MARGARET MEAD AND PSYCHOLOGY: THE EDUCATION OF AN ANTHROPOLOGIST

Patricia A. Francis
Independent Researcher

Margaret Mead's brand of anthropology was deeply rooted in the psychological. Mead began her career in psychology, taking a master's degree in that field but switching to anthropology at the urging of Ruth Benedict. Mead's background in psychology equipped her particularly well to embark on her field trip to American Samoa in 1925. While the anthropological training of her day did not emphasize practical aspects of conducting fieldwork, Mead's training in psychology taught her how to conduct case studies, design experiments, and measure results quantitatively and qualitatively. Mead's family background also contributed to her training as a social scientist, particularly through the influence of her mother, sociologist Emily Fogg Mead.

ALTHOUGH SHE IS BEST KNOWN as an anthropologist, Margaret Mead's master's degree was in psychology, and her first two scholarly publications came from her master's research (see Mead [1926], [1927]).[1] Her training in that field—particularly in the techniques of the experimental psychology in vogue in the 1920s—provided a critical base from which she approached her early anthropological field studies. This article will review her training in psychology, examine samples of her course work, and discuss briefly the two earliest intensive applications of her psychological training: her administration of intelligence tests to children in New Jersey in 1923 for her master's thesis on race and intelligence testing; and, her use of various psychological tests as a field work tool in her study of adolescent girls in American Samoa in 1925–26.

Reviewing Mead's background in psychology allows a better understanding of the tools she took with her to the field as an anthropologist, where,

Pacific Studies, Vol. 28, Nos. 3/4—Sept./Dec. 2005

from the beginning, she conducted psychological studies of various sorts. Derek Freeman ([1983] 1984:75) claimed that Mead was too inexperienced to conduct the Samoan research, despite her study with the eminent anthropologist Franz Boas. According to Freeman:

> . . . Mead lacked any systematic training in biology, and was thus by no means scientifically equipped to investigate the subtle and complex interaction, in Samoan behavior, of biological and cultural variables.

This review of her psychological training, however, illustrates that Mead was far better prepared to conduct a systematic study of human behavior than Freeman indicates. As Shankman (this volume) argues, re-evaluating Mead's early work reveals a resourceful and theoretically savvy ethnologist.

In her memoir, *Blackberry Winter*, Mead (1972:140) recalled that anthropology trained her in what to look for in the field but not how to do it. Two major factors outside anthropology supplied the "how": (1) formal education in psychology at Barnard College and Columbia University (including the Teachers College); and, (2) informal training in social science and observation, particularly of children, acquired through her family background.

Mead (1972:122; 1974:295) recalled in her later years that her formal connection to psychology ended when she completed her master's degree in 1924. By this time, she had, with the encouragement of Ruth Benedict, made the decision to move to anthropology. "But," she wrote, "I left psychology to live, in many ways, always within its precincts, working with psychologists and concerning myself with psychological problems" (Mead 1974:295). Throughout her career, Mead worked with psychologists, psychoanalysts, psychiatrists, social workers, and educators, selecting from other thinkers and fields the techniques and ideas that interested her. Writing to her former sociology professor, William Fielding Ogburn, in 1927, Mead reflected on her career choice:

> All th[e] others have a bug, and get an emotional kick out of Anthropological material. . . . But anthropology doesn't do that for me. It's just something to think with. I'd be as happy in psychology or any other social sciences, or anything that was good to think with (letter from Mead to Ogburn, 27 April 1927, LOC: MMP, Box Q11, file 20).

In their article, "Margaret Mead and Paradigm Shifts Within Anthropology During the 1920s," Stephen Murray and Regna Darnell (2000) discuss the historical context for Mead's early anthropological work, illustrating the

extent to which Mead was affected in her intellectual development and disciplinary orientation by people other than Franz Boas and the so-called "Boasians." They cite such significant influences as the sociologists Ogburn and W. I. Thomas, as well as ethnologist E. S. C. Handy.

