

# Robert McC. Adams

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A Biographical Memoir by Thomas E. Levy

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# ROBERT McCORMICK ADAMS

July 23, 1926 - January 27, 2018 Elected to the NAS, 1970

Robert McCormick Adams was one of the most distinguished anthropologists of the 20th century by any measure—quality and quantity of scientific publications, effect on the field, leadership in national and international academic bodies, prizes and awards, and teaching. Over a period of more than sixty years Bob Adams carried out pioneering research in Iraq to address the rise and fall of civilizations in the Near East. Underlying many of his most powerful contributions was his extensive use of surveys, during which he discovered and mapped ancient towns and cities, introduced the sophisticated use of remote aerial sensing of archaeological sites, and worked to explain their location and relationship to the natural environment and to the evolution of hierarchies and political systems.



Takes Mulowill de Sam-

By Thomas E. Levy

Adams earned a bachelor's degree in 1947 and a Ph.D. in 1956, both from The University of Chicago. For most of his academic career he held a joint appointment in The University of Chicago's Department of Anthropology, Department of Near Eastern Studies and Civilizations, and Committee on Social Thought. He was a professor in the Oriental Institute, its director from 1962 to 1968 and again from 1981 to 1983, and Harold H. Swift Distinguished Professor in the Department of Anthropology. His other administrative positions included dean of the Division of Social Sciences (1970–1974, 1979–1980) and, finally, provost of the university (1982–1984). In 1984 Bob left Chicago to become Secretary of the Smithsonian Institution, a position he held for nine years. While directing the Smithsonian he also was a staff member at Johns Hopkins University in the Departments of Anthropology and Near Eastern Studies. In 1992 he stepped down from the Smithsonian to become an adjunct professor in the Department of Anthropology at UC San Diego. In 1995-96 he also was a fellow at the Wissenschaftskolleg zu Berlin (Berlin Institute of Advanced Studies).

Robert McCormick Adams was born in Chicago on July 23, 1926. His father grew up in St. Louis, attended Princeton and then Northwestern University Law School to become an attorney. His mother, Janet Lawrence, was from an old Chicago family. Bob (as his friends and colleagues came to call him) was a junior or, in fact, Robert McC. Adams III, but he never used that designation after the death of his father.

In high school Bob developed an interest in physics. He enrolled in the Massachusetts Institute of Technology but left to enlist in the Navy in the fall of 1944, where he trained as a radar technician, finishing his training toward the end of the war around July of 1945. At the end of the war he was stationed on a destroyer escort that sailed along the coast of China, with Shanghai as its port. By May 1946, he was sent to Long Beach, California, where he was decommissioned. While in China, Bob had been rethinking what he wanted to do in college (and life) and decided against returning to MIT and physics. According to Bob, the excitement of being in Shanghai in the mid-1940s gave him a sense of history—"all of the contradictions of the last years of the Kuomintang Regime, and the Communists were already very strong in the city and there were demonstrations. It was a very exciting place."

In the fall of 1946, Bob enrolled at The University of Chicago. The following June he received a degree called a bachelor of philosophy (the university did not have a B.A. then). During this time he oscillated between history, economics, and anthropology, finally settling in the anthropology program. Even so, he became increasingly interested in work at the Oriental Institute in the humanistic Department of Near Eastern Languages and Cultures. From 1947 to 1949, he worked in these areas and also as managing editor of the student newspaper, without any intention of pursuing further academic work. Instead, he began participating in activist causes and left the university.

As a veteran and on the G.I. Bill, Bob had the freedom to return to study whenever he wanted, so, dreaming of being a part of the proletariat, he worked for some months in a Ford assembly plant in South Chicago. Then he shifted to the great U.S. Steel South Works, which was at that time perhaps the biggest single steel mill in the country, where Bob worked all through the winter, spring, and summer of 1950 as a semi-skilled mill hand and cutter operator and in other of what he called "exciting jobs." According to Bob, the unions were very seniority oriented, and he was "really too activist for the union." As he was on a swing shift, he used the G.I. Bill to take occasional courses at The University of Chicago.



