

27

Royal College of Surgeons of England.  
Lincoln's Inn Fields.

Telephone, Holborn 3474.  
Telegrams, Collsurg, Holb., London.  
Cables, Collsurg, London.

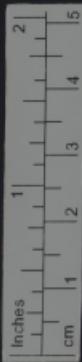
London, W.C.2.

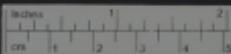
*With the Assistant Secretary's Compliments.*

Dr Sol Tax

Dept of Anthropology  
University of Chicago

Chicago 37  
animal archives  
furnished 24-8-61.  
accepted PRCS 11-9-61





27

ON  
THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

world, we can at least go so far as to say that events are brought about not by chance, but in each particular case by general laws."

WILLIAM: Headmaster Thorne.

"no man out of a weak conceit of iteration, think or maintain, that a man is well studied in the book of God's works; divinity or philosophy; but less progress or profusion in both."

WILLIAM: *Advancement of Learning.*

ON THE  
PRESERVATION OF FAVOURED RACES IN THE STRUGGLE  
FOR LIFE.

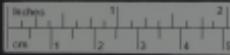
By CHARLES DARWIN, M.A.,

FELLOW OF THE ROYAL, BRITISH, LINNEAN, ETC., SOCIETIES;  
AUTHOR OF 'JOURNAL OF RESEARCHES DURING H. M. S. BEAGLE'S VOYAGE  
ROUND THE WORLD.'

LONDON:  
JOHN MURRAY, ALBEMARLE STREET.  
1859.

The right of Translation is reserved.

CHICAGO:  
THE UNIVERSITY OF CHICAGO  
1959



## GENERAL INFORMATION

The registration and information desk is located in the North Lounge of the Reynolds Club, 5706 South University Avenue. It will be open from 8:30 to 5:00 from Monday, November 23, to Saturday, November 28. Registrants should make seating arrangements for the Centennial and Thanksgiving dinners at the seating desk next to the registration desk.

Tickets for "Time Will Tell" are on sale at the Reynolds Club Box Office. All other Centennial events are limited to persons who have registered in advance. Admission to all events will be by ticket only. Special programs will be distributed for the panel discussions, the Institute for High School Biology Teachers, and "Time Will Tell."

The Society for the Study of Evolution is holding its annual meeting during the Celebration, with headquarters at the Shoreland Hotel. Its sessions are listed in a separate program.

To reach a wider audience The Encyclopaedia Britannica Films, Inc., is filming the Celebration events to develop documentary films and educational material for distribution among groups unable to attend. WUCB, the student-operated campus radio station, is tape-recording the panel discussions and lectures and broadcasting these through closed circuit to Breasted Hall for the audience there. The University of Chicago Press is publishing the centennial papers and the panel discussions as a three-volume work titled *Evolution after Darwin* and edited by Sol Tax.

Transportation is available by taxi (Yellow Cab, Midway 3-8650); Emery-Drexel Livery service (FAirfax 4-6400); Chicago Transit Authority bus running east-west on 55th Street (CTA bus #55); and Illinois Central commuter train to the Loop.

Chartered bus service directly to and from the Shoreland and the Windermere hotels will be available to registrants from Tuesday through Saturday. Tickets must be purchased in advance. Registrants are advised to purchase a supply of tickets (25 cents each) at once (money will be refunded for those unused) and to plan to use the bus early to avoid waiting, congestion, and loss of reserved seats at sessions. Breakfast at Hutchinson Commons will be found to be especially convenient.

## CAFETERIAS

	BREAKFAST	LUNCH	DINNER
HUTCHINSON COMMONS OR COFFEE SHOP	7:15— except Thursday	11:10-1:30 except Thursday and Saturday	Monday, Wednesday, Saturday 5:15-7
BILLINGS HOSPITAL	6:30-9:30	11-1:30	5-6:45
INTERNATIONAL HOUSE	7-9:30 Thursday: 8-9:30	11:45-2:30 Thursday: noon-2*	except Saturday 5:15-7 Thursday: 5-7*

\* International House is serving on Thanksgiving Day for the convenience of Centennial Registrants before and after the Convocation.