In Mead's master's thesis, "Intelligence Tests of Italian and American Children," she thanked her professors Franz Boas, Robert Sessions Woodworth, Harry Levi Hollingworth, and Georgina Stickland Gates, in addition to her mother, sociologist Emily Fogg Mead (Mead 1924:2-3).[2] Of these, her mother's influence on Mead's work was perhaps the most subtle and pervasive. Mead had begun studying anthropology with Boas in the winter term of 1922; he suggested the topic for her master's thesis, which drew on her mother's work on immigrant acculturation (Mead 1972:122). Woodworth, Hollingworth, and Gates all taught Mead psychology at either Barnard or Columbia in the early 1920s. In that period, psychology was "king of the social sciences, the most developed and the most relevant to contemporary social concerns" (Rosenberg 1982:216). Woodworth exerted a profound influence on Mead's later work, though she apparently only took one class with him. An early conversation with Woodworth raised a crucial question of childhood development and acculturation for Mead, which ". . . set my feet on a path from which they have never strayed: 'When does an Indian become an Indian?'" (Mead 1974:311). Hollingworth, who had founded the Barnard psychology department, a major force at that time, was on Mead's Ph.D. committee (Barnard College Psychology Department 1995; Mead 1974:311). When Mead came to psychology in 1921, Gates (then Stickland), only six years her senior, had just completed a dissertation on psychological testing (Gates [1920] 1922), an area of lasting interest to Mead and critical to her career in anthropology.

Finding the "How"

The Classroom

"There was no formal field work training" at the time Mead (Mead 1978:93) entered the field of anthropology. Students were told what to look for in the field but not how to do fieldwork. "There was, in fact, no *how* in our education," she wrote in *Blackberry Winter* (Mead 1972:140). Boas's field methods class was not about being in the field but rather, "about theory–how material could be organized to support or to call in question some theoretical point" (Mead 1972:137). In this class, Boas "used ethnographic materials to discuss and criticize the principal anthropological theories of the day" (Mead 1978:93).

Despite the lack of formal field training, Mead did acquire some practical skills from her anthropological education, such as techniques for categorizing use of natural resources or forms of social organization, and experience in analyzing other field workers' observations (Mead 1972:142). Most of her formal training in how to approach a concrete problem, however, came from psychology, where she had learned, as she phrased it in another context, "to use a stopwatch and to write protocols" (Mead 1972:143). This training helped her to develop and administer tests in the field and to record and interpret information on human behavior systematically.

A review of Mead's academic transcripts indicates that her psychology training consisted of seventeen courses at Barnard, Columbia, and the Teachers College: thirteen psychology classes, two sociology classes (dealing with psychological aspects of culture), and two classes at the Teachers College (dealing with educational psychology). Twelve of these classes were taught in all or in part by Harry Hollingworth or Georgina Stickland Gates.[3] Archival materials related to these courses include such things as papers and lab reports written by Mead, her class notes, her notes on readings, psychological testing materials, and course handouts.[4] For the most part, these classes focused on the experimental aspects of psychology and on mental measurements, though some classes were more philosophically and theoretically oriented. While there was a heavy emphasis on quantitative methods, Mead was also trained in the case study approach.

Some of her class assignments involved using instruments to take physical measurements, and Mead made reference to some of the devices in her notes, including diagrams of the equipment (e.g., reports for Psychology e111 [LOC: MMP, Box I1, file 5] and reports for Psychology 17-18 [LOC: MMP, Box A15, file 2]). In her laboratory report of 9 December 1923 on Physical Measurements for Psychology e111 (Psychological Tests, Methods, and Results), Mead recorded and analyzed data from tests measuring height, weight, and head size. Reviewing the literature on such anthropomorphic tests, she discussed the correlation of physical measurements with intelligence and their role in determining the influence of environment on race. Mead concluded:

> It is in studies which are primarily of an Anthropological or biological natur[e] that psychologists are interested, at least until far more conclusive work in correlating intelligence and physical measur[e]ments have [*sic*] been accomplished (LOC: MMP, Box I1, file 5).

Beyond the quantitative skills required by her psychology classes, Mead also learned qualitative techniques for assessing human behavior. Some of

Mead's laboratory reports included her proposals for future experiments. Two specific experiments from Mead's Psychology 17–18 classes illustrate how Mead's class work in psychology may be seen as foreshadowing her later anthropological work.

Two Experiments

In her later years, Mead (1974:313) described "the very simple experiments in the recognition of emotion in photographs" to which she was exposed as a student as "preparation for the use of photography, still and film, as a research tool." As part of experiment 17, which was designed to measure people's ability to recognize expressions of mood or emotions in photographs, she proposed her own experiment to measure emotion recognition in children (6 December 1921, LOC: MMP, Box A15, file 1). Mead observed that in her experience of children they "recognize emotions at about six months old. Anger, fear, and excessive hilarity affect them first. Haughtiness only make[s] them laugh." In order to find "at what age children [r]ecognize different emotions" and "whether they recognize them quicker on strange or familiar faces," Mead proposed using "thirty children, ten one year old, ten three years old, and ten five years old. Let them be of the sam[e] nationality and as similar environment as possible." Selected emotions, such as fear and anger, are to be presented by "the child's mother...an occasional visitor in the child's home...[and] a total stranger" and then observations made of "the difference in the response of the different ages [and]...the correlation between the responses made to the individuals of different degrees of familiarity" (LOC: MMP, Box A15, file 1).

