

Physique as Destiny: William H. Sheldon, Barbara Honeyman Heath and the Struggle for Hegemony in the Science of Somatotyping

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Abstract. When Ron Rosenbaum unveiled his explosive journalistic report on the “Great Ivy League Nude Posture Photo Scandal” in 1995 it was a story that revealed the uneven evolution of attitudes toward body, race, and gender in the last half century. His intention was to highlight how easily ideas about the body have been taken up by scientists and sustained in elite institutions of higher education well beyond the bounds of common sense. The villain of his story was William H. Sheldon, a constitutional psychologist who appropriated the ritual of taking posture photos for his scientific study of somatotypes, a system built upon the relationship of body type to character. Sheldon’s toxic eugenic views and equation of physique with destiny in the years following World War II made him increasingly unpopular. And while Rosenbaum concluded that Sheldon’s downfall was due to the anger of women students over the taking of nude photos, the deathknell of his career was dealt by his former female assistant, Barbara Honeyman Heath. Publicly denouncing his methods as fraudulent and his somatotypes inaccurate she went on to build a successful career modifying somatotyping techniques and participating in projects all over the world.

Résumé. Quand Ron Rosenbaum dévoila son rapport journalistique explosif sur le « Great Ivy League Nude Posture Photo Scandal » en 1995, cette histoire a mis en évidence l’inconsistance des attitudes au sujet du corps, de la race et du sexe dans la seconde moitié du siècle dernier. Son intention était de montrer comment les idées sur le corps furent facilement reprises par les scientifiques et soutenues par l’élite des institutions de hauts savoirs, bien au-delà des limites du sens commun. Le vilain dans cette histoire était William H. Sheldon, un psychologue constitutionnel, qui avait comme pratique de prendre des photos du

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corps, pour son étude scientifique des somatypes, un système érigé sur les relations entre le type corporel et le caractère. Dans les années qui suivirent la Seconde Guerre mondiale, les thèses eugéniques de Sheldon, ainsi que son équation du physique et de la destinée, l'ont rendu extrêmement impopulaire. Si Rosenbaum concluait que la chute de Sheldon fut causée par la colère des étudiantes au sujet de ses photos de nus, le glas de sa carrière fut en fait provoqué par son ancienne assistante, Barbara Honeyman Heath. En dénonçant publiquement ses méthodes comme frauduleuses et ses somatypes comme inexacts, elle s'est bâtie une carrière fructueuse en modifiant les techniques du « somatyping » et en participant à des projets partout dans le monde.

INTRODUCTION

When Ron Rosenbaum unveiled an explosive piece of investigative journalism in the *New York Times* a few years ago, he called it "The Great Ivy League Nude Posture Photo Scandal: How Scientists Coaxed the Best and the Brightest Out of Their Clothes." He spoke about an unsuspecting employee stumbling upon something both shocking and disturbing in the gymnasium of Yale University in the late 1970s—an enormous cache of official university nude photographs, thousands upon thousands of photographs of young male students in front, side and rear poses; some of those students had surely gone on to important positions in government and society. Rosenbaum contemplated that his own nude picture might well have been among them. He remembered as a Yale freshman being directed to the Payne Whitney Gymnasium where men in crisp white garments directed him to remove his clothes.

They attached metal pins at regular intervals down my spine...I was positioned against a wall, a floodlight illuminated my pin-spiked profile and a camera captured it...It didn't occur to me to object. I'd been told that the posture photo was a routine feature of freshman orientation week (though) the procedure did seem strange.¹

To avoid embarrassing reminders of their youthful nakedness, said Rosenbaum, the Athletic Director of Yale initiated what was essentially a "Bonfire of the Best and the Brightest," but the incident provoked Rosenbaum into embarking on a quest to find the thousands of other nude photos that had routinely been taken of freshman at colleges and universities across the United States which might remain stored away in gymnasiums and physical education departments. What was this peculiar practice of taking posture photos, he asked, and how had what seemed to be such academic folly masqueraded as science at elite higher education institutions for so many years? Indeed "what happens when well-intentioned institutions allow their reverence for the reigning conjectures of scientific orthodoxy to persuade them to do things that seem silly or scandalous in retrospect."²

It was not Rosenbaum, however, but Naomi Wolf, in her best selling book *The Beauty Myth* (1990) who opened the Pandora's Box of the posture-photo controversy, a controversy which included women as well as men. In that book, and in an "op ed" piece in *The Times* in 1992, she bitterly attacked men's appropriation of women's bodies through these nude freshman photographs taken in gym class. As a young graduate of Vassar, Wolf remembered being party to the jokes of Dick Cavett who had been invited to speak at her graduation ceremony. His story was that a cache of posture photos taken of Vassar girls had been stolen, later to appear for sale in New Haven's pornography black market. Cavett's punchline, aimed at the traditional view of a female academic as all mind and no body, was that "the photos found no buyers."³

Wolf's irritation was understandable. "Waiting for the parchment that honoured our minds, we were returned with reluctant confusion to our bodies, which we had just been told were worthless."⁴ But even she, said Rosenbaum, as he pursued his story with a tone of righteous indignation, was totally unaware of the sinister nature of the posture photos. He was referring to the accusations of Yale art historian George Hersey, who in a letter to the *New York Times* suggested that these nude photographs had nothing to do with posture. Rather, he said, they were made for anthropological research. The reigning school of the time, explained Hersey, was presided over by Harvard professor E. A. Hooton and his colleague, psychologist William H. Sheldon, Director of the Constitutional Laboratory at Columbia University, and held that the size and shape of a person's body were indicators of intelligence, temperament, moral worth, and even future achievement. The inspiration for such views, he continued, came from the founder of social Darwinism and father of eugenics, Francis Galton, who, in the late 19th century, had proposed a photo archive and beauty map for the whole British population which could serve as a guide for selective breeding.⁵ Galton's idea was to use his archives to restrict the reproduction of inferior types—unfit, ugly, unintelligent or misshapen people—and encourage a kind of stud farm for intellectuals.⁶ Such ideas had legs.⁷ To Hersey they were a clear prophecy of Hitler's laws of racial hygiene (which he also claimed used data from American high-school year book photos) and they flourished well into the 20th century, particularly in the decades after World War I. It was American investigators such as Hooton and Sheldon, he suggested, whose hierarchical classification systems of superior and inferior bodies developed from measurement techniques and collections of nude photographs of college students had advanced negative eugenic beliefs in the United States.⁸

In fact the procedure of taking nude or partially nude posture photos of undergraduates as a guide to assess the need for corrective physical therapy was an extremely common one for decades at many higher education institutions in the United States and elsewhere, in some cases

from the 1890s until well into the 1960s. What could have been simply a story about informed consent, or lack of it, during those years when posture photos were regularly taken at colleges and universities (as well as at prisons, mental hospitals, and military institutions), turned into a rallying cry for Ivy League students to be aware that “entire generations of America’s ruling class had been unwitting guinea pigs in a vast eugenic experiment run by scientists with a master-race hidden agenda.”⁹ We can’t help being fascinated, says Rob Walker, talking about the added spiciness of “just-add-Yale” to newspaper reports, “when our alleged best and brightest end up stripped bare, literally and/or figuratively.”¹⁰

Furthermore, Rosenbaum’s second objective, to track down numerous caches of hidden away nude photos of Ivy League college women which he understood had been destined in the 1950s for an *Atlas of Women*—a publication which never in fact materialized—was hardly the cloak and dagger treasure hunt he laid out in his salacious news story. There was in fact never much of a mystery about the location of many of these photos in the Anthropological Archives of the Smithsonian Institution in Washington D.C., and similar male photos have been freely available in the *Atlas of Men* since 1954 and in physical education and kinesiology textbooks for even longer.¹¹ Their erotic value, comments Arraj, rates somewhere under the level of your average *National Geographic Magazine*.¹² The never completed sister volume, the *Atlas of Women*, however had a most interesting history that has not been fully told, one connected to the fortunes of physical education, eugenics and private philanthropies such as the Rockefeller Foundation in the first half of the 20th century, the development of the sciences of anthropometry and cultural anthropology, and bitter personal—and gendered—controversies among those who sought to establish hegemony in a taxonomy of body typing known as the science of Somatotyping.

WILLIAM SHELDON—VILLAIN OR MISUNDERSTOOD GENIUS?

