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X-RAYS OF INNER WORLDS: THE MID-TWENTIETH-CENTURY AMERICAN PROJECTIVE TEST MOVEMENT

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This essay begins to tell the neglected history of the projective test movement in the U.S. behavioral sciences from approximately 1941 to 1968. This cross-disciplinary enterprise attempted to use projective techniques as "X-ray" machines to see into the psyches of subjects tested around the world. The aim was to gather subjective materials en masse, pursuing data on a scope, scale, and manner rarely hazarded before in any science. In particular, the targeted data included the traces of the inner life and elusive aspects of subjective experience including dreams, life stories, and myriad test results from a battery of tests. This essay explores how the movement and the experimental data bank that resulted were unlikely yet telling sites for the practice and pursuit of the Cold War human sciences. To look closely at the encounters that resulted is to show how the most out-of-the-way places and seemingly insignificant moments played a role in heady scientific ambitions and global geopolitical projects. At times, the projective test movement became a mirror of Cold War rationality itself, as tests were employed at the very limits of their possible extension. The essay argues for an off-kilter centrality in the movement itself, shedding light on the would-be unified social sciences after World War II and the "subjective turn" they took. © 2011 Wiley Periodicals, Inc.

It is becoming unprecedentedly difficult for anyone, anyone at all, to keep a secret.

—William Gibson, *New York Times*, June 25, 2003

As fall gave way to winter in 1947 on the island of Ifaluk in the far southwestern Pacific, an anthropologist studied a man who was drawing attention to himself by exhibiting strange behavior. The man, whose name was Tarev—short for Tariveliman—was intent on raising a large wooden pole to the sky and circling it. As he went round the pole his movements took on a wild ecstasy unlike the usual stylized manner of dance favored on Ifaluk. Formerly a hardworking fisherman who lived with his wife and son, Tarev had of late given up his occupational pursuits and forsaken his social role in favor of odd projects such as this mad cavorting. The anthropologist Melford E. Spiro, a specialist in the psychological aspects of culture, took the opportunity during these events to question Tarev, who, relaxing for a moment, replied that he was performing an "American dance." Why was he dancing? Because the white man, said Tarev, "has something in his clothes." Whatever it was, Tarev wanted a part of it. He continued his dance, despite the fact that he was dancing at an atypical time and in an odd way, so that others on the island attempted to hide him from view. Neighbors had begun to call him "fool fella," and worried he would embarrass them in front of the two anthropological observers, Spiro and his tent-mate, the symbolic anthropologist Edwin Burrows, who were residing on Ifaluk's main beach. As Tarev became more violent, villagers, ordered by the highest chief, tied him down with ropes. It appeared that only the presence of Spiro, the anthropologist, could calm him.

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It was then some two years into the United States's occupation and subsequent trusteeship of Micronesia, a territory that included the Marshall, Mariana, and Caroline island chains. "Nothing but sandpits," Dwight D. Eisenhower once remarked, assessing their apparent value. What they were, in fact, was a collection of tiny outposts of land in a vast stretch of ocean, spread out over some 3 million square miles ("Micronesia" refers to the small size of the 2,000 islands that comprise it). Within this constellation, Ifaluk formed, even for Micronesia, a remote outpost. Successive waves of colonial dominion began with the Spanish and continued with German and Japanese rule. Since 1919, the Japanese empire had subjected their "mandates" to intensive colonization in some parts (e.g., Saipan and Palau), where boom towns sprang up, phosphorus and bauxite mines produced for export, and Geisha girls performed. Ifaluk, much quieter, had been affected mainly in seeing its young men occasionally conscripted for month-long labor stints in mines on neighboring islands. (Tarev, in fact, had worked such a mine before the onset of his madness.) When the Second World War's Pacific front opened up, Ifaluk was likewise spared. No battles were fought there. In this it differed again from other areas of the territory, which became sites of fierce fighting and legendary devastation.[1] In August 1945, the post-Hiroshima Imperial Navy at last surrendered the entire territory, although some Japanese troops, holed up in remote caves, refused to believe the war was over and, on at least one Micronesian island, resistance continued an additional three months. In May 1946, Bikini Island, in the middle of Micronesia, became the site of the first two postwar nuclear bomb explosions, the above-land "Able" and the below-the-water "Baker" shots, with a cascade of atomic- and hydrogen-bomb tests to follow in years to come, when Micronesia earned the nickname "Nuclear Pacific." And in June 1947 a large team of experts in human relations—ethnographers, linguists, personality experts, geographers, physiognomists, demographers, and a pair of documentary filmmakers—arrived en masse, following the general paths of both armed forces and nuclear-test teams, to conduct intensive scientific investigations in the United Nations–mandated Trust Territory the islands now constituted.[2] As this capsule history suggests, Micronesia was a far-off, land-poor, little-known place that had suddenly become central to world geopolitical concerns.

Project CIMA, or the Coordinated Investigation of Micronesian Anthropology, was the largest such study to date. Indeed, "largest" was the dominant superlative used to describe it, as in an annual report by prominent social scientists: "This cooperative project is by far the largest of its kind in the history of anthropology" (Hallowell & Bray, 1948, p. 177; see also Richard, 1957, p. 582; Murdock, 1948, p. 424; Kiste & Marshall, 2000, p. 265). In fact, the breadth of its fieldworkers' expertise was hardly restricted to anthropology, as the original title of the project, the Coordinated Investigation of Micronesian Peoples, indicated. An assemblage of 42 experts who fanned out to cover 20-plus atolls, the investigation's specialists sought

1. The 1968 film *Hell in the Pacific*, starring Lee Marvin and Toshiro Mifune, was filmed in Micronesia, on Palau's Rock Islands, near the site of the Battle of Pelelieu, where many thousands of U.S. and Japanese troops died.

2. In only a decade or so, Micronesia went from Japanese possession to United States "Occupied Area" to United Nations–mandated U.S. Trust Territory. It was the only "strategic trust" in existence in the world, the category having been invented for the express purpose of Micronesia filling it. This designation was a bow to the unique circumstances of these islands (they were poor but newly important in the postwar world), and was meant to guarantee the mutual benefit of American geopolitical interests and Micronesian socio-politico-economic needs on the island groups of the Marshalls, Carolines, and Marianas. See United Nations Trusteeship Agreement for the Former Japanese Mandated Islands, approved by the Security Council on April 2, 1947. Additional scientific investigations included, in 1946, a biological survey and a survey by the U.S. Commercial Company of the exploitability of Micronesian assets for the benefit of native populations. Following CIMA, the 15-year-long program SIM (the Scientific Investigation of Micronesia) continued scientific study of Micronesian parasitology, botany, ecology, and especially the health of coral atolls.

complete information about almost every aspect of the islands and the people who lived there, neglecting neither the most intimate things (how they thought, what they thought about, what made them happy and sad, what their "private worlds" were like), nor the most practical (what had become of the large native land snail? and why were the human inhabitants of Yap not reproducing apace?). What was once a scientific unknown lying behind Japan's "copper curtain" quickly turned into a data-supplying wellspring: Micronesia's "vacuum in knowledge has, within half a decade, yielded to an abundance of detailed information perhaps unparalleled for any comparable area in the world," observed the investigation's director (Murdock, 1948, p. 423). This abundant yield took place under the Navy's aegis—with Admiral Chester W. Nimitz's specific blessing—and garnered as well financial support from the National Academy of Sciences' National Research Council.[3] In the production of data, the island of Ifaluk participated fully, for anthropologist Spiro was engaged in testing every man, woman, and child with a "battery" of psychological projective instruments: the Rorschach inkblot test, the Thematic Apperception Test, the Bavelas Moral Ideological Test, and the Stewart Emotional Inventory, primarily. In an interim report, Spiro matter-of-factly informed Naval Pacific Command that he had secured tests for every child over 5 and every adult on his atoll, administering in addition a "free drawing" test to 5- to 18-year-olds: "As yet, I have not analyzed the records. But my impression is that there is an underlying anxiety in the personalities of the people that is connected with their childhood," he reported. In addition, he had been pursuing "systematic information on infant and child care," and attending to values of the culture by means of the moral ideology and emotional response tests (Spiro, 1947a). His results, telexed to the Navy and duplicated for the Coordinated Investigation's files, contributed within the decade to a 25,000-page experimental data bank of "subjective materials," one that included test results, life histories, fragments of ordinary thoughts, and dreams gathered from people all over the world. This archive is, even today, available in the Library of Congress, where a reader can peruse, in microprocessed form, the results of 354 of the Ifalukans' tests, as well as 54 of their dreams (Spiro, 1957; more generally, Kaplan, 1956–1963). (Figure 1.) (Had Tarev not failed most of his tests, his records would be there too; as it is, he appears only as a fleeting figure in his neighbors' dreams.)

Perhaps it was an understandable mistake, then, that around the time he danced the American dance, Tarev also reported having subversive thoughts about Americans. Children's voices in his head told him the Americans were stealing from them: "They say that tree"—pointing to it—"does not belong to you, it belongs to us," Tarev confided to Spiro. Still Tarev professed unswerving devotion to the United States as a nation and to the specific individuals who represented it. He assured Spiro he did not heed these dangerous voices. He brought Spiro and Burrows cherished herbs (*angorik*) as tribute, and whenever possible kissed their hands and feet. On other occasions, he fell into trances and delivered lines from Hollywood movies in a strange falsetto, perhaps in an attempt to imitate John Wayne's drawl. His dreams, he boasted, were "like the movies."[4] Like other Pacific islanders on the more remote atolls, Ifalukans only recently had become familiar with most kinds of two-dimensional representation, and with projective devices such as movie cameras in particular. They viewed their first movies as a result of the occupation, when U.S. forces organized showings for evening entertainments. It seems likely that elements from these movies (though it is not clear exactly

3. Nimitz wrote to the head of the NRC, "The Navy not only has an interest in the program you propose for the results which may accrue to science itself but also because these results may have important aspects in plans involving military considerations" (Nimitz, ca. 1946).

4. All quotations by Tarev in the first four paragraphs are from Spiro (1948).

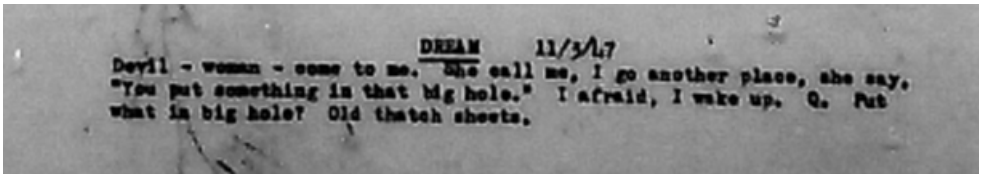

DREAM 11/3/47
Devil - woman - come to me. She call me, I go another place, she say, "You put something in that big hole." I afraid, I wake up. Q. Put what in big hole? Old thatch sheets.

FIGURE 1.
Aveligar's dream, one of 54 collected on Ifaluk. Later that night, Aveligar dreamed about fighting off Tarev ("Crazy Man") and knocking a knife out of his hand. Microcard Publications of Primary Records in Culture and Personality (1947), Volume 2, Number 27.