Bob Adams in 1950 excavating at the site of Jarmo, Iraq (Photo credit - Oriental Institute, University of Chicago.)

In the fall of 1950, one of Bob's professors, Robert J. Braidwood, organized an archaeological expedition to Iraq. When a graduate student had to drop out of the project, Braidwood invited Bob to join, partly because he would know how to fix the expedition's cars. As he later wrote, Bob candidly told Braidwood and his wife, Linda, an equal partner in the research, "I wasn't at all sure I wanted to be a professional in any academic field..." During the winter of 1950-1951, however, lying on the lower bunk of the mud-brick expedition house in a remote site in Iraqi Kurdistan called Jarmo, he had a life-changing discussion with a graduate student from Norway, whom Bob recalls saying, "You really ought to give further thought to this idea of the academic

business, Bob. It's really very attractive." This simple remark was Bob's epiphany that archaeology and academia would be his life's work.

While Bob still had a desk in Braidwood's lab, his interests in the Braidwoods' focus on the origins of agriculture and settled life in the Middle East began to wane. He was more interested in cities, history, and civilization and was very much influenced by V. Gordon Childe, an Australian archaeologist who made his career in the United Kingdom and wrote a number of influential books, including *What Happened in History* (1942) and *Man Makes Himself* (1936). Bob spent the summer of 1952 working in the field in western New Mexico with Paul S. Martin, then a curator at the Field Museum in Chicago. According to Bob, Martin was

in some ways personally an old maid and curmudgeon, if you can combine those two, but he was ahead of his time as a person who was not interested in the material finds in themselves, but much more interested in the reconstruction, the social organization and so on. It was a very pleasant summer, and I think I may have even learned something from it

This was the only time Bob actually worked in the American Southwest, though later in life he and his wife purchased a vacation home in Colorado, and he retained a lifelong interest in the archaeology of the region. By March of 1956 his doctoral dissertation, "Level and Trend in Early Sumerian Civilization," was accepted in the Department of Anthropology at The University of Chicago.

Bob spent four seasons carrying out fieldwork in Mexico (1952, 1958-1959, 1961), and this work had a profound effect on his cross-cultural thinking about process and the evolution of ancient civilizations. In the winter of 1952 he went to Yucatán. The Carnegie Institution of Washington then had a very distinguished group of Maya archaeologists, including Tatiana Proskouriakoff, who later played a significant role in the decipherment of Maya hieroglyphs. They were concentrating on one of the late Maya cities, occupied until only a century or so before the coming of the Spaniards, called Mayapán. It was not far from Mérida, the capital of Yucatán, and it was a genuine city. According to Bob, "a walled city that covered several square miles, I guess—it's hard to reconstruct it now—made up of internal house compounds and lots of temple mounds and so on." It was in Mexico that Bob began coming to grips with cities, and the Mexican fieldwork was an opportunity for him to think about urbanism.

In 1961 Bob was part of Chicago's Tzeltal-Tzotzil Maya project. One of his tasks was to excavate the ruins of Copanaguastla, Chiapas, Mexico. His student field assistants included Edward Calnek, Donald McVicker, and future NAS member Kent Flannery. Copanaguastla lay on the finca (hacienda) of a cacique (local strongman), whose word was law. He was illiterate, traveling everywhere with a .45 caliber revolver and a young boy who would do his reading and writing. He agreed to let Bob excavate on condition that Bob rent a spartan set of rooms on the finca and pay a local woman to prepare the meals. The woman turned out to be a toothless crone who had mastered one dish: cold black beans, mixed with eggs that had been heated only sufficiently to turn the albumin from transparent to cloudy. Only by covering these meals with a layer of sliced jalapeño peppers could the crew render them edible. Flannery recalls, however, that each night as the crew lay on their cots Bob spoke at length about his philosophy of doing archaeology and relating it to the rest of anthropology. Flannery insists that Bob's nightly talks affected him more powerfully than any course lectures.

