# NIAS NEWS



Vol 12 No 3

July 2003



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# JULY 2003









As before, we continue with our objective of bringing you newsworthy information that will make you aware of the research being conducted in our Institute as well as the many other activities that we organise every month. Please do write to us if you would like to participate in any of the upcoming events being organised at the Institute. And help us to strengthen our activities further.

**Anindya Sinha**, **Hamsa Kalyani** and **A Deva Raju**, Editors, July 2003



#### From the Director's Desk



As the Institute was approaching its fifteenth year I began to feel that the time had come to take stock of where we are now and where we want to go in the coming years. To help us to do this a Review Committee was appointed; it was chaired by Prof Kenneth Keniston (Andrew Mellon Professor of Human Development and Director MIT India Program at the Massachusetts Institute of Technology, USA) and had as members Dr Armaity Desai (former Chairperson of the University Grants Commission and former Head of the Tata Institute of Social Sciences), Ambassador M K Rasgotra (former Foreign Secretary, Government of India), Prof Obaid Siddigi FRS (National Centre for Biological Sciences, Bangalore), Prof P K Mukhopadhyay (Department of Philosophy, Jadavpur University, Kolkata) and Dr D M Nanjundappa (former Deputy Chairman of the Karnataka State Planning Board, former Chairman of the Indian Council of Social Science Research, and former Vice-Chancellor of Karnataka and Bangalore Universities). The Committee visited us during the month of June, and spent four days on the campus talking to all the faculty, reviewing our academic programmes and administration and reporting to the Council of Management on their preliminary findings. I believe that this exercise has been most useful for the Institute, for it is always of value to learn how such a distinguished group of people as we had the good fortune to have as members of the Review Committee looks at our various programmes, and what they consider our directions should be in coming years. I myself found that the very act of preparing to tell them about the Institute, how it is run, how it has grown, and why it has taken the path it has, is of value in itself, for it gave me an opportunity to collect my own thoughts and to ask what the patterns of developments were. I believe my colleagues at the Institute have also found it very useful to speak to the members of the Committee individually and collectively, and visualise for themselves their own future in the Institute as well as that of the Institute itself. It is a pleasure to thank Prof Keniston and his colleagues on the Committee for the busy days they spent here, for the patience with which they listened to everybody, for their evident regard for the Institute, and for the contributions they are going to make to a vision of the Institute's future.

Apart from the seminars, lectures and other programmes that we have continued to have at the Institute I must mention two that were very unusual. They were both story-telling performances in English, rendered by Prof C R Anantha Rao, who was visiting us from January to June this year from Flinders University in Adelaide, South Australia (see report in NIAS News, April 2003). Prof Anantha Rao is an applied mathematician, but in keeping with the spirit of this Institute he displayed his many other interests, which have included offering katha-kalakshepas in English, originally composed to interest younger Australian-Indian audiences. His performances at the Institute included one on The Salvation of Muchukunda and another on Girija Kalyana based unusually on Kalidasa's Kumara-sambhava. Everybody present thoroughly enjoyed these unusual performances. Prof Anantha Rao later repeated the second item at the New Book Store at Hotel Leela, again to an appreciative audience.

#### R Narasimha

# MEETINGS OF THE COUNCIL OF MANAGEMENT AND ANNUAL GENERAL BODY OF NIAS



The twenty fifth meeting of the NIAS Council of Management and the thirteenth Annual General Body meeting of the NIAS Society were held on June 18 at NIAS. They were attended by Prof M S Swaminathan (Chairman), Prof Roddam Narasimha, Mr R M Lala, Dr B Hari Gopal, Mr B K Das, Dr K Kasturirangan, Prof B V Sreekantan and Maj Gen M K Paul [Retd].

#### MEETING OF THE NIAS REVIEW COMMITTEE

The first NIAS Review Committee, comprising of Prof Kenneth Keniston (Chairman), Dr Armaity Desai, Ambassador M K Rasgotra, Prof P K Mukhopadhyay, Prof D M Nanjundappa and Prof Obaid Siddiqi reviewed the academic performance of NIAS over the last decade in a series of meetings held between June 15 and 18. The committee also presented their report to the Council of Management of NIAS on June 18.



