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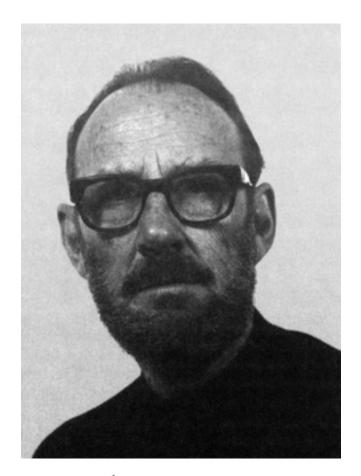
ROBERT FLEMING HEIZER 1915—1979

A Biographical Memoir by THOMAS R. HESTER

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Biographical Memoir

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Courtesy of Stephen Heizer

Robert F. Heize

ROBERT FLEMING HEIZER

July 13, 1915-July 18, 1979

BY THOMAS R. HESTER

Robert Fleming Heizer was one of the preeminent archaeologists of the twentieth century. A longtime professor of anthropology at the University of California, Berkeley, Heizer made scholarly contributions to archaeology, anthropology, ethnohistory, and history. Much of his research and the many publications that followed dealt with the prehistoric and historic Native American peoples of the western United States, particularly Nevada and California. He was a pioneer in the field of scientific applications to archaeology, principally in research dealing with radiocarbon dating in its early phases in the 1950s and then with trace element analysis of obsidian (volcanic glass) artifacts in the 1960s and 1970s.

Heizer also was deeply involved in the early application of cultural ecology in North American archaeological sites. Much of this research stemmed from analyses of preserved materials from ancient Nevada caves, primarily coprolites (fossil feces) that were a direct reflection of human diet

This work draws heavily on Hester (1982). Some portions originally appeared in *American Antiquity* 47:99-107. Copyright 1982 by the Society for American Archaeology. Reprinted with permission

and dietary change through time. Heizer became active in fieldwork in Mesoamerica in the 1950s, continuing up to the time of his death. His excavations provided insights into cultural evolution of the Olmec civilization, and collaborative efforts with geologists and chemists provided new data on trade patterns in prehistoric Mexico and Guatemala. Heizer's prodigious publication record leaves a tremendous resource for future generations of archaeologists and anthropologists in the study of many facets of ancient and early historic human lifeways.

Heizer was born on July 13, 1915, in Denver, Colorado, the son of Ott Fleming (a mining engineer) and Martha Madden Heizer (a nurse). He married Nancy Elizabeth Jenkins in 1940 (they were divorced in 1975); they had two sons, Stephen and Michael, and a daughter, Sydney. It was during Heizer's youth, much of it spent in Lovelock, Nevada, that he developed his lifelong interest in the culture of the American Indian. He was able to observe the surviving remnants of the northern Paiute peoples and to collect artifacts from prehistoric sites in the area. Curtice (1981, p. 2) reports that Heizer's uncle learned to make chipped stone projectile points from local Indians. Heizer did a lot of reading about Indians and archaeology, and he once told me that his father contacted an acquaintance (perhaps a relative) who worked in Washington, D.C., to secure copies of Smithsonian Institution publications for Bob. Shortly thereafter, a whole set of Bureau of American Ethnology Bulletins, Smithsonian Annual Reports, and related publications were dumped off, in crates, at the Lovelock train depot! At the age of fourteen Heizer worked as a volunteer at the Smithsonian Institution (Curtice, 1981, p. 2).

After graduation (in a class of eleven) from Lovelock High School in 1932 Heizer had wanted to go to the University of California, Berkeley, to study archaeology; however, the Lovelock school had an enrollment of only seventy students and several subjects required for admission to the university were not taught there. Heizer later said (here and in some later passages I quote from unpublished reminiscences that he sent me in July 1973) that he "failed the College Entrance Examinations and was advised to go to a junior college" prior to entering what was then called the "State University."

He thus enrolled in Sacramento Junior College in September 1932. During registration an important event took place:

Along the line, when someone noted that I wanted to be an archaeologist, I was pulled out of line and escorted to meet the president of the institution, Jeremiah Beverley Lilliard—a sweet and dear person who had worked his way up through the city school system until he achieved the presidency of the junior college. From that time on, I became a special ward of his, and I can say that his interest was an important determinant in my life yet to come.