# Fieldwork in Iraq

The centerpiece of Bob's field career developed in Iraq over many years (1950-1951, 1956-1958, 1960, 1967, 1968-1969, 1973, and 1975). It was in the land between the Euphrates and Tigris rivers, where the world's earliest civilization emerged, that Bob's most lasting contributions rest. By the fall of 1956 his highly original thinking began to crystallize. With funding from the Oriental Institute and the American Schools of Oriental Research he started a project that was an outgrowth of work that Thorkild Jacobsen had done in the 1930s east of Baghdād. Jacobsen and other scholars thought that even though you couldn't trace ancient canals on the surface, they must be there because ancient sites were displayed in linear patterns. For Bob, the identification of the network of ancient canals and the mapping of sites helped disentangle the many things we didn't know about ancient historical geography. As he pointed out, however,

It was a very static notion with no sense of change. There was no understanding of the historical processes by which landscapes change.

Bob set out to pioneer a rigorous new approach. It quickly became clear that no scholar had really considered the dynamic nature of civilizations or the interactions between human beings and settlements. Although a landscape might today appear serene, it was really a very harsh setting that was continuously changing through the flooding of rivers, changes in their courses, and other kinds of processes, including desertification and a frontier of cultivation continually moving repeatedly through time for any number of reasons. In the field, Bob realized that researchers had made a terrible mistake in thinking only about the ancient past. He wrote,

I found myself walking among mile after mile of later ruins that nobody had ever bothered to think about, and the question of why you were looking only for the ones that went back to the pre-Christian millennia—became unacceptable to me to think that way.

Thus his deep-time Braudelian approach to long-term historical socio-economic change was born in the Iraqi desert, with his now signature use of multiple sources of socio-economic data.

The best archaeological fieldworkers are risk takers. Bob was no exception. He took two graduate students with him to Iraq, Robert Fernea and his new bride, Elizabeth Warnock Fernea, to do something that Iraqi officials forbade. Their appearance there occurred at the time of the 1956 Suez crisis, and the Iraqi government did not want social anthropol-

ogists nosing around their country. Nonetheless, calling them irrigation specialists, Bob enlisted the Ferneas (who went on to become distinguished anthropologists) to join his team to study contemporary land tenure systems, irrigation networks, and tribal dynamics. Later, Robert Fernea wrote his PhD. dissertation on "Irrigation and Social Organization among the El Shābana: A Group of Tribal Cultivators in Southern Iraq" (1959) and Elizabeth Fernea published an important book titled Guests of the Sheik: An Ethnography of an Iraqi Village (1965). Both works provided Bob with dynamic contemporary models for studying ancient processes. Among other findings, they revealed tension between farmers and great absentee landowners who were also tribal leaders, a process that no doubt began in antiquity.



Robert McC. Adams working on maps in his University of Chicago office, ca. 1958 (Photo source - Oriental Institute, University of Chicago.)

Around this time, the Iraqi monarchy enlisted Bob to explore a critical problem facing agricultural development—rampant soil salinity (salt accumulation) affecting crop growth. For Bob, the key to this problem was what happened in antiquity. He designed a project on the Diyala Plains, east of Baghdād, where there had been a massive canal, the biggest in the Middle East, in the early Islamic period. Why hadn't its builders needed to construct deep drains of the kind that engineers in 1950s said were necessary to remove salt from the soil? This led the government to allow Bob to examine restricted-access aerial photographs that were being taken to develop the area. Immediately he understood that there was an immense amount of confusing information in these photographs and that an entirely different kind of study was possible with them. The government brought Thorkild Jacobsen out to serve as project director, as he had in the Diyala Plains in the 1930s. Jacobsen stayed for part of the year, and Bob served as the field director, staying throughout the year.