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# THE UNIVERSITY OF CHICAGO DARWIN CENTENNIAL CELEBRATION



NOVEMBER 24-28, 1959

*Joining the University in sponsoring the Darwin Centennial Celebration are the National Science Foundation, the Werner-Green Foundation for Anthropological Research, and the National Institutes of Health. The first two have contributed transportation and living expenses for the participants; the third, costs of the panel discussions.*



COMMITTEE  
for the  
DARWIN CENTENNIAL CELEBRATION

SOL TAX, *Chairman, Department of Anthropology*

ALFRED E. EMERSON, *Department of Zoölogy*

CHAUNCY D. HARRIS, *Department of Geography*

EVERETT C. OLSON, *Department of Geology*

H. BURR STEINBACH, *Department of Zoölogy*

ILZA VEITH, *Department of Medicine*

Appointed by the Chancellor in January 1956, the original Committee included also KARL P. SCHMIDT of the Chicago Natural History Museum, as Editor, and ROBERT REDFIELD of the Department of Anthropology. The planning for the Centennial was in large part their creation and was far advanced before the deaths of Dr. Schmidt on September 27, 1957, and of Professor Redfield on October 16, 1958.

François Bordes, Sir Julian Huxley, and A. L. Kroeber, visiting Professors in the University during the Autumn Quarter, 1959, helped the Committee and other participants to plan the panel discussions.

CHARLES CALLENDER, *Conference Director*

MARIE-ANNE HONEYWELL, *Conference Secretary*

JEAN DAMES AND ROSE WEINER, *Assistants*

ROCHELLE DUBNOW, *Director of volunteer work by students*

MARIANNA TAX, *Assistant*

INSTITUTE AND NATIONAL CONFERENCE FOR HIGH SCHOOL BIOLOGY  
TEACHERS

RICHARD BOYAJIAN, *University High School*  
*Director of the Institute*

JOHN C. MAYFIELD, *the College*  
*Director of the National Conference*

Committee: G. ERNST GIESCKE and D. BOB GOWIN, *Graduate School of Education*; BARBARA F. PALSER,  
*Department of Botany*; HEWSON H. SWIFT, *Department of Zoölogy*.



TUESDAY  
NOVEMBER 24

1:30 P.M.  
MANDEL HALL

ISSUES IN EVOLUTION—"INTRODUCTION"  
SOL TAX

2:00 P.M.  
MANDEL HALL

ISSUES IN EVOLUTION—I: "THE ORIGIN OF LIFE"

*Panel Discussion*

*Chairmen:* HARLOW SHAPLEY and HANS GAPIRON

SIR CHARLES GALTON DARWIN	RALPH W. GERARD
TH. DOZHANSKY	H. J. MULLER
EARL A. EVANS, JR.	C. LADD PROSSER
G. F. GAUSS	

6:00 P.M.  
HUTCHINSON COMMONS AND COFFEE SHOP

CENTENNIAL DINNER

*Presiding:* CHAUNCY D. HARRIS, Dean, *Division of Social Sciences*

The Citizens Board of the University of Chicago will join the after-dinner program. Other registrants are invited to the limit of seating capacity.

8:30 P.M.  
MANDEL HALL

WELCOME

LAWRENCE A. KIMPTON, Chancellor, *University of Chicago*

"THE DARWIN CENTENNIAL CELEBRATION"  
SOL TAX

"DARWIN THE TRAVELLER"  
SIR CHARLES GALTON DARWIN



## WEDNESDAY

NOVEMBER 25

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9:45 A.M.