Through the common interest in archaeology that Heizer and Lilliard shared a great deal of fieldwork was done (and the basis laid for later investigations) in the Sacramento Valley and much of this was published. Heizer provides these insights:

Lilliard, untrained and uninformed, was at the same time extraordinarily perceptive and energetic, and he saw in some fashion which I could not, and can never divine, that one could recover the story of the Indian past by digging and studying the materials recovered. He was absolutely indefatigable, and on Saturdays we would go dig for Indian relics.... Always we dug where we hoped to find some poor old buried Indian whose grave would produce some interesting thing. . . . This was pothunting, pure and simple. But (this is not intended as an excuse), we were all interested in Indian culture, though not in the way contemporary archaeologists say they are.

After the experiences in Sacramento Heizer went on in his junior year to Berkeley, where he received an A.B. de-

gree (with highest honors) in 1936. There was little interest in local archaeology in the department, and to gain additional field experience he dug with Waldo Wedel, then the only archaeology graduate student (Kroeber, 1981, p. 209). When he began graduate school Heizer got a wide exposure to various subfields of anthropology from such teachers as A. L. Kroeber, Robert Lowie, E. W. Gifford, and Ronald Olson. He also carried out fieldwork with Alex Krieger and others in Nevada with funding from Francesca Blackmer Wigg (Heizer, 1970, p. 210); but, when it came time to write a dissertation Kroeber did not want it done on an archaeological subject, and a study on aboriginal whaling in the Old and New Worlds resulted. Another key part of Heizer's training was his work in 1934 and 1935 with Ales Hrdlička in the Aleutian Islands. Heizer liked to talk about those experiences with Hrdlicka; more importantly, he saw through to publication many years later the findings of some of those investigations.

Heizer received his Ph.D. in 1941. His graduate school experience led to a long professional relationship with Alfred L. Kroeber for whom he had a tremendous respect, speaking of him fondly as "my teacher." Heizer and his family were living in Paris, where he was doing research at the Musée de l'Homme, at the time of Kroeber's death there in 1960.

Heizer's academic career began with a one-year appointment for 1940-41 at the University of Oregon. During World War II he worked for four years and four months as a marine pipe fitter in the Richmond (California) Kaiser ship-yard. Following the war he resumed teaching, this time as an instructor at the University of California at Los Angeles in 1945-46. In addition to his full-time teaching (paid at \$1,800 per year), he worked with sociologist Edwin Lemert at the tank site in Topanga Canyon. His thirty-year career

in the Department of Anthropology at the University of California, Berkeley, began in 1946 with an appointment as assistant professor; in 1948 he was promoted to associate professor and in 1952 attained the rank of professor. He worked closely with many students, both undergraduate and graduate. He particularly enjoyed working with a group of students that he had in the late 1940s and early 1950s (Martin A. Baumhoff, James A. Bennyhoff, Albert B. Elsasser, Clement A. Meighan, Francis Riddell, and others). Collaborative efforts among students and professor led to the first version of A Guide to Field Methods in Archaeology (1949) as well as the popular volume, The Archaeologist at Work (1959). Other student groups, beginning in the late 1960s and continuing through the 1970s, did extensive fieldwork in the Great Basin. Heizer, in an unpublished note, wrote that this was his happiest period as a teacher and researcher. A great deal of fieldwork and, of course, subsequent publication was done by students like C. William Clewlow, Jr., James F. O'Connell, Richard Ambro, Richard Cowan, Lewis K. Napton, Karen M. Nissen, James Bard, and Colin Busby. My own experiences as a student under him were particularly enlightening. I successfully resisted his efforts to steer me into the coprolite analysis program, and while I did my share of Great Basin research, we began to work more in the area of obsidian analysis, lithic use-wear and functional studies, typology, and research on Olmec and Egyptian monuments.

Indeed, Heizer's strength in teaching was in working with students through research projects, by steering them into new methodological and theoretical approaches, putting them into contact with colleagues in other disciplines, and sharing with them his enormous knowledge of the archaeological literature.

