

2-70

Name of Applicant: Wertime Theodore Allen
(For Index) Last First Middle

Return to:

National Geographic Society
Committee for Research and Exploration
17th and M Streets, N.W.
Washington, D. C. 20036

Applications should be typewritten on one side of page only with a heavily inked ribbon.

Date: April 18, 1970

1. Project (Give an explanatory title in ten words or less):

On The Metallurgical Trail Of Homer And Strabo In Turkey

- a. Explain the proposed research, and indicate the relation of what you plan to do with previous and current work on the subject, by yourself or others (use additional page 5 if necessary):

I propose to take a small team to Northern Turkey from Alaça Hüyük to Trabzon to reconnoitre metallurgic zones described in Homer and Strabo. We were not able to cover this zone in proper detail during the National Geographic-Smithsonian Expedition of 1968. We need to make further reconnaissances of the zone because of its importance to the early bronze and early iron ages.

- b. Under what major field of science do you classify this project?

History of science, technology, and civilization (the pyrotechnologic revolution in pre-history)

2. Biographical facts about applicant:

a. Name: Theodore A. Wertime

- b. Mail address and telephone number with area code:

American Embassy - USIS APO New York, New York 09223 (Phone: Athens, Greece

c. Place and date of birth: 712-951 Ext. 7-512)

Chambersburg, Pennsylvania August 31, 1919

230-761 Ext. 512

- d. Education and degrees with institutions and dates:

Haverford College B.A., 1939

American University M.A., 1941

Johns Hopkins University 1941-2; 1947-8

- e. Present position (institution and rank):

Cultural Attache, American Embassy in Athens, Greece

- f. Personal data, (marital status, number of children, etc. If you have a biographical statement, please append it):
Married, 4 sons (3 through graduate school)

(If others are to participate in the project, please give the above biographical facts about each such

person. Additional pages may be used.) It is not certain whether I shall have other professional persons along, beyond a Turkish archeologist. However, I shall probably invite my son, John Wertime, a Persian-Arabic-Turk specialist; and Radomir Pleiner, a Czech anthropologist-metallurgist from the Archeological Institute in Prague. I do not submit data on either in view of the tentativeness of their participation. In any case, both were covered in the application for the 1968 grant.

Dear Ronald -

May 6

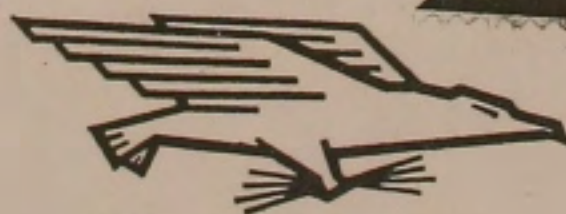
The National Geographic has
not awarded me funds this year.
They shot down my project, as
they did that ~~for~~ in Sardinia.

I pass along this news with deep
regrets. Now we shall have to find
new funds. My deepest regrets.
I hope you are well otherwise!

Sincerely
Ted

4/12/68

Worktime - Anthropology
SMITHSONIAN INSTITUTION
WASHINGTON, D.C. 20560
OFFICIAL BUSINESS



POSTAGE AND FEES PAID
SMITHSONIAN INSTITUTION

Professor Ronald Tykocote
University of Newcastle-Upon-Tyne
Metallurgy Dept.
Haymarket Lane NE1-7RU
Newcastle-upon-Tyne
United Kingdom

SI-24
Rev. 2-70

Name of Applicant: Theodore A. Wertime

3. Total amount needed in the grant requested from the National Geographic Society (in U.S.A. Currency): \$900.00

- a. Budgeting of this sum to be specified in detail; e.g., equipment, assistants (name and qualification), field work, travel, etc. The Committee is very anxious to have the budget items given with precision and in detail.

This amount is to cover transportation to and from Ankara for myself, my wife, and a photographer; for rental of a large Land Rover or Minibus; for living expenses in the field. I shall try to stretch it to help cover Pleiner's costs if he should come, as well as some of the costs of publication.