The villain of Rosenbaum’s story, described in the tone of someone who viewed anthropology and anthropometry as “the study of nude people by lewd people,” was William Sheldon, constitutional psychologist, somatotyping expert, and author. Sheldon’s efforts to typologize bodies was part of the interwar years’ efforts of a group of clinical physicians and psychologists to develop models of mind-body interaction which might enable a more holistic medical practice—a practice which in many ways placed its trust upon the whole man as understood through the surface of the body.¹³ During his most productive period he published *Varieties of Human Physique* (1940), *Varieties of Human Temperament* (1942), *Varieties of Delinquent Youth* (1949) and the *Atlas of Men* (1954), and over the course of his career he had affiliations with the Universities of Texas,

Wisconsin, Harvard, Columbia, and California, as well as Chicago and its Theological Seminary, the University of Oregon medical school, and the US Army Medical School.¹⁴

Rosenbaum's story implies that Sheldon's anthropometric work involved ruse, blatantly subjective judgment and generally loose if not downright fraudulent research methods. In fact, Sheldon's approach to somatotyping, as we shall see later, was initially recognized, even applauded, by such eminent psychologists and social theorists as David Riesman, Abraham Maslow, Gardner Lindzey, and Henry Murray, and widely disseminated through the writings of Aldous Huxley, Charles Morris, Gerald Sykes, and others.¹⁵

For contemporary confirmation of his complaints about the shady character of Sheldon and the dubious nature of his somatotyping theories, Rosenbaum looked first at the substantial introduction of the leading and eminently reputable academic textbook on somatotyping, published in 1990 by Cambridge University Press and co-authored by Professor J. Lindsay Carter and Barbara Honeyman Heath, Sheldon's former assistant. Since 1990, undergraduate and graduate students of sport science worldwide studying the science of somatotyping have been encouraged to read here about Sheldon's temperamental perversity, his predilection for deliberately antagonizing people, his failed love affairs and his unethical tampering with scientific evidence—an extraordinary list of personal and professional peccadilloes not commonly seen as appropriate material for academic textbooks but presented in lucid and somewhat vindictive detail by his former assistant, Barbara Honeyman Heath. "Plainly," she says on page 14 of her introduction:

the man who mutilated and manipulated the materials for the forthcoming *Atlas of Men* was not a misunderstood genius....His personal insights were often dulled by his incapacity for redeeming empathy....His self-insights suffered from a lack of humility....He knew the answers without completing the research, and was unwilling to ask the appropriate questions.¹⁶

What Rosenbaum failed to understand from the outset was that there was a significant difference between Sheldon's work with standard somatotype photos and the much more extensive "science" of posture studies which had flourished since the early 19th century in parenting, hygiene, and educational manuals. Nor, it seems, did Rosenbaum fully take into account the nature and extent of the antagonism that had developed between Barbara Honeyman, Sheldon's assistant in the years leading up to the aborted publication of the *Atlas of Women* or the platform that Sheldon's somatotyping work (and Honeyman's accusations about its falsifications) provided for Honeyman's future ascendancy and extensive somatotyping career with Margaret Mead, James Tanner, Derek Roberts, J. Lindsay Carter, and many others.

What, then, was the role played by William Sheldon and Barbara Honeyman in the abortive campaign to organize and publish an *Atlas of Women* and why did he become the main target of criticism in relation to the fairly routine photographic analysis of body types by cultural anthropologists, physical educators, and athletic trainers through the first half of the 20th century? How did Sheldon's one time popularity come to be buried under a cloud of scholarly embarrassment, his ideas and methods reviled, and his papers and collection of nude photographs become the source of unusual restrictions at the Smithsonian in later years?¹⁷

POSTURE AND THE PHYSICAL EDUCATORS

According to Yosifon and Stearns in their well documented study of the rise and fall of the American posture movement, references to good posture began to appear in the 1820s, and by the end of the 19th century, three issues had become paramount. First, posture was perceived to be under increasing threat as modern living, especially the emerging constraints of school and schooling were understood to cause physical degeneration in youth. Second, anxieties about health increased around the growing perception that straight limbs and an erect stature were necessary to prevent internal organs from being crushed or deformed. Third, a decline in good posture (associated with a perceived degeneration of correct body habits in general) began to be associated with wider anxieties about character, eugenic practices, and the need for better bodies for improved breeding.¹⁸ At President Hoover's White House Conference on Child Health and Protection in 1929, Hoover publicly stated his belief that civilization would only march forward on the feet of healthy children.¹⁹ The conference drew national attention to the problem of "defective" children and demanded efforts to "clear our streets and schools of the humpbacked, the crooked legged."²⁰ Among the ideas to assist was the persistent impulse to use the straightening effects of posture as an index of civilization.²¹

These developments, focusing the scrutinizing gaze upon the perceived degenerating or disabled body, were undoubtedly part of the profound shift from a text based to a visually dependent culture, vividly described by Barbara Stafford in *Body Criticism*.²² Set on course by the Enlightenment, and propelled by the age-old desire to find methods to "read" the inner nature of a person through the window of his external appearance, one can follow the development of a variety of key pictorial strategies or techniques for externalizing the internal, for linking physical appearance to character. Craniometry, phrenology, physiognomy, and comparative anatomy all shared long-standing beliefs that the outer body was a window into a host of moral, temperamental, racial or gender characteristics. And as the science of measuring human bodies

matured during the 19th century, anthropometry became one more of a long line of sciences concerned with detailed measuring, comparing, and interpreting variability in parts of the body, including posture. Those favouring anthropometric techniques focused upon rigid standardized methods and quantifiable results, holding them out as objective and unambiguous. In particular, the proliferation of the photographic image provided a powerful tool to those measuring bodies in an attempt to identify criminals, illustrate scientific laws, and document medical procedures.²³ In many respects, however, in tying together physique and character (and encouraging certain physiques to be equated with superior mental and spiritual qualities), these anthropometric techniques had the reverse effect by substantiating a priori beliefs about class, race, and gender and highlighting the growing ambiguity inherent in the term normal.²⁴

From the perspective of this study, and our interest in the thousands of pictures collected for the aborted *Atlas of Women*, the most important aspect of this long-standing posture debate and its impact upon changing approaches to imaging, measuring, and correcting the body was its enthusiastic incorporation by the emerging profession of physical education in the late 19th century. Physical educators saw in schools and colleges both a remedial solution to poor posture and an opportunity to develop, in line with Plato's admonitions, an ideal straight and healthy body as temple to the mind. The rise of the formal physical education movement thus provided a useful forum for widespread posture assessment and remediation, and physical education instructors, initially at elite universities such as Harvard and Yale, and at women's colleges such as Vassar and Wellesley with their emphasis on physically fit womanhood, eagerly grasped the opportunity to extend their influence.²⁵ As Edward Hitchcock M.D., first president of the *American Association for the Advancement of Physical Education* commented at its 3rd annual meeting in 1887, "Let the thought be eminent and predominant with us that the highest aim of our special work is to develop the most perfect types of men and women in body, soul and spirit."²⁶ In this respect, Francis Galton was an appropriate choice as the Association's first honorary member.

In 1898, the *American Physical Education Review* was founded, to become the leading centre for expressions of concern about posture and corrective therapies, and through the *Review* one can follow the stream of articles detailing methods of observation and measurement to detect posture defects and techniques to train deficient children to straighten up for the betterment of the race. Between 1885 and 1900 Seaver charted the records of 2700 Yale Students; Wood of Wellesley collected 1500; Hanna of Oberlin 1600 and Clapp of the University of Nebraska, 1500 records. The last three sets consisted entirely of female students.²⁷ Dudley Allen Sargent at Harvard surpassed them all measuring 10,000 men and women with 50

different measurements.²⁸ During the years of the *Review* 10% of 13,000 articles focused upon anthropometrical measurements of students' bodies, usually in the college environment, which was believed by Hitchcock and his associates to be the best place to determine the "universal man"—given that the intellectual progress of the world was made possible by ideas developed in colleges and universities.²⁹

Physical educators mixed eagerly with leaders of the *American Posture League*, founded in 1914 by Jessie Bancroft, and adopted wall charts, shadow pictures, observations in mirrors, specific leg and back measures such as posturemeters, conformateurs, pedorules, pedographs, and scoliometers as well as various types of nude or semi-nude photographs as the basis for character assessments and corrective exercises. In schools and colleges many students were photographed, as well as being subject to painstaking recordings of posture measurements along a host of scales and assessment procedures. Wickens and Kiphuth described the procedure at Yale in 1937:

...at the beginning of each fall term, each member of the incoming freshman class is sent a post card requesting him to report to the Payne Whitney Gymnasium...at this time the student fills out his activity record card and also has his height and weight, without clothes, recorded on the examination card which he takes with him to the examination room. Here the student stands in parallel footprints drawn upon the floor with the inner borders three inches apart...specific points on the left side of the body are marked with a black flesh pencil...5 aluminum pointers are attached to the back by means of one inch strips of "Dryback" white adhesive tape...the anterior photograph is then taken after which the pointers are removed....After the negative has been developed and the picture printed the various measurements are determined...eighteen separate measurements are made directly onto the photographs.³⁰