In addition to full-time teaching and instructing summer field classes, Heizer organized and directed the University

of California Archaeological Survey from 1948 to 1960, when it was disbanded. The survey was responsible for many major excavations and field studies in California, and Heizer personally saw to it that the results were promptly published in the seventy-five volumes of its Reports series. The style of the Reports was an inexpensive mimeographed one, as Heizer was more interested in rapid and wide dissemination of information than in a fancy format. The survey was succeeded in 1960 by the Archaeological Research Facility, a research unit with broader goals. Heizer became coordinator of the facility and served in this capacity until his retirement. A major publication series, the Contributions, was initiated and more than thirty-five volumes were published under his supervision. Several volumes dealt with Mesoamerican topics and resulted largely from the collaborative efforts of Heizer and John A. Graham. As with the Survey Reports, publication in the Contributions was quick; upon completion of a manuscript Heizer saw that it went immediately into production. This often meant that he had to raise the money for printing through his friend Dean Sanford Elberg.

Heizer retired from teaching and administration in 1976; however, he continued to be involved in archaeological projects up to the time of his death.

During his career Bob Heizer received numerous research grants. He took enormous pride in obtaining what he felt was just enough money to carry out a project; he then stretched every dollar in terms of fieldwork and publication. He received grants from the National Science Foundation, the National Geographic Society, the Wenner-Gren Foundation, the American Philosophical Society, and from a variety of private funding sources. I cannot find one of these which did not result in substantive archaeological rewards.

Let us look at Heizer's record of publication. It is staggering in terms of numbers, creativity, and anthropological diversity. An almost complete bibliography of Robert F. Heizer's works appears in the *Journal of California and Great Basin Anthropology* (Clark, 1980), with a set of comments by Philip Wilke (an extensive list of citations is also found in Hester, 1982). My inventory of his publications is somewhat at variance with figures published earlier; this doubtless reflects the use of different publication lists and my inclusion of publications that appeared after his death. Heizer's scholarly output totaled at least 500 items: 415 papers, reprinted papers, reports, prefaces; 30 books (authored, co-authored, or edited); 53 book reviews; and 2 films.

It is impossible within the space limitations of this memoir to attempt any sort of detailed analysis of his publications. I offer the following observations and refer the reader to other evaluations by Clark (1980) and Baumhoff (1980). Heizer's publications are dominated by archaeology, principally on the prehistory of the Great Basin and California. Also figuring largely are works on Mesoamerican archaeology, especially on the Olmec, stimulated initially by his research with Philip Drucker at La Venta in 1955. Interdisciplinary research (much of what would now be called archaeometry) is also very important in his publications. This is especially true of his collaboration with physiologist Sherburne F. Cook. Their innovative studies on the chemical analysis of human bone, midden constituent analysis, and on quantitative methods are still important references.

Among the other scientists with whom Heizer worked, and often published, were Howell Williams (geology; extensive studies of the stone sources for Olmec monuments); Robert N. Jack (geochemistry; trace element research on Mesoamerican and Californian obsidian); Fred Stross, Frank Asaro, I. Perlman, and Harry Bowman (nuclear chemists at

the Lawrence Berkeley Laboratory; Mesoamerica, Egypt); W. I. Follett (studies of fish remains); and Rainer Berger (radiocarbon analyses).

Heizer's publications also reflect a continuing interest in archaeological methods, and he was well known for the six editions of his text on archaeological field methods. His main approach to fieldwork, from my perspective and based on his own comments, was one of flexibility and adaptability; use what is best for the problem at hand and, above all, be observant and diligent in record-keeping. As he wrote in the introduction to the 1975 edition of *Field Methods in Archaeology* (Hester et al., 1975), "There is nothing very exciting about techniques for recording data during an excavation; one simply has the obligation to record whatever information is there." Many solid site reports resulted from his field investigations.

A review of Heizer's publications reveals this sample of some of his other archaeological interests: the archaeology of hunters and gatherers, principally in California and the Great Basin; early human occupation of the western United States; rock art; historical archaeology; prehistoric technology and material culture studies; archaeological bibliography; history of archaeology; dating techniques; cultural ecology, especially as learned through coprolite analysis; general archaeological issues and theoretical concerns; and, experiments in archaeology.

Heizer, working with Frank Hole, co-authored an introductory text in archaeology that was one of the most widely used from the 1960s to the 1980s; it went through three editions, and a restructured, briefer version was published in 1977.

