"but let Time's news Be known when 'ns brought forth"

Eime's Netus

Aperiodic Newsletter

Time's News No. 20

International Society for the Study of Time

January 1992

A MESSAGE FROM THE PRESIDENT

The purpose of this issue of Time's News is to give members the necessary information for making arrangements to attend ISST's forthcoming 8th triennial conference. Our theme is Time and Life: Contributions from the Sciences, the Humanities and the Arts. The meeting will be held at the International Cultural Center in Cerisy-la-Salle, Normandy, France, July 3-9, 1992.

You will learn elsewhere in the present issue of Time's News about the attractions of the area, about the seventeenth-century chateau in which we are meeting, and about the excellent papers and program to which we can look forward. My purpose in this message is to thank those who have helped with the administrative underpinnings of the program: the Members of our Council, Rémy Lestienne of CNRS and Hervé Barreau who attended the Council's last

meeting. My special thanks to Hervé Barreau who, as Chairman of the local committee, has been heavily involved in the work of preparation. I am also very grateful to Rick Block who will be handling your deposits and registration fees, to Marlene Soulsby who has made this issue of Time's News possible, and to J. T. Fraser who, as usual, has held everything together.

One final word: Please make sure that you send Rick Block your deposits and registration fees at the earliest possible moment together with membership dues if appli-

As for myself, I very much look forward to seeing you all-old and new friends alike-at Cerisy-la-Salle in Normandy next July.

Sam Macey

THE FOUNDER'S COLUMN

In the ninth century the Nortmanni — Norsemen occupied the coastal areas of that rich and attractive land that now bears the name, Normandy. They came, they conquered (locally) then became a part of the history of France. Four centuries earlier the Huns rode by carrying with them — so I imagine — generational dreams of a distant China. They were made to change their plans in the battle of Châlon in 451, turned back, and left for Attilla's residence in Hungary. Normandy was the westernmost province of the realm of Charlemagne at the turn of the eighth century, with its eastern boundaries extending to Bavaria and to the land of the Avars. By the 11th century Normandy was the most centralized province of Europe. It is from Normandy that Duke William II, better known as William the Conqueror, set out, crossed the Manche and began that historical commuting between France and England, which counts among its more recent events the Allied landings in Normandy during Second World War and the Chunnel, now being completed.

The Blue Guide to France speaks about trips from Caen to Cherbourg, from Caen to Coutance via Bayeux and St.-

Lô, from Cherbourg to Le Mont St.-Michel, and shows a black-and-white map of the Département of Manche. But the countryside is neither black-and-white nor is it flat like a printed page. It is very much alive; it is green and lush with haze coming in from the sea then departing, giving way to slow rains and sunshine. And it is three dimensional with rolling hills, fences, and houses that resemble those in the south of England. The fourth dimension of the countryside is not so much time as it is history.

Our meeting will be held in a Chateau built in the 17th century and carrying among its traditions the calendrical system of the décades. That is why our conference starts on the 3rd of July (a Friday), followed by working days on Saturday and Sunday. Monday we will be off to enjoy the hospitality of culture and nature. Then, back to work for two more days. Wednesday night we will hold our usual banquet, with an informal after-dinner talk by Helga Nowotny, Director of the Institute for Theory and Social Studies of Science (Vienna) on, "Here and there, now and then: What time does when you are traveling."

The business session will be held on Thursday. We plan to adjourn at noon. The Society will then begin to prepare itself for extending its present membership of 300 into the upper hundreds, and for serving as the oldest and largest professional group dedicated to the interdisciplinary exploration of the nature of time.

I doubt that future historians will mention ISST together with the visits of Attila, Charlemagne and the Normandy landings, but it should be an important and memorable occasion to those who will partake in the conference on "Time and Life."

Guest Column

Time and Becoming: a French Perspective

Can we talk about a French epistemological tradition of time, or of time and becoming? In view of the diversity of philosophical standpoints taken by ancient and contemporary researchers, such a topic would certainly be pretentious. But before the gathering in France of the VIIIth ISST Conference on *Time and Life*, it may be appropriate to point out a special contribution from French philosophy that can be traced back to J. B. Lamarck rather than to C. Darwin, and which is characterized by a special reverence for the idea of an intrinsic force in nature, leading it to produce novelties and increased complexity.

The XIXth century is notable for two leading figures among French epistemologists interested in this question: A. A. Cournot and P. Duhem. A. Cournot (1801-1877) should be revered for having insisted on the psychological side of duration. As he put it, (in substance)"...one can imagine that if we cut off all the legs and remove all sensory input from an animal, that he will still have the sensation of time passing." Also, Cournot devoted a great deal of attention to probability. His definition of *chance* as the concurrence of two independent causal chains has won him fame. It introduced the possibility that nature could not be described by a single body of laws of a strictly deterministic character. Thus the doors were opened to *becoming* and *novelty*.