MANDEL HALL

### ISSUES IN EVOLUTION—II: "THE EVOLUTION OF LIFE"

#### *Panel Discussion*

Chairmen: SIR JULIAN HUXLEY and ALFRED E. EMERSON

DANIEL I. AXELROD  
TH. DORZHANSKY  
H. B. FORD  
HERBERT MAYR  
A. J. NICHOLSON

EVERETT C. OLSON  
C. LADD PROSSER  
G. LEDYARD STEBBINS  
SEWALL WRIGHT

2:45 P.M.

MANDEL HALL

### "THE LADDER OF LIFE"

Advance showing of a film on "evolution in action"  
Prepared by the Columbia Broadcasting System  
for broadcast on CONQUEST November 29

3:30 P.M.

MANDEL HALL

#### *Illustrated Lecture*

### "THE ORIGIN OF THE GENUS HOMO"

L. S. B. LEAKY



THURSDAY  
NOVEMBER 26

9:45 A.M.

MANDEL HALL

ISSUES IN EVOLUTION—III: "MAN AS AN ORGANISM"

*Panel Discussion*

Chairmen: GEORGE GAYLORD SIMPSON and F. CLARK HOWELL

MARSTON RATES

H. W. MAGOUN

CESARE EMILIANI

BERNARD REINHOLD

A. IRVING HALLOWELL

C. H. WADDINGTON

L. S. B. LEAKY

3:00 P.M.

ROCKEFELLER MEMORIAL CHAPEL

DARWIN CENTENNIAL CONVOCATION

Presiding: LAWRENCE A. KIMPTON, Chancellor, *University of Chicago*

*Convocation Address:*

"THE EVOLUTIONARY VISION"

SIR JULIAN HUXLEY

Awarding of Honorary Degrees

Immediately following the recessional, official delegates will greet the recipients of honorary degrees in Ida Noyes Hall.

6:00 P.M.

HUTCHINSON COMMONS

THANKSGIVING DINNER

Presiding: EDGAR A. ANDERSON, President, *Society for the Study of Evolution*

8:30 P.M.

MANDEL HALL

"TIME WILL TELL"

An original musical play written for the Celebration  
by ROBERT A. ASHINHEURST and ROBERT POLLAK

OPENING PERFORMANCE



FRIDAY  
NOVEMBER 27

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9:45 A.M.  
MANDEL HALL

ISSUES IN EVOLUTION—IV: "THE EVOLUTION OF THE MIND"

*Panel Discussion*

*Chairmen:* RALPH W. GERARD and ILZA VEITH

HENRY W. BROWN	A. IRVING HALLOWELL	H. W. MAGOUN
MACDONALD CHITCHLEY	ERNEST HILGARD	ALEXANDER VON MURALT
W. HORSLEY GANTT	SIR JULIAN HUXLEY	N. TINBERGEN

1:30 P.M.—4:30 P.M.  
JUDD HALL 136

INSTITUTE FOR HIGH SCHOOL BIOLOGY TEACHERS

The National Conference for High School Biology Teachers brings to this Institute teachers from all over the United States. It is financed by a grant from the National Science Foundation as a means of widening the influence of the Centennial Celebration and of this Institute.

*Panel and Discussion Sections*

*Chairman:* H. BURR STEINBACH

EDGAR ANDERSON	H. J. MULLER
TH. DORZELANSKY	GEORGE GAYLORD SIMPSON

8:30 P.M.  
MANDEL HALL  
"TIME WILL TELL"

SATURDAY  
NOVEMBER 28

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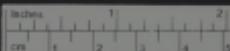
9:45 A.M.  
MANDEL HALL

ISSUES IN EVOLUTION—V: "SOCIAL AND CULTURAL EVOLUTION"

*Panel Discussion*

*Chairmen:* CLYDE KLUCKHOHN and ALFRED L. KROEBER

ROBERT M. ADAMS	SIR JULIAN HUXLEY	JULIAN H. STEWARD
EDGAR A. ANDERSON	H. J. MULLER	LESLIE A. WHITE
FRANÇOIS BORDÈS	FRED POLAK	GORDON R. WILLEY



SATURDAY  
NOVEMBER 28 (CONCLUSION)

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12:00 M.