An interest in the transport of ancient heavy monuments was kindled in Heizer through his work with Olmec colossal sculpture. He began a research program that was worldwide in scope and later led to a project in Egypt in 1971 and 1972, funded by the National Geographic Society. On the west bank of Thebes at Luxor, Heizer and his team studied the New Kingdom statues known as the Colossi of Memnon. Trace element analysis using the techniques of nuclear chemistry was employed to determine the quarry origins; then the aim was to study the attendant problems of transport and placement of these 720-ton monoliths. Through the efforts of Stross, Perlman, Asaro, and Bowman this project was successfully completed and remains, as far as I know, the only research of its sort yet carried out with Egyptian monuments. The methodology developed through the work of the project still has tremendous potential. As was typical of most Heizer projects the Colossi investigations had spinoffs, particularly an ethnoarchaeological study of contemporary Egyptian stone-vase manufacture, carried out by Heizer, John Graham, and the author.

Thorough reports on a number of major sites are found among Heizer's publications. These include Humboldt Cave, Lovelock Cave, and the Eastgate shelters, Nevada; La Venta, Tabasco; Uyak, Alaska; and Hum-67, California. In addition to the geographic areas represented by these sites Heizer also did fieldwork in Peru, Egypt, Guatemala, and Texas. In the year prior to his death he worked with his friend Giancarlo Ligabue and the Centro Studi e Ricerche Ligabue (he was a member of the Centro's Scientific Committee) on the planning of fieldwork slated for the Maya site of Colha, Belize. His deteriorating health kept him from going into the field during the first season at the site in the spring of 1979.

Throughout his career Heizer published extensively on the ethnology and ethnohistory of the Indians of California and Nevada. Baumhoff (1980) has dealt with this research facet in some detail. His interest in California Indians went beyond the scholarly level. This included his work with Kroeber on the Indian claims cases in 1954-1955 and his personal involvement as a consultant to the legal assistance program for California Indians. He also saw to it that many of the documents in the C. Hart Merriam collection were published (Simmons and Bickel, 1981). He wrote eloquently, and often bitterly, about the treatment of the native peoples of California. He has been honored since his death by a symposium held in October 1980 by the American Society for Ethnohistory. This organization has also established an annual Robert F. Heizer Memorial Prize for the best annual article using an ethnohistorical approach.

Aside from writing, which he loved and which he seemingly did almost continuously, Bob Heizer greatly enjoyed the chores of editing. This was expressed in several books, the Archaeological Survey Reports, most of the Archaeological Research Facility Contributions up to 1976, and as one of several editors for the University of California Publications in American Archaeology and Ethnology (as well as in the Anthropological Records also published by that university). He was also on the editorial board of a number of journals. With the help of Gerald O'Neal he started the Ballena Press Publications on Archaeology, Ethnology and History (fourteen volumes had been published at the time of his death). He assembled and edited the California volume of the Handbook of North American Indians (Volume 8); typically, the task was done efficiently and was the first volume to be issued (1978) in this major publication series (a library journal described it as one of the ten most important references of 1978). Heizer had long maintained that there was a need for a statewide anthropological journal for California and he was thus one of a group of people who helped start the Journal of California Anthropology (and its successor, the Journal of California and Great Basin Anthropology).

Finally, in regard to Heizer's extensive publications, it

should be noted that much of his work was collaborative. He took much pleasure from such research and the exchange of ideas that it engendered. Most such collaboration was with students and colleagues; for example, there were five to ten (or more) papers and books each with M. A. Baumhoff, C. William Clewlow, Philip Drucker, Albert Elsasser, Franklin Fenenga, John A. Graham, and Lewis K. Napton. I worked with him on more than twenty papers and books. An equal amount of collaborative research was done with colleagues from other scientific disciplines, all of whom have been mentioned earlier; at least sixteen papers resulted from his joint research with S. F. Cook.

Numerous honors came to Robert F. Heizer as a result of his distinguished career. These included an honorary Doctor of Science degree from the University of Nevada (1965), two Guggenheim fellowships (1963 and 1973), a year as a fellow in the Center for Advanced Study in the Behavioral Sciences (1972-73), an award for "distinguished scholarly contributions" from the Southwestern Anthropological Association (1976), the Henry R. Wagner Medal of the California Historical Society (1977), and repeated listings in Who's Who in the World. He was elected to the National Academy of Sciences in 1973.