The principal areas of research that faculty members of the Institute are currently involved in include consciousness studies; conservation biology; energy policy and renewable energy; environmental toxicology; epigraphy; fluid dynamics and atmospheric sciences; gender studies; history and philosophy of science; Indian history; international and strategic studies; mathematical modelling in non-traditional areas; primate behaviour, communication and cognition; science and technology policy; sociology and social anthropology; and theory of numbers.

More specifically, the **International and Strategic Studies Unit** has just completed the project on Systems Engineering Approaches to Complex Mega Projects", funded by the DRDO, Ministry of Defence, New Delhi.





#### **NIAS PUBLICATIONS**

#### I. NIAS REPORTS

R1-03 Socio-ecological implications of pesticide use in India

PK Shetty

R2-03 Publications from NIAS

#### II. NIAS LECTURES

L1-03 The idea of the atom

N Xumar

Raman Research Institute, Bangalore

L2-03 What is psychotherapy? R L Kapur

#### III. NIAS WORKING PAPERS

WP1-03 Can it be boom-time for Indian aerospace?

R Narasimha

WP2-03 Mendacity in our midst: Treatments in Ramanujan, Max Müller and ancient Indian behaviour codes

Dilip Ahuja

#### IV. SPECIAL PUBLICATIONS

SP1-03 Prospects for stability in a nuclear subcontinent

S Rajagopal and S K Chari (eds)

#### **PAPERS**

**Anasuya Devi, H K.** 2003. Reading and identification of characters using neural networks. *Studies in Indian Epigraphy* 29: 45-56.

**Ahuja**, **D**. 2003. Mendacity in our midst. *Economic and Political Weekly* 38(18): 1795-1799

**Madhusudan, M D** and Raman, T R S. 2003. Conservation as if biological diversity matters: Preservationism *versus* sustainable-use in India. *Conservation and Society* 1: 49-59

**Madhusudan, M D** and Raman, T R S. 2003. The hunting of the Snark: Seeking transcendence in the Indian conservation debate. *Conservation and Society* 1: 73-76

Menon, S. 2003. Being free: 'Consciousness' and 'freedom' according to the Bhagavad Gita. In: Proceedings of the Conference on Application of Oriental Philosophical Thought in Mental Health (ed J P Balodhi), National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, NIMHANS Publication No 47, pp 43-49

**Menon, S.** 2003. Getting "digital manuscripts": New technologies for digital preservation and publication. *The Indian Archives (Special Number: Information Technology and Preservation)*, National Archives of India, Vol. XLIX(1-2): 41-44

**Vasavi, A R** and Kingfisher, C. 2003. Poor women as economic agents: The state and welfare in India and United States. *Indian Journal of Gender Studies* 10(1): 1-24

#### REVIEWS

**Rajagopal, S.** 2003. Book review of "Contemporary Nuclear Debates Missile Defence, Arms Control and Arms Races in the 21<sup>st</sup> Century" (ed A T J Lennon), MIT Press, Cambridge, USA, 2002. *Current Science* 85(1): 96

#### REPORTS



Ahuja, D. 2003. Transitions to sustainable energy systems: A prospectus, approved by the Board of the InterAcademy Council for a study on energy, Amsterdam, the Netherlands, June 12

#### ARTICLES

**Shetty P K**. Tips for motivation. *Deccan Herald*, April 9

**Shetty P K**. Glorious chapter in Kannada cinema. *The Vijay Times*, May 30

**Shetty P K.** Temple that truly stands tall. *The Vijay Times*, June 13

**Srinivasan**, **S**. Heritage: The Nataraja catapulted to the global stage from sacred environs. *The Week*, Vol 21(29): 60-62, June 22

#### **DOCTORAL PROGRAMME IN NIAS**

NIAS is a unique institution that conducts advanced research in multidisciplinary areas that bridge the gap between the natural sciences, technology and the social sciences. Complementing its research programmes, NIAS also offers courses in different areas of research, development and policy for different groups of professionals including teachers, bureaucrats, and executives.