With the connection between posture and character well articulated, "the great medical-physical education campaign essentially revived the 19th-century insistence on posture as a measurement of social and personal quality."³¹ Correct posture, declared influential physical educator Thomas Cureton, Jr. from Springfield College, "has long been associated with desirable personality traits," as well as being an important indicator of fitness.³²

College women's bodies received disproportionate attention from physical educators, impelled by the long-standing view that women suffered from poorer posture, either naturally or due to tight clothing and lack of exercise. Especially at private colleges the proliferation of costly and intrusive posture campaigns worked to straighten women's bodies in their desire to strengthen their health and ability to better navigate "with graceful carriage" the problems of modern society. In the 1930s, Vassar went so far as to claim the right to dismiss students if they had severe postural defects or if other aspects of their physical condition

appeared inadequate at enrolment. Special exercise assignments were widely demanded and a "Fundamentals" course on posture and carriage based on the analysis of posture photos was mandated for all freshmen. The course lasted well into the 1960s.³³

WILLIAM SHELDON, BODY TYPES, AND SOMATOTYPING

Just as the rise of the formal physical education movement provided fertile soil for eugenic thinking and new opportunities for posture assessment and remediation, allowing an elaboration of concerns about health and character alike, their measurement techniques, widespread use of photographs and interest in body build or type offered a unique opportunity for William Sheldon and his associates to gather the large sets of data that he believed necessary to confirm his body typing theories. His own interest in body typing had been stimulated by the work of German psychiatrist Ernst Kretschmer who, claiming the tape measure sees nothing, used photographs as a method to categorize people into "types" with corresponding psychiatric profiles.³⁴ Kretschmer's division of his clinical cases into "pyknic," "asthenic," and "athletic" types provided the most proximate raw material on which Sheldon drew, though he also built upon the work of Sante Naccarrati, student of the Italian anthropometric school of Viola and Di Giovanni.³⁵ His aim was to duplicate and extend the process of quantification to a new 3-dimensional level in his doctoral studies in psychology at the University of Chicago in the 1920s. Collecting a set of 4000 photographs of white, male students from the University of Chicago he articulated a numbered scheme to describe the components of each of three basic body structures or somatotypes that he believed endured through time with their corresponding temperament; ectomorphy (thinness), endomorphy (fatness), and mesomorphy (muscularity).³⁶ Such a detailed system of body typing, as I have discussed elsewhere,³⁷ was in many respects a new twist on an old game—a 20th-century physiognomy linking physique with temperament, behaviour with structure—and Sheldon's classifications, inferring temperament and character from bodily measurements, along with his emphasis upon the healthfulness of beauty and symmetry in the human physique, all encouraged orthodox eugenic readings with distinctly racist and sexist interpretations.³⁸

Sheldon's research thus outwardly shifted the concern for posture and its relationship to character and discipline, to one more focused on constitution and heredity. Yet his interest in utilizing posture programs for obtaining somatotyping photographs gave new life to the physical educators' diminishing enthusiasm for posture programs in the 1930s and 40s and they did not seem to realize that his techniques contradicted some of their aims. Mapped out in the first two books in his series on Constitution, Sheldon's real interest lay not in the generalized tech-

niques to affect rigid posture control sought by physical educators but in cataloguing the varieties of bodies that might predict different personality types and corresponding behaviours. After all, an endomorph by definition could not be held to the same posture as an ectomorph, and the mesomorph's muscles, being always ready for action, meant that good posture was more natural to him than other body types. Nevertheless, enthusiasm for eugenic goals was shared by both.³⁹

Posture was applied easily to racial analysis, with the argument that those of European descent had erect spines and straight bones allowing graceful deportment to further the contrast to the stooped posture and flat feet of non-white, less civilized races.⁴⁰ Ivy leaguers were exhorted to demonstrate their erect (upper class) carriage and linearity through good posture in contrast to the crooked backs of working (lower class) immigrants. Sheldon, as a staunch biological determinist, believed that the biological quality of the population would be enhanced by improving its beauty, but in his view the type of body one was born with (and its corresponding levels of beauty and symmetry) could not be much changed as the physical educators believed with good training and exercise.⁴¹ To him physique was indeed destiny. The lowering of attractiveness ratings in the population at large, he complained, "was the result of modern medicine's keeping people alive indiscriminately."⁴² Negative eugenic breeding policies were the natural result of such views, and in this sense his constitutional work possessed the same value base as Nazi ideology where health and vitality could best be recovered through a eugenic program of improved breeding with special regard for superior physical specimens.⁴³

Sheldon followed his doctoral work with a medical degree. The aim was not to practice, he declared, but like William James before him "to become a better psychologist and religious philosopher."⁴⁴ In this sense he followed other constitutional researchers who embraced psychiatry and psychology as part of medicine's arsenal to understand the constitutional predisposition to disease. Now 35 years old he obtained a grant from the Council for the Study of Religion in Higher Education to visit Jung, Freud, Kretschmer, and others in Europe before staying at Dartington Hall in Southwestern England where he met and made friends with Aldous Huxley, Gerald Heard, Christopher Isherwood, and others. It was during this time that he wrote his first book, *Psychology and the Promethean Will* (1936)⁴⁵ and met Aldous Huxley who would widely popularize Sheldon's articulations of the correlation between shape and personality in both his fictional and non-fictional writings, bringing his body typologies to *Harper's Weekly* and making "endomorphs," "ectomorphs" and "mesomorphs" household words in journals and magazines such as *Time*, *Life*, *Esquire*, and *Popular Science*.⁴⁶ Sheldon also became close friends with Dorothy Whitney Elmhirst, the wealthy American heiress who had married Yorkshire squire Leonard Elmhirst and

moved with him to develop the Dartington Hall estate as an educational experiment and general haunt of coterie culture in the 1930s. Through Dorothy Elmhurst, Sheldon later tapped the William Whitney Foundation in New York for funding for his constitutional work at the University of Chicago, Harvard, and New York.⁴⁷

PLANNING THE ATLASES: THE *ATLAS OF MEN* AND THE (ALMOST) *ATLAS OF WOMEN*

Returning to the United States in 1936, Sheldon taught briefly at the University of Chicago's Divinity School and the University of Wisconsin before linking up with physical anthropologist Earnest Hooton and psychologist Smith (Smitty) S. Stevens at Harvard.⁴⁸ It was here that he wrote the first two books in his constitution series, *Varieties of Human Physique: An Introduction to Constitutional Psychology* (1940) and *Varieties of Temperament: The Psychology of Constitutional Difference* (1942) before moving, first during the war to the military's School for Aviation Medicine in Texas⁴⁹ and later, through an opportune meeting with C. Wesley Dupertuis at the American Association of Physical Anthropologists, to Columbia. Dupertuis, who worked at George Draper's well-known Constitution Clinic at Columbia's Medical Centre in New York had participated in Earnest Hooton's physical anthropology projects at Harvard, helping him measure 4000 people at Chicago's World Fair and 10,000 men in a racial survey of Ireland.⁵⁰ He was immediately drawn to Sheldon's efforts to develop accurate biotyping techniques through the use of large numbers of tripolar photographs of body builds, and he and his wife developed a close working relationship with him, photographing large numbers of psychiatric patients and classifying them morphologically according to Sheldon's evolving method.⁵¹

All of this work appears to have been done on a shoestring, with Sheldon regularly applying to various foundations for working funds. In a letter to Miss Bogue, secretary to the William C. Whitney Foundation in March 1939, Sheldon asked, as usual, for more money and pointed out that

I have myself managed to get along for the past several years without any salary at all, and have devoted the Whitney funds almost entirely to research expenses—this has necessitated drawing rather heavily upon savings...I have found it necessary to sell a collection of antiques to meet the expense of our New York Study of 3800 psychiatric cases...another difficulty with continued working without a personal income has been the necessity of postponing marriage, and I have come to feel that I need a home.