Those are the basic statistics. What lies behind them is a brilliant anthropological career and a record of accomplishments that few can hope to attain. Heizer as a person was most typified by his incredible energy. He was competitive, aggressive, and did not shrink from controversy. He tremendously enjoyed fieldwork and the challenges and prospects of discovery that it presented. If conditions deteriorated he responded to the challenge and worked harder, as I well remember in two quite different environs: recording southern Nevada rock art in a snow flurry and documenting the Colossi of Memnon in 122° heat! His energy ex-

tended, as we have already seen, to publication, for in his view fieldwork, a laboratory project, or any type of archaeological endeavor was worth nothing unless it was published.

To say he was energetic about archaeology is indeed an understatement. He was obsessed with archaeology. Lunches on Telegraph Avenue, airplane journeys, sitting in a bar in the Winter Palace Hotel at Luxor, all were locales for Heizer to take pen in hand, get out one of his ubiquitous yellow note pads, and proceed to outline a paper, develop some ideas for a future project, or jot down another reference to be squirreled away until the next revision of one of his many books.

From a personal perspective, I knew Heizer for ten years, first as his graduate student (1969-72) and then as a colleague, co-researcher, and close friend up to the time of his death. He had a complex personality, and this led to a number of stormy relationships with graduate students, not to mention some of his professional colleagues (see Baumhoff, 1980; Curtice, 1981). While I am sure that many such encounters and feuds grew from a variety of causes, some stemming from his own personality, Heizer's primary explanations were that such persons were "not serious about archaeology" or that they did not "produce." I found him to be a very generous person, particularly with his time, his knowledge, and his experience. He had a keen wit and an engaging, albeit sardonic, sense of humor. I more than once expected that we would be tossed out of a restaurant or bumped off an airplane as he mumbled out incisive commentary on an inept waiter or offered his pointed appraisal of some fellow traveler. And many situations called forth a joke or anecdote derived from his fondness for the writings of Mark Twain.

Heizer died on July 18, 1979. He was initially hospitalized with cancer in June 1978, although he had been in poor

health for several months prior to that time. He waged a determined battle against the disease and despite its debilitating effects continued research and teaching until a few days before his death. Elsasser (1979, p. 151) notes that Heizer had twelve manuscripts in preparation or in press at the time.

Robert F. Heizer leaves a considerable legacy to archaeology, in terms of fundamental and often far-reaching research and more than three decades of teaching and lecturing. He made a number of gifts of books and special literature collections to several institutions; collections on rock art went to UCLA and to the University of Texas at San Antonio. At the latter there is also a special collection of publications on Olmec archaeology. His personal notes and records on La Venta and on other facets of his research went to the National Anthropological Archives at the Smithsonian Institution. Heizer's personal and professional letters as well as assorted research notes are now in the archives of the Bancroft Library at the University of California, Berkeley.

I AM GRATEFUL TO a number of persons for providing information on Robert F. Heizer. An insight has been provided by others, including J. Desmond Clark, A. E. Elsasser, Lynette Curtice, Karen Nissen, Colin Busby, and L. K. Napton. Giancarlo Ligabue, who first met Heizer through a mutual interest in duck decoys (Nevadan and Venetian), encouraged him in many projects and insured that an Italian version of Heizer's ancient heavy transport book was published.

REFERENCES

- Baumhoff, M. A., 1980. Robert Fleming Heizer, 1915-1979. *Am. Anthropol.* 82:843-47.
- Clark, J. D., 1980. Memorial to Robert Fleming Heizer (1915-1979). J. Calif. Great Basin Anthropol. 1:241-45. Includes almost complete bibliography.
- Curtice, L., 1981. Historical perspective of Robert F. Heizer's work. Unpublished manuscript written for R. E. Taylor's seminar in archaeology, University of California, Riverside. On file with the author.
- Elsasser, A. B., 1979. Robert F. Heizer (1915-1979). *The Masterkey* 53:151-52. Southwest Museum, Los Angeles.
- Heizer, R. F., 1970. Robert F. Heizer. In *There Was Light, Autobiogra*phy of a *University, Berkeley: 1868-1968*. Edited and with an introduction by Irving Stone, pp. 207-13. Garden City, N.Y.: Doubleday.
- Hester, T. R., 1982. Robert Fleming Heizer, 1915-1979. Am. Antiq. 47:99-107.
- Hester, T. R., R. F. Heizer, and J. A. Graham, 1975. Field Methods in Archaeology. Palo Alto, Calif.: Mayfield Publishing.
- Kroeber, C. B., 1981. A dedication to the memory of Robert F. Heizer 1915-1979. *Ariz. West* 23:208-12.
- Simmons, W. S. and P. M. Bickel, 1981. *Contributions of Robert F. Heizer to California Ethnohistory*. Archaeological Research Facility, University of California, Berkeley.