FIGURE 2.
Typing class U.S. Trust Territory (Micronesia) ca. 1961. An example of the visible meeting of technology and tradition.

which ones were shown) gave Tarev some of the material he expressed while entranced. A few weeks earlier, stopping on the island of Yap en route to his eventual field site, Spiro, in some surprise, observed men in loin cloths and women in grass skirts, going about their business in Yap Town: "It is quite something to see the natives watching a movie in their native costumes," he remarked in a letter (Spiro, 1947b). For the newly arrived observer, there was a thrill registered in the visible meeting of technology and tradition, framed as if in a tableau (Figure 2). In a more systematic sense, the Coordinated Investigation itself was a way of investigating and even intervening in such meetings between old and new, seemingly primitive and modern, technologically bypassed and technologically advanced. This essay is about occasions when these contrasts became visible in relation to each other through the scientific use of projective tests across cultures. X-ray–like tools, in the course of their deployment in fieldwork, would be able to regularize the observation of all that otherwise eluded ordinary visibility.

This potential connected them to the pursuit of a "science of subjectivity" in the Cold War human sciences. Specifically, the essay will address (1) the birth of a new human science movement out of the possibilities offered by projective psychological tests; (2) the ways "projection," properly deployed and controlled in the mid-twentieth-century human sciences, promised to expand the ambit of scientific observation; and (3) the common thread found in many Cold War-era projects of the pursuit of remote subjectivities through assemblages of high-end, elaborately theorized, methodologically self-conscious techniques and gadgets.

However unlikely or unusual it may be, however evidently a lacuna, this Micronesian episode serves as a useful example—one may say a case study of a case study—to introduce a reconsideration of the Cold War human sciences, the topic of this special issue. Projective tests have received scant to zero attention among science studies practitioners and historians of technology, science and medicine–cf. otherwise comprehensive and excellent histories of the twentieth-century American psychological and behavioral sciences (e.g., Capshew, 1999; and Herman, 1995; on the historiographical point see Hegarty, 2003, p. 400). The encounter between Tarev and Spiro, and the various projects within and among which their encounter took place, have something to say about what makes such sciences in the postwar period significant as Cold War enterprises. The aim is to take a marginal case in an out-of-the-way place and to prove it to be central in some ways to the purposes of the Cold War, even if it can hardly qualify as central to the political imperatives of the nation state. In other words, this off-kilter centrality, if made sufficiently vivid, helps to define disciplinary agendas that have since been lost from view. It puts the focus not simply on results, money conduits, or what deeds were done but how and why. By means of which tools and which epistemological alterations? What were the methodological innovations put into service and the claims made for the attendant instruments? "We are only at the beginning of a deeper understanding of the tremendous transformations the life sciences underwent on the eve of, during, and in the aftermath of World War II" (Gaudillière & Rheinberger, 2004), and this is also the case in the human sciences. The transformations they wrought were not in life *per se* but in the human being—specifically in the calculation of the different possible ways of being human.

Projection Project

The projective test movement in the American social sciences lasted from 1941 to 1968, although it was only occasionally called exactly that (a "movement") and the dates can be argued (but see mention of "the projective movement" in Klopfer, 1973, p. 60, and "the projective test movement" in Lindzey, 1961, p. 31).[5] However, it conformed in many ways to the typical sense of what makes a political, social, artistic, or technological movement a movement. Consider the *Oxford English Dictionary* definition: "[A]n organization, coalition, or alliance of people working to advance a shared political, social, or artistic objective." In this case, the shared goal was to amass data-rich psychological portraits of a worldwide sample comprising all types of people known to humanity. Such studies targeted the sorts of people not often encompassed in psychological undertakings: the Blood Indians (Blackfoot) or the Oglala Sioux, to take two examples from the North American West. Or another from across the Pacific: When Spiro, having diagnosed Tarev as schizophrenic, published "A Psychotic Personality in the South Seas" (1948), he envisioned the case study as one small contribution to a large matrix

5. The inaugural date used here is that of the publication of Hallowell's statement (1941) as quasi-manifesto for the movement. Other possible inceptions include Frank's (1939) first published use of the phrase "projective technique" and DuBois's (1944) employment of an extensive set of Alorese Rorschachs to analyze the culture.

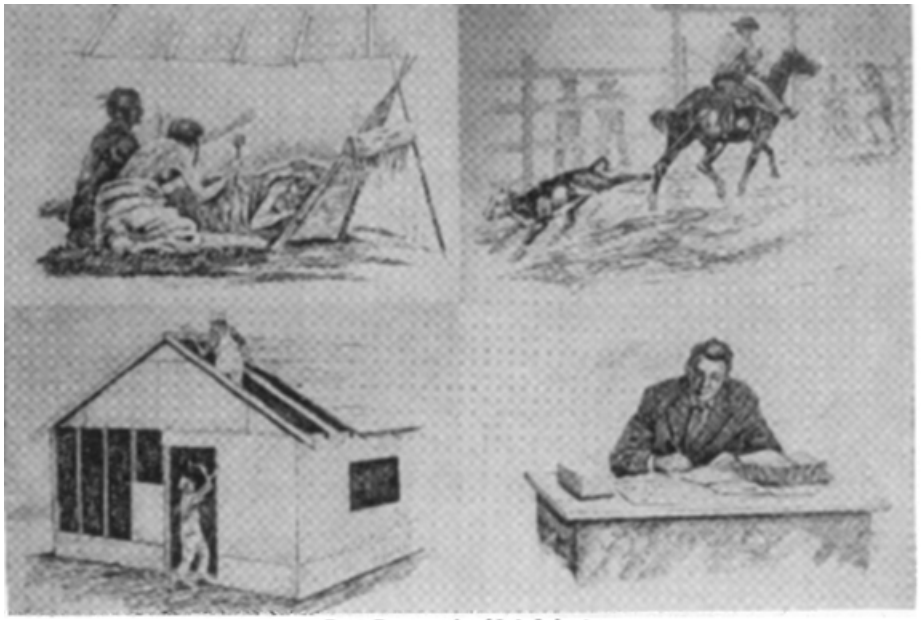


FIGURE 3.
From the Spindlers' Instrumental Activities Inventory of 1965, tested on Blood (Blackfoot) American Indians.

of information about the inner lives of primitive people. The point was to collect "everything about their tests" as well as "everything about their culture," as a leader in the field (as well as Spiro's mentor), I. A. Hallowell, specified (1955, p. 76). In this effort, projective techniques promised access to new areas of the human psyche and new understandings of socio-cultural dynamics. When used across cultures, they invited comparisons: Not only could a social scientist ask what made one individual unique, he could ask whether there were cultural regularities found in certain groups, even among their denizens' most secret thoughts. Might selves be like snowflakes? No two are exactly the same (it is said), but under different conditions structures do appear—sectored plates, dendrites, hollow columns, solid prisms.

As technologies, the tests produced an automatic transparency no matter where they were used:

> Projective techniques, however, can now be regarded as almost indispensable to fineness of interpretation at the personological level. Especially for those fairly well adjusted in their society, the communal and role components of the personality tend to constitute disguises. Just as the outer body screens the viscera from view and clothing the genitals, so the "public" facets of personality shield the private personality from the curious and conformity-demanding world of other persons. . . . Often only projective techniques will bring out what the individual does not want to tell about himself and what he himself does not know. (Clyde Kluckhohn, quoted in Lindzey, 1961, p. 3)

To pull off their subjects' shields of self-ignorance and self-defenses, a leading cohort from the new generation of behavioral scientists employed such tests. Not exactly naively—for they were always aware of various methodological shortcomings and epistemological stumbling blocks—they nevertheless hung tremendous hopes on the tests. Why? Perhaps because the tests

so clearly and explicitly offered to do exactly what it was that social scientists needed in order to build an integrative science and a unified system that encompassed not only human behavior but the human psyche—*what the individual does not want to tell . . . and what he himself does not know.* The tests "do not ordinarily purport to measure actual behavior or conscious self-report but rather are intended to measure a level that people ordinarily do not express, which may not be fully conscious," an adherent explained (Klopfer, 1973, p. 62). They were too convenient by several orders of magnitude to ignore—if they worked. It would be illogical for the most forward-looking practitioners not to try them out. Having done so, they frequently embraced them. To test the hitherto untested, to know the difficult to know, and to see what had until recently been invisible, anthropologists and psychologists traveled far and examined wide swathes of populations. Among the Sioux, the Arawak, the Ilongat, and the Ifalukan, among mental patients and heroin addicts, as well as many others, they amassed a tremendous data cache, perhaps unequaled in the conjoint histories of psychology, anthropology, and sociology.

Distinctive of the movement, too, was a quest: Young men and women took part in large-scale, short- or long-term studies, setting out for putatively untouched territory that was often—in an apparent contradiction of fact—recently occupied or militarily secured. In teams of 20 to over 100 specialists, they convened on a designated spot or series of spots in projects such as the Micronesian study under the auspices of which Spiro and Tarev met. There was also the Cornell University Vicos Project, through which the university purchased in 1956 a Peruvian village and social scientists studied it as it underwent a controlled transition into modernity, all accompanied by projective tests reflecting the change. A partial list also includes the Harvard Social Relations Department's Five Cultures or "Values Project," the Harvard Laboratory of Human Development's Six Cultures Project, the University of Chicago's Committee on the Comparative Study of New Nations, and its equally ambitious American Indian Education and Personality Project. The burgeoning of such "Big Social Science" enterprises both reflected and added to the test-centrism of synthetic social scientists working in the field: Such projects, in their design, their infrastructure, and their often painstaking elaboration of theoretical bases, helped to facilitate the gathering of many protocols. In turn, the intensive gathering of protocols became their most tangible *raison d'être.* As many "human documents" (Gottschalk, Kluckhohn, & Angell, 1945) as possible should be collected as efficiently as possible, all in the most concentrated area—this was imperative. It sounded at times as if experts were in a race to wring from every inch of territory the densest data slurry. Bragging rights in Micronesia, for example, issued from the intersection of one's scientific thoroughness with a kind of derring-do in regard to data. As one set of participants put it, "The work was planned experimentally as a deliberate attempt to find out how much information concerning personality structure in a cultural group can be obtained by a relatively short, standardized method" (Joseph & Murray 1951, p. vii). A sluice of data might be opened.

In this way, tests first developed for clinical use with upper-middle-class European and American neurotics in the 1920s and 1930s came to fruition as part of the movement in the next decades, during and after the war. Now they were vehicles to study not just the personal tics and the deeply buried struggles of the test taker but were guides to a whole cultural configuration, promising access to otherwise inaccessible worlds. The Rorschach psychodiagnostic test (by Hermann Rorschach, 1921) and the Thematic Apperception Test (by Henry A. Murray and Christiana Morgan, 1935) were the number 1 and 2 tests, respectively.

In an unusual twist that characterized few other diagnostic techniques, Rorschach's test, published as *Psychodiagnostik*, was rumored to have resulted in its author's death from

heartbreak. With an inaugural publication run of only a little over 1,000 copies, it nonetheless sold so disappointingly that Rorschach, who had hoped for a breakthrough to revolutionize the practice of psychotherapy, fell into despondency. He had been preparing the test for years. At Münsterlingen in Switzerland during his early training as a resident, he had been known for adopting strange but oddly productive methods. A monkey, deliberately set loose, climbed around the clinic and he recorded his patients' revealing responses to its apery. At times he experimented with turning the clinic into a theater, projecting shadow-puppet shows, and allowing his patients to dress up and perform, which antics were also revealing for their file and subsequent diagnosis. He also had patients draw and posted their results on the walls. Eventually he settled on the inkblot as a desirably ambiguous stimulus that could reveal the preoccupations, and indeed the whole human truth, of the person at hand.[6] By this time, he had taken up a practice at Herisau, near the Swiss border with Austria, where he was more systematic, testing 405 subjects, patients and colleagues, on a set of different inkblots made from folding a page in half. Form, color, and movement were his three parameters for interpretation: It was not what one found in the blots but *how* one found them—processes of perception—that revealed important truths about the *Erlebnistyp* or experiential type—loosely speaking, whether one was introversive or extraversive.