During the present year, he continued, "I have taken between 14,500 and 16,000 standardized photographs of about 5000 individuals (including a series of 2000 West Liberian native Negroes) supported by funds

from Dr Hooton. I am ready to take my work wherever it is most welcome, but would be delighted to find a little security."⁵²

It was George Draper's retirement from the Constitution Clinic at Columbia that provided the opportunity for Sheldon to take over in 1946 and continue his somatotyping work in the Clinic which he renamed the Constitution Laboratory. However, from the perspective of Rockefeller Foundation officers, who were renegotiating the Foundation's support of the Constitution Clinic at that time, Sheldon's leadership was controversial.⁵³ Sheldon's racist views, exposed as early as his master's thesis at the University of Colorado entitled "A Comparison of the Intelligence of Mexican and White Children" became increasingly noxious in *Varieties of Delinquent Youth* where he decried Jews and Italians as "vermin," called New York a "rather Negrophilic city" and labelled American culture "mongrel," and "socially chaotic."⁵⁴ His increasingly outspoken and reactionary views made him difficult to get along with, the results of his research were slow to come to fruition, and few of his academic positions ever became permanent. It was also known that Draper and Sheldon had been at odds for some time over his beliefs, and Dr. Robert Morison, who was the Rockefeller grants negotiator, was less than enthusiastic about Sheldon's productivity and his lack of official faculty status at Columbia. "It seems to me," he wrote in one of his memos, "that Sheldon frequently has difficulty in restraining his natural bent for speculative philosophy.... On the tactical level he has a tendency to take on a good many projects at once and one wonders if support for the nuclear project at Columbia would finally result in at least one competed facet of his whole program."

In his favour, Dupertuis had shifted his loyalties from Draper and covered all the routine duties required in the laboratory that Sheldon had no interest in doing. As a result Morison agreed to gamble Rockefeller Foundation support for half of the budget of the Laboratory on the understanding that Sheldon would raise the rest from elsewhere. In fact Sheldon seemed quite good at raising money from friends and foundations and had secured the support of Eugene McDermott, co-founder of Texas Instruments (and an ardent eugenicist) to fund his research and help publish *Varieties of Delinquent Youth*.⁵⁵ In addition he had raised a grant of \$11,500 from the newly formed Wenner-Gren Foundation for anthropological research (also known as the Viking Fund) which was targeted to support the publishing costs of the forthcoming *Atlas of Men* at Harpers—a book which would record the full range of somatotypes for American men between the ages of 18 and 65.⁵⁶

BARBARA HONEYMAN MEETS WILLIAM SHELDON

Dupertuis was not Sheldon's only devoted assistant. The other person helping him in his laboratory was Barbara Honeyman, a young woman

newly arrived from Portland offering to be his unpaid secretary and general assistant. The circumstances of her arrival are recounted in her own words, in vivid detail in the oral history archives of the University of California Berkeley and at Smith College which was her alma mater. Born and raised in Oregon she had lived a relatively sheltered, rural life there, followed by some years at Smith to obtain a general arts degree, return to Portland, and marriage to a wealthy entrepreneur. As part of Portland's social circle, Honeyman joined the Junior League where ladies in her position dedicated their time to good works in the city. Her volunteer job was at the outpatient clinic of the Oregon Health Sciences Hospital where she worked as a secretarial assistant each Thursday afternoon for 14 years.

The war years disturbed this routine when her husband volunteered to work as a civilian for the government in Washington D.C. On one of her visits to the department where he worked she met Fred Wulshin, an anthropologist who introduced her to Sheldon's books on constitution. It was an epiphany. From that moment, she said, she was "enthralled with the idea that people's physiques and behavior were closely linked...I came back from Washington with the Sheldon books very much on my mind. It was like having a second adolescence...an intellectual rebirth."⁵⁷

Apparently her new interests in body typing helped confirm her dissatisfaction with life as housewife and mother of two adopted children, as well as her desire to pursue more academic interests. A chance meeting in Portland with a student of Earnest Hooton from Harvard provided her with the names and addresses of people in Cambridge and Boston who knew Sheldon.⁵⁸ During a business trip with her husband she visited Hooton and "Smitty" Stevens at Harvard, as well as Roland Elderkin at the Hayden Goodwill Inn in Boston with whom Sheldon was collaborating in collecting body measurements of delinquent boys. She then wrote to Sheldon at the Constitution Laboratory in June 1947 declaring her interest in his work and desire to learn more about it. Four months later she visited the Laboratory and had her first experience with somatotyping procedures.

The following year Honeyman asked for a divorce, agreeing to give up her children and accept a financial settlement. Leaving Portland she drove to New York and began work as a volunteer in Sheldon's laboratory. There she rapidly learned to do somatotype ratings and over the course of the next 3 years was assigned by Sheldon to take photographs of more than 3000 college girls at Smith College, Mt Holyoke, Swarthmore, Vassar, University of Pennsylvania, Brooklyn College, and 4 or 5 Midwestern colleges and universities including Iowa, Illinois and Wisconsin.⁵⁹ "We had a fair enough sample of female somatotypes to give us a fair handle on the most likely distribution of female physiques in the

United States. Sheldon's notion was that these would become the basis for an *Atlas of Women*."⁶⁰

Her new career as a somatotyper was solidified by support from a new quarter. Honeyman got on very well with Sheldon's Texas supporter Eugene McDermott who increased Sheldon's grant to allow him to pay her a salary and provided her with a large apartment where he could stay on his New York visits, as well as a car. "Within a year McDermott was so enthusiastic about my potential usefulness to the somatotype enterprise," she said,

that he set up a fund for \$100,000 which he and Sheldon called the Biological Humanics Foundation. I was made treasurer and the money paid for all the trips to photograph college girls... [So] at age 38, with an AB in history from Smith College and no specific training for earning my own living I had a monthly income of \$800, a rent free apartment and a late model car.⁶¹

Honeyman also became familiar with Sheldon's supporters in the Wenner-Gren Foundation through her new friendship with Lita Binns, the Director's assistant who would soon become his wife. The Foundation, she later claimed, had agreed to fund Sheldon's *Atlas of Men* only if she were closely connected to it as co-author. Her connections extended to many of Sheldon's friends as well. Through a series of anthropology symposia at the Wenner-Gren Foundation she met Julian Huxley and a number of prominent anthropologists of the time including Margaret Mead. She also met Sheldon's acquaintances from Dartington when they visited him at the Laboratory, Gerald Heard, Aldous Huxley, and Lewis Mumford among others.

Yet despite her enthusiasm for somatotyping, Honeyman's co-operation with Sheldon was becoming clouded. "Unfortunately for Sheldon," she said, "I not only learned to somatotype by his criteria just as well as he did, but began to have serious doubts about his method.

I worried him...there was no doubt about that...the undermining of my confidence reached a critical point when we started to assemble the somatotype photographs for the *Atlas of Men*...the whole procedure of choosing them struck me as odd....The arrangement made good sense...but he built this elaborate trap for himself in defense of his assertion that one's morphogenotype is reflected in his somatotype at age 18, and is unchanging.⁶²

To fit his schema, Honeyman claimed, Sheldon instructed her to trim the photographs according to hearsay evidence of height, weight, and age (i.e., the memory of the client as to his or her weight and height at age 18). Angered, she called her friend's husband, the Director of the Wenner-Gren Foundation to expose the alleged manipulations.

I was terribly pleased when I realized I had chosen the ethical decision....It sustained me for a long time...Sheldon quickly found a substitute. I remember

the little girl, I can't remember her name. She was a medical student. It didn't bother her any. She did what Willie said...I just said I didn't want to be an author of the Atlas.⁶³

SHELDON, HONEYMAN, AND THE OREGON PROJECT

Despite Honeyman's rather vocal opinions, possibly tainted by a failed love affair with him, Sheldon's research findings were supported and his views widely tolerated well into the 1950s in both academic and popular circles.⁶⁴ And despite Honeyman's displeasure at Sheldon's methods she continued her association with him for several more years as they moved into another Rockefeller Foundation supported project on somatotyping, this one located in Honeyman's home town Portland. Not surprisingly the Oregon project proved problematic from the start with quarrels over leadership, management, and direction. Documents concerning the Foundation's involvement with the constitutional medicine project at the University of Oregon medical school date back to April 1950 in a memo from the Dean. "We have been interested for some time in the fascinating studies in constitutional medicine conducted by Dr. William Sheldon. An unusual opportunity exists in our Outpatient Clinic to amplify these studies...and Dr. Sheldon has persistently encouraged us to take advantage of this opportunity."⁶⁵

The Dean did not mention Honeyman who recalled that it was at her insistence, while volunteering there years earlier in the Outpatient's Clinic, that Sheldon be invited to establish a research unit there.⁶⁶ Instead he authorized two medical doctors from his faculty, Drs. Lewis and Griggs, to formalize the work of the Rockefeller Grant of \$100,000 over four years. It was clear that those at the Foundation recognized the controversial nature of Sheldon's "pioneering work" but were also convinced of the importance of his system of classification of physical types which they agreed was simple to use, reliable among different observers and easily susceptible to statistical analysis.⁶⁷ They were pleased to hear, given Sheldon's growing reputation of being difficult to get along with, that Dr. Griggs, known to be steady and hardworking, had been selected by the Dean to lead the project. Sheldon and Honeyman were less pleased, however, and insisted on Griggs' removal. Honeyman believed she should be the executive Director and research associate of the project and refused to work with Dr. Griggs.⁶⁸ Nor did she expect Sheldon to spend much time in Portland. Howard Lewis was really in charge, she said:

He let me set up the project pretty much as I wanted. I interviewed and recruited every person that registered in the Outpatient Clinic...making scribbles about their somatotypes, dysplasias. I even gave them temperamental ratings...and then invited them to come for "medical photographs" in the Constitution Laboratory....It was a beautiful, beautiful set up.⁶⁹

As she saw it, however, the project was increasingly messed up by Sheldon who, on his visits, "infuriated almost everyone in the environment...swishing around the medical school and saying outrageous things."⁷⁰ In 1953, she complained to the Rockefeller Foundation that Sheldon's visits were proving longer than expected and he was sabotaging the original plan. Embarrassed by the public nature of these squabbles and increasing doubts about Sheldon's views, the Foundation considered a more direct intervention than was usual in the case of Rockefeller Foundation grants, noting that "as Sheldon grows older he seems to be emphasizing all the defects as a scientist which have hitherto been apparent in his publications."⁷¹ And while the Rockefeller Foundation came to privately regret their decision to support the Oregon project, Honeyman quarrelled once more with Sheldon before moving to New York to begin a PhD in physical education in New York and be closer to Scott Heath whom she had met during his residency at the Medical School in Portland.⁷² Explaining her decision to study in a Department of Physical Education she said

The physical educators are the best ones to work with when it comes to somatotyping. They don't squabble amongst themselves, they're interested in human physique, and they know that there are bodies under those clothes. They're... less full of themselves (than anthropologists) and often do just as good research as anyone else.⁷³

As it turned out, Honeyman never completed her PhD and instead married Heath and moved to Carmel where she ran his ophthalmology office for the next 20 years while becoming a "freelance somatotype expert" in her spare time. "I became known as a somatotype expert and I got collections of somatotype pictures and data from all over the goddam world....Actually I earned several thousand dollars as well as accumulating a remarkable library of somatotype photographs."⁷⁴

OBITUARY TO THE *ATLAS OF WOMEN*

So what became of the planned *Atlas of Women*? There was certainly no lack of somatotype pictures to dedicate to the volume. The reasons for its abandonment, said Honeyman Heath, were purely political. "The women's atlas, as it turned out, never came to be, we never got it done. Of course I left before it could be done but Sheldon could have done it afterwards himself. By this time [though] Harpers was disenchanted and not about to publish an atlas of anything."⁷⁵

Ron Rosenbaum, however, had a more sinister explanation in his *New York Times* exposé. He claimed that it was William Sheldon who unleashed public anxiety over the female posture photos that were destined for the *Atlas of Women* by going on the road to Seattle in 1950 and

photographing nude women at the physical education department at the University of Washington.

He began taking nude pictures of female freshmen but something went wrong. One of them told her parents about the practice. The next morning a battery of lawyers and university officials stormed Sheldon's lab, seized every photo of a nude woman, convicted the images of shamefulness and sentenced them to burning. A short lived controversy broke out. Was this a book burning, a witch hunt? Was Professor Sheldon's nude photography a legitimate scientific investigation of the relationship between physique and temperament the raw material of scholarship? Or just raw material...pornography masquerading as science.⁷⁶

In fact, when Sheldon applied from Columbia to somatotype female students at the School of Physical and Health Education at the University of Washington in Seattle, Ruth M. Wilson had been reassured by Dr. Morison at the Rockefeller Foundation of the scientific nature of Sheldon's work.⁷⁷ In reply to her letter of 23 September 1949, Morison noted that

although there has been some controversy as to details of Sheldon's somatotyping system I think it is fair to say that the method is now generally used and respected by people working in the field. Some of Dr. Sheldon's work on classifications of personality types is perhaps more controversial but in view of the complexity of the field this is hardly surprising....⁷⁸

Morison, of course was following the mandate of the Foundation to support a holistic vision of psycho-biological medicine aimed at bridging the divide between body and mind, embodying the patient so to speak. As a constitutionalist, Sheldon's laboratory work fitted well with this missionary view of science, though in the years following the World War II the intellectual coherence for psychosomatic research and constitutional medicine was coming under increasing attack.⁷⁹ To be sure there was a public appetite in American society and beyond during the inter and postwar years for taxonomies devised by constitutionalists classifying mankind in a variety of ways. Knowledge of an individual's body type was thought by many to provide clues to all manner of treatments for disease and disability.⁸⁰ (Indeed when Jung was given a copy of Sheldon's *Atlas of Man* by Humphrey Osmond, the pioneer of treatment for Schizophrenia, he was delighted, saying one must always give the body its due.⁸¹) It was only when their work grew increasingly reductionist during the 40s and 50s, moving away from medicine toward anthropometry and the prediction of performance that trouble brewed. The practical problem, epitomized by the somatotyping work of Sheldon (and the conclusions he drew from it) was the ready conflation of correlation and causation drawing direct relationships between shape, temperament, and behaviour.⁸² This was nothing new, of course. As Hersey has pointed out, Sheldon was inspired by the work of Lombroso, Kretschmer, and Hooton to continue "the Renaissance and baroque prac-

tice of equating the body's features, proportions and measurements with temperament and intellect. This habit precisely is what has continued to tempt anthropometrists into value judgments right down to our own time."⁸³ As Griffith points out, however, at the time the habits Sheldon's system encouraged for reading people's bodies made for a much more virulent than happy science.⁸⁴

The more immediate issue, however, was Sheldon's virulent biological determinism articulated through ethnic, racial, and gender prejudices which reached a peak in *Varieties of Delinquent Youth*. Sheldon never fell silent about his vision of "biological humanics." Vituperatively anti-Semitic, his insinuations that most Americans were biologically if not yet socially delinquent did not sit well in a post-Holocaust world where it had become unacceptable to publicly endorse a racially discriminating eugenics program.⁸⁵ In many respects, Gatlin has concluded, his scientific career was obscured and compromised by the weight of his own alienation from the modern world.⁸⁶

Perhaps, though, we also have to look more closely at the 20th-century context in which Sheldon and his assistants pursued their research to see how easily eugenic views could spring from and cling to studies of body typing. Historians have begun to dissect the ambiguities and extensive nature of eugenic movements and examine their different justifications and convictions that experts could locate the source of complex social problems in the biology of the individual. In Oregon, for example, where Sheldon's last Rockefeller funded project took place, what David Noble called the "paradox of progressive thought" was played out through eugenics, with "progressive" legislators trying to balance competing ideals of individual rights and collective reform.⁸⁷ The resulting "reform" was a far-reaching program of sterilization of feeble minded and unfit citizens that lasted for almost 50 years, decades beyond the 1950s when Sheldon and Honeyman set up their constitution laboratory in Portland and somatotyped there and in cities nearby. By 1983, when the legislation was overturned, 2500 "unfit" citizens had been sterilized, many of them in the Oregon State Mental Hospital in Salem which later became the location for the movie *One Flew over the Cuckoo's Nest*.⁸⁸

Furthermore, the photographing of nude bodies for body typing was by no means slowed by the Seattle "scandal" and subsequent photo burnings at colleges and universities across the United States.⁸⁹ Indeed Sheldon's public fame reached an apogee in 1951 when *Life Magazine* devoted several pages to a glowing description of his views.

On the basis of his work up to now, many workers in the psychiatric field and in the allied sciences of sociology and anthropology are convinced that Dr. Sheldon has done what Hippocrates tried to do 2500 years ago: he has shown that character and physique are closely related, and that the first, like the second is to a considerable extent a product of heredity.⁹⁰

Sheldon, continued the editor of the article, rivaled Freud for the significance of his theories which were about to be illustrated in two "Atlases," one of men and the other of women. As for the mishap at the University of Washington, it was blamed upon a female assistant who had failed to make clear to freshmen coeds that their anonymity was guaranteed by blacking out their faces before analysis.

Yet the fate of the *Atlas of Women* had been sealed, along with the demise of constitutionalism and its questionable ties with eugenics. By the time the *Atlas of Man* was finally published in 1954, Somatotyping was losing its appeal and Harpers had lost interest in publishing any further Atlases. Nor was the Wenner Gren Foundation interested in supporting an *Atlas of Women* after hearing from Honeyman about her quarrels with Sheldon in Portland. The Constitution Laboratory was closed in the summer of 1953 by the Dean of Medicine at Columbia, leaving Sheldon to find a home for thousands and thousands of somatotype photographs. He moved them into the New York apartment of Dorothy Paschal, a wealthy widow who, like Honeyman Heath before her, had become fascinated with Sheldon and his somatotypes and become a willing partner in his work. Later they took them to her home in Cambridge and set up the *Biological Humanics Foundation*, likely supported once more by Eugene McDermott. Sheldon died in 1977 followed by Dorothy Paschal two or three years later, leaving the photographs, according to Honeyman Heath, to an uncertain fate.