Mead, not quite twenty years old, seems to have recognized cultural background as a variable affecting her results. She also realized the importance of using children of different ages in order to get comparative results. When Mead took Harry Hollingworth's developmental psychology class (Psychology 19) the next year, her notes indicate that she was taught the necessity of taking a series of longitudinal cross-sections to account for the complexity of human development (notes from 29 September 1922; LOC: MMP, Box A15, file 3). In her 1925–26 Samoan study, she developed her own cross-sectional approach, looking at girls older and younger than her target group in order "to give a dynamic picture of how human beings develop" (Mead 1972:154).

As evidenced by experiment number 17, Mead's interest in individual development and its connection to the cultural stylization of temperament began early in her academic career. In addition, one may see her practical knowledge of children (e. g., they learn to recognize emotions at about the age of six months) coming into play as well.

Another of her proposed original experiments from Psychology 17-18, included as part of experiment number 34 (dated 14 March 1922), dealt with the influence a person's background has on results of a word association test (LOC: MMP, Box A15, file 1).[5] In experiment 34, Mead offered the hypothetical case of an arrested man suspected of Bolshevism or other radicalism and suggested word associations–including "bread," "wage," and "picket"–which might reveal his political bias.

This proposed experiment seems to be based on Mead's own experience with the Kent-Rosanoff word association test. Mead recalled late in her life that when she tested "definitely insane" on the Kent-Rosanoff test, she was intrigued by the fact that the test did not account for a literary orientation (Mead 1974:310). Experiment number 34 appears to be a record of that episode. Results on the Kent-Rosanoff test were evaluated by how one's responses fit with so-called "normal" responses from 1,000 people, as standardized in the Kent-Rosanoff frequency tables, with someone who gave different answers from that norm being classified as insane or otherwise deviant (Kent and Rosanoff 1910). The test, however, "had been standardized on the general population" (Mead 1974:310), a weakness Mead addressed in her comments in experiment number 34.

Students themselves took the tests they were studying in these classes and also administered the tests to their partners and classmates. In experiment number 34, Mead used her own answers to show how religious, literary, and sociological influences could affect someone's responses on a word association test (14 March 1922; LOC: MMP, Box A15, file 1). She indicated that her own responses to stimulus words could be traced to her particular background in specific areas. For instance, her response to the stimulus word "salt" was "earth" (religious training); to "dream"–"stuff" (literary background); and to "woman"–"suffrage" (sociological background).[6] Mead argued that certain technical and cultural training may affect someone's word associations and "remove them [from] the median of community—and yet not convict them of being pathological" (LOC: MMP, Box A15, file 1).[7] This experiment deepened Mead's interest in psychological testing, spurring her to take the Advanced Experimental Problems course (Psychology 24), a special methods class in testing, in the spring of her senior year (Mead 1974:310).[8] This interest in psychological testing persisted throughout her career.

The experiment also demonstrated Mead's willingness to use herself as a subject in her own studies. Her findings in the experiment seem as well to have informed the way she approached her master's thesis, which dealt with the extent to which the language children hear spoken at home affects their scores on intelligence tests (Mead 1924). In an outline of her early the-

sis findings titled "Italian and American Children Compared Using the Otis Group Test," she concluded:

> Only by holding constant the factors of language, social status and education can even an approximation of a quantitative expression of racial differences be arrived at. And were this possible the results would still be vitiated by the influence of habits of thought, etc. which is impossible to evaluate quantitatively (LOC: MMP, Box I1, file 3).

Case Studies

For Education 455, a clinical psychology class for educators, Mead proposed a study which points to another component of her field researches that had its roots in her early training: case studies. Her notes for this class are filled with information on case studies and questions about the best way to manage students with particular problems and backgrounds. Several of her class assignments entail analyses of such case studies. One undated page in Mead's notes, headed "Projected studies," offered this idea for a case study:

> Two sisters, children of a college professor. A complete family history and also a great deal of reliable developmental data is available for these two children.
> a. Aged fourteen. Will include the record of the child's vocabulary for the first three years.
> b. Aged twelve. Will include special emphasi[s] on social difficulties of a precocious child who has mingled very little with other children (LOC: MMP, Box A15, file 4).

Mead took this class in the winter term of 1923. These two children are undoubtedly Mead's younger sisters: Elizabeth (born 1909), whose early vocabulary was recorded by Mead, and the bright but troubled youngest child, Priscilla (born 1911).