Even after Rorschach streamlined the title to the one-word *Psychodiagnostik*, six publishers turned it down, and the one who at last agreed to put it out was half-hearted, had trouble funding even the limited run, and insisted Rorschach cut five of the 15 inkblots he originally intended to use as cues. Not long after his work's largely unheralded debut, which gained notice mainly in sustaining attacks from the respectable and august in psychological circles, Rorschach succumbed to sudden-onset peritonitis and died at 37. Although his technique gained some posthumous support (adopted by Jungians, crucially), it was only in the United States that it could be said, initially, to flourish. One central reason for its flourishing was the arrival in July 1934 of impresario émigré Bruno Klopfer in Brooklyn, accompanied by his son Walter and carrying the Rorschach in his luggage. Until his decision to flee Nazi rule, Klopfer had been a well-placed psychologist in Munich. On his way to the U.S., he stopped for a year in Switzerland, where he gained experience in the use of the Rorschach from Jung's circle, and once relocated, his intimate knowledge generated interest among the young and forward-looking at Columbia University. Intensive training sessions sprang up—not, initially, at Columbia itself, due to resistance from stodgy traditionalists, but rather in Klopfer's apartment, in empty churches, and in kitchens of other adherents. During this fervid time, certain obvious flaws in Rorschach's research design were remedied, discussion (it is said) extended late into the night, and what emerged was a clique or cadre of devotees. Klopfer, as founder in 1934 of the Rorschach Research Exchange and the Society for Projective Techniques and author of the first how-to manual for the Rorschach published in the United States (Klopfer, 1945, 1954, 1962), befriended anthropologists and was instrumental in the spread of the technique to this discipline with its in-built access to other kinds of minds. (The fact that his first job in the United States was as a research assistant in Franz Boas's anthropology department at Columbia may have accelerated the building of these connections.) Meanwhile, internecine battles ensued in which rivals pitted themselves against Klopfer for control of the Rorschach in the American context, so that eventually, by the 1940s,

6. The history of the inkblot form in Europe extends some centuries back to its employment as a parlor game, an artistic stimulus (to Leonardo, Botticelli, and Victor Hugo), an accompaniment to poetry (in Justinus Kerner's 1857 dark volume *Kleksographien*), and even by Alfred Binet as an intelligence test, all of which preceded Rorschach's adoption of the form.

the test's adherents had split into five mutually antagonistic communities, each of which systematized the Rorschach in its own way, and each of which had different ideas about the relationship of science to interpretation.

By the 1940s and 1950s, the Rorschach inkblot test had achieved great prominence, despite the fact that a "final" synthetic systematization of the five competing interpretative methods into the Exner Comprehensive System would have to wait some decades (Exner, 1974). Marking this new level of acceptance were some prominent testees: In 1945, 21 Nazi prisoners at the Nuremburg International Military Tribunal took the Rorschach test, and subsequently 209 mostly Danish collaborators did so at the Copenhagen War Crimes Trial.[7] In 1962, an Israeli psychologist administered it to Adolph Eichmann before his trial in Jerusalem—and the results of this test have been argued over for years. Did his Rorschach test undermine Hannah Arendt's characterization of him as a "desk monster," a banal family man whose monstrosity lay precisely in his normality? Some interpreters claimed his Rorschach tests were not in fact normal, and in the intervening the years his results have been reinterpreted over and over, becoming a sort of psychological–political football in arguments about the power of tests and the right way to do psychology, as well as the field's claims to scientific authority.

Still, in the early postwar period, the fate of the test was almost always in the direction of more traction, more authority, more credence. It spread especially within American juridical, clinical, and "pure research" circles. Even as experts administered the test to subjects exhibiting an extreme range of human behavioral possibilities—on the one hand, notorious psychosexual murderers such as Jeffrey Dahmer, on the other exemplars of excellence such as Franklin D. Roosevelt, Linus Pauling, and Albert Einstein—it achieved wide acceptance for use in day-to-day child custody cases and human resources departments. Did you get the job? Will you have rights to see your child two, three, four (or zero) days a week? It may depend on, as one disgruntled divorced father put it, whether you saw a butterfly or a bat.[8] Each year, hundreds of thousands "or perhaps millions" of people take the test.[9] Throughout the tests' years of growth, a technical claim of epistemological cogency and object-related transparency of vision prevailed, offering a self-justifying rationale for the test's further use; at the very least, a systematic database of millions of responses was being built. As a nurse who worked early on with Rorschach at Herisau noted, the staff could "penetrate by way of the test into the world of the mentally ill to an amazing extent."[10] Worded differently but in essence the same, this claim would surface again and again as the projective test movement

7. Rorschach protocols of high-level Nazi personnel, including Hermann Göring and Albert Speer, were secured in 1946 while the accused awaited trial at Nuremberg. Gustave Gilbert, a prison interpreter without psychological training, and D. M. Kelley, an American psychiatrist, each gave the tests. Their subjects seem to have approached the test with various levels of enthusiasm; Göring, for example, clapped his hands in delight at one point, whereas Speer was reticent in his answers, often claiming there was nothing to see in the inkblots. Note that the tests were not admissible as criminal evidence but were to be used for research purposes only. The first study of the "Nuremberg Mind" (Kelley, 1946) was followed by many further studies over the next five decades, with a recent study (Greiner & Nunno, 2004) applying "improved state-of-the-art research methodology and instruments" to the data (p. 417).

8. The Rorschach's heyday was arguably the period discussed in this paper, the 1950s and 1960s, but its power in courtrooms and classrooms grew in the 1970s, 1980s. and 1990s due to the Comprehensive System Exner proposed, which was widely adopted. For decades, the Rorschach was the most commonly used psychological test. Its prevalence as of 1996 had fallen to number four, "in part because of the reimbursement pattern of insurance companies; it takes about two hours to administer and score the test, and it's expensive. It's much easier to do a behavioral rating scale or a quick interview" (Zillmer, 2001).

9. The vagueness of the estimate is itself of interest; figure from Lilienfeld et al. (2005).

10. Quotation from Paul (2005, p. 20). Please note that I have relied in my account of the Rorschach test's publication and spread on this volume and on Galison (2004), among other sources.

gained ground, and its expression even at the outset, within the test's scene of origin, should be marked, for it spoke of the need, and the felt achievement of, *penetration*—not just of the mad or criminal, but of all that was far-off or difficult-to-talk-to.

The Rorschach test only truly "came of age" in the mid- to late 1930s. Likewise, the Thematic Apperception Test—its only real rival in the realm of projective instruments—observed similar timing, born in the middle of that decade and gaining much ground by the end. This test, too, had its adherents. Whereas the Rorschach was the product of a single father, the TAT emerged from a non-fertile but romantic relationship between two people, one an artist, the other a psychologist. Henry A. Murray was a New England Puritan–stock, Harvard-educated biochemist who turned psychologist after reading *Moby Dick* and meeting Carl Jung during a European tour. (His initials were the same as Melville's, H.A.M., he noted somewhat mystically, and went on to found the revival of Melville studies in the United States.) He and his lover, Christiana Morgan, another Boston Brahmin, convened with Jung in the late 1920s—her visionary drawings from this time were immortalized in a special set of seminars in the Jungian oeuvre (Jung, 1976, 2007)—and decided to pursue their interest in the "dyad" as the root of all human relationships by inventing a psychological test based on an emotionally resonant series of pictures. By 1935, when they first published an article describing their test, subtitled "A Method for Investigating Fantasies," Murray had gained the directorship of the Harvard Psycho-Clinic, and Morgan was an assistant there. They solidified their invention in a 1938 volume from Harvard University Press called *The Thematic Apperception Test* and followed up with the reissuing in 1943 of the manual, again with Harvard, by which time the test was a star, a new light in the field of personality psychology (Morgan & Murray, 1935; Murray & Morgan, 1938; Murray, 1943).[11]

Morgan and Murray offered a way of exploring the least accessible unconscious contents of the personality in themselves. The Rorschach in their view elicited only simple responses. To begin with "Looks like. . ." augured only "quasi-projections" or pseudo-projections based on the surface perceptions of the subject. In contrast, the TAT could access *apperception*, that is, the fantasy life and its fancies, imagination and its secret contents. The test was to be a way of making the invisible visible, the irretrievable retrievable in some manifest form: "My idea," Murray said in a later interview, "was to illuminate the unconscious processes—that were repressed—of which the subject was not aware. That was the whole point of it." Murray was in fact making a critique, by means of the operations of the test itself, of a significant portion of professional psychologists. He was disgusted with what he saw others doing: Colleagues racing to become experimentalists by the endless running of rats through mazes "had trained in incapacity. They were trained to have tunnel vision." Obsessed with quantifying and being precise about carefully delimited areas of human functioning, his cohort shied from the unruly, the "darker, blinder areas of the psyche" (Murray, quoted in Anderson, 1999, pp. 25–37). Paradoxically, his and Morgan's test, with its claims of new penetrating powers, itself became the object of experimentalists' rush to quantify and standardize during the Cold War (discussed as follows).

In order to enter unmapped terrain, the two invented their test. Each picture in their series of 31 cards came from a current popular magazine photograph or an illustrated pulp novel.

11. It is interesting to note that the first author in the initial publication was listed as Christiana Morgan, but by the third publication, the major and influential 1943 volume, which went on to become the second highest seller in the history of the Harvard University Press, her name had "dropped off" the cover. According to Murray, in at least one account, this was at the behest of Morgan, who "asked that her name be officially omitted" due to having received a vexing amount of mail asking questions she felt unable to answer, and due to the larger fact that, as Murray put it retrospectively, she didn't really understand the test she had invented at all. On the "vexing question" of the authorship of the test, see Anderson (1999).

Morgan, a skilled draftsman, stripped away most indexical details indicating story or context, so that each black-and-white drawing, adapted, became something new: the portent of an ominous but unknown future event. A mood of angst, hard to describe in words but easy to locate in the series, descended. (Although the pictures were said to be full of ambiguous stimuli, the dominant tone was decidedly ominous, bringing to mind Jung's analysis of Morgan's own dilemmas: "She is constantly fighting against something overpowering that comes from below," Jung remarked in the course of his four-year-long seminar analyzing Morgan's personal drawings; Jung, 2007, p. 660. The TAT images shared this quality.) Show a selection to a patient or subject and ask her to tell one story per card: The test was simple at first. The analyst subsequently analyzed the accumulated stories, and this constituted the entirety of the test. "As a rule, the subject leaves the test happily unaware that he has presented the psychologist with what amounts to an X-ray picture of his inner self," observed Murray (1943). By getting the subject to focus on an indeterminate yet emotionally saturated phenomenon, the perceptive interpreter—"one with 'double hearing,'" as the researchers put it—will see that the subject "is exposing certain inner forces and arrangements, wishes, fears, and traces of past experiences" (Morgan & Murray, 1935). There was no fail-proof method given for interpreting the test, much less quantifying its results; success depended on the hermeneutic gifts of the test giver. The TAT, thus, was a powerful if not sure-fire way of looking inside someone's skull. Soon, claims for its prowess at doing so would be heightened and generalized further.