In 1953 Bob married Ruth Salzman. Ruth and her two daughters (Gail Lorien, Beth Skinner) by a previous marriage and their new daughter (Megan McCormick Adams, born in 1955), all accompanied Bob to Iraq. Jacobsen took his wife, Joanne, as well, but she became very ill, leading him to spend much time looking after her and eventually

having to take her back to Chicago. According to Bob, "Thorkild was not in the field extensively, but we had an interesting relationship—at times tense, but intellectually always, I think, rewarding for both of us." By 1955 Bob was able to operate, with Iraqi government vehicles and with no government controls, over the Diyala area and to get a sense of what one could do with aerial photographs. In the meantime, the Iraqi revolution was creeping nearer. Before returning home, Jacobsen stressed to Bob that Ruth and the children should also leave Iraq, which they did. Bob himself got out in late June, just before the revolution came on July 14, 1958, after spending ten or eleven months in the field. In 1958 Bob published his landmark paper (with Jacobsen), "Salt and silt: Problems of irrigation agriculture in ancient Mesopotamia" in the journal *Science*. It explained why land that was once productive had gone to ruin. In that seminal study, Jacobsen and Adams show how progressive changes in soil salinity and sedimentation contributed to the disintegration of past civilizations.

Bob's fieldwork in Mexico and Iraq enabled him to go beyond Childe's focus on social surplus in the social evolution of Mesopotamian society, and to integrate the Ferneas' ethnographic work to show how older complex social formations can break down and be replaced by a number of smaller powerful families as hereditary landholders. This was brought forcibly forward in his book *The Evolution of Urban Society* (1966) and was explored earlier in his co-edited book with Carl H. Kraeling entitled *City Invincible*. According to Norman Yoffee (1997:403-404), the former became an instant classic in anthropology, as it provided a detailed comparison between the two best-known cases of archaic state evolution and represented the best anthropological archaeology back in the day.

Bob's magnum opus for his early Iraqi research was his book *Land Behind Baghdad* (1965), which summarized his seven-month field season in 1957-1958 on the alluvial fan of the Diyala River (ca. 8000 km²), a tributary of the Tigris River near Baghdad, and, most importantly, demonstrates how history and geography are integrally linked, based on long-term patterns of human adaptation and exploitation of unique natural environments. This highly original study spanned a ca. 7000 year period from the prehistoric Ubaid to 1900 C.E. For this work Bob collaborated with a soil scientist, Stuart A. Harris, who was trying to map ancient canals using a Jarret Auger hand drill to make bore holes. Harris was advising the Iraqi government on behalf of Hunting Aerosurveys Ltd. Early on, Bob began to recognize the importance of his application of remote sensing (aerial photographs) coupled with data from other fields.

# **An Iranian Digression**

In the winter of 1960-1961, and again in the spring of 1963, Bob went to Iran for the Khuzestan Development Service, which was the Iranian operating arm for economic development. The CEO of that agency was a distinguished Jewish American administrator named David Eli Lilienthal, who began working for the Shah of Iran in 1955. Previously he had led the Tennessee Valley Authority under Franklin D. Roosevelt. The Iranians were facing salinity problems similar to those in Iraq as they were attempting to redevelop the Khuzestan Province's Susiana Plain in the country's southwest. Lilienthal had read the Jacobsen-McCormick paper in *Science* and consequently invited Bob to be an advisor. Iran, however, was not where Bob wanted to work.

Bob had always been generous in helping people in the sciences whom he respected. Near Eastern archaeologist Frank Hole (NAS member) recalls just how magnanimous and helpful Bob was to him:

After Bob had finished his Susiana survey, he wrote his report and moved on. When I expressed interest in pursuing further survey, with an emphasis on the prehistoric sites, he handed over to me the maps he had laboriously traced from aerial photos, as well as the photos themselves. I subsequently shared them with others. We were able, using his records, to quickly identify places of interest and to fill in gaps that he had not had time to do himself.

# In terms of Bob's methods, Hole observed:

The Susiana survey exemplifies his approach to survey. In Susiana he was interested in the history of water use as background for the Khuzestan Water Development Authority's plans to construct dams and canals and open up huge tracts of irrigated land. Bob traced a set of aerial photos on which he could recognize sites and canals, and used this as his base map. In the field he used triangulation to spot sites on his map. He used a Brunton compass and a three-arm protractor for plotting the locations. He worked primarily from large sites and traces of canals and he spent little time fording the mazes of modern canals to visit every site. Often, owing to the conformation of sites, he was able to guess their periods and he did not literally visit every one. He worked efficiently, collecting enough pottery on the surfaces to determine the ages of sites, and

often left the sherds on the sites where I found them in neat piles. Bob worked strictly with diagnostic sherds that he could recognize rather than collecting large assemblages from every site.