Two factors are of special significance here. In *Blackberry Winter*, Mead remembered having spent time one summer as a child poring over case reports while visiting her Aunt Fanny, who worked at Hull House in Chicago. "This had given me an idea of what the social context of individual behavior was—how one had to look at the household and place the household in the setting of the community" (Mead 1972:139). Education 455 gave her more formal training: how to look at such things as school record, home situation, recreation, interests, and conduct in order to determine how best to

approach a particular youth (e.g., the case of Augustino, 7 December 1923, Ed 455; LOC: MMP, Box A15, file 4). Mead was thus trained to look at environmental factors, among others, when considering the psychology of an individual, before she came to study children outside the United States. A second notable feature of the Education 455 proposal, as in experiment 34, was Mead's willingness to use herself, her family, and her friends as the source of data.

As the eldest child in a peripatetic household of social scientists and educators, Mead learned early to observe the world around her and to record detailed information rapidly. These skills, sharpened by her formal training, were invaluable in her subsequent fieldwork. When Mead was a child, her mother and paternal grandmother had observed her development and recorded her early behavior in notebooks (e.g., Emily Fogg Mead's "Notes on Baby (Psychology)"; LOC: MMP, Box Q3, file 4). Mead, in turn, was encouraged to observe her younger sisters. As a child of about nine or ten, for instance, she documented her sister Elizabeth's language development (LOC: MMP, Box Q7, file 5). The kind of observation she experienced, Mead felt, was "an act of love. . . . As a result, I have never felt that to observe others was other than a friendly act, one that enhanced rather than diminished their uniqueness and identity" (Mead 1974:298).

Mead "found very early that it was necessary to write things down, lists of dates and names, and sequences of events" (Mead 1974:297). She also learned about observing and recording human behavior from accompanying her sociologist mother on visits to gather information about Italian immigrants who lived near them in New Jersey. As a graduate student in psychology, Mead conducted her own study on the same community, with the assistance of her mother.

Field Studies

New Jersey

"Racial measurement is not yet a science, it has hardly advanced to the stage of a well conducted experiment," wrote Mead in "Measurement of Racial Characteristics," a paper prepared for Georgina Gates in Psychology 21, dated 20 January 1923 (Mead 1923:41; LOC: MMP, Box I1, file 3). This paper, a prelude to her master's thesis on race and intelligence testing, reviews the literature on racial testing. Portions of this essay appear nearly verbatim in Mead's master's thesis. In "The Measurement of Racial Characteristics," Mead indicated an awareness of the limitations of administering tests designed for Americans to people outside the United States (cf. Mead

1923:31). Mead justified the need for a literature review of racial testing, in part because of the paucity of scientific studies of racial characteristics and differences. She wrote:

> On this account a review of the little which has been done is useful, not in pointing to general conclusions or indexing data from which reliable theories may be built up, but rather in emphasizing with statistical relentlessness the absence of evidence on which to base any theory whatsoever (Mead 1923:1).

Mead stressed the variety of tests used to conduct studies, some used only "once or twice," and the incommensurability of their results. She concluded:

> It will not be until many experimenters, using the same test, have tested much larger groups that we can make any scientific generalization concerning racial differences in mental ability (Mead 1923:41).

The proposal for Mead's master's project and the actual testing were done as part of her Advanced Experimental Problems class, Psychology 24, with Georgina Gates in the spring of 1923. In her master's thesis, "Intelligence Tests of Italian and American Children," Mead compared the results of intelligence tests taken by children of Italian-born parents (or in Italian-speaking households) with those taken by children with American-born, English-speaking parents. She considered the language spoken at home by the parents, the social status of the parents, and the number of years the parents had been in the United States and concluded that these three factors—particularly language—affected the scores the Italian children made on the intelligence test. She argued that the lower scores attained by the Italian children would put them at a clear disadvantage in these public schools "if grading or promotion were to be governed by test results" (Mead 1924:59; LOC: MMP, Box I1, file 4). The thesis is a statistics-laden work, with numerous charts and graphs correlating various factors Mead considered in her study. The matter of social status was calculated, based on Emily Fogg Mead's work, and accounted for such factors as home ownership and whether the family owned a Victrola or subscribed to a newspaper.