French science is certainly indebted to P. Duhem (1861-1916) for his major works in thermodynamics. They contributed greatly to the introduction in France of the concept of entropy, developed in 1865 in Germany by R. Clausius. Some of Duhem's works prefigure the development of the thermodynamics of irreversible systems, although his general philosophy was certainly marked by the then-in-vogue "energism."

It was of course Henri Bergson (1859-1941) who took up the flame and defended a time different and distinct from its causal and mechanical shadow, from materialistic and deterministric philosophers enthralled by the formidable development of classical and relativistic mechanics. Impelled by the evidence of psychological duration that, according to him, we apprehend not by way of our intelligence but by our intuition, he was led to his well-known position

of dualism. The idea that time is in essence a psychological or even spiritual attribute led him to a personified view of nature caught up in the adventure of Creative Evolution. His book closes with the words "Philosophy...is the deepening of becoming in general, the true evolutionism, and thus the true extension of science." Bergson's highly original position distances him from Lamarck's philosophy, to which the French spiritual philosopher Teilhard de Chardin came much closer. Thus, beyond differences of opinion we find, in the French tradition, many roots of the doctrine of "emergencism" (the doctrine that a property like that of becoming is rooted in things themselves, hidden in simple systems but which emerges into evidence upon consideration of complex systems) in the natural sciences.

Whether they share some of these convictions or not, I and my colleagues from France who will defend our ideas on time and life at Cerisy-la-Salle will feel like "dwarves standing on the shoulders of giants" alongside those illustrious predecessors. In his thesis devoted to "The Construction of the Notion of Time," Mr. Barreau has enlisted and developed some aspects of the anthropological genesis of the concept of time, leading to some cultural universals, apart from its bio-psychological foundations but in connection with them and receiving support from them. All these roots of the notion manifest the solidarity of life, of consciousness, and of the rational construct that, in science, we call time.

I also acknowledge my inheritance from the above-sketched tradition. Amazed by the idea that a too close and too realistic identification of the concept of time with the concept responsible for the determination of causal order in classical and relativistic mechanics leads to a dead end, I defended in Les Fils du Temps the idea that processes of the increase of entropy should be understood as having two stages. The first, linked to the limited scope of our standards for measuring objects and to the loss of information in any coarse-grained description of systems as time elapses, is epistemological in nature and reminds us of the psychological dimension of becoming emphasized by Bergson. The second, linked to a presumed universal sink of correlations, has a realistic content and admits the possibility of a true

becoming in the spirit of the aforementioned tradition. The existence of such a universal (and perhaps cosmological) sink of correlations is possible if there exists, at some level of reality (whose precise boundary with the classical world of deterministric phenomena is still unknown) a genuine randomness. According to this view, randomness in nature is richer than the mathematical property of randomness would have suggested: it is indeed the seed of both temporality and evolution.

At the VIIIth Conference, I shall illustrate how the development and functioning of the brain itself depends upon the opportunistic ability of living matter to use chance, present in Darwinian ruled embryological development, to refine the magnificent temporal mechanisms that make this organ so successful in the apprehension of external reality. In this organ of thought also, therefore, *time* emerges from chance and randomness.

Rémy LESTIENNE Director CNRS Washington Offic

Announcements and Reports

May 25-26, 1992: "European Meeting of Societies of Chronobiology." The Groupe d'Étude des Rythmes Biologiques, the French society for chronobiology, invites European researchers in this field to participate at its meeting in Paris. You may submit proposals for papers or posters, preferably by January, 1992 to:

Dr. Jean-Francois Vibert
Réunion de Chronobiologie
CHU Saint-Antoine
27 rue Chaligny
75571 Paris Cedex 12
France
(Official languages are French and English.)

A conference on "Time, Action and Cognition" was held on October 22-25, 1991 in Saint Malo (Brittany, France). Several members of ISST played a leading role at this conference. Viviane Pouthas, CNRS-Paris, was director and was assisted by Françoise Macar, CNRS-Marseille, and William J. Friedmann, professor of Psychology at Oberlin College, Ohio. Others who participated were past ISST president John Michon, as well as Janet Jackson, Richard Block, Marc Richelle, and Jacques Montangero.

The objective of this NATO Advanced Research Workshop was to make a decisive step forward in our understanding of time information processing by bringing together time specialists in the areas of motor behavior, attention, memory and representation.

REPORT OF THE ACTING EXECUTIVE SECRETARY

When, in 1990, the decision was made to meet at the charming 17th century chateau and French intellectual gathering place, Cerisy-la-Salle, it looked quite certain that all participants and their families would be able to stay there. Because of the large number of papers and posters selected by the Program Committee, from an even larger number of proposals, it now seems likely that some of the participants will have to stay at a Hotel in a nearby town.