In the between-the-wars environment, Morgan and Murray's invention was not immediately welcomed, and it took a subsequent process of standardization to make it eventually, during the 1940s and 1950s, an acceptable vehicle for exploring in a properly scientifically adequate way the "depths of the self." In fact, in some circles it bore for years the taint of its unconventional origins. Projective techniques like the TAT and Rorschach, admitted one prominent promoter, "originated with a highly specialized and somewhat esoteric group in psychology and psychiatry who were quite removed from the domain of 'respectable' academic psychology" (Spindler, 1962, pp. 1326–1327). Nonetheless, respectability might be won. A search for "behavioral indices that would be operationally and conceptually equivalent cross-culturally"—and in particular "standard scoring systems for projective responses"—ensued (ibid.).

The test became experimental in two senses: First, a new set of users reconceived it explicitly as an experiment, and something like a miniature laboratory that could be conjured up on demand. Wherever one set the test down, the logic went, quasi-experimental conditions prevailed. (In this way, it was more like a mobile set of epistemological frameworks than an actual lab.) The "quality controlled" inkblots and the standard sequences of apperceptive images lent, if not perfect control, an assurance that "behavior is observed under semicontrolled conditions" (Spindler 1955, p. 28). Second, it was experimental in bringing qualities of rigor, exactitude, and a scientific aura to whatever was being studied. Several systematizing camps worked at their own versions of the TAT to regularize its procedures and standardize its scoring.

Perhaps the most influential psychologist to do this was the unlikely figure of David McClelland, then at Wesleyan, but soon to move to Harvard as the result of his exertions on behalf of the TAT, as well as his research on the achievement motivation, or "N." What, he asked, was the factor that caused, say, Germans and Americans to succeed in business while Peruvians, Indians, and others seemed less adaptable to capitalism's demands? Could this factor be isolated, even perhaps quantified? With the help of the TAT, the answer was a provisional yes. (In this way, McClelland gave empirical, "experimental" support to Max Weber's Protestant-ethic-and-spirit-of-capitalism hypothesis.) Whereas Murray had objected to the

use of the test to number-crunch conclusions about people across cultures or large groups—"you can't make these big groupings"—this was precisely what McClelland, along with the projective test movement as a whole, did (quoted in Anderson, 1999, p. 35). By the spring of 1947, McClelland was using the TAT in laboratory studies of human subjects exposed to simple "need" situations. Hungry or anxiety-ridden undergraduates took the TAT while experiencing different stages and states of these affects. In 1948–1949, the U.S. Office of Naval Research sponsored a four-part series on "The Projective Expression of Needs" (published as McClelland et al., 1953). McClelland and several graduate students found that peoples's needs and affective states, even hunger, revealed themselves in a predictable way in their TAT responses. More important than the content of the results was the elaboration of a method which was "like . . . a rat experiment" in all the important ways (McClelland, quoted in Winter, 1998, p. 139; political scientists' likeminded operationalizing of decision-making processes via experiments during this period is the topic of Nicolas Guilhot's "Cyborg Pantocrator," this issue). For McClelland, who trained with some of Yale's foremost behaviorists, rat experimenters all, this was a desirable outcome.[12]

Whereas the Rorschach appeared to require little translation—an inkblot is an inkblot wherever you go the world over, went the reasoning[13]—the TAT, with its pictures of knife-wielding surgeons and glowering lovers, did not always lend itself to smooth translation. This shortcoming did not stop enthusiasts from giving the tests to, say, young Navajo war veterans and Hopi schoolchildren in 1949 (Kaplan, 1956–1963), but it also spurred the creation of adaptations and target-specific, picture-based storytelling tests in the 1950s. Some spoke to subset audiences, others to cultures and subcultures. For children, there was the Blacky by Blum, which serialized the adventures and misadventures of a black dog (one frame depicted the rabid Blacky grabbing another dog's collar, clearly stitched with the word "Mama"), and the Children's Apperception Test, which featured animals in existential or dangerous situations. For other age groups there was the Michigan Pictures Test, the Adolescent Fantasy Test, and the Senior Apperception Test. Utilizing another sense dimension was the Auditory Apperception Test, and a briefly explored "odor imagination test" involving some combination of violet perfume and Worcestershire sauce. Capitalizing on the capacity of visual representations to reveal their creator's preoccupations were the Make-A-Picture-Story Test, the House-Tree-Person Test, and the Draw-A-Man Test. Niche targeting proliferated for geographical areas: There was a version for the South Seas, one for Mexican Indians, one for West Africans, and one for Vietnamese;[14] the Thompson TAT, with its vaguely Harlem-Renaissance style, targeted African Americans and Africans. A North Korean POW test explored the psyches of possibly brainwashed men. A welter of creative and surprising tests appeared during this heyday period: The Minister's Black Veil, for example, had participants complete a Nathaniel Hawthorne short story left off mid-narrative.

In the 1960s, new tests arrived, accompanied by claims that they pinpointed levels of the social self that were closer to the threshold of conscious awareness. One of these was the

12. Further systematizing of the TAT has taken place in recent decades by combining the test, per Murray's vision, in assessment centers, which conduct seven exercises over two days to evaluate prospective employees, usually in corporate or government lines of work. Used by thousands of American companies, Development Dimensions International, a Pittsburgh-based firm, has annual revenues of over $100 million and is credited with assessing more than 15 million people in 70 countries. Police, fire, and public-sector human resources departments report using the assessment method frequently for high-ranking positions (Paul, 2005, p. 95).

13. See, for example, George and Louise Spindler's assertion that "the inkblots themselves are acultural" and thus the Rorschach instrument offers a superior opportunity to standardize stimuli (Spindler & Spindler, 1965, p. 9).

14. See Joy Rohde's revealing discussion, this issue, of the extensive use of projective testing during the Vietnam War.

Instrumental Activities Inventory (Spindler & Spindler, 1965), meant to reveal how the subject organized his perceptions of his modernizing social environment—"how he views the whiteman system of instrumentalities" and how he values "perceived social realities" (p. 10) (Figure 3). Another such fine-tuning test was Goldschmit and Edgerton's Picture Test (1961), intended to zero in on social and religious tacit values. Out of these various tests and their results, one gets the sense that scientists were building a veritable architecture of inner space, each level and redoubt reachable by its own dedicated technique. At the same time, as I argue as follows, the inner space the tests accessed was often externalized by the process used to capture it.

The Projective Turn

The question remains: How did these instruments for plumbing psychological depth travel to a new set of fields? How exactly did they spread from psychology to anthropology and the behavioral sciences more generally? On one level, this is a straightforward question of dissemination. The answer appears surprisingly simple: At a New York seminar in the mid-1930s on "The Effects of Personality on Culture," sponsored by the National Research Council, the renowned anthropologist Ruth Benedict began talking about the Rorschach to a man who had never heard the name before. Her interlocutor was A. Irving Hallowell, a recent convert to anthropology with a background in social work, and also in psychoanalysis. He was struck by this new name and the possibilities the test seemed to offer. "Well . . . so I didn't talk to Ruth about this at the time but . . . I decided to look into this. And I did [for a few years]," he recalled years later in an interview (Hallowell, 1963). After some meandering, Hallowell, unable to find any available Rorschach expert, taught himself the technique and took it into the field, studying members of the Berens River Ojibwa tribe in the summer of 1938. By the time he got back from the field, he heard that a Rorschach expert named Klopfer was giving classes in the Philadelphia area, Hallowell's home. Meeting Klopfer for the first time, Hallowell arrived with protocols in hand. "I linked up then, I met Klopfer, and then you see I told him about this stuff and he looked over some of my records which I'd gotten that summer and that started me off with Klopfer. . . . [O]nce I got into this then I really not only got into it deeply but I felt I had to push the thing through myself . . . not just to collect these things and hand them over to somebody else for interpretation, I had to study the thing and all this so I worked hard at this for quite a few years" (ibid.). Hallowell's resulting groundbreaking publication, "The Rorschach Method as an Aid in the Study of Personalities in Primitive Societies," marked, if any single work does, the real start of what would eventually become the movement to import projective tests into culture and personality study, a goal that, in less than a decade, would be shared by dozens (Hallowell 1941).[15]

Within a few years the movement launched. To those involved, however, this move constituted anything but a rejection of first-generation culture and personality approaches—the Benedict, Margaret Mead, Edward Sapir generation—but rather a canny strategy for its

15. But see also the influential "manifesto" for the widening use of projective tests by Frank (1939), and note that Hallowell in retrospect thought the first-use honor might in fact belong to Jules Henry, who had a similar conversation with Ruth Benedict around the same time Hallowell did. Furthermore, the question becomes slightly more complicated by the fact that Hallowell mentions, somewhat ruefully, in the 1941 piece (originally written, he says, before conducting his 1938 fieldwork) that there were in existence only around 300 Rorschach protocols of "primitives" entire. It seems that Cora DuBois, Theodora Abel, and others had taken up the idea around the time that elapsed between Hallowell's conversation and his writing of the article. Note, too, that even earlier several psychoanalysts had undertaken racial studies using the Rorschach to confirm judgments of superiority and inferiority; this approach was so foreign to the culture-and-personality use of the Rorschach that it must be classed as a distant, if related, enterprise.

continuation. Indeed, Benedict used Rorschach results in her *Chrysanthemum and the Sword* (1946) analysis of Japanese culture during the war (gained from testing native-born Japanese Americans, often), and the 1947–1951 culture-at-a-distance project drew from the Rorschachs of Chinese subjects to make positive, if heavily qualified, conclusions about the test ("a highly formalized and relatively exact way of coding materials so that they can be communicated to other projective-test workers"—Mead et al., 2000, p. 353). The tests were an occasion for first- and second-generation scholars to join together). Again, Hallowell addressed this point directly: "There was professional resistance on almost every front to investigations along these lines [the work of the culture and personality school]. This was partly my reason for using the Rorschach Test; it would be an aid in accumulating relevant empirical data" (Hallowell, n.d.). What was avant-garde in the 1930s became a shared—if still controversial—practice in the 1950s (on the early and continuing resistance the Rorschach aroused among anthropologists, see Wallace, 1980, p. 156). Nonetheless, it was remarkably productive.

The most effective agent in transforming this practice from one-man brigade and niche methodological obsession to broad-based movement was, most simply put, World War II. A large portion of professional psychologists and anthropologists joined the war effort, and this experience revolutionized their practices at every level. Not least, the war gave them confidence. And at some level, perhaps the most literal, it forced them out of academic offices and into Washington's corridors, or sometimes farther afield. A sense of giddiness mixed with gravitas characterized the human sciences whose representatives were finding new audiences and appreciation. There are several specific ways in which the war stimulated the "projective turn" in the study of cultures. First, many directly involved in the spread of the tests served as psychological experts in branches of the U.S. military. This galvanized them to action and awoke them to the advantages of efficiency. The TAT's inventor, Murray, newly appointed as Army captain, joined the Office of Strategic Services (the OSS, generally considered the precursor to the CIA). He headed a team that planned and carried out a test-based method to uncover and graph the characterological mettle of potential spies and behind-the-lines operatives. Among other advantages of the method, according to Murray, was its assembly-line efficiency, by means of which his team could test many applicants in a short time—no more than a long weekend at a country house dubbed Station S would suffice. There researchers set up a series of "test situations" including staged scenarios, interview dyads, stressful disputations, multiple-choice inquiries, a projective questionnaire, and several formal projective tests.[16] A batch of 5,391 candidates went through the series and came out ranked on a six-point scale; these results were deemed a successful approach to what the title of the ultimate volume labeled *The Assessment of Men* (OSS Assessment Staff, 1948). More generally, a large percentage of U.S. psychologists served in the war, and those who didn't kept a low profile on campuses, which were themselves transformed into military camps.