Mead drew on the results of four different intelligence tests in working on her master's thesis: the Otis Advanced Group Examination, Forms A and B; the Stanford Revision of the Binet Scale; and the New Jersey Composite Test. The New Jersey test, which included both intelligence and achievement

portions, was administered by teachers to 130 Italian-American fifth-graders. Mead considered these results separately in her thesis from the results of the tests she had administered herself. Mead administered the other tests in April, May, and August of 1923. All of the students in grades six through ten in the Hammonton Public Schools took the Otis tests. She made her final comparisons, based on test results of 276 Italian-American children and 160 American children, who had been given Otis Form A (Mead [1924:45]; LOC: MMP, Box I1, file 4; Mead [1927:465]). The Stanford-Binet was given to forty-three Italian-American children chosen at random from the larger group (Mead [1924:44]; LOC: MMP, Box I1, file 4; Mead [1927:465]). Mead was familiar with both the Otis and Binet tests through her coursework, particularly in Psychology 21 and 24. As Mead analyzed the test results in the summer of 1923, she sought advice not only from Professor Gates, but also from the author of the Otis test, Arthur S. Otis.[9]

Mead was thus well prepared to conduct her study of children and adolescents when she went to Samoa, due both to her early socialization and to her formal training in academic psychology. The New Jersey study may be seen as a bridge from Mead's study of psychology to her career in anthropology. She had learned in doing her master's thesis that culture was a factor in intelligence tests. While she had a substantial background in using psychological testing materials, including both individual and group intelligence tests, she needed to adapt these materials to working in cultures outside the United States.

American Samoa

In Appendix V to *Coming of Age in Samoa,* Mead ([1928] 1961:289–290) wrote of the intelligence testing she did on this first field trip:

> It was impossible to standardise any intelligence tests and consequently my results are quantitatively valueless. But as I had had some experience in the diagnostic use of tests I found them useful in forming a preliminary estimate of the girls' intelligence.

Despite their limitations, then, she felt that the tests could still serve a purpose.

Mead (1972:125) later recalled that she "had been exposed to a type of psychology in which the practitioners were emulating the 'scientific' standards of physics, so that measurement was important." Consequently, she had considered taking what was then a state-of-the-art galvanometer with her on the Samoan trip. She decided against taking the instrument—designed to

measure emotional reactions through galvanic skin response—because of its imprecision.

Mead, however, took intellectual equipment with her to Samoa: knowledge of how to design and administer psychological tests to children and adolescents and how to make sense of the results. Her training in psychology had given her "ideas about the use of samples, tests, and systematic inventories of behavior" (Mead 1972:139). In Samoa, Mead administered types of tests with which she was familiar from her psychology classes and readings: a color-naming test, rote memory for digits, digit symbol substitution, opposites, picture interpretation, and the ball and field test (Mead [1928] 1961:290–291; cf., LOC: MMP, Box A15, files 1 and 2 and Box I1, file 5). She administered many of the same tests to her sample of sixty-eight Samoan girls as to the American and Italian-American children, yet they were adapted to the special circumstances, including but not limited to language factors. Mead developed her own tests for the Samoan study based on what she had learned in psychology. She painted a hundred different colored squares for the color naming test, for instance, and using three pictures someone had sent her from an *Asia* magazine article on the film, *Moana of the South Seas,* for the picture naming test (Mead [1928] 1961:290–291; Mead 1972: 154).[10] The Terman testing materials in her notes have cards with scenes on them that are for a similar picture interpretation test. She created her own opposites test—similar to that in the Otis Group Intelligence Test—in Samoa as well (Mead 1974:312). And she administered the Binet ball-and-field test.

Mead ([1928] 1961:291–292) found her test results illustrative of Samoan culture in a number of ways. She deemed the results of the ball and field test "the least satisfactory" in that many of the subjects were more concerned with aesthetic considerations—for instance, the design they drew—than with solving the problem as it was set out for them (Mead [1928] 1961:291). Moreover, in a culture that did not stress rote memorization, few Samoan girls had good rote memory for digits (Mead [1928] 1961:291). On the other hand, Mead found that "the opposites test was the one which they did most easily, a natural consequence of a vivid interest in words. . ." (Mead [1928] 1961:292). The Samoan emphasis on elaborate formal speech patterns was further reflected in the picture identification test, as "almost all of the children adopted some highly stylized form of comment and then pursued it through one balanced sentence after another. . . ." Mead considered the results of this test "the most subject to vitiation through a cultural factor" (Mead [1928] 1961:291).

Given the short duration of her fieldwork, Mead knew from her training in psychology to use a cross-sectional approach to her subject, studying not just adolescents, but those just younger and just older as well. She also compiled case studies of her Samoan subjects, much as she had, with the assistance of

her mother, gathered family information for the subjects of her master's thesis. Checklists of types of information obtained on the Samoan girls, their cultural achievements, and their families are reminiscent of Mead's cataloguing of qualities determining social status used in Mead's master's thesis (cf. Mead 1924, [1928] 1961:292–294; Mead 1924 [LOC: MMP, Box I1, files 4 and 5]).