If you wish to stay at Cerisy, enjoy their welcome, excellent cooking and reasonable prices, then please return your reservation immediately, for places will be assigned on a first come, first served basis.

NOMINATIONS

If you wish to nominate a member of ISST for the next Council, please submit his or her name to the Acting Executive Secretary. Courtesy requires that the person so nominated be asked for his or her consent.

Editorial Reflections....

The focus of this newsletter is the up-coming conference in Cerisy-la-Salle when we can once again enjoy the energy and camaraderie that distinguish ISST. The topic, "Time and Life," has inspired a variety of intriguing responses, as is evident from the list of contributions to the conference program. The place, a 17th century château with a tradition of intellectual exchange, promises an atmosphere and mood conducive to thoughts and conversation of temporal matters. Hervé Barreau and the French committee have given considerable effort to help make our arrival smooth and our stay at Cerisy pleasant and inviting.

Perhaps an inevitability of working so intensely with these conference materials is that I find myself confronting the topic on several levels. For example, recently I discovered the delightful experience of reading the cartoon strip, Calvin and Hobbes, and my 9-year-old daughter chose to believe in Santa Claus. Both experiences spoke of time and life; both drew my attention to a reality that holds itself together in very concrete and rational fashion but also permits experiencing the extraordinary and paradoxical without conflict.

When reading Watterson's cartoon strip about a rambunctious 6-year old and his stuffed tiger, one must be prepared to slip back and forth between a well-defined everyday world, filled with the familiar conflicts of child-hood, and a rich imaginative realm where battles unfold in times long past and long future, yet are all simultaneously present. One must also be prepared to live for a while on that pivotal edge between knowing what is and is not and feeling free to affect that awareness. The pivot point for a Calvin

and Hobbes reader is, of course, the tiger whose reality becomes more paradoxical the more one reads. Hobbes has a unique role in that he does not participate in Calvin's fantastic, imaginative worlds; he is very much anchored in the affairs and time of everyday life. Watterson presents him in a dual aspect: as a witty, charming, affectionate pal with a healthy dose of aggression and also as a lackluster, shrunken, lifeless object—a common toy that anyone with eyes turned to the "real" world would see. The reader, however, comes to reject this reality as a shadow of inanimate stuffing and willingly embraces the reality of a Hobbes who can just as easily wrestle with Calvin as engage him in philosophical discussion about all sorts of things, including the problems of time.

My daughter's choice for Santa, which defied mounting evidence, a pointed logic, and the taunts of class-mates, was a willing and deliberate way of preserving this same sort of response to life--it comes at a time when living hangs suspended for a while between child and adult. Here time "marches" on but it also stops for wondrous things to happen and curves back on itself to embrace other years, other times, other places, and other generations who warmed to similar experiences. It necessitates knowing and still being able to play with absolute abandon--something that we often forget as we grow older and more serious with our living and making the most of our time.

Perhaps such experiences as reading the adventures of Calvin and Hobbes or choosing to live "playfully" just a little while longer are ways to evoke the delight of childhood where possibilities are countless, time is in our being not on our watch, and there is magic in the ordinary.

Marlene Soulsby

O hours of childhood,
hours when behind the figures there was more
than the mere past, and when what lay before us
was not the future! We were growing, and sometimes
impatient to grow up, half for the sake
of those who'd nothing left but their grown-upness.
Yet, when alone, we entertained ourselves
with everlastingness: there we would stand,
within the gap left between world and toy,
upon a spot which, from the first beginning,
had been established for a pure event.

Rainer Maria Rilke
"4th Duino Elegy"

Letter to the Editor

The following letter raises a question about the value of poster events, particularly in the social sciences. Should the issue be brought up for discussion at the conference?

Ed.

... to visit a poster exhibition, like a science-in-pills market, fixes one's attention only on ideas which catch the eye. It is a better way of controlling time, which is what humanity in the most "developed" countries aspires to. On the contrary this manifests only a progressive fragmentation of the use of time and an inconsistent level of relationship with the other. Visiting an exhibition with different stimuli from individuals and ideas, my attention is not concentrated but simply attracted. My curiosity is greater than my genuine interest. The reaction to words written on the paper is a reaction to a cold means of communication which I can more easily make my own than a coherent and stimulating discourse. This does not lend itself to reflection on ideas and discussion of them, it is more a way of ascertaining that other ideas exist and a way of controlling them within one's own conceptual world. Poster exhibitions avoid boredom but they do not develop any depth of exchange of ideas.

Precisely because of this it is not worth using such a form for a meeting intended to spark off ideas.

