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BRILLIANT ENIGMA

*Physicist-Philosopher
Peter Putnam '46 *60 Inspired a
Fervent Following, Presented Princeton
an Abundance of Art, and Lived His
Last Years as a Janitor*

By Ann Waldron

PETER ANDREWS PUTNAM '46 '60 WROTE A brilliant senior thesis in the physics department . . . worked for an electronics company and gave a block of its stock to Princeton to fund a peerless collection of outdoor sculpture . . . earned a Ph.D. at Princeton and taught the philosophy of science and religion at Union Theological Seminary, where he inspired devoted disciples . . . wrote prodigiously, but published rarely, on every subject under the sun, seeking primarily to unify moral law and natural law . . . and died in 1987 while working as a night janitor in Houma, Louisiana.

But except for the barest outline, Putnam's life is "veiled," in the words of his lifelong friend and mentor, John Archibald Wheeler, the Joseph Henry Professor of Physics, Emeritus, a world-class physicist, and the man who coined the term "black hole."

This much is known about Putnam. He was born on May 20, 1927, in Cleveland, Ohio, the son of John B. Putnam, a prominent lawyer whose wife, Mildred Andrews Putnam, collected art and was a generous donor to the Cleveland Museum of Art. She bought Impressionist paintings, owned a figurine by Edgar Degas and a rabbit by Marc Chagall, and purchased works by Alexander Calder and Joan Miró before these artists were famous. Louise Nevelson did a sculpture for her garden. She saw the work of Isamu Noguchi in Japan and commissioned a piece from him for the Cleveland museum.

Peter Putnam is said to have graduated from the University School in Cleveland in 1942, but the prep school's alumni office has no record of his having matriculated. In any event, he was admitted to Princeton as a member of the Class of 1946. Because he was only sixteen years old, he stayed in Cleveland for a postgraduate year at the Case School, which later became Case Western Reserve University. In 1943, he joined the Navy, and three years later, he finally matriculated at Princeton, as a junior because the university gave him credit for the year at Case and his service in the Navy. He graduated in 1948.

The few people who remember Putnam from his undergraduate days say he was something of a recluse. John Wheeler says he was tall, good looking, charming, and very bright. He took an English class with the literary critic R. P. Blackmur, a man he admired for the rest of his life. He majored in physics, and wrote a thesis that Wheeler still remembers. "It was so puzzling in its philosophical approach that I was at a total loss on how to mark it," Wheeler recalls. "After consulting my colleagues, I finally graded it in proportion to his course marks."

Because Putnam's family wanted him to be a lawyer, he enrolled at Yale Law School. But he was more interested in the work of Sir Arthur Eddington (1882-1944). Eddington was a brilliant English astronomer, physicist, mathematician, and pioneer in the field of cosmology. His research extended from the theory of relativity to

the evolution, motion, and composition of stars, and he also wrote on the philosophy of science. His book *The Nature of the Physical World* (1928), which maintained that the world's meanings could not be discovered from science but must be sought in an apprehension of spiritual reality, captured Putnam's attention while he was still at Princeton. Under the growing influence of Eddington, Putnam left Yale after two years and went to work for an electronics firm three days a week, an arrangement that gave him time to wrestle with Eddington's ideas. Wheeler remembers that, about this time, Putnam refused his mother's gift of a Cadillac convertible. "He didn't like the trappings of wealth," Wheeler says. "He wore an old overcoat."

The electronics company, Sanders and Associates, paid him more than he needed to live on, and he sent the surplus to Princeton. When Sanders gave him a wad of stock, Putnam turned it over to Princeton, too, telling the university to hold on to it. By 1970, when he told Princeton to sell the stock, it was worth \$1 million. That was what paid for the campus's John B. Putnam, Jr. '45, Memorial Collection of twenty sculptures by such noted artists as Pablo Picasso, Jacques Lipchitz, Henry Moore, Gaston Lachaise, Tony Smith, Nevelson, Calder, and Noguchi. John Putnam, Peter's older brother, had left Princeton at the end of his sophomore year to enlist in the Army Air Corps. A fighter pilot with a Thunderbolt squadron in England, he flew some fifty missions, and on D-Day, June 6, 1944, saw nine hours of combat over the Normandy beaches. Six weeks later, he died in the crash of a bomber in which he was flying as a passenger.