Mead gave test directions in Samoan. For the tests that required the careful following of instructions, such as the ball and field test, the Knox Cube, color naming, digit memory, opposites, and design memory, she apparently had someone translate her English instructions into Samoan.[11] These were all tests used to measure intelligence in the United States at this time. With the exception of the Knox Cube, they were all part of the Stanford-Binet test, an intelligence test she had given to some of her Italian subjects. It is not clear from Mead's record sheets if she actually used in Samoa the Knox Cube, which measures memory for a physical task. Directions for the test were translated into Samoan, and her record sheets have a space for the results, but she did not include the Knox Cube in the list of tests she published in the appendices to *Coming of Age in Samoa* (LOC: MMP, Box TR3; Mead [1928] 1961:290–291).

In addition to these measures of intelligence, Mead kept records of achievement for her Samoan subjects, recording their levels of experience with tasks related to such things as food preparation and knowledge of courtesy language (Mead [1928] 1961:292–294; LOC: MMP, Box TR3). She also asked her informants questions designed to elicit moral judgments. In a 1933 article on field methods, she recalled:

> In Samoa[,] where moral attitudes were inexplicit, I had to resort to the device of getting every girl to name a series of individuals—the best man, the wisest woman, the worst boy, the best girl, etc. in the village. Only by collecting a large number of such judgments could the implicit moral standards of the children be discovered (Mead 1933:13).

With this approach, Mead (1933:13) utilized her ". . . own particular methods, devised to meet definite situations, many of them suitable for only one culture." Her training in psychology helped prepare her to devise and implement these methods in the field.

Conclusion

Margaret Mead and Derek Freeman exchanged correspondence as he worked on his reassessment of her work in the 1960s and 1970s (see also Côté [this volume]). In a letter dated 6 November 1968, Mead responded

to two previous letters from Freeman in which he questioned, among other things, seeming anomalies in the appendices to *Coming of Age in Samoa*. In her answer, Mead wrote:

> The material in *Coming of Age in Samoa* is disguised in a variety of ways. My concern was to protect the identity of my subjects in every possible respect. Lowell Holmes wrote me, when he was working in Tau[,] that he had not been able to identify my informants. This was my intention. The book was done within the framework of psychological and social work research where protection of subjects was already an issue in the 1920s. It did not become an issue in anthropology until two decades later (LOC: MMP, Box I2, file 1).[12]

The subtitle of *Coming of Age in Samoa* is *"A Psychological Study of Primitive Youth for Western Civilization,"* and review of archival materials reaffirms just how truly this was a "psychological" study. Mead's grounding in psychology, including the educational psychology she studied at the Teachers College, was inextricably bound up with her approach to anthropological fieldwork, as she devised and executed her own methods. This psychological training furnished Mead with knowledge and tools she used in various ways to study human behavior in different cultures; it taught her the "how" in a way the formal anthropological training of her day did not. Her educational background in psychology guided Mead as she conceptualized and conducted anthropological field studies, affecting issues such as the means by which she elicited and analyzed data from her informants and the ways in which she considered and safeguarded their privacy.

Margaret Mead's career as an anthropologist was firmly grounded in her life experience and in her education as a psychologist. Looking back near the end of that career, she wrote: "My early exposure to academic psychology provided a background for the continuing resort to psychological methods and psychological findings, and the later invitations from psychologists evoked responses that would not otherwise have been made" (Mead 1974:295).

Mead continued the use of psychological testing in the field after Samoa. She added new tests and means of psychological testing in subsequent field trips—such as having children draw pictures—beginning with her Admiralty Islands trip in 1928-29. Subsequently, she also collected art from children on her field trips among the Arapesh, Mundugumor, Balinese, and Iatmul people, and on further trips to Manus. She also, herself or through proxies, collected art from American children (Francis n.d.). Mead acknowledged the influence of Goodenough's 1926 "Draw-a-Man" test (Mead 1974:312; 1978:92) in making her own collection of drawings in the field.

Sometimes she applied other people's psychological tests in the field to get them cross-cultural data, as when she administered Theodora Abel's Limited Free Design Test in Bali (LOC: MMP, Box N23, file 5; for a listing of psychological tests Mead found useful cross-culturally, see Mead [1978:91–93]).