MANDEL HALL

ISSUES IN EVOLUTION—"CONCLUSION"

SOL TAX

1:30 P.M.-3:30 P.M.

JUDD HALL 126

INSTITUTE FOR HIGH SCHOOL BIOLOGY TEACHERS

*Lecture and Film*

EVOLUTIONARY ASPECTS OF SOCIAL COMMUNICATION IN ANIMALS

N. TINBERGEN

*Remarks*

THE PLACE OF EVOLUTION IN THE CURRICULUM

SIR JULIAN HUXLEY

1:30 P.M.-5:30 P.M.

MANDEL HALL

INSTITUTE ON SCIENCE AND THEOLOGY

Arranged with the cooperation of the Federated Theological Faculty

*Lecture*

"CREATION AND CAUSALITY IN THE HISTORY OF CHRISTIAN THOUGHT"

JAROSLAV PELIKAN, *Federated Theological Faculty*

*Lecture*

"CREATION AND EVOLUTION IN PRESENT-DAY ROMAN CATHOLIC THOUGHT"

THE REVIBEND J. FRANKLIN EWING, S.J., *Fordham University*

*Panel Discussion*

"WARFARE OF SCIENCE WITH THEOLOGY"

*Chairman: JERALD C. BRAUER, Federated Theological Faculty*

FRANÇOIS BORDÉS

WILLIAM O'MEARA, *Department of Philosophy*

SIR CHARLES GALTON DARWIN

H. BURR STEINBACH

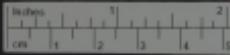
G. F. GAUSE

LEO STRAUSS, *Department of Political Science*

8:30 P.M.

MANDEL HALL

"TIME WILL TELL"



## EXHIBITS

### ON THE UNIVERSITY CAMPUS

#### REYNOLDS CLUB, SOUTH LOUNGE

*University of Chicago Library Exhibit.* The history of evolutionary theory and the influence of Darwin's writings on social thought and theology are shown in a book exhibit assembled by the Department of Special Collections of the University Library. Among the books on display from the Library's collections are first editions of seventeen of Darwin's works, including the *Origin of Species*, presented to the University by Col. William M. Spencer of Chicago.

*University of California at Los Angeles Exhibit.* A series of posters loaned by the University of California at Los Angeles Biomedical Library illustrates Darwin's precursors, his life and work, and contemporary reaction to his theories, and post-Darwinian developments in genetics, embryology, physical anthropology and psychology.

#### UNIVERSITY OF CHICAGO BOOKSTORE

Books by Celebration participants as well as works about Darwin and Evolution are on display and may be purchased at the Bookstore, 5801 Ellis Avenue.

### IN AND NEAR CHICAGO

#### CHICAGO NATURAL HISTORY MUSEUM

"Darwin's *Origin of Species*" is the subject of an exhibit in Stanley Field Hall. It consists of six panels that trace the history of the *Origin* and explain the meaning of, and the evidence for, natural selection. Included in the exhibit is a copy of the first edition of the *Origin of Species* loaned for the occasion by the John Crerar Library of Chicago. Original letters by Darwin and specimens from the Museum's collections that were collected by him on the voyage of the "Beagle" will also be on display. The Museum, at Roosevelt Road and Lake Shore Drive, can be reached by car or by the Illinois Central Railroad's commuter trains.

**THE MUSEUM OF SCIENCE AND INDUSTRY**, at 57th Street and South Lake Shore Drive, contains both scientific (including medical) and historical exhibits.

#### CHICAGO ZOOLOGICAL PARK (BROOKFIELD ZOO)

Members of the staff will be glad to arrange escorted tours which would include the Animal Hospital and Animal Study Center as well as the regular displays. For further information and arrangement of tours, call Bishop 2-2630. The zoo is about one hour by car (west on 55th Street and Garfield Boulevard to Harlem Avenue, north on Harlem to 31st Street, 31st to 8300 west) and can also be reached by Bluebird Bus from the Loop.