PUTNAM FELT GUILTY THAT HE WAS STILL ALIVE WHILE his brother was dead. At first, he wanted to give Princeton a building for theoretical physics that would honor Wheeler as well as memorialize his brother. Then he decided that great art would be his brother's best memorial. Putnam believed that sculpture was modern art's most exciting medium and stipulated that the funds be used to acquire primarily large, important works by the great masters of contemporary sculpture. He knew enough to call in experts to decide which sculptures fulfilled his stipulation. The selection committee included P. Joseph Kelleher '47, then the director of the University Art Museum; William M. Milliken '11, the director from 1930 to 1958 of the Cleveland Museum of Art; Thomas P. F. Hoving '53 '60, then the director of the Metropolitan Museum of Art; and Alfred H. Barr, Jr. '22 '23, of New York's Museum of Modern Art.

In 1956, Putnam decided to return to Princeton to study for a graduate degree in physics. Because Wheeler, his mentor, was to be a visiting professor at the University of Leiden, in the Netherlands, that year, Putnam went with him (as did several other Princetonians). In Leiden, Putnam became close to the Wheeler family; in fact, Wheeler's wife Janette told their daughter Alison that she should turn to Putnam for help if anything happened to them.

Opposite: The brothers Putnam. At left, the enigmatic Peter Putnam, donor of Princeton's extensive collection of outdoor sculpture, and at right, his brother John, for whom the collection is named.

"Only two or three times in my life have I met thinkers with insights so far reaching, a breadth of vision so great, and a mind so keen as Putnam's."

Alison Wheeler Lahnston, now a fundraiser at Harvard, remembers Putnam with vast affection and admiration: "He was a recluse, but a man who cared passionately about ideas. He was warm and generous. I was sick in Leiden and living in a hotel room with no windows. He filled it with all kinds of flowers. He was interested in things that nobody else was interested in at the time—he adored the music of Jelly Roll Morton, for instance."

John Wheeler recalls that Putnam, although reclusive, had a knack for making friends with off-beat people. "We were celebrating my daughter's birthday in a restaurant in Leiden," he says. "Peter brought along this wonderful eighty-five-year-old woman. Her name was Nieuwenhuizen. She had grown up in Russia, where her father had been a general in the Czar's army. She had known the Czar personally, and when she had studied in Zürich, she'd known Lenin—and Einstein. She married a Dutch archaeologist, and the Kaiser, after he was interned in the Netherlands following World War I, used to invite them to Sunday dinner. And while we were in Leiden, Peter called on the widow of Ehrenfest, a physicist and friend of Einstein's who had killed himself in 1933."

It was in Leiden that Putnam came to terms with his sexuality. According to Wheeler, someone made a homosexual advance toward Putnam, and he decided to accept that he was homosexual. After he wrote to his mother about the matter, she made a special trip to Leiden to talk to him, but eventually she accepted his homosexuality.

In 1957, Putnam returned to Princeton to continue his graduate work. His dissertation explored the relationship between mass, radiation, and gravity in stars. "It was a valuable piece of work," Wheeler says. "Only two or three times in my life have I met thinkers with insights so far reaching, a breadth of vision so great, and a mind so keen as Putnam's."

Another graduate student in the physics department in those days was Robert W. Fuller '61, who later became the president of Oberlin College. Although Fuller saw Putnam as "a solitary fellow," they became friends. Fuller recalls once asking Putnam what his research involved. Putnam replied, "Do you really want to know?" Fuller answered in the affirmative—a response, he asserts, that changed his life. Putnam immediately "launched into a discourse on the relationship between scientific and moral law. He argued that they weren't really separate bodies of law—the one causal, the other ethical—but could be brought together consistently into a single unified framework based on an understanding of how the mind works. Our conversation lasted all that day, and similar intense discussions on philosophy, science, and politics went on for ten years." Fuller calls it the "most important learning of my life." Putnam "worked without breaks, and with a passion and dedication unsurpassed by anyone, student or professor."

IN 1960, AFTER HE COMPLETED HIS PH.D., PUTNAM taught at a school on Long Island and then joined

the physics and astronomy department at the University of Massachusetts at Amherst. Fuller, then teaching at Columbia University, would take his family to Amherst for the summer so he could work with Putnam. When Putnam left the university after several years, Fuller arranged for him to have an office at Barnard College, just across Broadway from Fuller's office at Columbia.