Perhaps the most ambitious of Mead's psychological testing schemes was related to the theory of the squares she developed from her own experiences, along with Reo Fortune and Gregory Bateson, in New Guinea in 1931-33 (Mead 1972:216–220; Banner 2003, chapter 11; Sullivan 2004). She had found the available tests for measuring temperament, including the Downey Will-Temperament Test, inadequate when she conducted classroom experiments using these materials in the early 1920s (Experiment number 4, Psychology 21, 8 December 1922 [LOC: MMP, Box A15, file 2]). Mead's squares test, first developed in the 1930s, was her own attempt to systematize the study and analysis of temperament (e.g., LOC: MMP, Box Q35, file 11 and Box S11, files 7 and 8). The theory was never published formally.

Psychological testing remained a prominent feature of Mead's anthropological work throughout her career. Mead continued as well to work with others interested in psychology. She returned, for instance, year after year to the Menninger Foundation in Topeka, Kansas, and to the Department of Psychiatry at the University of Cincinnati Medical School to consult and collaborate with the practitioners there. She was particularly interested in working with those interested in children's thought. Archival materials belonging to three of those individuals (Margaret Lowenfeld, Martha Wolfenstein, and Edith Cobb) can be found in the Papers of Colleagues series in the Mead Papers at the Library of Congress (LOC: MMP, Series O).

NOTES

This article began as a paper presented at the Association for Social Anthropology in Oceania (ASAO) Meetings in Miami, Florida, 16 February 2001. It draws both on that work, titled "'Something to Think With': Mead, Psychology, and the Road to Samoa," and on the paper, "Developing Methods: Margaret Mead's Use of Psychological Tests in New Jersey and American Samoa in the 1920s," presented 22 March 2002 at the Library of Congress symposium, *Archival Gold: Treasures from the Margaret Mead Collection*.

I would like to acknowledge my gratitude to Gerald Sullivan, Jessica Johnston, and Lois Banner for comments on previous versions of this article, and to Sharon W. Tiffany for her guidance in preparing the article. Many thanks to the staff of the Manuscript Reading Room at the Library of Congress for their assistance. I am especially indebted to the late Mary Wolfskill, whose support was invaluable. For their helpfulness in providing me with old course information, I would like to thank Donald Glassman, Barnard College archivist; Stephen Urgola, Assistant Director, University Archives and Columbiana Library, Columbia University; and, David Ment, Head, Special Collections, and Bette Weneck, Manuscript Curator, Special Collections, The Milbank Memorial Library, Columbia University

Teachers College. Finally, I am very grateful to Mary Catherine Bateson for her interest in and support of this project. Quotations from the Mead papers are courtesy of the Institute for Intercultural Studies.

Mead's papers at the Library of Congress (LOC: MMP) are cited throughout this article with a prefix designating the series, followed by the box and file numbers. The file number is used to give an approximate idea of location within a container and may not always be reliable.

1. These were Mead's third and fourth publications. She had published two poems in 1925 (see Gordan 1976:67). In addition to her own research, in 1923 Mead worked with Melville J. Herskovits in his effort to validate the Downey Will-Temperament Test (Herskovits 1924). In the resulting article, Herskovits expressed his gratitude to Mead "for assistance in giving the test to group I, and for arranging the meeting of group III" (Herskovits 1924:75). Group III appears, from the description Herskovits (1924:82) gives of the participants, to be Mead and her apartment-mates, the so-called "Ash Can Cats." For a brief discussion of the significance of this project, see Mead (1978:94).

2. The version of the thesis referred to here is a close-to-final draft dated May 1924, which is available in Mead's papers at the Library of Congress, along with a letter detailing corrections to be made for the final version (LOC: MMP, Box I1, file 4). I am using the term "thesis" here, though Mead herself referred to the document as a master's essay.

3. Some of these classes were actually two-semester courses numbered sequentially (e.g., Psychology 17-18). They appear as discrete classes on the undergraduate transcript; the graduate transcript lists the two-part classes together (LOC: MMP, Box Q14, file 8). I have counted the classes separately.

4. Grading schemes differed for various classes, especially between undergraduate and graduate courses. Transcripts in her papers indicate that she got "A's" in ten of these classes and a "B" in one (Psychology A, her first Psychology class). In five others she received a "P" for passing, and for one course (Education 458A), which she appears not to have taken for credit, she received no grade (LOC: MMP, Box Q14, file 8 and Box A15, file 2).

5. There are two experiments numbered 34; the other seems to have been intended as number 33. There appears to be no record of an experiment number 33.

6. These stimulus words are all used in the Kent-Rosanoff test, but it is not clear from the laboratory report if that test was the only one utilized in Experiment 34.

7. The term "median of community" appears to be one used in the psychology class rather than in the Kent-Rosanoff test itself. See Kent and Rosanoff (1910) for further discussion of the Kent-Rosanoff test and tables.

