# JOURNAL OF IDEAS

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## Journal of Ideas

The Journal of Ideas is an archival forum for discussion of existing and original ideas and concepts. Its purpose is to circulate and nurture inquiry that focuses attention on the evolution and spread of ideas, on the process of discovery as well as the creative process, and on biological and electronic implementations of idea/knowledge generation and processing.

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# Editorial: News, Views, Status & Plans.

This issue of the Journal of Ideas includes three technical papers that deal directly with idea propagation and culture, namely those of A. Lynch, C. Lumsden, and M. Witten. Lynch's "Thought Contagion as Abstract Evolution", presents a particular method of representation and calculus of 'memory abstraction' entities or 'mnemons'. Lumsden's "Culture as a Semantic Fractal: Sociobiology and Thick Description" presents the potential of modeling culture as a socially constructed network of meanings [made of culture units such as culturgens or memes] that can be accessed at different hierarchical levels of interpretation. Witten's paper presents a detailed mathematical age dependent model for the spread of memes.

One of the urgent needs of a science of culture [which includes the study of creation and propagation of units of culture] is the identification of different cultural entities and their relationships and means of classification. This requirement is quite similar to the one encountered in systematic zoology. The papers of Lynch, Lumsden and Witten are significant in broadening the base of discussions, articulating new structures to be examined, and providing quantitative as well as physical models for interpreting different phenomena in the study of ideas and culture.

We would like to mention, as a note of interest regarding Lynch's work, that Lynch is in the process of completing a book on the topic of thought contagion. We look forward towards the publication of his book and plan on preparing a book review at the appropriate time. We invite readers of the *Journal* to both suggest books that merit review, and to submit book reviews as well as book synopses [that fall within the scope of the *Journal*] for consideration.

Two other papers are included in this issue. These papers are more in the nature of research program descriptions. Heylighen et al's paper introducing the Principia Cybernetica Project describes an ambitious undertaking that will attempt to capture a wide variety of conceptual structures in a computer supported architecture. The computer based aspects will allow dynamic entry, maintenance, re-entry and emergence of concepts. It is of great interest to those who study the evolution of culture as it offers a very real laboratory for studying and tracking of the organization and evolution of existing and novel conceptual and cultural constructs.

Moritz's paper, "Brain and Mind: The Ultimate Grand Challenge" attempts to focus attention on a problem that has intrigued philosphers and scientists for centuries [if not millenia]. Although many have attacked this problem in the past, it is only now that we are approaching the very real possibility of understanding and perhaps modeling the connection between brain and mind. It is only now, with the emergence of massively parallel supercomputers, imaging tools such as Positron Emission Tomography scanners, and adequate research funding [e.g. NIMH, McDonnel-Pew], that technical and economic resources can be used synergetically. Moritz suggests that among the so-called grand challenge research problems being identified for intensive numerically based simulationist research, the Brain/Mind problem be considered the ultimate grand challenge problem.

In view of the great potential associated with brain research and with the Principia Project, periodic updates on the state of knowledge of the brain [since the brain is the substrate in which ideas form], and on the progress of the Principia Cybernetica Project will be presented.

Regarding publication schedules: as subscribers may have noticed, the appearance of this issue has been delayed. The editors apologize sincerely for this delay. Publishing the *Journal* has been, and probably will continue in many ways to be, a learning experience. We hope to approach our planned publication schedule as early as possible. Our main goal will continue to be to circulate and nurture inquiry that focuses attention on evolution and spread of ideas. Looking towards the future, with the view of expediting production of the *Journal*, we continue to encourage prospective authors to submit manuscripts in electronic form.

Looking at forthcoming topics in the Journal, we are anticipating elaboration of mathematical theories of idea spread dynamics, more on entropy production in biological systems and related work on hierarchical information theory. Gunkel's intriguing approach to idea generation will be presented in a forthcoming issue. Gunkel has proposed a theory of combinations of ideas or combinatorial ideonomy. In this theory he proposes that one may view many things such as words, objects, sensa, events, realms, etc. as 'ideas in the mind'. In a manner similar to Lumsden, he argues that real importance and meaning of ideas may lie at more than one level, that what one regards as discrete or distinct ideas may in fact be operations or laws, or perhaps symbols created by mental activities. Further, Gunkel argues that it may be that what is of great importance are the variances, covariances, contravariances and emergent patterns, rather than ideas themselves. Finally, Gunkel argues that what may be of most importance is that combinations of ideas motivate the mind, and that these combinations of ideas catalyze the growth of knowledge by defining possibilities and structure of further knowledge.