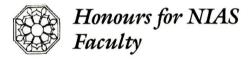
One constraint that NIAS has functioned under so far has been the lack of a doctoral programme whereby young students are trained in the research areas that the Institute has traditionally been interested in. There is, however, an urgent need for such a programme for two principal reasons. First, the unique multidisciplinary academic culture that NIAS has so carefully been building up over the past years has to be nurtured and not allowed to dissipate with the passage of time. This would require that young, talented, and committed students are identified and absorbed into the organisation they would then serve as torchbearers into the future. Second, much of the research being conducted in the Institute, being of an interdisciplinary nature, requires cooperation between a number of specialists. Groups such as these would definitely benefit from young researchers of different disciplines who can actively academically contribute in their respective areas of expertise.

It must also be noted that there has been, in recent times, increasing awareness and interest in issues relating to the interfaces between the natural sciences. technology and the social sciences among young Indian graduate students. Many of them, in fact, are becoming increasingly attracted to pursuing a research career in these interdisciplinary areas. Very few opportunities, however, exist for such students, who have dared to think differently, to pursue a career of their choice within the country. NIAS has thus begun a doctoral programme in collaboration with the Manipal Academy of Higher Education (MAHE), Manipal, an innovative leader among institutions imparting higher education in the basic and applied sciences in the country. This programme specifically involves the awarding of doctoral degrees by MAHE to students interested to



pursue independent research in the areas that NIAS specialises in. For more information, please c o n t a c t A n i n d y a S i n h a (asinha@nias.iisc.ernet.in).

#### Anindya Sinha



#### Dilip Ahuja

Invited to be a member of the Organizing Committee for the International Conference on Renewable Energy for Sustainable Development, to be held in Bangalore in January 2004

#### Sangeetha Menon

Awarded the annual Young Philosopher Award by the Indian Council of Philosophical Research (ICPR) for 2001-2002. The award carries a cash prize and a citation

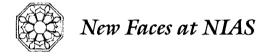
#### **COURSES TAUGHT BY THE NIAS FACULTY**

#### S Rajagopal

Taught a course on Systems Engineering for scientists of the DRDO, Ministry of Defence, at the Institute for Armament Technology, Pune, during June-July 2003



With effect from April 1, the name of the Philosophy, Science and Society Unit has been changed to the History and Philosophy of Science Unit. The Unit is currently being headed by Dr Sundar Sarukkai, with Prof R L Kapur and Dr M G Narasimhan as its other faculty.



#### **NEW FACES AT NIAS**

#### Rishi Kumar

Mr Kumar has joined the Culture, Cognition and Consciousness Unit of the Institute as a Research Scholar from February 19. With a Master's degree in Environmental Biology from the Centre for Environmental Sciences, University of Delhi, Mr Kumar has been awarded a Junior Research Fellowship of the Council of Scientific and Industrial Research (CSIR), New Delhi, that will enable him to work for a doctoral degree under the NIAS-MAHE Doctoral Programme. He will be working on the behavioural ecology and conservation biology of selected Indian macaques under the quideship of Dr Anindya Sinha.





Complementing its research programmes, NIAS organises a variety of seminars, workshops, and academic courses each year. Some of the important events that were organised during the period from April to June 2003 included:

# NIAS DISCUSSION MEETING ON THE FUTURE DIRECTION OF US STRATEGY

#### May 19

What is the rationale behind the foreign policy actions of the most powerful country in the world? What do they want, and what do they hope to achieve? Are they making mistakes? What is the neature of the international system, and how is it responding to a pivotal power centre? How will it impact India, and what should we be doing? The terrorist attacks of September 11, in the USA, the subsequently launched international 'war on terrorism', and the campaign against Iraq, set against the background of technological advance, a slowing global economy, and increasingly tense debates on globalisation, migration, the environment, and energy issues, make evaluating the possible future directions and intentions of US strategy an important exercise for India, and indeed the whole world.

This discussion meeting served as a preliminary exercise towards such an evaluation. The speakers included Dr R Narasimha, Director, NIAS ("The New War and a New Empire?"), who also chaired the meeting, Mr Sridhar K Chari ("Understanding US Grand Strategy some conceptual tools"), Dr Dilip Ahuja ("Liberal interventionism") and Dr S Rajagopal ("US non-proliferation and arms control strategy").