# **Back to Iraq**

In 1966-1967 Bob was again conducting long field seasons in Iraq, using the German Archaeological Institute as his base. During this period he collaborated closely with Hans J. Nissen, a young German researcher whose work on his book *Archaic Bookkeeping* deeply impressed Bob; Nissen was one of the few who could significantly bridge archaeology and ancient texts. At this time, Bob stayed with the Germans at their field base in Warka— ancient Uruk. According to Bob, "The German camp had been there since the

1870s or whenever—a long time. It was in one way very primitive—they refused to allow anything but kerosene lamps—but it was very comfortable for work, and it was a routine that people had settled into that was very good." Bob obtained excellent aerial photographs for the site of Uruk and its environs. On the morning of June 5, 1967, the Six-Day War between the Arab states and Israel broke out. A few days earlier, Bob and an Italian fellow (who Bob believed was a spy) were sitting next to the Tigris River watching loaded boxcars cross the bridge. According to Bob, "I suspect he was counting them for somebody, but you could see the covers, and it wasn't hard to guess there were tanks under the covers and so on. So the June war was about to pop."



Bob Adams at his desk at the Smithsonian Institution, ca. 1986 (Photo credit - Smithsonian Institution.)

The result of the Adams-Nissen four-and-one-half month field collaboration was the magisterial *The Uruk Countryside* (1972), which, according to Yoffee (1997:405), transformed our knowledge of early urbanization in Mesopotamia. It showed how southern Mesopotamia produced the first urban society in world history and then explains why and how this region today is devoid of towns and large-scale agriculture. This was followed by the groundbreaking work *Heartland of Cities* (1981), which presented the results of Bob's southern Iraq surveys carried out between 1968 and 1975. This work is both a detailed description of the primary data he collected and an innovative demonstration of his ability to analyze and synthesize data. Hardening his signature cross-disciplinary approach, Bob combined his own archaeo-

logical settlement pattern data with ancient texts to trace the evolution of the canals and settlement systems on the southern Mesopotamian plain.

The result was a new, integrated view of how environment, geography, and human agency affected trajectories of Mesopotamian history over a 7,000-year period. In this volume Bob employed tools developed by the New Archaeologists, including locational analyses and rank-size rules, to test his ideas of the evolving processes that led to growth, stability, and resilience in Mesopotamian cultural systems. Especially impressive was Bob's open-minded approach to exploring every possible historical source in works as disparate as the neo-Babylonian Murashu archive, the Babylonian Talmud, the writings of Roman historian Strabo, and others.

# **Intellectual and Concrete Underpinnings**

It was early in his career that Bob became interested in cultural ecology and a regional approach, which were catalysts for his search for the "big picture" to explain culture change. Never forgetting the historical context (and accompanying ancient texts) in which societies emerged and collapsed, Bob analyzed the relationship between climate, environment, population, and subsistence across time and space. Using the cultural ecology paradigm, Bob explained the emergence of civilizations as a cross-cultural phenomenon, most famously in *The Evolution of Urban Society* (1966). This book was based on the Lewis Henry Morgan Lectures that Bob delivered at the University of Rochester in 1965. In these lectures Bob presented detailed analyses of the development of early civilizations in Mesopotamia and Mesoamerica. He was able to demonstrate that in spite of obvious differences in details, they displayed some significant similarities. His explication showed stunning parallel processes in the way these otherwise unrelated civilizations evolved. In this way, Bob helped establish the field of anthropological archaeology.