Budget

Air Transportation	\$400.00
Rental of vehicle	200.00
Expenses in field for 14 days	300.00

- b. Person or Institution (Please note that no charge for overhead is allowed) to whom payment should be made:

Theodore A. Wertime, Smithsonian Research Associate

- c. Schedule of payments desired:

Lump sum (all passports in order)

If a grant involving travel abroad is approved no payment will be made until the Society has the following information: (1) that a passport from the State Department can be secured and if necessary a foreign visa, and (2) that, if the work is to be done in any laboratory or library abroad, adequate access to the same has been assured and the material to be studied will be available.

4. a. Plan for research or exploration (Please outline in some detail techniques to be used):

I shall not in this case be attempting to cover all of pyrotechnology as I was in 1968. There is just not the expertise for it. I am more interested in going in detail into the scientific specifics of the beginnings of the bronze and iron ages. Pleiner will be especially important to the latter; and my own researches here in Greece with Professor Eiler Henrickson at the Atomic Energy Center to the former. It is now clear that from about 3000 B.C. to about 1500 B.C. there was no real Bronze Age as such - that is, so far as consistent use of tin was concerned. But this matter as well as the matter of the continuous edge which Anatolia had in metallurgy and related crafts from the beginnings of pyrotechnology through the early iron age is deserving of much more investigation. I have been fortunate in Greece in being able to test these observations on a variety of scholars, including Colin Renfrew, a British archeologist, who is now looking at Balkan metallurgy. And I hope to write the definitive articles on both metallurgy and pyrotechnology for

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b. Expected duration of investigation (Starting date and date of expected completion):

August 29 - September 15, 1970

c. Proposed method and means of publication:

Incorporation into an article in Science, article for Encyclopedia of Prehistory, lectures, and final expedition report.

5. Amount and nature of institutional contributions toward this work (if you are receiving no aid on this project from a university or other organization or individual, please explain):

No outside aid; just my own annual leave.

6. Previous grants received for this work, grants now available, or applications to other organizations which are now pending, stating whether they are alternative with your request to the Society (i.e., if one of them is granted, will it make this application unnecessary?) If another request for a grant is made after this is sent to the Society, please notify the Society at once. If you have had previous grants from the National Geographic Society for any project, please list these grants first:

No grants received other than the National Geographic - Smithsonian grants of 1968. None applied for.

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Prague. I do
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Name of Applicant: Theodore A. Wertime

7. Names and addresses of at least three individuals competent to pass judgment upon your project. (Note: The Committee has its own sources of information, and these references may or may not be used in evaluating the proposal):

- a. Professor Eiler Henrickson
The American School of Classical Studies - Athens, Greece
- b. Messrs. Clifford Evans and Gus Van Beek
Office of Anthropology
Smithsonian Institution
Washington, D. C.
- c. Professor Ronald Tylecote
Department of Metallurgy: University of Newcastle-on-Tyne
Newcastle-on-Tyne, England

8. Books and papers published by the applicant. (Please send full bibliography, if convenient):

See attached vita

9. If the grant request presented here is approved the applicant pledges himself to present a preliminary report on the project to the National Geographic Society on December 31, 1970 (give date) and a final formal report on December 31, 1971 (give date).

Typed name: Theodore A. Wertime

Signature: Theodore Wertime

Metallurgy and
Archaeology

Name of Applicant:

Theodore A. Wertime

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This page is to be used in explaining the project if additional information beyond that given on page one (Item 1a) is necessary.

In 1968, for example, we discovered black sands along the Black Sea that may have large significance for the story of the Chalybes, first described in Xenophon. By the same token we got our first significant clues of tin in the same area - indeed first significant clues to the supply of tin anywhere during the early bronze age, a subject I have been pursuing on two expeditions.

In February I visited Ankara to discuss these research plans and was given a warm welcome by both the antiquities authorities and the geological authorities. Stream samples from the 1967 and 1968 expeditions are undergoing neutron activation analysis at the Democritos atomic energy center here, for tin. Slags and metals have already been substantially analysed at Newcastle-on-Tyne and in Prague.

And in my spare time, I am collaborating with the University of Minnesota team on the study of Greek connections to S. W. Asian metallurgy; and with a Greek expert on Laurium, C. Confagos.