Fuller emphasizes that although he and Putnam spoke of themselves as collaborators, their relationship was really one of apprentice and mentor. "I had the sense from the very beginning, and throughout those early years, that what Putnam was doing was of the very highest importance, and I retain that feeling to this day," Fuller says. "It was a source of frustration to me that he showed little interest in seeing his work into publication, and I tried repeatedly to persuade him to put time and energy into this. But he always preferred to go on to the next set of discoveries. And in doing so, perhaps he was right. He did *his* job incomparably."

Fuller gave colloquia on Putnam's theories at several universities—Princeton, Columbia, Harvard, Ohio, SUNY-Stony Brook, and Penn State—but says he never felt satisfied with his attempts to communicate Putnam's work. During their years together, Putnam (with Fuller as coauthor) published just two papers bearing his name: "On the Origin of Order in Behavior" and "Causal and Moral Law: Their Relationship as Examined in Terms of a Model of the Brain." John Wheeler believes the latter is the most important statement of Putnam's work. He sums it up with care:

"Loop" was the central idea in Putnam's picture. Excitation runs out on one branch of the loop, comes back on the other branch as response from the point of action. On return, this excitation enhances or inhibits the chemical pathway between one memory element and another. In more technical language, it enhances or inhibits the synapse that links one neuron to another. Depending upon the feedback received—burn on finger, pleasant taste on tongue, or call in ear—a complex learning process goes on. Putnam spelled out this process in terms of long sequences of inhibitions and enhancements played out almost like the notes of a piano. These "notes," these chemical acts of enhancement of this synapse, inhibition of that one, build the magic web of learning and memory. . . .

"Although Putnam helped me with these papers and proofread every draft, I do not think they do justice to his thought," Fuller says. "And they do not begin to represent what his thought had developed into by the time of his death."

Through Fuller's influence, Putnam was engaged to teach one summer at Columbia. Students and professors from Union Theological Seminary attended his courses, and because of their enthusiasm, Union hired him in 1965. He taught two courses. One, "Contemporary Science and the Philosophy of Religion," was described in

the seminary's course catalogue as developing a "basic computer-oriented, self-model building approach to the overall functional operation of the brain," with implications for the "foundations of mathematics and its relations to Western philosophic traditions, especially Kant and Hegel." The other course, "Human Thought and Human Values," applied Putnam's model to "practical politics (Apter), history (Hegel, Spengler, Toynbee), psychology (Freud, Jung, Adler), aesthetics and mystical experience (St. John of the Cross), and to an understanding of Whitehead and Eddington, ending in an interpretation of the New World significance latent in our African-American tradition."

Officials then at Union recall Putnam as a brilliant loner, a man who had few close associates and who failed to earn the respect of fellow faculty members—who could not understand his ideas.

But Putnam's classes were enormously popular, and he had considerable impact on some students. Kim Hopper, now an assistant professor at City University of New York Medical School and a cofounder of the Coalition for the Homeless, recalled in a 1988 op-ed piece for *The New York Times* a homeless woman he called Emma, whom he had met when he was a graduate student at Columbia. "My best teacher at graduate school, the late Prof. Peter Putnam," he wrote, "had somehow met and befriended Emma. He enrolled her in community art classes and, at her request, combed through mounds of her 'pseudo-Byronic' poetry looking for something publishable." Hopper says that he learned a great deal from Putnam, "but nothing stayed with me more than his regard for the strengths and richness of common folk—quirky ones in particular."

"Peter was both a saint and a genius," says Coleman Clarke, another graduate student whom Putnam influenced at Columbia. "He would befriend people—blacks, poor people, and outsiders—around Columbia. He went out of his way to find something worthwhile in people. He was extremely helpful to his students who were interested in his work and spent unlimited amounts of time with them. He had intense followers, and they had to speak his language and understand the framework he was developing. It was pretty difficult. He was involved with the linkage of syntax and the symbols and rules of all disciplines and trying to come up with a system linking it all with the nervous system as its core."

Putnam was happy for a while at Union. But the seminary, aware of the Putnam family's affluence, began to pressure him for a substantial gift. Angry, Putnam resigned from Union in the early seventies.

PUTNAM DID NOT HAVE TO WORK BUT BELIEVED IN EARNING his own living, so he looked for another academic position or some other job that would allow him to continue writing. In 1974, he became a volunteer for VISTA, the government program established in 1964 to improve the living conditions of people in impoverished areas of the United States. By this point, he was living with

John Claude DeBrew, a black ex-serviceman Putnam had met while DeBrew was attending City University of New York. When VISTA sent Putnam to work with the rural poor in Houma, Louisiana, DeBrew went with him.