Bob's extraordinary contributions to the theory of the rise of the world's earliest civilizations went well beyond cerebral reasoning at the highest level, because he applied theoretical modeling to his own original and pioneering Middle East fieldwork. Using settlement-pattern data that included measuring site sizes and collecting datable pottery sherds from the surface of ancient settlements, Bob applied cultural ecology principles to (1) an examination of the natural environment of Mesopotamia, monitoring how natural conditions influenced human adaptation, and (2) explaining the different strategies used by societies throughout Mesopotamia to adapt to and exploit their changing environ-

ments. Around the same time, Gordon R. Willey (NAS member), who was working in the Viru Valley of Peru, did the same kind of regional survey for the New World.

Bob achieved what no scholars had achieved until then: he combined large-scale surface reconnaissance (with a Jeep) with recently available aerial photographs to identify changing settlement sizes and spacing through time that reflected the rise of the first cities in the world—from isolated agricultural village to village clustering as a result of population increase to the rise of Early Dynastic (3rd millennium B.C.E.) urban centers connected by road systems. He was able to date old watercourses and canals, along with probable agricultural fields. Taken together, decades of field work in the Mesopotamian lowlands enabled Bob to document long-term settlement patterns and demographic changes in the oldest civilization in the world. Never forgetting the role of history in culture change (something Bob' contemporary processual archaeology colleagues decided to do), Bob was able to present a magisterial picture of deep-time culture change from the sixth millennium B.C.E. to the late Islamic periods.

# Bob left us a legacy of data and analyses from all the fieldwork he conducted.

Unlike the research of many archaeologists, all of Bob's fieldwork was published, thereby fulfilling a central ethical principle of the field. This accomplishment is a model that all aspiring scholars should achieve. The three exceptional monographs he published—*Land Behind Baghdad* (1965), *The Uruk Countryside* (1972, with Hans Nissen), and *Heartland of Cities* (1981)—all became archaeological classics. They are essential for comprehending the conditions that operated during the period when the earliest urban centers in the world first emerged, around 3500 B.C.E. Not content to be an expert on one narrow archaeological period, Bob devoted himself to collecting data from every archaeological period at the sites he recorded. These data enabled scholars to trace the later development of each civilization that emerged in the Mesopotamian lowlands.

Bob regarded the historical records as central for full understanding of the Near Eastern archaeological record, and those data enabled him to present an enhanced approach to cultural ecology, one that moved away from facile environmental determinism. As the late Roy D'Andrade (NAS member), a UC San Diego colleague of Bob's said:

In his work [Bob] clearly documents not only how environmental constraints helped shape early Mesopotamian societies, but also how those societies were able to exploit the immutable environmental framework they were embedded in, how they adapted to it, and, at times, how they circumvented it. In fact, throughout his career he has recognized and explored the importance of social interactions, both within and between societies, for understanding the origins and evolution of early civilizations.

Given Bob's appreciation of and reliance on historical records to complement his archaeological research, he declined to become deeply associated with the New Archaeology movement in the 1960s and early 1970s. Contemporary New Archaeology scholars, such as the paradigm's leader, Lewis Binford (NAS member), eschewed the use of history in their search for general laws of cultural behavior. But Bob's deep anthropological perspective shone in a number of articles, such as his masterful "The Emerging Place of Trade in Civilizational Studies," first published in 1975 in a landmark book edited by Jeremy A. Sabloff (NAS member) and C. C. Lamberg-Karlovsky, and "Ideologies: Unity and Diversity" (1992). In his search to explain the sociopolitical evolution of the earliest civilizations, Bob explored the use of ideology and trade mechanisms in an original integrative perspective. As Norman Yoffee observed (1997:399), what makes Bob's contribution to world archaeology so prominent was his holistic approach to the study of Mesopotamian history and archaeology

# The Smithsonian

Having published all his fieldwork and contributed major theoretical contributions to the study of ancient civilizations, in 1984 Bob took up another major challenge as Secretary of the Smithsonian Institution, where he applied his skills and intellect toward the greater good of culture in the United States. At the Smithsonian Bob initiated new programs to ensure cultural diversity, establishing a Cultural Education Committee in 1986. He oversaw acquisition of the National Museum of the American Indian and the development of the National Postal Museum from the National Philatelic Collection. He oversaw construction of the Quadrangle, a complex housing the National Museum of African Art, the Arthur M. Sackler Gallery, and the International Center. Bob's goal was to reinvigorate research at the Institution, as well as incorporate new technologies into education, research, and museum programs. The resulting National Science Resources Center was created to improve the teaching of pre-college science and mathematics.