With a short follow-up trip to Turkey, I hope, I can begin to write the authoritative treatises on early pyrotechnology and the early bronze and iron ages that deserve to be written.

4. a (Continued):

Hence, we shall, as before, explore mines, slag heaps, ores, sands, and settlements through the northern Hittite and pre-Hittite metallurgic zones, following the acidic metal-rich geology adjacent to the Black Sea, where polymetalism was most common. We shall continue with analyses of various kinds at Democritos, here, and in Prague and Newcastle-on-Tyne. (Of additional interest will be a look at a large meteorite in eastern Turkey which may have been the source of iron for the early Hittites.)

file

Theodore A. Wertime
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Arlington, Virginia 22203
Tel.: 528-9059, Home
W03-3189, Office
W02-3987, Office

*USIS - AMERICAN EMBASSY
APO NY 09223
[ATHE*

GOVERNING INTEREST The development and management of programs in research, humanities, education, and overseas development, with two overriding objectives: to bring American technique to the developing world and to harness that technique in the cause of human welfare generally.

EDUCATION B.A. Haverford College, 1939.
M.A. American University, 1941.
Advanced graduate work, Johns Hopkins University, 1941-2. and 1947-8 (Social Science Research Council Grant).

PERSONAL Persian language and area studies - 1960.
GREEK LANGUAGE STUDY - 1961
Born Chambersburg, Pennsylvania.
Married; four sons, three in graduate school.
Health excellent; age 48; 5'10"; 170 lbs.
Avocations: writing, archeology, sports (tennis, mountain climbing), music (string quartets).

TRAVEL Wide travel and service in Asia.

LANGUAGES Reading knowledge German and French; speaking knowledge German and Persian.

EXPERIENCE *CULTURAL ATTACHE* ~~FACE~~ *(A) AMERICAN EMBASSY*
Senior Foreign Service Officer and Editor with the United States Information Agency. Since 1963 editor of broadcast-publications program called Forum at the Voice of America (1963-). The Forum lectures cover the broad front of the arts, humanities, social sciences, and sciences in the United States. The series are broadcast in English and in translation and ~~are~~ published in anthology in English and in translation in hardback and paperback editions throughout the world. Position of Forum editor affords a unique access to the American intellectual and artistic community (including the learned and voluntary societies) and the publishing and communications industries.

Concurrently holds the honorary position of Research Associate of the Smithsonian Institution, Office of Anthropology (1965-). Director, two Smithsonian expeditions to the Middle East in past two years, adding to broad expertise as Asianist and historian of technology.

Cultural Attache, the American Embassy Tehran, establishing long standing connections with the leadership of Iran, 1960-3.
Assistant Director of Research for USIA, with responsibilities to study world attitudes through research studies carried on in the various countries, 1955-60.

Political Analyst for the Far East with the Department of State, 1946-55.

Economic Analyst with the Foreign Economic Administration and the Office of Strategic Services (as well as the U.S. Army), 1942-6.

Assistant in the Department of History, Johns Hopkins University, 1941-2.

PUBLICATIONS

Books

As author: The Coming of the Age of Steel, University of Chicago Press, 1962. As co-author: North Korea: Case Study of A Soviet Satellite (1951, released by the Department of State, 1962).

Articles

- "The Discovery of The Element Carbon," Osiris, 1954.
"A New Era Begins In Iron," Cento Conference on Metals, 1963.
"Asian Influences on European Metallurgy," Technology and Culture, V:3, Summer, 1964;
"Man's First Encounters With Metallurgy," Science, 146:3649, December 4, 1964.
"Communications And Tomorrow's World," Foreign Service Journal, 42:2, February, 1965.
"Marshall McLuhan and The Extensions of Man," Technology and Culture, VII:4, Fall, 1966.
"Information and Citizenship," The Journal of Communications, XVI:4, December, 1966.
"Kinga, Copernicus, and the Grompies," Foreign Service Journal, 44:4, April, 1967.
"A New Look At Ancient Technology: The Smithsonian Program," Technology and Culture, IX:4, Fall, 1967.
"Iran: Voyage Into The Future," USIS Tehran forthcoming.
"A Metallurgical Expedition Through The Persian Desert," Science forthcoming.
"An Argosy In The Persian Desert," Foreign Service Journal 1968
forthcoming. JUNE 1968
"Culture and Continuity," Technology and Culture forthcoming.