SELECTED BIBLIOGRAPHY

1947

Francis Drake and the California Indians. Berkeley: University of California Press.

1949

A Manual of Archaeological Field Methods. Milbrae, Calif.: The National Press (revised 1950, 1953). Revised in 1968 as R. F. Heizer and J. A. Graham, A Guide to Archaeological Field Methods, and in 1975 as T. R. Hester, R. F. Heizer, and J. A. Graham, Field Methods in Archaeology, Palo Alto, Calif.: Mayfield Publishing.

1951

With S. F. Cook. The physical analysis of nine Indian mounds of the lower Sacramento Valley. *Univ. Calif. Publ. Am. Archaeol. Ethnol.* 40:281-312.

1953

Long range dating in archaeology. In *Anthropology Today*, ed. A. L. Kroeber, pp. 3-42. Chicago: University of Chicago Press.

1956

With A. D. Krieger. The archaeology of Humboldt Cave, Churchill county, Nevada. *Univ. Calif. Publ. Am. Archaeol. Ethnol.* 47:1-190.

1959

Ed. The Archaeologist at Work. New York: Harper and Row.

With P. Drucker and R. Squier. *Excavations at La Venta, Tabasco,* 1955. Bureau of American Ethnology Bulletin 170, Washington, D.C.

1960

With S. F. Cook, eds. *The Application of Quantitative Methods in Archaeology*. York: Viking Fund Publications in Anthropology 28, New York.

1962

Ed. Man's Discovery of his Past. Englewood Cliffs, N.J.: Prentice-Hall. With M. A. Baumhoff. Prehistoric Rock Art of Nevada and Eastern California. Berkeley: University of California Press.

1966

Ancient heavy transport: methods and achievements. *Science* 161:914-15.

1968

With T. Kroeber. Almost Ancestors: The First Californians. San Francisco: Sierra Club.

1969

With L. K. Napton. Biological and cultural evidence from prehistoric coprolites. *Science* 165:563-68.

1970

The anthropology of prehistoric Great Basin coprolites. In *Science in Archaeology*, ed. D. Brothwell and E. Higgs, pp. 244-50. London: Thames and Hudson.

1971

- With A. L. Almquist. The Other Californians: Prejudice and Discrimination Under Spain, Mexico, and the United States to 1920. Berkeley: University of California Press.
- With M. A. Whipple, eds. *The California Indians: A Sourcebook*, 2nd ed. Berkeley: University of California Press.

1973

With others. The Colossi of Memnon revisited. *Science* 182:1219-25. With F. Hole. *An Introduction to Prehistoric Archaeology*, 3rd ed. New York: Holt, Rinehart and Winston.

With C. W. Clewlow. *Prehistoric Rock Art of California*. Ramona, Calif.: Ballena Press.

1974

Studying the Windmiller culture. In Archaeological Researches in Retro-

- spect, ed. G. R. Willey, pp. 179-206. Cambridge, Mass.: Winthrop Publishers.
- Ed. The Destruction of California Indians. Salt Lake City: Peregrine Press.

1979

With T. Kroeber, eds. *Ishi. The Last Yahi: A Documentary History*. Berkeley: University of California Press.

1980

- With A. B. Elsasser. *The Natural World of the California Indians*. Berkeley: University of California Press.
- With T. R. Hester and C. Graves. *Archaeology: A Bibliographical Guide to the Basic Literature*. New York: Garland Publishing.

1990

The Age of Giants. Ancient Heavy Transport in Antiquity, eds. T. R. Hester et al. Venice: IVECO Marsilio Editore and Erizzo Editrice.