#### A Deva Raju

### PROGRESS MEETING ON THE GENDER STUDIES UNIT PROJECTS

#### May 30

Presentations were made by members of the Gender Studies Unit of NIAS on the progress achieved and the problems faced by the team in carrying out the projects on Violence Against Women and Women and Decentralised Governance. This discussion meeting was attended by the members of the Advisory Board constituted for the purpose, including Ms Ruth Manorama (activist), Ms Seema Singh (journalist), Mr Ramesh Kanbargi (academician), Mr Suresh Babu (IGP), Dr Usha Abroel (gender expert). The members of the Advisory Board contributed significantly in developinghe future course of action of these particular projects.

#### N Shantha Mohan

# CONSULTATION MEETING ON EVOLVING LOCAL-LEVEL MECHANISMS TO CHECK AND PREVENT VIOLENCE AGAINST WOMEN

#### June 9

The Gender Studies Unit organised this one-day consultation meeting at NIAS with the complete participation of the stakeholders from all the six districts of Bagalkot, Chitradurga, Kodagu, Kolar, Koppal and Udupi where the Unit has been conducting the project on Violence against Women. This meeting was attended, among others, by community members both men and women, representatives from the Panchayat Raj institutions, local NGO partner organisations, Mahila and Makkala Sahavavanis (helplines for women and children in distress) and the enforcement agency represented by the Additional Director General of Police, Recruitment and Training. Efforts were made to ensure the participation of decision-makers at the districtlevel, particularly that of the Superintendents of Police and the District Commissioners. However, they were unable to attend the meeting due to certain unforeseen law and order problems that arose in their respective districts during this time. Despite this setback, however,

a total of 50 participants took part in the meeting.



The consultation focused on reviewing the processes evolved by the different interest groups in the districts and jointly drew up district-specific strategies and mechanisms to prevent and check the identified forms of violence at the local level. It also examined the possible ways in which this could be achieved, including the setting-up of institutional mechanisms and strengthening the partnerships within and across stakeholder groups.

#### N Shantha Mohan

# SECOND NIAS COURSE ON 'UNDERSTANDING SCIENCE'

#### June 16-27

The History and Philosophy of Science Unit, as announced in the previous issue of the NIAS Newsletter (Vol 12, No 2, April 2003), held a twoweek course on 'Understanding Science' in NIAS. The course, organised consecutively for the second year, was co-sponsored by the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore. This course, aimed at introducing undergraduate students of Bangalore to the broader perspectives needed to understand the nature and growth of scientific knowledge, was attended by 31 students drawn from different undergraduate colleges of Bangalore as well as professionals from the fields of Speech and Hearing and the News Media. While the majority of students came from different natural science disciplines, a few of them were from the social sciences.

The course was inaugurated by Prof M R S Rao, President, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR). In his inaugural address, Prof Rao appreciated the initiative taken by NIAS in organising the course. He emphasised the role of science and technology, particularly in the newly emerging areas of biosciences and

biotechnology. He also expressed the hope that in the coming years Indian scientists would be making significant contributions in these frontier areas. Further, he suggested that courses of this kind should reach wider sections of the community. In his opening remarks, Prof R Narasimha, Director, NIAS, stressed the importance of looking at science and technology from a historical, philosophical and sociological perspective. He illustrated his remarks with reference to the studies being conducted in the area of Indian contributions to the emergence of modern science. Dr Sundar Sarukkai, Head, The History and Philosophy of Science Unit, gave a brief introduction to the course. All of them underlined the need for NIAS and JNCASR to collaborate on such programmes in future.

The two-week course comprised lectures on the history and philosophy of science as well as those on science education, science in India, technology, the history of medicine and certain specific topics in the life sciences and social sciences. The lectures delivered during the programme included:

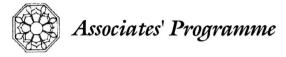
- Psychology: Science or Art? Malavika Kapur
- Scientific Temper Prabhakar G Vaidya
- What is Science? Sundar Sarukkai
- Introduction to History of Science M G Narasimhan
- Ancient Indian Astronomy S Balachandra Rao
- Epistemology Sundar Sarukkai
- Science in Ancient Period I M G Narasimhan
- Consciousness: In Evolution and in Science Anindya Sinha
- Science in Ancient Period II M G Narasimhan
- Scientific Epistemology Sundar Sarukkai
- Ancient Indian Metallurgy Sharada Srinivasan
- Philosophical Basis of Traditional and Modern Medicine – Ravi Narayan
- Science in Medieval Period M G Narasimhan
- Scientific Methodology: Theories Sundar Sarukkai
- Scientific Methodology: Experiments Sundar Sarukkai
- Social Anthropology: The Universal and the Particular
   A R Vasavi
- Science in Modern Period I M G Narasimhan
- Changes in the Fundamental Concepts in the Physical Sciences – B V Sreekantan
- Logic and Rationality Sundar Sarukkai

- Children's Understanding of Experiments -Padma Sarangapani
- Science in Modern Period II M G Narasimhan
- Gender and Gender Relations B K Anitha
- Science and Language Sundar Sarukkai
- Science in Modern Period III M G Narasimhan
- Animal Rights and Human Obligations: A Reflection – Anindya Sinha
- Technology Tales R Narasimha
- Science and Society Sundar Sarukkai
- Summary and Conclusions M G Narasimhan

In addition to these lectures, a special programme, a staged reading of the play "Galileo" by Bertolt Brecht, was organised by the NIAS faculty under the direction of Dr Sundar Sarukkai. During the course, the student-participants made presentations on a variety of topics on each day of the second week. It was interesting and heartening to see the range of topics chosen for projects, e.g., science and history, philosophy of science, qualia, music and science, biographies of Kepler and Srinivasa Ramanujam, Indian contributions to astronomy and mathematics. The projects were prepared by the students on the basis of their own reading and in consultation with the NIAS faculty. The majority of the projects were of fairly high standard.

#### M G Narasimhan





The Institute maintains a strong outreach with its Associates Programme, organised by **P K Shetty**. The Associates of the Institute include prominent personalities from widely different backgrounds in the media, arts, policy-making and academia. Associates are invited to a monthly evening lecture series and other important events, and constitute a strong base of ongoing outside support and interactions for the Institute.

The Associates' Programmes during the period from April to June 2003 included the following events:

May 2 Strategic challenges for the Indian economy

Vijay L Kelkar Advisor to the Union Minister of Finance and Company Affairs New Delhi

May 29 Turn-around of an urban development body

Jayakar Jerome Commissioner Bangalore Development Authority Bangalore

June 27 Galileo

A staged reading of the play by Bertolt Brecht, presented by Ordinary People, NIAS





#### WEDNESDAY DISCUSSION MEETINGS

The members of the Institute meet every Wednesday morning (and rarely on other mornings too!) for informal academic discussions after a talk delivered by a member of the faculty. These Wednesday meetings, organised by Sangeetha Menon and Sridhar K Chari, also serve as a forum for invited guest speakers to deliver a lecture on a subject of their choice. The discussions then continue over the high tea that follow these talks!

The Wednesday Discussion Meetings during the period from April to June 2003 have included:

#### April 9

International instruments to counter violence against women their implications

**BKAnitha** 

The global campaign for the acceptance of women's rights as human rights and specifically of the violence against women (VAW) as a violation of their human rights captured centre stage in the 1993 Vienna Conference on Human Rights. Alongside several international agencies, instruments were also introduced as an attempt to combat violence against women. The presentation focused on CEDAW, specifically the General Recommendation 19 that deals with violence against women. While examining the data on violence against women at the global and national level, an attempt was made to compare the concluding comments of CEDAW on VAW among developed and developing countries. Focusing on the CEDAW concluding comments of India, the presentation described the project of Violence Against Women and examined ways of improving the reporting mechanism with reference to General Recommendation 19.

#### April 16

Boundary conditions for interdisciplinary irrigation studies

Peter P Mollinga

The title of the talk represents the working title of the monograph on interdisciplinary irrigation studies that the author Peter Mollinga plans to write during his stay at NIAS. This will be an effort to further develop the 'sociotechnical' approach evolved by the IWE group at Wägeningen University, Holland. It attempts to integrate natural and social science perspectives on irrigation, and on the study of water control systems more generally by looking at water management systems as sociotechnical systems, and water control as a form of politically-contested resource use. The talk sketched the evolution of this 'sociotechnical' approach, and outlined the present, rather preliminary, ideas for the design of the monograph. The title expressed the idea that for useful communication across disciplines one needs 'boundary concepts' that make sense in all disciplines concerned, even when they may have different meanings in these disciplines. This may allow the development of an interdisciplinary vocabulary relevant to the particular issue-domain.

