic influences and criticisms of his maturational theory, I began constructing a more nuanced mental picture of the continuances of his work and its undergirding ideas which even framed his more palatable contributions that are less commonly identified as "eugenic."

Some of my initial guiding sources were the chapter "Out of Step with His Times: Arnold Gesell and the Yale Clinic" of Alice Boardman-Smut's 2006 *Science in the Service of Children*, *1893–1935* and Frank J. Marchese's 1995 "The Place of Eugenics in Arnold Gesell's Maturation Theory of Child Development." I came across the book chapter during my Eugenics and its Afterlives capstone project, and the Marchese article was referred to me by Yale graduate student in American Studies, Kelsey Henry. Kelsey's insight on her dissertation work with 'race-neutral' developmental technologies and norms was incredibly helpful and guiding as well.

Science in the S talked about how science and social policy were not just interdependent, but jointed in the goal of advancing child welfare, especially in the 20<sup>th</sup> century with the case of Gesell. I found that this historical formation of imbuing science with social responsibility was incredibly reminiscent of eugenicist language and aims, including those of the leading eugenicist figures I knew of in the Yale-New Haven space (Irving Fisher, James Rowland Angell, Milton Winternitz, Leon Whitney, and so on).

Another core secondary source which offered a version of Gesell's origins, milieu, and also his involvement in Charles Davenport's infamous race-crossing study was Frederic Weizmann's "From the 'Village of a Thousand Souls' to 'Race Crossing in Jamaica': Arnold Gesell, Eugenics and Child Development." This source was particularly helpful to place Gesell in context and conversation with some of his eugenic contemporaries, like Lewis Terman, Robert Yerkes, Henry Goddard, and, of course, Charles Davenport. Yet the connections between these

eugenicists and Gesell were so much more than just friendships and sources of professional capital and exchanged. The narrative of how eugenics influenced Gesell's earlier work but came to fall away or be less clear overtime was provocative, and I didn't find myself quite agreeing with that kind of assessment, especially as I continued to look through Gesell's archived work from the 1930s, 1940s, and 1950s. He was member of the New Haven Committee of the American Eugenics Society all the way in 1941: 30 years after the founding of the Psycho Clinic and 28 years after the publication of "Village of a Thousand Souls."

Drawing out some of the connections to hygiene and public health, I looked to Gesell's writings on the purposes of his clinical and research work, and the procedures used to further these aims. After learning about Arnold Gesell's visualizing and observational technology in the context of thinking about epistemological / knowledge producing hierarchies, I was led to an article by Carola Ossmer, "Normal Development: The Photographic Dome and the Children of the Yale Psycho-Clinic." She makes some really provocative arguments in this article about how the photographic dome reified ideas of normative development and a "normal child." The idea of Gesell's Clinic as something of a 'photographic laboratory' is something I don't get to touch on in-depth but is really intriguing to me as an outgrowth of my discussion on his observational and documentation techniques, and also the ways in which Gesell advanced the idea that behavior was visual and self-evident. This is something I might urge exploration into for the future. Efforts to critique these formations of child development knowledge through depersonalizing and candid observational procedures also exist in other realms beyond the strictly historical, like the visual arts—such as with the Aesthetic Behavior; Developmental Sequences (2019), installation by Gabo Camnitzer and Lluís Alexandre Casanovas Blanco (http://gabocamnitzer.com/aesthetic-behavior-developmental-sequences).

Something can also be said for how future research might tackle the missing subjectivity of the child, especially as I have made the point that direct observation is the cornerstone for child development as the only way to assess/gather a child's interiority.