Anthropologists served widely, too: Mead's and Gregory Bateson's efforts on behalf of the Committee for National Morale, an attempt to mobilize behavioral scientists of all kinds to join the war effort, were so energetic that complaints were registered (the two were pandering for influence all over Washington, said some). Yet the war, in Mead's view, had forced

16. Note that the aim was to develop systematic procedures to reveal recruits' future behavior, to wit, to "provid[e] ground for sufficiently reliable predictions of their usefulness to the organization during the remaining years of the war" (OSS Staff, 1948, p. 8). Among the formal projective tests used were the Rorschach, the TAT, the Sentence Completion, and the Rapid Projection Test. An unprecedented innovation was the use of stereopticon slides to show TAT images to the group (this was employed not at Station S but at Stations W, WS, and F). Precedents for this systematic method of testing lay among German military psychologists (namely, Max Simoneit's 1933 *Wehrpsychologie* and the British Army's War Office Selection Board [whence came the idea of using a country house as a testing facility]).

anthropologists to become "interventionists and practitioners in the lives of human communities," among moderns and primitives, the home front and the colonized, allies and enemies equally (Yans-McLaughlin, 1984, p. 184). Such interventionism would prove a legacy after most social scientists had left government employ. Likewise, Yale's most avid collector of anthropological facts, George P. Murdock, enlisted as a lieutenant colonel and shipped off to the Pacific front, where he and two graduate students policed a small internment camp in Micronesia—paving the way, eventually, for his leadership of the Coordinated Investigation project (with which this essay began). It is not so simple as to say that the military somehow infected academics with its can-do, pragmatic spirit. Nor is it simply a matter of funding opportunities opening up to scholars—experts in the subjective realm of experience—who were previously out of the loop. Rather, elements already present in the academic pursuit of remote-access machines with subjective penetrating power were now in tune with national imperatives and geopolitical struggles. For example, Murdock found himself praised for his military-like zeal in counting up facts processed, marking hours saved, and doing scholarship the time-saving way, rendering library visits obsolete. Fantasies of automaticity and speed proliferated among social scientists: As Murray remarked, his OSS team found things out from candidates in two hours that otherwise would have taken six or seven months of therapy (Paul, 2005, pp. 75–103). By the final years of the war, projective tests came into wide use in military and non-military projects alike, ranging from the University of Chicago's project employing a "battery" of tests to investigate the psychological states of five different Indian tribes to Seymour Klebanoff's Rorschach study of operational fatigue in Army Air Forces combat fliers.

At some point, then, to give a projective test came to seem like an obvious thing to do when one met someone from far away or who was very different (when that person was your research subject, that is). By the 1950s, it was nearly *de rigueur*. As British anthropologist S. F. Nadel commented on the American trend, "A new kind of routine seems to be emerging whereby anthropologists, before setting out for the field, pack into their kitbag a set of Rorschach cards and T.A.T. much as they do cameras, a compass, or a copy of *Notes and Queries*" (quoted in Henry et al., 1957, p. 247). Tests were becoming standard practice. Here is how Spiro defended the use in particular of the Rorschach, describing why he and others adopted them to gather up the subjective materials of Tarev and people like him:

> The Rorschach is an instrument well suited for this purpose [finding "a true measure of personality differences"]. It is a common and, for all non-literate peoples, novel stimulus to which the responses of different societies can be recorded, classified, quantified, and compared. Such a comparison provides at least a measure of the differences (and similarities) in the perceptions of different peoples and, to that extent, a measure of personality differences (and similarities). This much the Rorschach has already accomplished for, interpretations aside, the *raw* Rorschach protocols from different cultures do show significant differences (and similarities, too). I believe therefore, that it would be a gross scientific loss if we did not attempt to collect such protocols from as many different cultures as possible, if only to discover the range of these perceptual differences within our species (Spiro, ca. 1949).

In addition to the fact that their results were to be amassed in large numbers capable of being classified, quantified, and compared with other such results, the tests offered a kind of *lingua franca* to support intuitive guesses and impressionistic ethnographic stabs. In letters from the field, the language of Rorschach was also spoken. After praising the beauty of the white sand beaches, the 80-degree (F) temperatures, and the stereotypical "South Seas" environment, Spiro wondered at the lack of native initiative: "It is almost incredible how they can just sit for hours on end and do nothing. So that though the people are warm and friendly and kind, they are very dull." Their environment afforded little opportunity to exert themselves, he postulated.

A casual ethnographic observation, but followed as it was by confirmation from projective testing results, it becomes interesting, even exotic:

> This is consistent with the Rorschach picture—few I.M.'s, practically no M's. There is a tremendous amount of color—mostly CF—a lot of anxiety and depression. K & C: Clouds all over the place. (Spiro, 1947c)

Writing from the field to his advisor, Spiro reverted to a shorthand to bear up what otherwise might seem an impossibly general or somewhat banal observation. Few I.M.'s and a paucity of M's meant the subjects saw little movement in the inkblots, indicating a lack of imagination and initiative (people who saw movement were judged to be introspective, turned inward, and often socially inept). Color seen riotously meant the testee was "extratensive," a trait that indicated lurking anxiety and depression—so that underneath the placid and by all accounts pacific Ifalukan personalities lay a mine of untapped negative emotion. Possibly a damning detail in such an approach was that enthusiasts of the projective test sometimes spent more time learning the language of the tests than the language of their informants. (In most cases, interpreters formed a third party in the complicated transaction of administering tests.[17])

During the movement's heyday, projective tests bore their administrators' high hopes. They were heavily laden. In a deliberate manner, the movement's workers trained themselves in administering, interpreting, and scoring the tests. Whole specialties, entire careers rose and fell on the fortunes of these instruments and the publishing organs used to report on them. Scholarly articles in specialist journals devoted to projective tests addressed two areas of interest: first, frequent, minute focus on scoring and interpreting results, for example, "Form Level Rating: A Preliminary Proposal for Appraising Mode and Level of Thinking as Expressed in Rorschach Records" (Klopfer & Davidson, 1944). Second, an ever-growing range of potential subjects of interest, including "promiscuous girls" (Bradway et al., 1946), artists (Prados, 1944), homosexuals (Wheeler, 1949), Negroes (Schwartz et al., 1951), and Europeans (David, 1957). Testers shared dreams about what would come out of this burgeoning research. They augmented and modified governmental agendas. They added to bureaucratic files and helped make administrative rulings on islands new to American jurisdiction. They joined Cold War programs designed to access such difficult-to-access things as the "Soviet mind," the "African mind," and the "non-European mind." They also shared, generally and even from the start, a reasonable sense of the challenges of this work along with what can only be called a magnificently hubristic view of its possibilities.

Perhaps it is not surprising that the projective test enterprise ended up creating no single theory, no grand work, no paramount claim even of the most mundane variety. Diversity reigned (especially, diversity of results), despite the aims of all-inclusiveness and universal applicability. Reviewing an endeavor that produced over 5,000 published articles, it is impossible here to scan the interpretative results of the projective test movement. If there was a common thread running through the work, though, it was the dynamics of acculturation. Altogether, if in shreds and patches, the movement's accumulated material added up to a portrait of change-under-stress due to contact with (to borrow from Spindler) "whiteman instrumentalities." Old-style "salvage" Boasian anthropologists sought to be present—for it was considered "quite a *coup*"—to witness the "dying gasp" of a language or culture, and their work was to reconstruct for ever after that which had just disappeared (Fenton, 1953, pp. 169–170). In contrast, postwar anthropologists who adopted the projective test as a privileged instrument of choice wanted to isolate, draw out, and exquisitely study that last gasp. How do the world's people, even the most unlikely candidates, eventually and inevitably become modern?

17. The issue of the use of interpreters—as well as other much-debated elements of the practice of administering projective tests—is outside of the scope of this paper, but will be addressed in future publications.

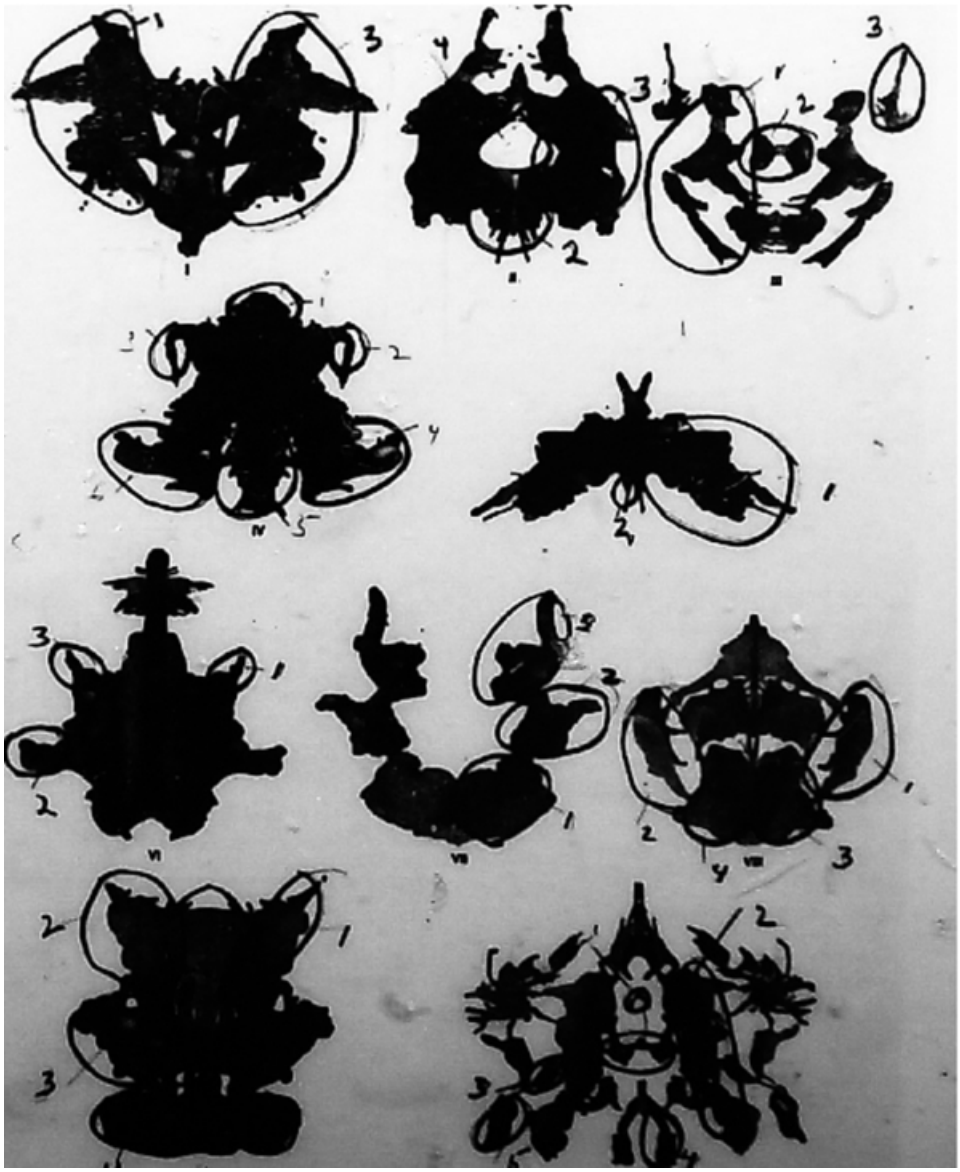
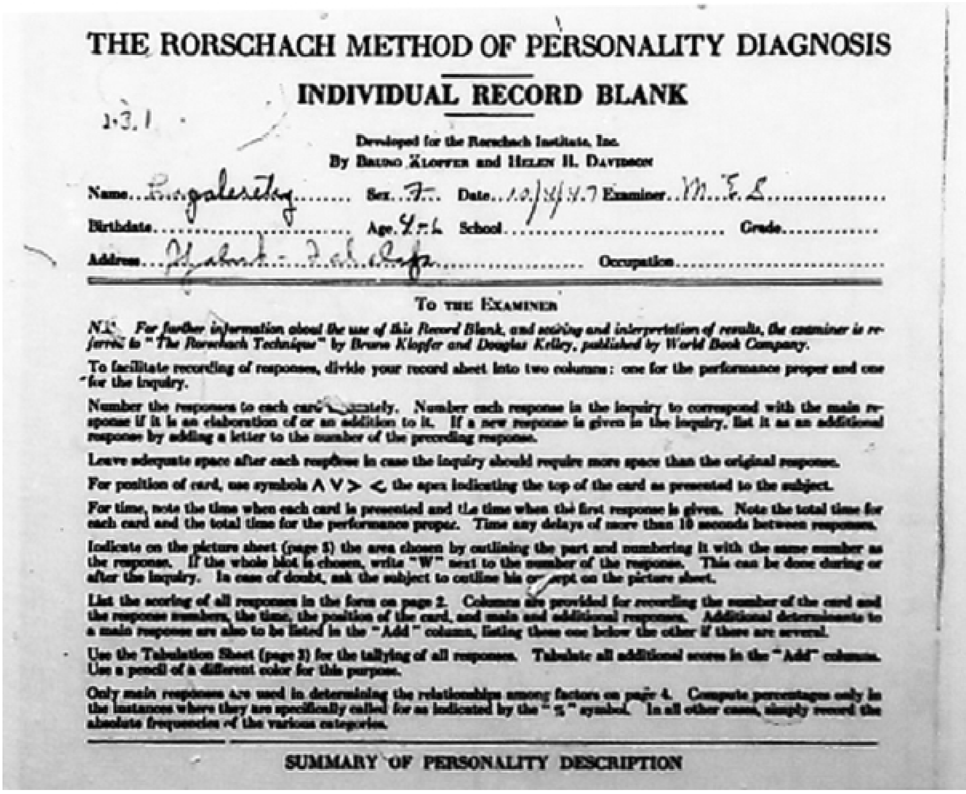