In many respects, Sheldon's career was finished although he claimed to have had plans to follow the *Atlas of Women* with an *Atlas of Children*, a study of constitution and clinical medicine, another of constitution and psychiatry, an example of Spanish American war veterans, a study of the Oregon criminal, and a follow up of the 200 subjects who appeared in *Varieties of Delinquent Youth*.⁹¹ What remains of his work are mostly thousands of somatotype pictures which were acquired in 1987 by the National Anthropological Archives at the Smithsonian Institute.⁹²

Looking back at his career, Sheldon once commented to his friend and colleague Louise Ames from the Gesell Institute of Child Development in New Haven that "almost nobody knew him as he really was, that almost everybody thought he was better or worse than the actual fact of the matter."⁹³ Barbara Honeyman Heath settled on the latter, and having contributed to his denouement, built a highly successful career adapting Sheldon's somatotyping techniques to numerous projects. Not only did physical educators and kinesiologists continue to be interested in her somatotyping skills, hiring her as a consultant for several large growth studies, in 1958 she developed a close and long-term collaboration with Margaret Mead in her work in Papua New Guinea.

Heath had met Mead 10 years earlier when she accompanied Sheldon to a Wenner-Gren Foundation dinner and it was the Foundation that

would provide the grants for her trips to New Guinea to assist Mead's anthropological work with Papuan natives. Mead had been intrigued with the constitutional type problem since the 1920s "when we had all read Jung" and Heath's task was to somatotype the entire population of Peré village in Manus Province. Both agreed, however, that "Sheldon's arbitrary scale gives one either a cultural or a biological procrustean bed," and were cautionary about the possibility of correlating some kind of bodily configuration with an innate temperament varying in relation to particular populations and particular cultures."⁹⁴ Heath, in particular, although dedicated to designing ever more accurate somatotyping measurements, made few claims about the efficacy of her work and distanced herself from the racist and sexist overtones Sheldon had lent to somatotyping. "People frequently ask me what the usefulness of this is," she said. "I do it because it's interesting. I do not cherish any great illusions about its usefulness."⁹⁵ Nevertheless she regarded one of her greatest accomplishments to be the compendium on more accurate somatotype measurements which she and J. Lindsay Carter produced for Cambridge University Press in 1990 and which has remained a leading international text in kinanthropometry. Until Rosenbaum's provocative journalistic exposé in 1995, *The Atlas of Women* had been long forgotten.

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NOTES

- 1 Ron Rosenbaum, "The Great Ivy League Nude Posture Photo Scandal," *New York Times* (15 January 1995), p. 28. For a description of this procedure and diagrams see article written by the Physical Education Instructors at Yale University. J. Stuart Wickens and Oscar W. Kiphuth, "Body Mechanics Analysis of Yale University Freshmen," *Research Quarterly* 8, 4 (1937): 38-48.
- 2 Rosenbaum, "The Great Ivy League," p. 28.
- 3 Rosenbaum, "The Great Ivy League," p. 30.
- 4 Naomi Wolf, *The Beauty Myth* (Toronto: Vintage Books, 1990), p. 213.
- 5 George L. Hersey, Letter to the Editor, "A Secret Lies Hidden in Vassar and Yale Nude 'Posture Photos'," *New York Times*, 3 July 1992.
- 6 His composite photographs helped him rank people by beauty, health, ability, and reproductive potential, and project who was "valid" for marriage, immigration and most important, reproduction.
- 7 For a recent and highly critical view of Galton see Martin Brookes, *Extreme Measures: The Dark Visions and Bright Ideas of Francis Galton* (London: Bloomsbury, 2004).

- 8 George L. Hersey, *The Evolution of Allure. Sexual Selection from the Medici Venus to the Incredible Hunk* (Cambridge, Mass.: MIT Press, 1996). For an excellent discussion of eugenics see Daniel J. Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (Cambridge: Cambridge University Press, 1995) and Wendy Kline, *Building a Better Race: Gender, Sexuality, and Eugenics from the Turn of the Century to the Baby Boom* (Los Angeles: University of California Press, 2001). Also useful in relation to body work is David Mitchell and Sharon Snyder, "The Eugenic Atlantic: Race, Disability and the Making of an International Eugenic Science," *Disability and Society* 18, 7 (2003): 843-64.
- 9 James Arraj, "Sheldon as Pseudo Scientist or the New York Times as Tabloid?" www.innerexplorations.com/psytext/shnyt.html. Accessed 25 September 2005.
- 10 Rob Walker, "The Story of Y," www.nerve.com/opinions/Walker/StoryofY/main.asp. Accessed 2 November 2005.
- 11 William H. Sheldon, with the collaboration of C. Wesley Dupertuis and Eugene McDermott, *Atlas of Men. A Guide for Somatotyping the Adult Male of All Ages* (New York: Harper and Brothers, 1954).
- 12 Tyra and James Arraj, *Tracking the Elusive Human, Volume 2* (Chiloquin, Calif.: Inner Growth Books, 1988).
- 13 Earnest Hooton, *Young Man, You Are Normal: Findings from a Study of Students* (New York: G. P. Putnam and Sons, 1945).
- 14 R. Marie Griffith, *Born Again Bodies: Flesh and Spirit in American Christianity* (Berkeley: University of California Press, 2004), p. 132.
- 15 David Riesman, author of *The Lonely Crowd* discussed in his Harvard classes "the shape people were in"; Abraham Maslow developed the self-actualization theory; Gardner Lindzey was a University of Texas psychologist and editor of *Theories of Personality*; and Henry Murray was a Harvard psychologist and literary theorist. See John S. Sample, "A Closer Look at William H. Sheldon," www.innerexplorations.com/psytext/acloser.html. Accessed 28 September 2005.
- 16 Barbara Honeyman Heath, "Introduction," in J. E. Lindsay Carter and Barbara H. Heath, *Somatotyping-Development and Applications* (Cambridge: Cambridge University Press, 1990), p. 14. Despite this vituperative reference to Sheldon, his methods and his lifestyle, it does not seem to have deterred sport scientists from using it as a highly recommended textbook.
- 17 Griffith, *Born Again Bodies*, p. 132.
- 18 David Yosifon and Peter N. Stearns, "The Rise and Fall of American Posture," *American Historical Review* 103, 4 (1998): 1060. The theory of evolution sparked interest in the perceived racial hierarchy of animals and man, leading to anxieties that children with stooped, and hence more ape-like bodies were somewhat less likely to have good character than their straighter peers.
- 19 President Hoover's address on the Nation's Children, *New York Times* 20 (November 1930), p. 2.
- 20 Kline, *Building a Better Race*, p. 102-3.
- 21 Frederick D. Mason, *Straightening Children and Reconstructing Men: Medical Discourse on Physical Therapies and People with Disabilities 1885-1926*. Unpublished PhD Dissertation, University of Western Ontario, p. 1004.
- 22 Barbara M. Stafford, *Body Criticism. Imaging the Unseen in Enlightenment Art and Medicine* (Cambridge: Massachusetts Institute of Technology Press, 1991).
- 23 Lorraine Anne Davis, "Investing in Photography," in Jackson Lears and Jens Van Scherpenberg, eds., *Cultures of Economy-Economics of Culture* (Heidelberg Universitätsverlag, 2004), p. 167-202. The 19th century put extraordinary faith in science's capacity to unravel the mysteries of the human body as well as having high expectations of photography. By mid-century every British criminal was being photographed—a measure seen as a useful safeguard against crime since none could escape its crucial observation. William A. Ewing, *The Body Photographs of the Human Form* (New York: Chronicle Books, 2004), p. 18-19.