Secretary Adams at signing ceremony for the National Museum of the American Indian, 1989 (Photo - Smithsonian Institution.)

According to the archives of the Smithsonian, Bob faced several challenges head-on, raising awareness of the deteriorating infrastructure of the Smithsonian and initiating a renovation program for its historic structures. When the "culture wars" erupted at the Smithsonian in the 1990s, with criticisms of exhibits including The West as America, an exhibit at the Smithsonian American Art Museum: Science in American Life, at the National Museum of American History, and a script developed at the National Air and Space Museum for an exhibit on the Enola Gay, Bob oversaw a thoughtful national discussion of the issues.

Upon his retirement from the Smithsonian in 1994, Bob was named Secretary Emeritus and was eagerly welcomed as a new adjunct professor of Anthropology at UC-San Diego, where he taught and lent his prestige to the university's Anthropology program until his retirement in 2009. In 1995, that university's Department of Anthropology established "The Robert McC. Adams Award for Excellence in Anthropological Archaeology" to be given each year to a graduating senior.

# **More Recent Research**

After retiring to La Jolla, Bob published *Paths of Fire: An Anthropologist's Inquiry into the Making of the Modern West.* Having completed his fieldwork and publication obligations, Bob wanted to apply his views as archaeologist to the problem of technology and modernity in Western society. This work made a number of points: technology cannot be separated from the social and economic institutions in which it was embedded; technology is not an autonomous prime mover that can overturn its human inventors; humans have a responsibility for the consequences of the technologies they develop; scientists and technology have interacted in co-dependent relationships; technology has advanced through concentrated spurts of innovation, whose frequency has increased over time in Western societies; and, in general, technology has helped humans to overcome adversity through trial and error. While writing this book Bob taught a series of courses in anthropology and technology for upper division undergraduates at UC San Diego.

While teaching he not only engaged with young students but also sharpened his own thoughts on the processes of technological change that he had grappled with his entire academic life.

Bob's lifelong concern with strengthening American scholarship and the ethics of research, however, went well beyond anthropology and archaeology. This included his service as director of the Oriental Institute and provost at The University of Chicago and memberships on boards of institutions. Bob held a long-term trusteeship at the Russell Sage Foundation, was an active member of the American Academy of Arts and Sciences, contributing to a long-term federal financing, initiated by Senator Patrick Moynihan, of the Council of American Overseas Research Centers (Adams and Schelling, 1979) and another report linked to the German American Academic Council (Adams, 2002b).

Bob's largest contribution involved his work with the National Academy of Sciences, to which he was elected in 1970. He became a member of the NAS Council, chair of the Commission on Behavioral and Social Sciences and Education in the National Research Council and the NAS Committee on Science, Engineering and Public Policy. He also served as co-chair of the Joint American and Russian Academies of Science Committee on Conflict and Reconstruction in Multi-Ethnic Societies, as well as many other committee affiliations. For this latter project, as Bob was aware of his limited knowledge of the Russian Academy he asked the noted University of Wisconsin anthropologist and former Refusnik, Professor Anatoly Khazanov, to accompany him on this project. According to Khazanov, "[Bob] sincerely wanted to do his best to assist my step-mother Russia and its scholars in the transition from a totalitarian rule," so they set out on a joint project from 2000 to 2004 working with Russian colleagues to help shape the relationship between Western scholars and the 'new' Russian academy.

# **Honors**

Bob received many honors to mark his contribution. Included were honorary doctorates from Brandeis University (1992), City University of New York (1986), Dartmouth (1989), Copenhagen University (2002), Hunter College (1986), William and Mary (1989), Harvard (1992), Southern Illinois, UCLA (1989), and Pittsburgh (1985). The Republic of Panama bestowed the Grand Cross of Núñez de Balboa on him. Other honors include the Distinguished Service Award, Society for American Archaeology (1996), the Lucy Wharton Drexel Medal, University of Pennsylvania Museum (2000); the Gold Medal, American Institute of Archaeology, (2002); and the Field Museum Award of Merit (2003). Bob also served on the boards of National Humanities Center and the Santa Fe Institute, and as a trustee of the American University in Beirut, George Washington University, and Morehouse College.