Clarke says that Putnam found the VISTA program in Houma to be corrupt and failing to carry out its mission. He resigned from VISTA and, for a while, used his engineering skills to repair radios and television sets. Still determined not to use his family's money for his personal needs, he eventually found work as a janitor on the night shift at one of the Louisiana Department of Transportation's warehouses. He and DeBrew moved into a small apartment building in Houma.

Putnam rode his bicycle to and from work. "He had reached a point where he eschewed worldly goods," says his cousin, Oakley Andrews, of Cleveland. "He didn't own a car, because he didn't want to have to bother with repairs and insurance. He wanted to live a simple, uncomplicated life. His mother would see that he needed a new overcoat and send him one, and he would send it back."

DeBrew, who also worked for the transportation department, wrote poetry. Putnam encouraged him in his writing, and through the Mildred Andrews Foundation (named for his mother), he funded the Good Earth of Terrebonne Press, which published a collection of DeBrew's poems, *Maxims from a Poor Man*.

In 1976, John Wheeler retired from Princeton and became the director of the Center for Theoretical Physics at the University of Texas. Wheeler worked in Austin for the next nine years (he's now back in Princeton), and during that time, he visited Putnam in Houma. "He lived as poor as Job's turkey," Wheeler recalls. "Peter was writing and reading enormously—philosophy, art, history. He took Christianity seriously—and Princeton, the life of the mind, and the poor. He was an untimely Thoreau."

Through all these years, Wheeler and Putnam maintained a lively correspondence. In his letters to Wheeler, Putnam expounded his complex ideas (many of them quite incomprehensible to a layman) but also wrote about more homely things. In one letter, he quoted from Chinese folk tales, Henry James, Balzac's *Illusions perdues*, Twain, Bohr, Copernicus, Tolstoy, Hammar-skjold, Emerson, and Carlyle. As a tribute to Wheeler, Putnam persuaded some of Wheeler's best students to write letters to their old professor, paid for the printing and binding of a volume that collected the letters (*Family Gathering: Letters to John Archibald Wheeler*), and placed copies of the book in important physics libraries around the world.

Putnam and his mother were involved in many charitable pursuits, and they paid particular attention to Princeton. The Mildred Andrews Foundation paid for "Abraham and Isaac," a bronze sculpture that George Segal was commissioned to design as a memorial to the students killed by National Guardsmen in 1970 during an antiwar



The Putnam Collection includes Tony Smith's *Moses* (top) and Picasso's *Head of a Woman* (middle). George Segal's *Abraham and Isaac* (bottom) is also a Putnam gift.

protest at Kent State University, in Ohio. When officials at Kent State, worried that the evocative sculpting would reopen old wounds, refused to accept it, Mrs. Putnam gave it to Princeton. She and her son also funded a fellowship for graduate students in physics at Princeton and contributed to such projects as the organization of Firestone Library's collection of the papers of R. P. Blackmur and the playwright Luigi Pirandello. Putnam himself donated a bust of Balzac by Auguste Rodin to Firestone Library, and commissioned portraits of John Wheeler and Eugene Wigner (a Nobel laureate and emeritus professor) for the physics department, in Jadwin Hall.