- 24 That is an emphasis on normality as a central organizing principle of modern civilization. See Patricia Vertinsky, "Embodying Normalcy: Anthropometry and the Long Arm of William Sheldon's Somatotyping Project," *Journal of Sport History* 29, 1 (2003): 401-39.
- 25 Vassar began to maintain records on the physical condition of each student in 1884, including posture data. It was a practice soon converted into annual measurements, including a final evaluation before graduation. Smith, Wellesley and other women's colleges along with Syracuse University used shadowgraphs, schematographs and posture tracings. Smith graded the tracings of each student. Yosifon and Stearns, "The Rise and Fall," p. 1076.
- 26 Edward Hitchcock, "President's Hitchcock's Address," *Proceedings of the American Association for the Advancement of Physical Education*, Third Annual Meeting, 1887, p. 9.
- 27 John F. Bovard, Frederick W. Cozens and E. Patricia Hagman, *Tests and Measurements in Physical Education* (Philadelphia: W. B. Saunders Co., 1930), p. 44.
- 28 Dudley Allen Sargent, "The Physical Proportions of the Typical Man," *Scribner's Magazine* 2 (1887): 3-17; Sargent, "The Physical Development of Women," *Scribner's Magazine* 5 (1888): 172-84.
- 29 Edward Hitchcock, A Comparative Study of Average Measurements, *Proceedings of the American Association for the Advancement of Physical Education*, 6th Annual Meeting, 1891, p. 40.
- 30 Wickens and Kiphuth, "Body Mechanics," p. 39-41.
- 31 Yosifon and Stearns, "The Rise and Fall," p. 1074.
- 32 Thomas Kirk Cureton, "Body Build as a Framework of Reference for Interpreting Physical Fitness and Athletic Performance," *Research Quarterly* 12 (1941): 329.
- 33 Memorandum on the need for a new physical education building at Vassar College, 12 September 1930, Vassar College Archives, in Yosifon and Stearns, "The Rise and Fall," p. 1078.
- 34 Ernst Kretschmer, *Physique and Character: An Investigation of the Nature of Constitution and of Theory of Temperament*, trans. W. J. Sprott (New York: Harcourt Brace, 1926). Though Kretschmer dabbled in physiological explanations of psychological temperament, it seems that he kept enough grounding in psychiatry that his work is still regarded as respectable in psychology whereas Sheldon's work has been largely erased. Sarah Tracy says that Sheldon led American constitutionalism in a radically reductionist and politically unpopular direction that ultimately destroyed its credibility. Sarah W. Tracy, "An Evolving Science of Man: The Transformation and Demise of American Constitutional Medicine, 1900-1950," in C. Lawrence and G. Weisz, eds., *Greater Than the Parts: Holism in Biomedicine, 1920-1950* (Oxford: Oxford University Press, 1998), p. 161-88.
- 35 Kretschmer used the Greek terms pyknic (fatter, compact), and asthenic (thin, without strength) to refer to particular physiques (which he measured carefully), and called a third more muscular type, the athletic type. Pyknic types, he said tended to be psychotic while asthenic types were more often schizophrenics. For further information, see also Michael Hau, *The Cult of Health and Beauty in Germany. A Social History, 1890-1930* (Chicago: University of Chicago Press, 2003), p. 164-75.
- 36 Three short reports of the work were published in the *Journal of Personnel Research*. "Morphologic Types and Mental Ability," (March 1927); "Social Traits and Morphological Types," (June 1927); and "Ability and Facial Measurements," (August 1927).
- 37 Vertinsky, "Embodying Normalcy," p. 404-12.
- 38 The classification method was based on the patterning of the morphological components of an individual. Three basic components are recognized; endomorphy, characterized by the dominance of soft roundness; mesomorphy characterized by the dominance of muscle, and ectomorphy characterized by a dominance of linearity and fragility. The somatotype of a person is determined by analyzing the degree of presence of each of the 3 components on a 7 point scale (1 minimum, 7

- maximum). The total score may not exceed 12. Analyses are made from anthropometric measurements from photographs of front, back and side with a resulting score, e.g., 435.
- 39 Examining the physical educator's incorporation of Sheldon's somatotyping ideas into their knowledge base, Sample said that "as far as I know, no authorities in either sport psychology or physical education have ever disputed his assertions." www.innerexplorations.com/psytext/acloser.html. Accessed 28 September 2005.
 - 40 Patricia Vertinsky, "The Racial Body and the Anatomy of Difference: Anti-Semitism, Physical Culture and the Jew's Foot," *Sport Science Review* 4, 1 (1994): 1-24.
 - 41 Sheldon referred to dysplasia as the unequal inheritance of body parts—a lack of psycho-physical standardization that he called the "mongrelization of stock." Some blends are good, he said while others are less good. Stephen H. Gatlin, "William H. Sheldon and the Culture of the Somatotype," Unpublished doctoral dissertation, Virginia Polytechnic and State University, 1997, p. 119.
 - 42 William H. Sheldon, *Varieties of Delinquent Youth. An Introduction to Constitutional Psychology* (New York: Harper and Brothers, 1949), p. 793.
 - 43 Peter Weingart, "Eugenic Utopias. Blueprints for the Rationalization of Human Evolution," in Mendelsohn and Novotny, eds., 1984: *Science Between Utopia and Dystopia*, Vol. VIII (Boston: D. Reidel, 1984), p. 173-87. Said Sheldon, "Every breed of man, as well as of horse or rooster, is mongrel in the sense that it is derived from a blending of predecessor stocks. The point, and I think this may be the crucial point is that some blends are good, when measured in terms of the resulting individuals' strength, efficiency, intelligence, muscular coordination and bodily harmony or symmetry while some other blends are less good." Sheldon, *Varieties of Delinquent Youth*, p. 21.
 - 44 William H. Sheldon, *Prometheus Revisited* (Cambridge, Mass.: Schenken, 1975), p. 1.
 - 45 William H. Sheldon, *Psychology and the Promethean Will* (New York: Harper and Brothers, 1936), p. 5. "This book is in a sense the soliloquy of a psychologist who has found the study of the Promethean voice a supremely alluring hobby." Of his visit to Jung, Sheldon wrote, "He is a strong person and an excellent influence for any mind. There are great gaps in his power and his training, but he is the best and clearest mind in the field of medical psychology and he has taught me a good deal." Letter to Dorothy Elmhirst, from Zurich, 17 March 1935. Dartington Hall Archives. Dartington, Devon, England.
 - 46 See for example, Huxley's *Time Must Have a Stop* (New York: Harper and Bros, 1944) and *The Genius and the Goddess* (London: Chatto and Windus, 1955) discussed in L. G. A. Calcraft, "Aldous Huxley and the Sheldonian Hypothesis," *Annals of Science* 37 (1980): 657-71. In journals, see "Judging Mind by Body," *Time Magazine*, 36 (15 July 1940): 53-54; Aldous Huxley, "Who are you?" *Harper's Monthly* 189 (1944): 512-22; Earnest Hooton, "Is Your Man Normal?" *Ladies Home Journal* 63 (April 1946): 167-69; Phoebe Radcliffe, "Your Figure and Yourself," *Women's Home Companion* (September 1946): 31, 87; Edward Coughlan, "What Manner of Morph Are You?" *Life* 31 (9 July 1951); Liam O'Connor, "How Your Shape Shapes Your Life," *Popular Science* 160 (May 1952): 116, 19, 228, 230, 232; and William Lessa, "Somatomancy: Precursor of the Science of Human Constitution," *Scientific Monthly* (December 1952): 355-65.
 - 47 See series of letters to and from Miss Bogue, executive director of William C. Whitney foundation in New York, from 1937-39, located at Dartington Hall archives. By 1938 Sheldon had received \$11,000 from the Whitney Foundation and Miss Bogue wrote to the Elmhirsts that she was increasingly worried about reports of Sheldon's mental stability and personal difficulties in his contacts with people (22 March 1938).
 - 48 Stevens was director of the Psycho-Acoustic Laboratory at Harvard.
 - 49 Where he somatotyped pilots to predict their potential for flying success.