FIGURE 4.
Rorschach protocol of a 4–6-year-old girl on Ifaluk, 1947; test administered by Melford Spiro.

TECHNOLOGIES OF SUBJECTIVITY

Dreams of unfettered access to remote subjectivities were not unique to the projective test movement. They were also to be found in a broad set of Cold War human science projects the commonalities of which, when considered together, may foster a better understanding of the dynamics of research and politics during this period. During (approximately) the same years as the projective testing movement flourished, the great project of fully penetrating human experiential subjectivity—to see inside people's heads even as they were immersed



THE RORSCHACH METHOD OF PERSONALITY DIAGNOSIS

INDIVIDUAL RECORD BLANK

Developed for the Rorschach Institute, Inc.
By Bruno Klopfer and Helen H. Davidson

Name........ Sex.. Date........ Examiner........
Birthdate........ Age........ School........ Grade........
Address........ Occupation........

To the Examiner

N.B. For further information about the use of this Record Blank, and scoring and interpretation of results, the examiner is referred to "The Rorschach Technique" by Bruno Klopfer and Douglas Kelley, published by World Book Company.

To facilitate recording of responses, divide your record sheet into two columns: one for the performance proper and one for the inquiry.

Number the responses to each card separately. Number each response in the inquiry to correspond with the main response if it is an elaboration of or an addition to it. If a new response is given in the inquiry, list it as an additional response by adding a letter to the number of the preceding response.

Leave adequate space after each response in case the inquiry should require more space than the original response.

For position of card, use symbols Λ V > < the apex indicating the top of the card as presented to the subject.

For time, note the time when each card is presented and the time when the first response is given. Note the total time for each card and the total time for the performance proper. Time any delays of more than 10 seconds between responses.

Indicate on the picture sheet (page 5) the area chosen by outlining the part and numbering it with the same number as the response. If the whole blot is chosen, write "W" next to the number of the response. This can be done during or after the inquiry. In case of doubt, ask the subject to outline his concept on the picture sheet.

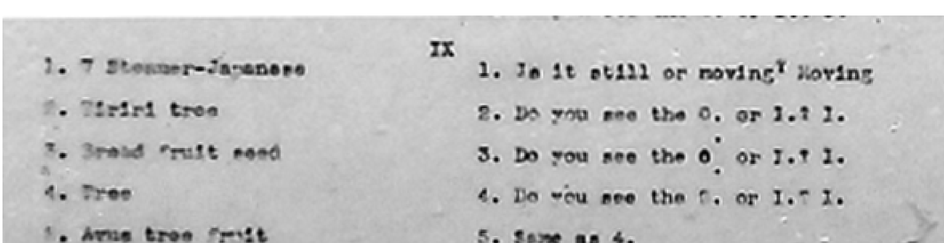
List the scoring of all responses in the form on page 2. Columns are provided for recording the number of the card and the response numbers, the time, the position of the card, and main and additional responses. Additional determinants to a main response are also to be listed in the "Add" column, listing these one below the other if there are several.

Use the Tabulation Sheet (page 3) for the tallying of all responses. Tabulate all additional scores in the "Add" column. Use a pencil of a different color for this purpose.

Only main responses are used in determining the relationships among factors on page 4. Compute percentages only in the instances where they are specifically called for as indicated by the "%" symbol. In all other cases, simply record the absolute frequencies of the various categories.

SUMMARY OF PERSONALITY DESCRIPTION

FIGURE 5.
Standard form for Rorschach record.



IX

1. ? Steamer-Japanese	1. Is it still or moving? Moving
2. Tiriri tree	2. Do you see the O. or I.? I.
3. Bread fruit seed	3. Do you see the O. or I.? I.
4. Tree	4. Do you see the O. or I.? I.
5. Avus tree fruit	5. Same as 4.

FIGURE 6.
Rorschach Card IX, responses from a young Ifalukan girl.

in ongoing, unfolding real life—this cynosure of scientific ambition found perhaps its fullest and most fanciful expression in Robert K. Merton's formulation of the ultimate social science tool, which he called the "introspectometer." Buried in the middle of the manual for use of the focused interview technique, a careful reader could find a single mention of this intriguing "hypothetical machine"—at once admittedly imaginary and yet possibly real. It would act like a movie camera capturing the data of an actor's life while she engaged in it: "a technological contrivance—an introspectometer, so to say— . . . would record, in accurate and intimate detail, all that the individual perceives as he takes part in social interaction or is exposed

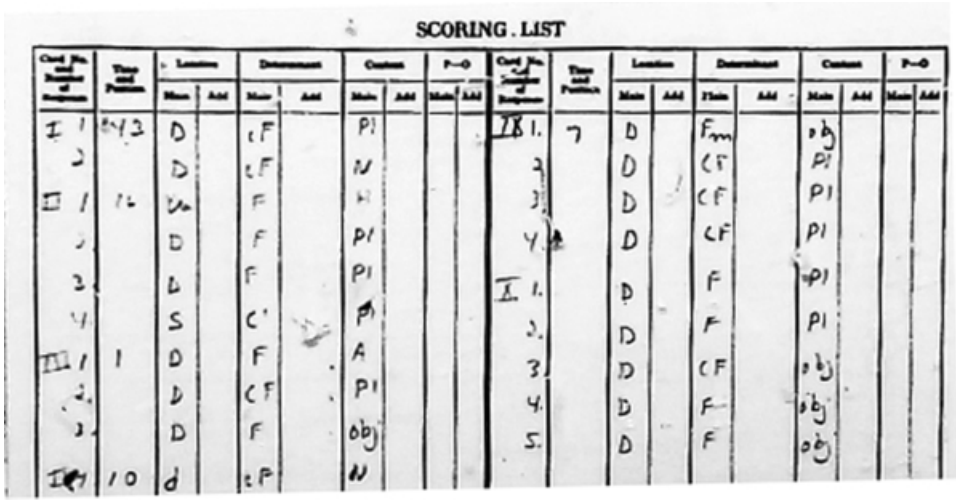


FIGURE 7.
Scoring list (partial image) from an Ifalukan Rorschach Test. The form provides an overview of responses and indicates the test-taker saw a great deal of form and color, as well as detail, which suggest a lack of sophistication and self-insight.

to various situations. . . . It would provide, in other words, *a motion picture of the individual's stream of experience as he is engaged in the situation*." The machine must work in secret, and the subject must "not be aware that the apparatus was at work," in order to secure the most undisturbed data flow (Merton, Fiske, & Kendall, 1956, pp. 22–23). And even though his introspectometer naturally could never exist—if it did, it could become a "collective nightmare" instead of a scientific boon—Merton suggested the beginnings of such an instrument "have of course been made" in several nascent forms, including the Lazarsfeld–Stanton Program Analyzer and his own focused interview. The imagined capacities of the introspectometer recalled the actual workings of projective tests (at least as framed by their users).

To isolate situation-based subjectivity was a widespread the goal of the actors in the Cold War human sciences. Consider the rise of scientific interest in coercive persuasion as part of the "great brainwashing debates" that galvanized experts across the U.S. behavioral sciences during the early years of the Korean War. Coercive persuasion relied on accessing and operationalizing the mechanics of self-constitution so that the subject—prisoner, spy, operative, deviant, addict, or patient, depending on the research context—could be first broken down utterly and later built back up, repurposed, and ideologically retuned (Schein, 1956). The technique of sensory deprivation, developed at this time, indicated that a volunteer robbed of sense contact and orientation to his environment might become disoriented and utterly lost in hallucinations within a short period: "exciting and unexpected findings" also included "intellectual and perceptual deterioration," "susceptib[ility] to propaganda" and in general subjects "found the situation to be very unpleasant" (Suedfeld 1969, p. 3). Discoveries in other fields showed the sense of self to be much more fragile and transitory that previously supposed. Small group research, a growing field at this time, shared the aim of access to subjectivity—in their case, to group processes, or what have come to be called intersubjectivity. In the mid-1950s, at Harvard's Laboratory of Social Relations, sociologist Robert Freed Bales set up a special experimental room where he gathered extensive records of face-to-face interactions to isolate what were called "indices of implicit emotional processes" (Bales, 1949). By monitoring these infinitesimally small exchanges among groups of people confined in the room,