# Legacy

Bob changed the interpretation of Mesopotamian civilization from temple and text to ecological processes rooted in cycles of history. He trained or inspired a number of individuals who have made important contributions to anthropological archaeology, including Henry T. Wright, Tony Wilkinson, Jennifer Pournelle and her associates in the marshes of Southern Iraq, Jason Ur in Syria, and even Iranians such as Mehmoush Saroush, who carried out a detailed survey of eastern Khuzistan with a focus on Susanian and Islamic canal systems.

In Bob's reflective 2014 Annual Review of Anthropology paper concerning "Ancient Mesopotamian Urbanism and Blurred Disciplinary Boundaries," we were given rare insight into his subtle view of his own legacy for the study of the world's oldest civilization. He highlighted four major conceptual advances (2014:10), which he attributed to the central role of new technological developments focused on satellite imagery. He modestly did not emphasize how vital his own surveys in Iraq were, even though these provided the baseline archaeological data for all future studies. These advances include Assyriologist Piotr Steinkeller's (2001) use of cuneiform sources to map systems of busy commercial waterways with names of ports and trade centers; Tony Wilkinson's (2003) landscape approach to field surveys that was rooted in Bob's early work; Elizabeth Stone's (Stone and Zimansky, 2004; Stone, 2007) use of DigitalGlobe satellite imagery and high resolution paleo-climate data to help detect architecture on many sites previously identified by Bob; and the work of Jennifer Pournelle (2007), Bob's last student, which showed some of the weaknesses in Bob' survey data by demonstrating not only that

linear artificial canal patterns can be recognized using new satellite data but also that ancient natural river courses in the lower alluvial plain emerged out of the marshlands in conjunction with urbanization throughout the fourth millennium. Devoted to the scientific method, Bob embraced new data and ideas, even if they sometimes refuted his own work.



Secretary Adams and his wife Ruth Skinner Adams admire the portrait of the Secretary, painted by Burton Silverman. It now hangs with the other portraits of Smithonian secretaries on the second floor of the Smithsonian Institution Building (Photo Source - Smithsonian Institution.)

### **SELECTED SOURCES**

Personal Interviews—Kent Flannery, Frank Hole, Anatoly Khazanov, Joyce Marcus Smithsonian Institution Archives, Record Unit 009602

Robert McC. Adams Oral History Interviews. Collection Description:

The Robert McC. Adams Interviews were conducted during three sessions in 1994 and 2012 by Smithsonian Archives Historian Pamela M. Henson. The first two interviews discuss his education and research prior to being named Secretary of the Smithsonian in 1984. The third interview discusses his tenure as Secretary of the Smithsonian and his research at UCSD. The collection consists of approximately 4.25 hours of audiotape, 102 pages of transcript, and occupies 0.25 cubic feet of shelf space. There are three generations of each recording, five original reel-to-reel audiotapes and one digital .wav file, 3 CDs with digital .wav files of all the interviews, with 5 audiotape cassettes and six .mp3 files for reference. Box 1 contains transcripts of the interviews and cassette and digital copies of the original recordings, which are in security storage.

Additional documentation pertaining to Bob can be found in the Records of the Office of the Secretary, and the Robert McC. Adams Papers in in Smithsonian Archives.

Video - Dig This: Robert McC. - https://www.youtube.com/watch?v=z7sydScisKs

Professor Thomas Levy of the UCSD Department of Anthropology hosted this series of conversations with leading scholars in archaeology and cultural anthropology. In this installment, Professor Robert McC. Adams discusses his study of the rise of civilization in Mesopotamia. Series: Dig This! [3/1999—Show ID:4084]

University of California, San Diego—Department of Anthropology Achieves: Robert McC. Adams Digital Repository.

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