- 50 The most famous of these was the Grant Study of Harvard male students, a research project begun in the 1930s to assess the relationship between "masculinity" and success in later life (academic and professional). Earnest Hooton and William Sheldon were involved in the photo-taking rituals and the project was directed by Arlie Bock, head of the Harvard Hygiene Department. Hooton summarized the results in *Young Man, You Are Normal*. For more information about how these ideas were connected to constitutional medicine at that time see Sarah W. Tracy, "George Draper and American Constitutional Medicine, 1916-1946: Reinventing the Sick Man," *Bulletin of the History of Medicine* 66, 1 (1992): 53-89.
- 51 C. W. Dupertuis and J. M. Tanner, "The Pose of the Subject for Photogrammetric Anthropometry, with especial reference to Somatotyping," *American Journal of Physical Anthropology* 8 (1950): 27-47. It was through Dupertuis that Sheldon met Eugene McDermott who would fund a number of his projects.
- 52 Letter to Miss Bogue from Sheldon from the Peabody Museum, Harvard University on 8 March 1939, Dartington Hall Archives. Interestingly, George Draper attempted to follow Sheldon to the Whitney Foundation asking them for a grant for the Constitution Clinic. Letter to Miss Bogue, 27 June 1938. Dartington Hall Archives.
- 53 Gatlin, "William H. Sheldon," p. 184, has examined the Rockefeller Archives in New York which offer a unique window into the thoughts and actions of the Foundation's Board during an especially visible interlude in Sheldon's career leading up to their decision to give him a \$100,000 grant at the University of Oregon Medical School to study what they considered the puzzling relationship of body type or constitution to the incidence of disease.
- 54 Sheldon, *Varieties of Delinquent Youth*, p. 687, 600, 513, 569. Despite the offending sections the book sold very well and was republished in 1970.
- 55 McDermott's support of Sheldon's work was longstanding and continued through his daughter after his death when support was given to Emil Hartl, Edward Donnelly and Roland Elderkin for their 30-year follow-up study of *Physique and Delinquent Behavior: A Thirty Year Follow Up of William H. Sheldon's Varieties of Delinquent Youth* (New York: Academic Press, 1982). See Gatlin, "William H. Sheldon," p. 192.
- 56 The Wenner-Gren Foundation was a major factor in institutionalizing physical anthropology, supporting research projects, conferences, and publications. Donna J. Haraway, "Remodeling the Human Way of Life; Sherwood Washburn and the New Physical Anthropology 1950-1980," in George W. Stocking, ed., *Bones, Bodies, Behavior* (Madison: University of Wisconsin Press, 1988), p. 221-27.
- 57 Barbara Honeyman Heath Roll, "A Woman's Life in Physical Anthropology, Somatotyping, and New Guinea Kinship Studies," an oral history conducted by Sally Smith Hughes, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1994, p. 63.
- 58 Bill McClaughlin lived in Salem, Oregon where his father was a professor at Willamette University.
- 59 She also somatotyped 2000 patients in two mental hospitals, Rockland State Hospital and Worcester State Hospital in Massachusetts, and hundreds of children in the nursery programs at the Gesell Institute in New Haven.
- 60 Heath Roll, Regional Oral History, p. 89. Sheldon, however, was in search of more photographs. In a letter to his brother Israel on 2 November 1948 Sheldon wrote, "It might be a fine idea to run off a project in Austin this winter and I think it would help the *Atlas* on which I am working. What we need principally now though is somatotype photographs of a few thousand more females and I doubt if Texas can quite be led up to that." See James Arraj web site, www.innerexplorations.com/psytex/ltshel.html, for copies of Sheldon's letters to his family.
- 61 Heath Roll, Regional Oral History Office, p. 70-71. McDermott, she said, "was a sweet man, with a master's degree in physics from Columbia, who invented a system for finding oil in Texas. According to his close colleague, Cecil Green, McDermott was a pioneer geophysicist, scientist, engineer, businessman, and

- philanthropist. His special interest was in the behavioural and medical correlations with basic structural taxonomy of human beings which he supported through the years at the Universities of Texas, Oregon, Columbia, and Case Western Reserve. He called it Biological Humanics and William Sheldon was one of his many beneficiaries. www.mssu.edu/seg-vm/bio-eugene-mcdermott.html.
- 62 Heath Roll, Regional Oral History Office, p. 88, 92.
- 63 Heath Roll, Regional Oral History Office, p. 94.
- 64 Gatlin hints at Honeyman's displeasure at a failed love affair with Sheldon while working at Columbia and her many acerbic comments about his other relationships seems to support his suggestion.
- 65 Dean D. W. E. Baird to Alan Gregg at the Rockefeller Foundation, 10 April 1950. The particular opportunity highlighted was the possibility of routine somatotyping of a large unselected group of patients. Gatlin, "William H. Sheldon," p. 196.
- 66 Heath Roll, Regional Oral History Office, p. 68. Honeyman claimed that she was the one to interest the Oregon doctors in Sheldon's work. Dr. Lewis however told Morrison at the Rockefeller Foundation that he might be willing to have her for a month or two to set up the project but he would under no circumstances want her there permanently as she had enemies in Portland and was difficult to get along with. Morrison, Rockefeller Archives, 1951.
- 67 It appears they were not put off by Kansas physician Robert Holt's letter to *The Nation* (November 1950), where, in response to the newly published *Varieties of Delinquent Youth* he suggested that Sheldon's work was a dangerous piece of fascistic pseudo science and that the Rockefeller Foundation was putting its money down a rat hole.
- 68 "It seems that Miss Honeyman...who is so well qualified in the mechanics of the photography...as to make her indispensable to us, cannot work with Dr Griggs," Morrison recalled in a flurry of correspondence. He also mentioned "a chance meeting with Honeyman at a cocktail party where she was quite outspoken about her determination to keep Griggs out of the picture, in part because his wife was a very unstable person." Gatlin, "William H. Sheldon," p. 201.
- 69 Heath Roll, Regional Oral History Office, p. 95
- 70 Heath Roll, Regional Oral History Office, p. 95
- 71 Gatlin, "William H. Sheldon," p. 203-4. Even while this was happening, however, Sheldon was invited to give the R. Tait McKenzie lecture to the American Academy of Physical Education. William H. Sheldon, "Frontiers in Human Physique Studies," *American Academy of Physical Education, Professional Contributions* 2 (1952): 67-75.
- 72 The quarrel related most immediately to the car given by McDermott to Sheldon's projects. Honeyman decided to take it and drive it to New York and move into McDermott's apartment there while pursuing her studies. Annoyed, Sheldon reported it stolen from the Constitution Lab and said he no longer wanted Honeyman to work with him. They never met again. Heath Roll, Regional Oral History Office, p. 107.
- 73 Heath Roll, Regional Oral History Office, p. 133.
- 74 Heath Roll, Regional Oral History Office, p. 136. There were 72,000 photos in her collection. See Barbara Honeyman Heath, "Need for Modification of Somatotype Methodology," *American Journal of Physical Anthropology* 21 (1963), p. 227.
- 75 Heath Roll, Regional Oral History Office, p. 133.
- 76 Rosenbaum, "The Great Ivy League," p. 32.
- 77 While the University of Washington acceded to Sheldon's request, a letter in the Smithsonian archives from a Wellesley Faculty member declined a similar request to somatotype their students.
- 78 Gatlin, "William H. Sheldon," p. 195.
- 79 Jack D. Pressman, "Human Understanding: Psychosomatic Medicine and the Mission of the Rockefeller Foundation," in Lawrence and Weisz, *Greater than the Parts*, p. 204.

- 80 In one (in)famous experiment, the Minnesota Starvation Experiment, somatotypers studied the effects of partial starvation on body build. G. W. Laker, "The Effects of Partial Starvation on Somatotype," *American Journal of Physical Anthropology* 5 (1947): 323-41. This study of course contradicted Sheldon's physique is destiny views by showing how malleable the somatotype could be.
- 81 Jim Arraj, "Jung's Forgotten Bridge," *Journal of Analytical Psychology* 31 (1986):173-80.
- 82 Tracy, "An Evolving Science of Man," p. 174.
- 83 Hersey, *The Evolution of Sexual Allure*, p. 99.
- 84 Griffith, *Born Again Bodies*, p. 140.
- 85 Tracy, "An Evolving Science of Man," p. 178.
- 86 Gatlin, "William H. Sheldon," p. 20.
- 87 David W. Noble, *The Paradox of Progressive Thought* (Minneapolis: University of Minnesota Press, 1958).
- 88 See Mark A Largent, "The Greatest Curse of the Race: Eugenic Sterilization in Oregon, 1909-1983," *Oregon Historical Quarterly* 103, 2 (2002): 188-209.
- 89 Including Harvard, Vassar, Brown, Yale in the 1960s and 70s as the colleges phased out posture photos and body measurements.
- 90 Robert Coughlan, "What Manner of Morph Are you?" *Life Magazine* 30, 26 (25 June 1951), p. 67.
- 91 This last work was finally published in 1982 by Sheldon's former colleagues in Boston, Emil Hartl, Edward Monnelly, and Roland Elderkin, *Physique and Delinquent Behavior*.
- 92 There were 7,000 photos of women and 20,000 of men. Some of them were returned to colleges for destruction and others are not available for research. The National Anthropological Archives lists all the letters and photos in their collection which measures 150 linear feet. www.nmnh.si.edu/naa/guide/_s2.htm.
- 93 Sheldon, quoted in Arraj and Arraj, *The Elusive Human*, chap. 2, p. 10, 22.
- 94 Margaret Mead, *Letters from the Field, 1925-1975* (New York: Perennial, Harper Collins, 1977), p. 346-47.
- 95 Heath Roll, Regional Oral History Office, p. 187.