**THE MORTON ARBORETUM**, Lisle, Illinois, contains 1,225 acres devoted to the study and exhibit of woody plants.



## PARTICIPANTS

The papers listed are being published by the University of Chicago Press and have been summarized in the special program prepared for the panel discussions. The discussions themselves are based upon advance study by the participants of all the papers.

ROBERT M. ADAMS

University of Chicago

*Evolutionary Process in Early Civilizations*

EDGAR A. ANDERSON

Missouri Botanical Garden

*The Evolution of Domestication*

DANIEL I. AXELROD

University of California, Los Angeles

*The Evolution of Flowering Plants*

MARSTON BATES

University of Michigan

*Ecology and Evolution*

FRANÇOIS BORDES

University of Bordeaux

*Problems of Evolution in the Paleolithic Cultures*

ROBERT J. BRAIDWOOD\*

University of Chicago

*Post-Pleistocene Evolution*

HENRY W. BROSIN

University of Pittsburgh

*Evolution and the Understanding of Diseases of the Mind*

MACDONALD CRITCHLEY

National Hospital, London

*The Evolution of Man's Capacity for Language*

SIR CHARLES GALTON DARWIN

*Can Man Control His Numbers*

TH. DOBZHANSKY

Columbia University

*Evolution and Environment*

ALFRED E. EMERSON

University of Chicago

*The Evolution of Adaptation in Population Systems*

CESARE EMILIANI

University of Miami

*Dating Human Evolution*

EARL A. EVANS, JR.

University of Chicago

*Viruses and Evolution*

PAUL FEJOS

Wenner-Gren Foundation for Anthropological Research

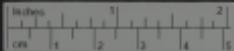
Discussion Participant

E. B. FORD

University of Oxford

*Evolution in Progress*

\* Unable to attend the Celebration.



HANS GAFFRON

University of Chicago

*The Origin of Life*

W. HORSLEY GANTT

Johns Hopkins University

*Parson and Darwin*

G. F. GAUSE

U.S.S.R. Academy of Medical Sciences

*Darwinism, Microbiology and Cancer*

RALPH W. GERARD

University of Michigan

*Breeding: The Residue of Change*

A. IRVING HALLOWELL

University of Pennsylvania

*Self, Society and Culture in Phylogenetic Perspective*

CHAUNCY D. HARRIS

University of Chicago

Committee, Darwin Centennial Celebration

ERNEST HILGARD

Stanford University

*Evolution and the Understanding of Psychology*

F. CLARK HOWELL

University of Chicago

with S. L. WASHBURN

*Human Evolution and Culture*

SIR JULIAN HUXLEY

*The Emergence of Darwinism*

CLYDE KLUCKHOHN

Harvard University

Discussion Participant

ALFRED L. KROEBER

University of California, Berkeley

*Evolution, History, and Culture*

L. S. B. LEAKY

Coryndon Memorial Museum, Nairobi, Kenya

Discussion Participant

H. W. MAGOUN

University of California, Los Angeles

*Darwin and Concepts of Brain Function*

ERNST MAYR

Harvard University

*The Emergence of Evolutionary Novelties*

H. J. MULLER

Indiana University

*The Guidance of Human Evolution*

ALEXANDER VON MURALT

University of Berne

*A Decisive Step in Evolution: Solitary Condomation*

A. J. NICHOLSON

Australian Commonwealth Scientific and Industrial Research Organization, Canberra

*The Role of Population Dynamics in Natural Selection*

EVERETT C. OLSON

University of Chicago

*Morphology, Paleontology, and Evolution*

STUART PIGGOTT\*

University of Edinburgh

*Prehistory and Evolutionary Theory*

\* Unable to attend the Celebration.