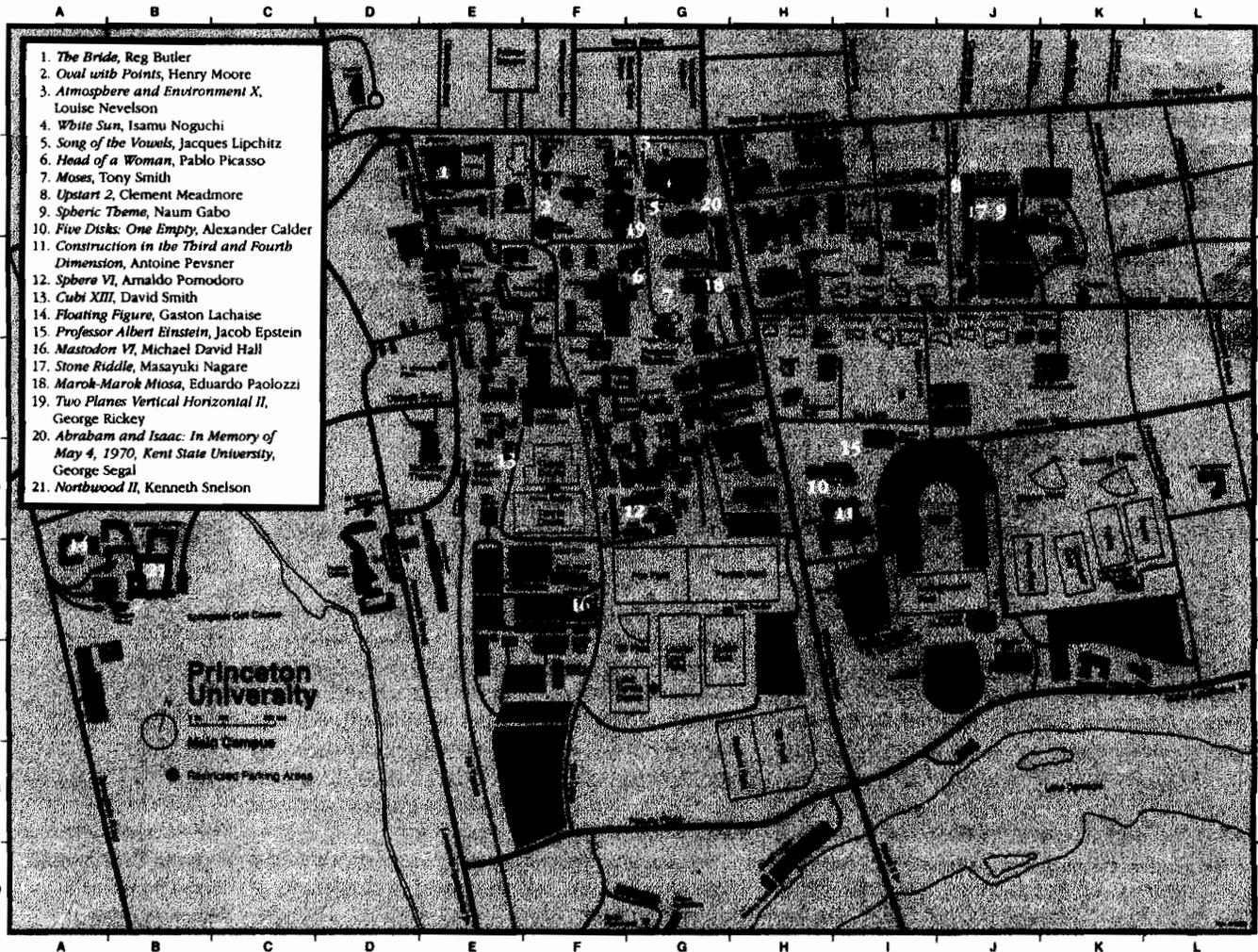
Mrs. Putnam regularly visited her son in Houma, and at his urging, she eventually moved there, settling into an apartment in the same building as his. She was in her eighties, in declining health, and in and out of the hospital. In a letter to Wheeler, Putnam wrote of his mother's courage and her ability to make "the best of whatever is left. Humans may not exercise much foresight for avoiding disasters, but we are marvelous for bearing up in it." To avoid disaster, he said, was to miss an opportunity to learn.

In April 1984, Mrs. Putnam died at the age of ninety. Her son outlived her by less than four

years. On the night of December 7, 1987, Peter Putnam was struck by a car and killed while riding his bicycle home from work.

Putnam left behind a mountain of unpublished papers. His protégé, Coleman Clarke, has collected most of them and, with support from Putnam's estate, is determined to see them published. They include seventy volumes of bound typescripts, more than five file-cabinet drawers of correspondence, and a bookcase of journals and notebooks. Clarke, who has published scholarly articles on Putnam's ideas and taught them at the University of Virginia, expects that the complete works of his mentor—spanning physics, biology, philosophy, psychology, history, economics, and political science—will fill nineteen printed volumes. As he sees it, his goal is to make Putnam's work understandable and to achieve for it the recognition it is due. It is an aim that Wheeler endorses wholeheartedly. The publication of Putnam's papers, he says, is "an enterprise comparable in importance" to publishing the writings and diaries of Henry David Thoreau.

Ann Waldron, a frequent contributor to PAW, wrote about art historian John Wilmerding in the issue of December 5, 1990.



From the Graduate College to the Engineering Quadrangle, from the Hamilton Hall courtyard to the Jadwin Hall plaza, sculptures in the Putnam Collection are all over the campus. This map shows the location of each sculpture given by Putnam. Copies of a booklet on the collection, suitable for self-guided tours, are available at the Art Museum.