Forum Titles Broadcast and Published

The American Novel, American Politics And Government,
Poets on Poetry, Labor In A Changing America, The Changing
American Economy, The American Symphony Orchestra,
The Philosophy of Science, The Theater In American Life,
A Comparative Approach To American History, Knowledge And
Society: American Sociology Today, The Earth In Space,
Linguistics: The Science of Language, Voices of America:
American Folklore Today, Problems and Trends in American
Geography.

Theodore A. Wertime
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HISTORICAL
RESUME

Since 1963, Theodore A. Wertime has edited the Voice of America's Forum, a major window for the foreign intellectual into American thought and life in the second half of the 20th century.

Mr. Wertime seeks out the men of science who can elucidate American explorations into earth, space, or life; searches for the humanists who can render history, linguistics, or folklore in meaningful terms to others; enlists engineers to speak about building our material civilization; or recruits social doers and thinkers who can talk about urban problems or the state of economic theory.

He is also a Research Associate of the Smithsonian Institution, advising on programs in technology and ancient civilization. He represented the Office of Anthropology at the Eleventh International Congress in the History of Science in Warsaw in 1965 and the Sixth International Congress of Protohistoric and Prehistoric Sciences in Prague in 1966.

That year he also helped to launch the Smithsonian's program to salvage ancient technology, which began in Iran. He himself has led two archeological-metallurgical expeditions into Iran.

A Haverford graduate in 1939, Mr. Wertime began to prepare for this dual role with the study of cultural and intellectual history in graduate school at American University and Johns Hopkins University (1939-42). A Social Science Research Council Grant in 1947 enabled him to begin the researches into technology and society that culminated in his various articles and the book The Coming of The Age of Steel.

In 1941-2, he was an assistant in the Department of History of Johns Hopkins University. In May, 1942, he joined the Board of Economic Warfare, later renamed the Foreign Economic Administration, as an analyst specializing in German war production techniques.

His wartime service in the U.S. Army and Office of Strategic Services involved work on the Japanese economy and a tour in China, his first step toward becoming an Asianist.

After the war he joined the Department of State as a research analyst specializing in Chinese and East Asian political affairs. In 1950, he was a member of a team that investigated North Korea firsthand for the Secretary of State.

Mr. Wertime was invited to the United States Information Agency, his present organization, as chief of the Far East Research Division. He moved up rapidly to the position of deputy director of the Office of Research. During this period he was twice sent to the Pacific on special missions, once as part of a team looking into research for the Department of St Defense, the second time to help with a special inspection of the information and cultural program in Vietnam.

In 1960, Mr. Wertime was appointed Cultural Affairs Officer in Iran, there promoting collaboration between the United States and Iran in the arts, sciences, technology, education, and other broad fields of intellectual communication between the two

Theodore A. Wertime

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societies; and supervising in detail the programs of the Fulbright Foundation and the Iran-America Society, together budgeted at well over \$1 million per year. During this period, Mr. Wertime :

- Helped in the reorganization of Tehran University.
- Helped to create the first organization in Iran for social science research: opinion, attitude, market, educational, and management research.
- Discovered a deposit of iron ore and encouraged the Iranian government to use modern direct-reduction methods of exploiting it.
- Encouraged arts and sports by strengthening the Tehran Philharmonic Society and Symphony Orchestra and by raising Iranian tennis to the level of Davis cup.

During the two and a half decades of governmental activity, he has been carrying on personal researches in the history of metallurgy, technology, and civilization that have brought him an advisory office in the Society for the History of Technology and memberships in the American Political Science Association, the Middle East Studies Association, and the Middle East Institute.

1968 APPOINTED CULTURAL ATTACHE,
AMERICAN EMBASSY ATHENS