Another topic that is planned for future attention is the examination of electronic journals, electronic newsnets, and electronic repositiories as means of idea spread. Currently, there is quite a large variety of electronic newsletters available [at no direct cost] via the Internet. Some newsletters have evolved into electronic journals with a rigourous structure. An example of such an electronic journal is *Postmodern Culture*. *Postmodern Culture* [PMC] is a peer-reviewed electronic journal. It provides an interdisciplinary forum for discussions of contemporary literature, theory, and culture. It is free via electronic form [print & other formats are available at modest costs]. PMC editors are Eyal Amiran, Elaine Orr and John Unsworth at North Carolina State University [PMC, P.O. Box 5657, Raleigh, NC 27650], and can be reached via e mail at pmc@ncsuvm on bitnet or pmc@ncsuvm.ncsu.edu.

Elan Moritz, Editor Patricia S. Smith, Managing Editor

# Instructions for Contributors

The key to our era, the Information Age, is knowledge generation and manipulation. A fundamental aspect of knowledge generation is the creation and combination of new ideas. In December 1989, The Institute for Memetic Research Inc. was formed to pursue the study of and dissemination of knowledge in the area of idea formation and spread. This journal, the Journal of Ideas, was established for archiving and disseminating research and knowledge in this area. You and your organization are invited to participate as authors, readers, referees and subscribers in this enterprise.

Prospective contributors are urged to read the introductory discussion of memes in the article "Memetic Science: I - General Introduction," [J. of Ideas, Volume 1, pp. 3-23, 1990] wherein one can find the basic concepts and references that provide a starting context for research in the science of ideas, and the editorial "Welcome to the Journal of Ideas," [J. of Ideas, Volume 1, pp 1-2, 1990].

#### Purpose

It is an intention of the IMR and the Journal to provide a forum for advancing novel, speculative and perhaps controversial ideas with care to avoid excessive peer restrictions. Attention to quality, however, will be given through careful review of technical accuracy, novelty, and content. This approach intends to stimulate generation and archival of 'low probability of occurrence' ideas that otherwise might not be expressed in a public forum. While some may regard this as a means for 'thumb-printing' or establishing precedence to new ideas, the IMR will strongly encourage relevant papers to be submitted in order that the Journal constitute a literal 'laboratory for meme evolution'. While this policy allows for substantial freedoms, prospective authors must keep in mind that as an archival journal, the Journal of Ideas can serve to record errors as well as genuine advances.

The target audience of this journal is intended to be as wide as possible within the lay and scholarly communities and will clearly be of a multi-disciplinary nature. With this audience in mind, authors are encouraged to use terminology that is easily accessible, to define specialized jargon carefully, and to avoid complicated mathematical derivations.

#### Length and Charges

Typically, a contributed paper should not exceed eight journal pages. Invited papers are targeted to be sixteen pages or less. In special cases discussion to support papers may require a significant amount of space. In this case, authors are requested to correspond with the Institute concerning space availability, and publication of a special issue. To defray costs of publication, payment of \$125 per page is required for contributed papers prior to publication. Payment of page charges entitles authors to

100 free reprints of their article. <u>Page charges will be waived for invited papers</u>. Invited authors will receive 25 reprints gratis. To estimate length, use the figure of 6000 characters (including spaces) per journal page.

#### **Manuscript Preparation**

The Journal of Ideas will be published with a nominal page size of 8 1/2 " x 11". Manuscripts may be submitted in one of the following modes:

- 1. Via e-mail sent to one of the following internet addresses moritz@well.sf.ca.us or 71620.3203@compuserve.com.
- 2. Via regular mail. If possible, include a copy of the text in ASCII format on MS-DOS IBM Compatible 360K, 5 1/4" or 1.44M, 3 1/2" diskettes.

In all cases, please send two paper copies to Patricia S. Smith, Managing Editor, Journal of Ideas, The Institute for Memetic Research, P.O. Box 16327, Panama City, Florida 32406-1327. Submitted manuscripts should be neatly typed on 8 1/2 x 11 paper using double spacing. All unusual symbols should be carefully defined.

References or bibliographies should be prepared and used in a consistent manner throughout the manuscript. Footnotes will be treated as references. Authors are encouraged to use standard formats such as the Chicago Manual of Style, or guidelines of professional society journals such as those issued by the ACM, the IEEE, the American Mathematical Society, or the American Institute of Physics.

Figures will be scanned in using an optical scanner, they should be prepared using high quality, high contrast ink and should not exceed 3 inches in width and 4 inches in height.

#### Copyright Transfer

Transfer of copyright is required prior to publication. Authors of accepted papers will receive a *Journal of Ideas* copyright transfer form with notification of acceptance.

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