FRED POLAK

University of Rotterdam

*Evolution and the Understanding of Man in his Social Setting*

C. LADD PROSSER

University of Illinois

*Comparative Physiology in Relation to Evolutionary Theory*

BERNARD RENSCH

University of Münster

*The Laws of Evolution*

HARLOW SHAPLEY

Harvard University

*On the Evidences of Inorganic Evolution*

GEORGE GAYLORD SIMPSON

Harvard University

*The History of Life*

G. LEDYARD STEBBINS

University of California, Davis

*The Comparative Evolution of Genetic Systems*

H. BURR STEINBACH

University of Chicago

Committee, Darwin Centennial Celebration

JULIAN H. STEWARD

University of Illinois

*Evolution and Social Typology*

SOL TAX

University of Chicago

Chairman, Darwin Centennial Celebration

N. TINBERGEN

University of Oxford

*Behavior, Systematics and Natural Selection*

ILZA VEITH

University of Chicago

*Creation and Evolution in the Far East*

C. H. WADDINGTON

University of Edinburgh

*Evolutionary Adaptation*

SHERWOOD L. WASHBURN\*

University of California, Berkeley

with P. CLARK HOWELL

*Human Evolution and Culture*

LESLIE WHITE

University of Michigan

*Four Stages in the Evolution of Minding*

GORDON R. WILLEY

Harvard University

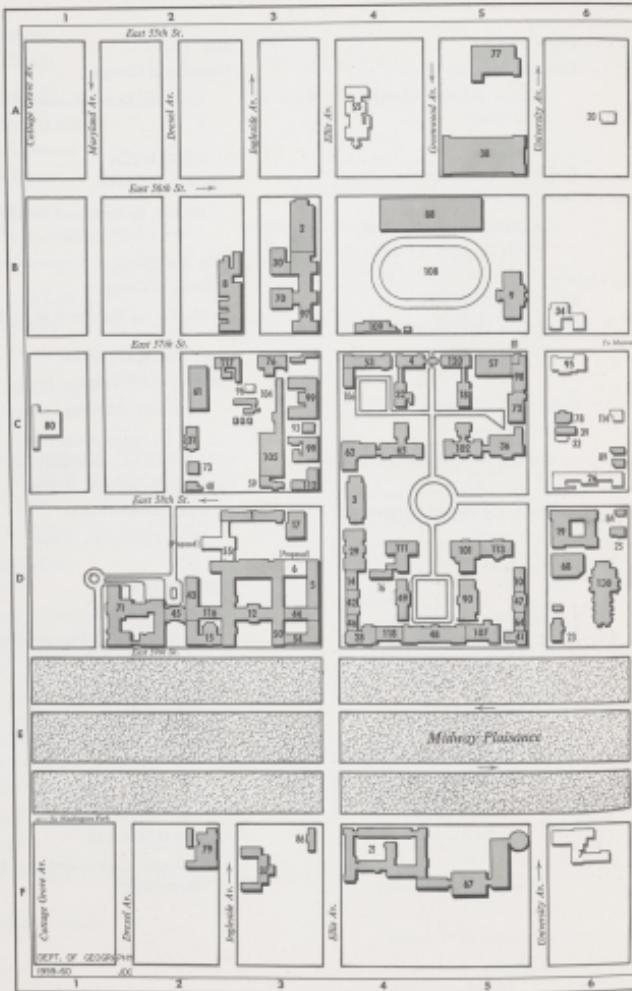
*Historical Patterns and Evolution in Native New World Cultures*

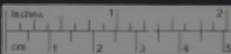
SEWALL WRIGHT

University of Wisconsin

*Physiological Genetics, Ecology of Populations and Natural Selection*

\* Unable to attend the Celebration.





# THE UNIVERSITY OF CHICAGO



## LEGEND

- UNIVERSITY BUILDINGS
- OTHER INSTITUTIONS
- STREETS AND LAWNS
- ONE WAY STREETS