But there is another point on which my opposition is based. I believe there is an internal profound difference between natural and social sciences. The first are based on fundamental hypotheses which constitute a homogeneous, geometrical structure of concepts to which all phenomena can be reduced and put under control. A similar structure does not exist for social sciences—not because they come later but because of the impossibility of distancing the relationships of individuals and the impossibility of observing them only in a very superficial way. The apparent coherence of natural science results only because it is not possible for us to reach the internal structure of matter. As far as it becomes possible, the natural sciences are no longer the exact sciences we often take them for.

So in the social sciences one cannot sufficiently distance objects and reduce them to an abstract but coherent schema of concepts. Experience makes this uneasy, uncontrolled situation more difficult because human relationships are often ambivalent and our own experience can only cover a little part of human reality. That is why social science can only be an experiment in knowledge. There are no fundamental hypotheses. As K. Burke said, "a way of seeing A is also a way of not seeing B".

In this condition each position is very precarious and I cannot present a point of view on a particular phenomenon on the presupposition that other fundamental hypotheses are clear and fixed for the other as in the natural sciences. That is why I express my opposition, in as far as social sciences are concerned, to a presentation through a poster exhibit. I'd like to represent the point of view of humanistic sociology and I think that such tabulations representing human phenomena can only increase misunderstanding and confusion.

Prof. Carlo Mongardina

Address all <u>Time's News</u> correspondence to:

Marlene Soulsby, Editor
<u>Time's News</u>
Penn State University
Worthington Scranton Campus
Dunmore, PA 18512
U.S.A.

Address all correspondence concerning the Time's Books column to:

J. T. Fraser ISST P.O. Box 815 Westport, CT 06881 U.S.A.

ISST acknowledges and thanks Carol Bresnock for secretarial support.

The sketch of Cerisy was drawn for Time's News by Al Ondush.

THE INTERNATIONAL SOCIETY FOR THE STUDY OF TIME

ciety for the Study of Time is a of scientists and humanists interested

The International Society for the Study of Time is a professional organization of scientists and humanists interested in exploring the idea and experience of time and the role time plays in the physical, organic, intellectual, and social world.

By holding meetings once every three years, the Society provides a forum for the exchange of ideas among its members. Selected papers from these meetings have been published in a reference library, consisting thus far of the six volumes of *The Study of Time* series with over 150 articles, making for a total of 2800 printed pages. The seventh volume will appear in 1991.

Why should there be an interdisciplinary study of time?

Time is a fundamental feature of the physical universe. It is intimately connected with the life process. The human mind, setting our species apart from all other species, is characterized by its ability to formulate and pursue long-term plans and to meet present contingencies based on the advantages of long-term memory. The passage of time has been of concern to all great religions and philosophies, and has found an infinite variety of expressions in the arts and letters. No other single aspect of reality relates more directly to basic human needs and desires than does time.

Although time has been a staple of all human knowledge and modes of expression, no systematic attempts have been made in modern times, before the founding of the International Society for the Study of Time (ISST) in 1966, to explore the nature of time through the collective power of scientific knowledge and humanistic insight.

If there exists a unity in the studies of the nature of time, conducted through the different fields of human knowledge, it is likely to reveal itself to the open mind through the course of our work.

But even without assuming the possibility of a universal theory of time, the interdisciplinary efforts of our meetings have been found rewarding, as demonstrated by the unique stimulus that ISST conferences have provided to their participants. The recent upsurge of professional and popular works dealing with time may well be credited to the two decades of quiet pioneering work of members of ISST.

The society was founded in 1966 by Dr. J. T. Fraser, acknowledged to be the world's leading scholar in the interdisciplinary study of time.

At the end of 1990 the Society's membership was 240, consisting of scholars from 31 countries around the world. The disciplines represented by members of the Society include anthropology, astronomy, the biological sciences, economics, geology, history, law, linguistics, literature and the arts

(including the history of art), mathematics, medical science, music, philosophy, physics, political science, psychology and psychiatry, religion, and sociology.

Individual members of ISST, writing in their own fields, have published scores of books relevant to the study of time, directed both to the scientist and academic, and to the inquisitive lay reader.

The Society has published six volumes of papers selected from its six conferences.

1969, Oberwolfach, West Germany: The Study of Time (New York: Springer-Verlag, 1972)

1973, Lake Yamanaka, Japan: The Study of Time II (New York: Springer-Verlag, 1975)

1976, Alpbach, Austria: The Study of Time III New York: Springer-Verlag, 1978)

1979, Alpbach, Austria: The Study of Time IV (New York: Springer-Verlag, 1981)

1983: Castello di Gargonza, Arezzo, Italy: Time, Science, and Society in China and the West (The Study of Time V) (Amherst, University of Massachusetts Press, 1986)

1986, Dartington Hall College, Totnes, Devon, England: Time and Mind (The Study of Time VI) (Madison, CT: International Universities Press, 1989)

1989, Glacier National Park, Montana, USA: Time and Process (The Study of Time VII) (Madison, CT: International Universities Press, 1991)

From the pamphlet The Study of Time Has Come of Age.