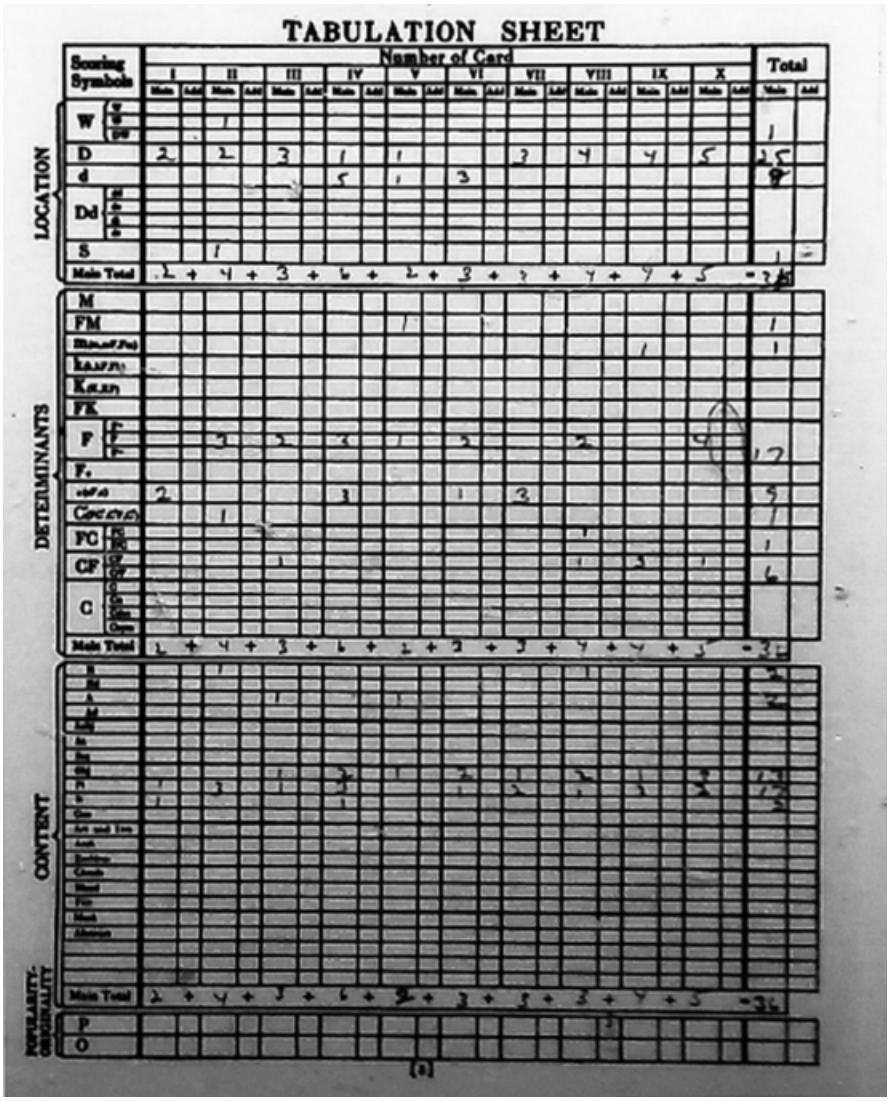


FIGURE 8.
Tabulation sheet, Ifalukan girl.

the researcher felt he could ultimately control the group's dynamics and engineer their collective outcome—results, as Bales was pleased to note, only dreamed of by science fiction a few years before. Emphasis had turned from tracking the deepest recesses of the subjective self to using tools to make those once deep recesses now visible and open to alteration. Specialists rendered interiority as no longer interior in this shift, which can be called the "subjective turn" in the postwar social sciences. Experimental subjects have an accessible subjectivity, a potentially manageable one. Thus deprived of its primary quality (of an essentially unknowable innerness), it is trackable.

Above all, those who joined the projective test movement were fiends for information in bulk, and here was their monument. If there was one solid product that did emerge from the

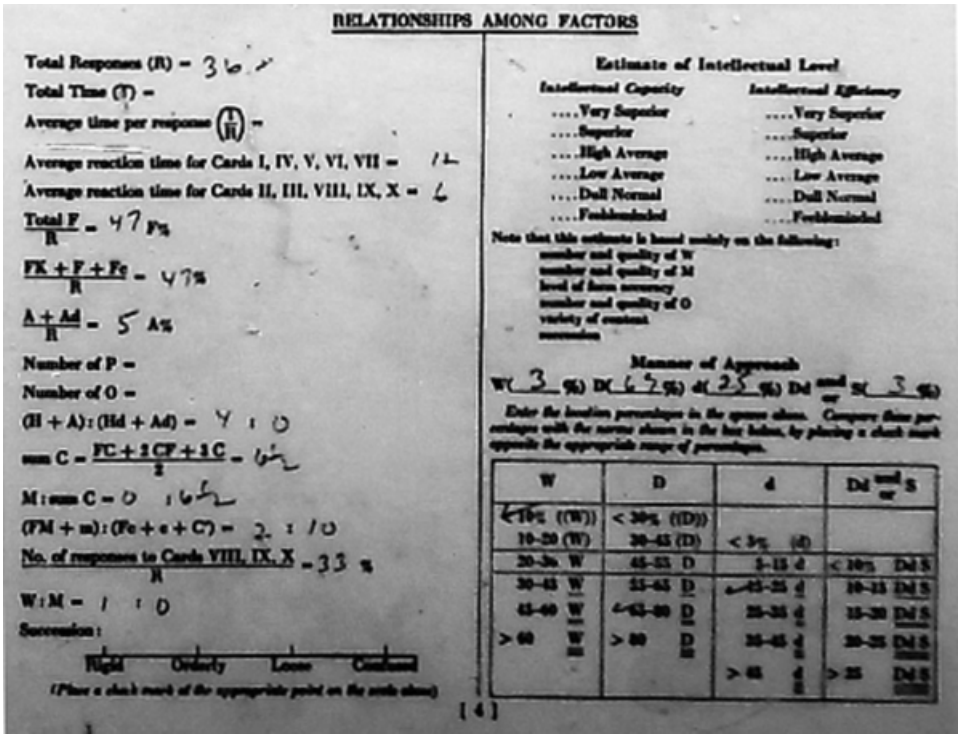


FIGURE 9.
Relationships among factors (same Ifalukan subject). Each of thousands of subjects included in the Microcard archive had one such form on which the test giver calculated the ratios and relationships found among the subject's Rorschach results. Ideally, findings could then be more easily compared across cultures.

movement it was their archive. Beginning in the early 1950s, an enterprising young University of Kansas professor named Bert Kaplan (in 1948 he spent the summer collecting projective tests from four American Indian tribes for his Harvard psychology dissertation) turned his efforts to collecting others' collections. As an enthusiast of the movement, he wondered what would happen to the reams of projective test protocols that had been and would be gathered at such cost and with such tremendous effort. Kaplan worried the data itself was endangered. He especially concerned himself with the more ephemeral types of data—data of the self, subjective data. His idea was the build a clearinghouse to preserve the fruits of big anthropology and the large-scale field missions of the behavioral sciences beginning during the Second World War and continuing into the postwar period (Figure 9). Assembling some of the most stalwart projective test adherents, he formed a National Research Council committee with Hallowell as chair and prominent members (including Melford Spiro), as well as a representative of the Microcard Foundation of LaCrosse, Wisconsin, a pioneer in micropublishing enterprises. The project, officially named Microcard Publications of Primary Records in Culture and Personality, but more accurately, perhaps, labeled the "database of dreams," was from its first micropublished installment in 1956 to its last in 1963, both a success and a failure. (On the archive, see Lemov, 2010a; on the history of anthropological knowledge-gathering practices in the twentieth century, see Lemov, forthcoming; space does not permit anything more than a capsule history of the database to be given here.) Figures 4 through 9 show some of the forms by means of which the records were standardized.

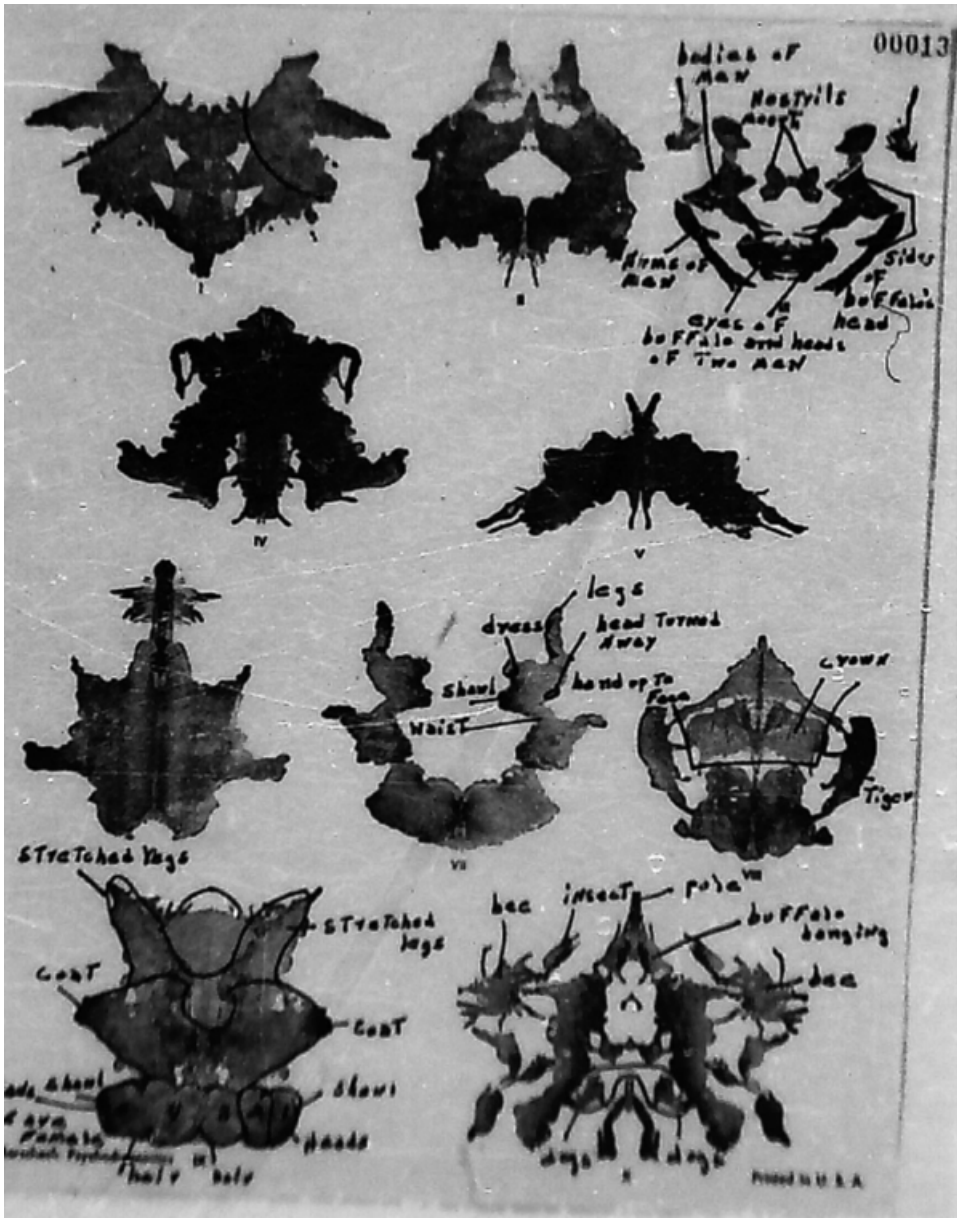


FIGURE 10.
Rorschach record from Victor Barnouw, "Rorschachs of 13 Nepalese Men and Children," Cultural Classification AK1, 1957 edition, Microcard Primary Records of Culture and Personality.