8. She refers to the testing class as "special methods." It seems more likely that by this she is referring to the Advanced Problems class (Psychology 24), rather than to the Mental Measurement class (Psychology 21).

9. LOC: MMP, Box I1, file 4: Georgina S. Gates to Margaret Mead, letter dated 30 July 1923; LOC: MMP, Box I1, file 2: Arthur S. Otis to Margaret Mead, letters dated 19 July and 30 July 1923, regarding Mead's letters to Otis of 17 July and 25 July 1923.

10. Mead identified the specific publication in a letter to Beryl Epstein, dated 20 October 1977, which also refers to creating tests from the Asia magazine photographs (LOC: MMP, Box I308, file 6; see also Tiffany [this volume]).

11. Evidence in Mead's notes points to someone other than Mead as the translator. While some instructions are typed in both English and Samoan, handwritten Samoan directions are not in Mead's handwriting (LOC: MMP, Box TR3).

12. This is Mead's spelling of Ta'u. Mead's letter of 6 November 1968 may be viewed on the Library of Congress Web site [online]. <http://www.loc.gov/exhibits/mead/images/mm0064p1s.jpg>, retrieved 14 May 2004.

REFERENCES

Banner, Lois W.
2003 *Intertwined Lives: Margaret Mead, Ruth Benedict and Their Circle.* New York: Alfred A. Knopf.

Barnard College Psychology Department
1995 Barnard College Psychology Department. History of Psychology Collection. Thomas Perera, Museum Curator, and Larry Heuer, Psychology Department chair. Electronic Documents [online]. <http://www.barnard.columbia.edu/psych/museum/b_museum.html>, retrieved 13 April 2004.

Francis, Patricia A.
n.d. Margaret Mead as a Collector of Children's Art. Unpublished manuscript.

Freeman, Derek
1983 *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth.* Cambridge: Harvard University Press. Reprint edition, 1984, Harmondsworth, Middlesex, England: Penguin Books Ltd., Pelican Books.

Gates, Georgina Stickland
1920 *Individual Differences as Affected by Practice.* Ph.D. dissertation. Department of Psychology, Columbia University. Reprint edition, 1922, *Archives of Psychology*, no. 58, 1922, ed. R.S. Woodworth.

Gordan, Joan, ed.
1976 *Margaret Mead: The Complete Bibliography.* The Hague: Mouton.

Herskovits, Melville J.
1924 A Test of the Downey Will-Temperament Test. *Journal of Applied Psychology* 8(1):75–88.

Kent, Grace Helen, and A. J. Rosanoff
1910 A Study of Association in Insanity, Parts 1 and 2. *American Journal of Insanity* 67 (1-2):37–96, 317–390.

LOC: MMP

var. The Margaret Mead Papers and South Pacific Ethnographic Archives. Manuscript Division, Library of Congress. Washington, D.C.

Mead, Margaret

1923 Measurement of Racial Characteristics. Paper submitted for Psychology 21, Barnard College, January 20. LOC: MMP, Box I1:3.

1924 Intelligence Tests of Italian and American children. Master's thesis. Department of Psychology, Columbia University. LOC: MMP, Box I1:4 (draft version).

1926 The Methodology of Racial Testing: Its Significance for Sociology. *American Journal of Sociology* 31(5):657–667.

1927 Group Intelligence Tests and Linguistic Disability among Italian Children. *School and Society* 25, no. 642 (April 16):465–468.

1928 *Coming of Age in Samoa: A Psychological Study of Primitive Youth for Western Civilization*. New York: William Morrow. Reprint edition, 1961, New York: Morrow Quill Paperbacks, William Morrow.

1933 More Comprehensive Field Methods. *American Anthropologist* 35(1):1–15.

1972 *Blackberry Winter: My Earlier Years*. New York: William Morrow.

1974 Margaret Mead. In *A History of Psychology in Autobiography*, vol. 6, ed. Gardner Lindzey, 293–326. New York: Prentice-Hall.

1978 The Evocation of Psychologically Relevant Responses in Ethnological Field Work. In *The Making of Psychological Anthropology*, ed. George Spindler, 87–139. Berkeley and Los Angeles: University of California Press.

Murray, Stephen O., and Regna Darnell

2000 Margaret Mead and Paradigm Shifts Within Anthropology During the 1920s. *Journal of Youth and Adolescence* 29(5):557–573.

Rosenberg, Rosalind

1982 *Beyond Separate Spheres: Intellectual Roots of Modern Feminism*. New Haven: Yale University Press.

Sullivan, Gerald

2004 A Four-Fold Humanity: Margaret Mead and Psychological Types. *Journal of the History of the Behavioral Sciences* 40(2):183–206.