International Society for the Study of Time Time and Life: Contributions from the Sciences, the Humanities, and the Arts VIIIth Conference

Centre Culturel International Cerisy-la-Salle, France July 3-9, 1992



The VIIIth Conference of the International Society for the Study of Time will be held in beautiful Normandy, France on the grounds of the 17th century château known simply as Cerisy. The Château itself is listed in the register of French historical monuments.

It was built between 1605-1620 on the site of an older medieval structure from which only a few remnants remain. In 1766 it was enlarged in alignment with the northern facade. The château includes a central building with 4 adjacent pavillions and a double exterior staircase parallel to the facade. The structure itself displays a grave and noble style. It was surrounded by a moat which was not typical of the time, but was most likely built for ornamentation rather than for defense.

The family that owns the château and the Association

of the Friends of Pontigny-Cerisy jointly manage the estate and attach great importance to the continuation of its cultural tradition and hospitality. For a century the *Décades* (ten days meetings) of Pontigny and the conferences at Cerisy witnessed many important events in French and international intellectual life.

The guests who gather under the aegis of the humanistic tradition of Cerisy are cordially invited to enjoy the natural beauty of the countryside and of the chateau, which has resisted agressive modernity. The management hopes that the guests, during their stay, will join the spirit of cooperation and conviviality that informs the permanent secretariat and the conduct of the personnel running Cerisy, and will depart with a pleasant memory of their stay.

Time and Life: Contributions from the Sciences, the Humanities and the Arts

International Society for the Study of Time
VIIIth Conference
Cerisy-la-Salle, France
July 3-9, 1992

Papers and Informal Talks

Barbara Adam, Wales, "Time and Human Life: the Technology-Ecology Connection"

Hoyt Alverson, USA, "Cross-language Universals in the Experience/Expression of 'Time': Collocational Evidence in English, Mandarin, Hindi and Sesotho"

Maria Helena Oliva Augusto, Brazil, "Dying and the Individual in the Contemporary World"

Mark H. Aultman, USA, "A Lawyer's View-Human Life Re-Presented to Society"

Hervé Barreau, France, "Lived Time and Ethical Thought"

Werner Bergmann and Gisbert Hoffmann, Germany, "Time Levels of Life and Time Conflicts"

Pushpa M. Bhargava and Chandana Chakrabarti, India, "Time and Anticipating Mechanisms in Living Organisms"

Richard Block, USA, "Psychological Time: Brain and Cognitive Processes"

Jens Brockmeier, Austria, "Anthropomorphic Operators of Time: Chronology, Language, Space"

José Carlos Bruni, Brazil, "Time and Transition"

A.G. Cairns-Smith, Scotland, "Conservatism and Complexification in Evolution"

Marcio D'Olne Campos, Brazil, "Time and Space in Native Societies: An Integrative Approach for an Ecological Calendar"

Vera Maria Chalmers, Brazil, "The Concept of Time in a Short-Story by Joao Guimaraes Rosa"

Laird Christie and Joel M. Halpern, USA, "Time: A Tripartite Interactive Model"

Olivier Costa de Beauregard, France, "Time and the Smoky Dragon," An informal evening talk.

Robert Payson Creed, USA, "The Replacement of 'Time' by 'Space' in Studies of Poetic Prosody"

J.P. Dupuy, France, "Time and Rationality: A New Solution to Newcomb's Paradox"

Claude Debru, France, "Functional Aspects of the Brain's Intrinsic Oscillatory Properties: About the Sleep-Waking Cycle and Other Cyclic Phenomena"

J.T. Fraser, USA, "Time and the Origins of Life" Founder's Lecture

Giovanni Gasparini, Italy, "The Temporal Nature of Post-Industrial Societies"

Ali Gheissari, USA, "Islamic Views and Idioms About Time and Life"

Robert O. Gjerdingen, USA, "Time in Artificial Neural Networks"

Raquel Glezer, Brazil, "History and Time: Ages and Temporal Marks"

A. Gouhier, France, "Bergson's View on Time"

Sabina Gross, USA, "Film - Real Time, Life Time, Media Time"

Paul A. Harris, USA, "The Light of Time: Einstein and Faulkner"

Paul Hernadi, USA, "The Timeliness of the Arts"

Joseph J. Kockelmans, USA, "On Space, Time, Space-Time, and Time-Space"

Rémy Lestienne, France, "Chance and Time from the Developing to the Functioning Brain"

J.J. Lewis, USA, "The Artifice of Eternity"

Judy Lochhead, USA, "The Expressivity of Timing in Musical Performance"

George R. Lucas, Jr. and Patricia J. Cook, USA, "Recollection and Expectation - Two Contrasting Views of Time, Life, and Memory"

Lennart Lundmark, Sweden, "The Mechanization of Time"

Françoise Macar, Franck Vidal and Michel Bonnet, France, "Does Temporal Information Processing Involve the Activation of Specific Cortical Sites?"