In sum, the archive amounts to 20-some-thousand fingernail-sized pages of "raw data" issuing from mainly illiterate subjects. With its thousands of Rorschach and TAT protocols, its hundreds of dreams, its myriad life histories—of three Pomo (California Indian) women, for example, or of a young Pathan man from northeast Pakistan—the culture-and-personality archive holds vanished worlds of thought reminiscent of a story from Borges (Figure 10).

Indeed, the narrator of "Tlön, Uqbar, Orbis Tertius" stumbles upon just such an encyclopedia of a hitherto unsuspected planet:

> Now I held in my hands a vast methodical fragment of an unknown planet's entire history, with its architecture and its playing cards, with the dread of its mythologies and the murmur of its languages, with its emperors and its seas, with its minerals and its birds and its fish, with its algebra and its fire, with its theological and metaphysical controversy. And all of it articulated, coherent, with no visible doctrinal intent or tone of parody. (Borges, 2007, p. 7)

The projective test movement's drive to articulate the seemingly inarticulate finds its apex in this set of materials. More influential than the large numbers of publications, the long-ranging plans, or the shared social engineering hopes was the impulse toward methodological innovation that resulted in this bank of data, with its "transparent tigers and towers of blood." This is precisely what Spiro and others predicted, if in another key. Perhaps Tarev did as well. Coming across the Rorschach cards while collecting discarded Lucky Strike boxes, he waxed enthusiastic "Those pictures you showed me"—speaking of the cards to Spiro—"I liked them very much."

Conclusion

The projective test movement overlapped with the great push of would-be new nations toward decolonization in these same years. While field workers were lugging their tests to islands, forests, and cities in areas that would soon be known as the Third World—the term anthropologist, historian, and demographer Alfred Sauvy coined in 1952 (see Escobar, 1994)—successive territories gained full or partial independence, forming a high tide of revolutionary chage. The Philippines (1946), India (partitioned in 1947), Burma and Ceylon (1948), Laos (1949), Ghana (1957), and Congo (1960), were only a few of the many. "Not so very long ago, the earth numbered two thousand million inhabitants: five hundred million men and one thousand five hundred million natives. The former had the Word; the others merely had use of it," wrote Sartre in the preface to *The Wretched of the Earth* (quoted in Jameson, 1984, p. 181). This echoed Sauvy's original usage of Third World as a term defined by deprivation: "Like the third estate, the Third World is nothing, and wants to be something." So began a period of upheaval often marked as "The 60s," with a clamoring for recognition and, as Jameson glossed Sartre's remark, ". . . all these 'natives' became human beings, and this internally as well as externally."[18] All citizens of new nations would rightfully want to be heard from—would demand a voice. And yet there was unsurprising ambivalence among the First World's scientific specialists toward actually hearing what they had to say. Modernization theory (intellectually) and area studies (institutionally) were the two most obvious responses to these world developments, often seeking to tame and bring order to independence struggles. (Often, indeed, they worked against liberation movements; see, e.g., Gilman, 2003). The projective test movement's story as told here offers another take on the scientific response to decolonization.

The movement, made of specialists attached to remote areas and putatively unseen places, used their technologies both to listen and not to listen to what their subjects had to say.

18. Jameson means by "internally and externally" to liken the twinned demands to be heard of "those inner colonized of the first world—'minorities,' marginals, and women—fully as much as its external subjects and official 'natives.'" In fact the internal–external dynamic applies to the situation of postcolonial subjects on its own. Such subjects, and in a sense even Tarev, demanded both internal and external command—over their mental orientations as well as their politics. In neither regard should their answers be presumed.

Although equipped with high-power remote-viewing tools, they rendered these instruments (at least partially) incapable of providing pertinent information. Earlier anthropological studies did not much wonder "what the natives thought"—although many concerned themselves with "primitive mentalities" as logically derived phenomena that could serve as useful contrasts with the scientific mentality and as philosophical spurs (cf. Levy-Bruhl, 1978, and arguably Levi-Strauss, 1966), but postwar projective testers in a sense held up a microphone to augment the voices of those they were studying. "Tell us a story," they frequently asked. They did this with many motivations: Often left-leaning, generally liberal, somewhat critical of their own society, and mostly in favor of tolerance and benevolent transitional rule, they nonetheless structured their tests to avoid freely "giving voice" to those they interrogated and tested. Rather, they provided a kind of instamatic psychic X-ray that, by its very workings, allocated *to the expert* the task of discerning the true meaning of what was being said, what the native was thinking. Renowned psychologist Walter Mischel recently recalled his early training, which appears as almost an ideal case: Having studied art with Philip Guston, taken on poetry with Alan Tate at New York University, and delved deeply into psychoanalysis, he greeted the Rorschach test as a godsend: "At the time, it seemed like a mental X-ray machine. You could solve a person by showing them a picture" (quoted in Lehrer, 2009). To be able to solve people as if they were puzzles was enticing. By shifting the terrain of inquiry to depth structures—which were then relentlessly externalized and flattened in the process of being measured—experts in effect transformed their objects. (No wonder that in many places—notably Micronesia—the tests were notoriously unpopular, and were subsequently blamed for poisoning people against psychological anthropology for decades; Black, 1998.) Indeed, the use of projective instruments in the middle of the Vietnam War's combat zones to access the hearts and minds of Vietnamese people and render them as operational constructs, which Joy Rohde chronicles in this issue (pp 232–250), is an important episode in this regard. Tests employed at the very limits of their possible extension at times ceded logic to absurdity. The quest for an objective science of subjectivity during the Cold War involved severely constraining and technologically manipulating "subjective materials," the hard-won empirical documentation of which it was composed and through which it might test its hypotheses. (On the irrational effects of Cold War rationality when pursued relentlessly, see Erickson et al., forthcoming.)

One could not say that the projective test was dead by the 1970s. Certainly the Rorschach continued to have a checkered and also spangled career—for example, in the courtroom, where, as Peter Galison observes, the ten cards "don't mind sending you home, to the clinic, or to jail" (Galison, 2004, p. 257). The TAT continues to enjoy widespread use as well as a "pantheoretical projective technique that accesses a person's unique narratives," although its role among international organizational and industrial psychology firms as a personality assessor, formerly very active, has in recent years been limited (Hersen, 2003, p. 366). Yet many fewer ethnographers by the 1970s were giving the test to their subjects. Even fewer would admit to doing so. With the rise of biological frameworks in the forefront of cultural and social study, hanging one's hopes on projective instruments came to seem a bit odd and quite a bit out of date. By the 1980s, a former fellow traveler of the movement expressed incredulity not just at its waning but at the utter finality of its relegation to the dust heaps of unfashionability:

> Culture and personality was big when I was growing up and it's nothing now, it's not even taught in this department, just disappeared from the curriculum, disappeared from the so-called "Social Relations Department." It was a fad, you know, you don't teach it anymore, it's not even on the reading lists. . . . Even in anthropology, psychological anthropology is out of favor and not taught anymore, you know. [N]obody even reads that stuff, they never heard of it. . . . (McClelland, 1983)

These end-of-career, oral-history ruminations by the chair of Harvard Social Relations circa the early 1960s and a major standardizer of TAT scoring give a sense of the precipitous fortunes that characterized this once prominent, soon to be ruined movement, an Ozymandias of social science. Today it appears to hail, as another erstwhile movement stalwart observed recently, "from another time, almost another planet" (Spindler, quoted in Black, 1998, p. 235). Only the great if now obscure archives and the personal recollections of actors involved in the movement—fragmented as they are, and rendered obscure by, among other things, a profession's reluctance to acknowledge them—act as reminders of its existence.[19]

There has been almost no historical scholarship on the projective test movement. Aside from testimonies of those who personally signed on, it has received only brief mention in historiography devoted to two relevant spheres: the culture and personality school and mid-century personality psychology. In both, the tests merit little more than footnotes or short discussions. In particular, culture and personality scholars have tended to focus on the between-the-wars period that constituted, for some, the glory days of this endeavor. For example, Meyerowitz's (2010) recent account usefully reframes the political, sexual, and liberal reforms forwarded in work the enduringly famous interwar generation carried out. These studies constituted an early moment of social-constructivist thought (which included, too, the school's wide-ranging social engineering aims). Here and in other recent scholarship (Shannon, 1995), no mention is made of the role of projective tests in the work of wartime and postwar culture-and-personality adherents. In this regard, Stocking's (1984) dedicated volume, its title drawn from Auden's bittersweet "Heavy Date," holds continuing sway. *Malinowski, Rivers, Benedict and Others* contains a remarkable set of essays that address the prewar or wartime exploits of culture-and-personality types without, however, touching on the burgeoning role of test instruments with their sci-fi promises. A possible cause and continuing effect of this neglect is the palpable sense of romance that remains attached to this school: Mead sailing off to Samoa at 24; Benedict writing poetry and eloquent bestsellers; Sapir as a legendarily sharp critic for the "little magazines"; Belo in Bali hanging out with musicians, studying trance (see the complete volume; Stocking, 1984).

None of these images squares with the postwar generation and their eager embrace of a set of kitbag tools as central to their practice, as if the unaided eye and the experience of immersion were not enough. One aim of this paper has been to suggest that the projective test movement deserves attention in the context of its forbears as well as the surrounding milieu of the early Cold War. Using high-tech instruments as technologies of self in material, graspable, portable form (Galison, 2004, p. 258) allowed practitioners to believe they could—or were on the cusp of being able to—penetrate the domain of subjectivity, of inner space. Indeed, such a prospect had long entranced field workers, and many of the early "heroic" generation of culture and personality joined the later iteration. This long-held hope grew into operational practice during these years, animating many projects in the human sciences, as I have argued. Such a perspective, in addition to furthering research into a "science of subjectivity" in postwar America, may also prove a helpful way of bringing together scholarship on

19. In a retrospective reevaluation of the culture-and-personality movement's anthropological accomplishments in Micronesia, Black found something odd in interviewing participants: "Of the many anthropologists I asked to [evaluate the movement], a surprising number gave responses that were quite emotional. Many senior anthropologists expressed bitterness, anger, or cynicism. They seemed to see their generation's work as under attack, an attack neither informed nor fair, and which if successful would sweep away much that is of value and leave in its place nothing of any great worth. Theodore 'Ted' Schwartz spoke for many when he defended the 'Herculean efforts [expended by the discipline] in bringing the diverse cultures of this planet under close observation and in the huge task of sorting, evaluating, and comprehending the data that have been accumulated' against the critique of what he named 'new age anthropology'" (Black, 1998, p. 236). This paper is an attempt to assess seriously that collective work, much of which lies neglected and un- or under-utilized.

the political Cold War (e.g., Gaddis, 1998), the cultural Cold War (e.g., Hixson, 1998; Saunders, 2001), the global Cold War (e.g., Westad, 2007), and the institutional-scientific Cold War (e.g., Chomsky, 1998; Cull, 2009). As Westad recently observed, "Moscow's and Washington's objectives were not exploitation or subjection, but control and improvement" (p. 5). A technology of subjectivity, to put it simply, would be useful and of urgent importance. What better way to arrive at such a thing than to discover the mechanisms by which on-the-ground subjectivity is produced in different places among people of different experiences?

The projective test movement, long forgotten, contains in itself, in a particularly concentrated form, many of the complexities and contradictions of its time. Its practitioners have long since moved on. And yet in their exquisite crafting of a sense of observational distance, their meta-methodological obsessions, their tool-based understanding, their overweening love of data, their Herculean efforts to tilt at windmills—all of this in an effort to secure the fugitive traces of what it means to be a human being in one place or another—the movement's scientists appear, if not exclusively heroic, then certainly up to date.

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