Samuel L. Macey, Canada, "Time and Life: An Evolving Relationship" Presidential Address

Peter K. McInerney, USA, "The Special Temporal Features of Human Being"

Masaki Miyake, Japan, "The Idea of Progress in Europe and Asia as a Problem in the Study of Time"

Helga Nowotny, Austria, "Here and There, Now and Then: What does Time do when you are Traveling?" An informal after-dinner talk

David Park, USA, "Consciousness and the Individual Event in Scientific Theory"

Viviane Pouthas, France, "Biobehavioral Rhythms: Development and Role in Early Human Ontogenesis"

Ravi Ravindra and Priscilla Murray, Canada, "Is the Eternal Everlasting?"

David Rothenberg, USA, "Time and the Human Place in Nature"

Lewis Rowell, USA, "Ma: Time and Timing in the Traditional Arts of Japan"

Ronilda R. Salami and Amancio C.S. Friaça, Brazil, "Cosmic Time and Individual Time in Yoruba Thought and Life"

Albert Shalom, Canada, "Aging and Death"

John J. Stuhr, USA, "Pragmatism and the Politics of Time"

Robert Thornton, Republic of South Africa, "Life in the Perspective of Science: Malinowski and the Birth of Functionalism from the Spirit of Central Europe - or - Zarathustra in the London School of Economics"

Posters and Exhibits

Marshall Arlin, Canada, "Finding Time in the Brain: Another Step"

Anna Maria Balogh, Brazil, "Time and Media"

Tom Bruneau, USA, "Subjective Temporality and Self-Identity: Ontogenetic Perspectives"

Vera Café, Brazil, "Dream Archeology of Urban Existence"

L.F. Giulio, Italy, "Time Information and the 'Oblique Effect'"

Richard Hancox, Canada, "Time and Moose Jaw: a Film"

James M. Jones, Marina Pomare, and Terrell Lasane, USA, "Temporal Orientation: Its Measurement and Some Behavioral Consequences"

Therezinha Moreira Leite, Brazil, "Subjective Time (Rhythm) Development"

Robert Levine and Laurie Conover, USA, "The Pace of Life and Well-being: The Person-Environment Fit"

Laura Camara Lima, Brazil, "Time and Lifestyles: A Study of Individual Notions of Time According to the Organization of Work Activities"

Luiz Menna-Barreto, Nelson Marques and Ana Amélia Benedito-Silva, Brazil, "Ontogenesis of the Sleep-Wake Cycle in Man - Some Landmarks"

Alberto Montare, USA, "In Search of the Chronogram"

Paola Reale, Italy, "Temporality in the Life-Cycle: From Youth to Old Age"

Gilson Schwartz, Brazil, "Economic Clocks and Time Freezing in Stabilization Shocks"

Gert Swart, Republic of South Africa, "The Cult of the 'Present' in Twentieth Century Architecture"

José C.B. Tiago de Oliviera, Portugal, "Time in Mathematics as Anticipation and Compressibility - a Comment on Chaitin"

Franck Vidal, Michel Bonnet and Françoise Macar, France, "Brain Potentials in Timing Tasks"

The Study of Time VIII

Selected papers from this conference will be considered for inclusion in <u>Time and Life</u> (The Study of Time VIII), edited by J. T. Fraser and Marlene P. Soulsby. Instructions to all speakers are being mailed.

Book Exhibit

As at our prior meetings, there will be an exhibit of time-related books, mostly those written by ISST members. If you wish to have one of your books exhibited, please ask your publisher to mail a copy to:

Prof. Robert Grudin
Book Exhibit Chairman
ISST Conference on "Time and Life"
Centre Culturel International de
Cerisy-la-Salle
F-50210 Cerisy-la-Salle
FRANCE

Make certain that the label has the following notation:

Prière de conserver ce colis jusqu'à l'arrivé de Professeur Grudin

The packages should be there no sooner than June 15, 1992.

CONFERENCE INFORMATION

International Society for the Study of Time
Time and Life: Contributions from the Sciences, the Humanities and the Arts
VIIIth Conference

Schedule

Friday, July 3 Arrival and registration from 3:00 p.m.

Opening ceremonies at 6:00 p.m.

Saturday, July 4 Sessions 9 AM-12 noon & 2-5 PM.

Opening of the Book Exhibit and Poster Displays 8-9:30 PM.

Sunday, July 5 Sessions 9 AM-12 noon, 2-5 PM, 8-9:30 PM.

Monday, July 6 Day off: Trip to Normandy landing beaches;
Bayeux and Caen; Mont Saint-Michel; Balleroy;

Benedictine Abbey in Hambye.

Tuesday, July 7 Sessions 9 AM-12 noon, 2-5 PM, 8-9:30 PM

Wednesday, July 8 Sessions 9 AM-12 noon, 2-5 PM,

Evening: banquet.

Thursday, July 9 Business session and adjournment 9 AM-12 noon.

Registration Fee

Registration fee for all participants\$75.00	
Non-participating guests do not pay a registration fee.	
Late Registration at Cerisy-la-Salle\$85.00	

Accommodations

The château of Cerisy has lodging to accommodate 70-80 people and facilities to serve 10-20 additional guests for meals. Lodging assignments at Cerisy will be made on a first come, first served basis. Overflow accommodations are available at Hotel Cositel in Coutances, approximately 20 kilometers away. Those who have to stay at the hotel may take their noon and evening meals where they wish or purchase a meal plan at the château for FF230. Again, the number of seats for meals at the château is limited and tickets are available on a first come, first served basis.

For those staying at Cerisy....

Rate per person per day: FF420

Includes room and 3 meals (French style cuisine)

All facilities are shared, but rooms are equipped with hot & cold running water.

Address:

Centre Culturel International de Cerisy-la-Salle

50210 Cerisy-la-Salle

France

Telephone in Cerisy: 33-46-91-66 Telephone in Paris: 45-20-42-03

For those who must be accommodated at Hotel Cositel...

Rate per day: FF305-FF400 Includes **breakfast only**.

Rooms include shower or bath.

Transportation between the Hotel and Cerisy in the morning and evening and between Cerisy and a restaurant at noon will be provided by a small rented bus or by private cars. Expenses will be shared by those using this transportation.

Address:

Hotel Cositel

Route de Coutainville 50200 Coutances

France

Telephone:

33 07 51 64

Fax:

(33) 33 07 06 23

For further information about accommodations and transportation contact (after May 6th):

Prof. Hervé Barreau

Centre National de la Recherche Scientifique
Fondements des Sciences (UPR 265)

3, Rue de l'Université
67084 Strasbourg CEDEX
France

Telephone: 88 35 80 55

Fax: 88 36 49 63

REGISTRATION FORM

International Society for the Study of Time VIIIth Conference Cerisy-la-Salle July 3-9, 1992

Name:		
Mailing Address:		
	(107-2-5-2-2	TOTAL PROPERTY AND ADDRESS.
Phone:		
Fax:		
Number of people in your party:		
Conference Participants		
Accompanying Guests		
Indicate first and second preference at Cerisy:		
(FF420 per person per day. Includes 3 meals)	1st	2nd
Room with double beds		
Room with twin beds Room with single bed		
		Autoria Van
Would you be willing to share a room if necessary? () male () female	Yes	No
Indicate preference in case you must be assigned to Hotel Cositel:		Provid America
Includes breakfast only		
Double with bath (FF 400 for 2 persons per day)		
Double with shower (FF375 for 2 persons per day		
Single with bath (FF320) Single with shower (FF305)		الارائيا وأرسور الاراتوشف
Indicate if you would be interested in purchasing a meal plan for l' (FF230 per person per day) Numb	unch and dinne er of tickets:	
If you are driving, would you be willing to assist with transportation () no () yes	on between Ce	risy and the hotel?
How many people could you accommodate?		

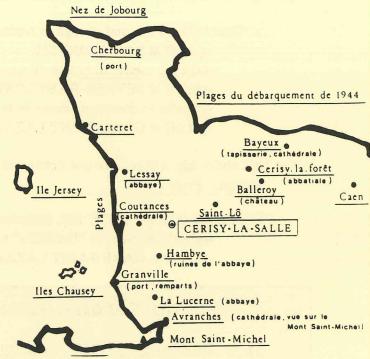
Please indicate payment enclosed:
Registration fee: participant(s) @ \$75.00
Late Registration at Cerisy: \$85.00
Deposit for accommodations: person(s) @ \$100
Membership dues if applicable: (See treasurer's statement) TOTAL
All fees and deposits are non-refundable . All deposits will be credited at the rate of exchange at the time of the transfer of funds from ISST to the French committee.
Indicate Method of Payment:
() Check or money order payable in U.S. dollars to: International Society for the Study of Time (check or money order must be drawn on a U.S. bank. Please do not send Eurocheque.)
() Charge my ()VISA ()MASTERCARD
Cardholder's Name (please print)
Cardholder's signature
Account Number
Expiration Date: Mo/Yr
Mail to: Professor Richard A. Block, Treasurer International Society for the Study of Time Department of Psychology Montana State University Bozeman, MT 59717

REGISTRATION DEADLINE: FEBRUARY 29, 1992

DIRECTIONS TO CERISY-LA-SALLE

BY CAR to Cerisy-la-Salle:

- -320 kilometers from Paris take autoroute de Normandie as far as CAEN,
- -then route nationale 13 as far as BAYEUX
- -then route départementale 572 as far as SAINT LO
- -then route départementale 972 towards COUTANCES as far as the hamlet LE POTEAU
- -turn left on route départementale 29 in the direction of CARANTILLY and then CERISY.



FROM AIRPORTS TO TRAIN STATION, Gare Saint-Lazare

- 1. If you land at Roissy Charles de Gaulle there are 3 possibilities to the train station, Gare Saint-Lazare:
 - a. Go to ROISSY-RAIL-SNCF (there is a free shuttle bus from the airport) and take RER-B.
 - -get off at Gare du Nord.
 - -take the subway (métro), direction "Porte d'Orléans" (direction refers to the last station on the line)
 - -get off at REAUMUR-SEBASTOPOL.
 - -change to direction, "Pont de Levallois"
 - -get off at GARE SAINT LAZARE.

Note: You only need one ticket to cover this trip (about FF50). It can be bought at Roissy-Rail-SNCF.

- b. Take the AIR FRANCE bus direction "Etoile"
 - -at "Etoile" take the subway, direction "Château de Vincennes"
 - -get off at CONCORDE
 - -transfer to direction "Porte de la "Chapelle"
 - -get off at GARE SAINT LAZARE.
- c. Take the AIR FRANCE bus as far as PORTE MAILLOT
 - -take the subway, direction "Chateau deVincennes"
 - -get off at CHAMPS-ELYSEES-CLEMENCEAU
 - -transfer to direction "Saint-Denis-Basiligue"
 - -get off at GARE SAINT LAZARE.

If you land at Orly Airport, there are 2 possibilities to Gare Saint Lazare:

- a. Take ORLYVAL and change at Antony for the RER-B line
 - -get off at SAINT MICHEL
 - -take the métro, direction "Porte d'Auteuil"
 - -get off at SEVRES-BABYLONE
 - -transfer to direction "Porte de la Chapelle"
 - -get off at GARE SAINT LAZARE.

Note: This entire trip will reguire one ticket which can be bought at the ORLYVAL counter at the airport. Price FF55.

- b. Take the AIR FRANCE bus, direction "Invalides"
 - -take the subway at "Invalides" to direction "Saint Denis"
 - -get off at GARE SAINT LAZARE

DIRECTIONS FROM GARE SAINT LAZARE TO CERISY-LA-SALLE:

These directions apply ONLY if you arrive on the first day of the conference, July 3, 1992:

- -At PARIS SAINT LAZARE take train 3311 at 15:00 with a change at CAEN at 17:17
- -take the express train 13.08216, direction "Coutances"
- -you will arrive at CARANTILLY-MARIGNY about 18:15
 - The trip from the train station to the Château will be taken care of by the Centre Culturel International.

ATTENTION: the train stop at CARANTILLY-MARIGNY has been arranged for the day of arrival to the conference only (July 3, 1992). It is not shown on the timetables. If your arrival is delayed, the stop must be requested.

If you arrive on days other than July 3, 1992:

- -Check the schedules.
- -You must confirm the place and time of your arrival with the Centre Culturel International one day ahead of time.

TELEPHONE: (16) 33-46-91-66

The Centre Culturel International will assure transportation from CARANTILLY to CERISY but cannot guarantee transportation from the SAINT LO Station (20 kilometers away) or the LISON Station (35 kilometers away)

No information is available at the time of this publication about return transportation but the Centre Culturel International or the local committee will provide for the trip back to Paris by train on the afternoon of July 9.

International Society for the Study of Time

APPLICATION FOR MEMBERSHIP Please type all answers

Signature Date Please return completed form and its enclosures to the Executive Secre-
Signatura
9. Bibliographic listing of your publications that deal with time: Preferably, please attach a copy of your vita
8. Bibliographic listing of your most important publications: Preferably, please attach a copy of your vita
7. Telephone/FAX:
6. Mailing address (if different from the above):
 Professional affiliation (university, research institute, corporation, etc.) and address:
4. Academic discipline or field of profession:
3. Highest academic degree, year awarded, and awarding institution:
2. Title of present position:
I. Name:





Penn State Worthington Scranton Campus 120 Ridge View Drive Dunmore, PA 18512



Dr. J. T. Fraser
International Society for the Study
of Time
P.O.Box 815
Westport CT 06881
USA

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International Society for the Study of Time

January, 1992