#### April 23

Truths? Or conjectures?

K Ramachandra

The speaker stated a few results on numbers. These results, though believed to be true, have neither been proved nor disproved for a long time. If some applications of these results could be found, it would assume these results to be true and would proceed further. The results, which are the outcome of such assumptions, have some stigma attached (namely true 'provided we assume some unproved results') to them. This, however, is not a matter of consequence, asserted the author.

#### May 28

#### Childcare in ancient India

Malavika Kapur

There are several sources for the study of childcare in ancient India. The contemporary relevance of ancient child-rearing practices as described in the Ayurveda is of interest to a psychologist working with children. In her work, the speaker has attempted to examine the normative aspects of child development and child-rearing practices: phenomenology, aetiological speculations and treatment practice for common and serious disorders. In her talk, attention was drawn to the developmental and holistic perspectives adopted by ancient thinkers.

#### June 3

Content-based Image Retrieval System (CBIRS)

H K Anasuya Devi and S Srivathsa, V Y Sudhindra, V Tejas, S R Vinod, B S Vidyalakshmi and Divya D Konnur BE Project Trainees from M S Ramaiah Institute of Technology, Bangalore and Sri Siddhartha Institute of Technology, Tumkur

An image speaks a thousand works. Images now play a crucial role in fields as diverse as medicine, journalism, advertising, design, education, digital libraries, medical and geographic databases, and criminal investigation. Handling of such large collection of images requires the image set to be ordered. All image indexing is done manually, listing the important objects in an image and other terms by which users may wish to access it. This method is not suitable for the large image databases of today. Problems with traditional methods of image indexing have led to the rise of new techniques for retrieving images on the basis of automatically-derived features such as color, texture and shape. This technology is generally referred as Content-based Image



Retrieval (CBIR). The area of content-based image retrieval is a hybrid research area that requires knowledge of both computer vision and database systems. The CBIR System can involve multiple levels of information retrieval. They are:

- (1) Primitive Level based on Color, Texture, Location and Shape.
- (2) Semantic Level based on derived features involving some degree of logical inference about the identity of the object in the image.
- (3) Automatic Level based on abstract attributes, involving significant amount of high level reasoning about the meaning and the purpose of the object as depicted in the image.

This talk described the development of a CBIR System for primitive-level based on Color, Texture and Location.

#### June 4

Optical Character Recognition system for Brahmi script

H K Anasuya Devi and Arun C Murthy, Bipin Suresh and Deepak N Koushik BE Project Trainees from R V College of Engineering

Knowledge-based Information Retrieval for Syntactic Analysis of Brahmi script

HKAnasuya Devi and SKAppachu, Apprameya Ravi, Nihal Kashinath, GAnjan, GN Srikanth, LRakesh and KS Vijay BE Project Trainees from RV College of Engineering and Dayanand Sagar College of Engineering

Language Processor for Brahmi script

H K Anasuya Devi and Shwetha Singh, K V Ravikanth and P Preethi BE Project Trainees from PESIT

This talk, in three modules, presented an attempt to develop an Optical Character Recognition (OCR) system for the Brahmi script. Such a system could be used as a development tool by archaeologists, epigraphists, historians, social anthropologists and others. The OCR is an automated software for



recognising characters. Year ago, when scanners first became products for consumers and small businesses, many scanners were packaged with supporting software to be able to read paper documents. In its early phase, optical character recognition often interpreted the results of a scanned document as a garbled mess, thus making the process a waste of time and resources. Today's technology for character recognition is for a wider variety of source images. It is vastly improved, and is more than ready for prime time. The proposed OCR system for Brahmi script is a complete system in the sense that it includes modules for Image Processing, Word Recognition and Graphical User Interface for displaying the text.

The **guest lectures** at the Wednesday Discussion Meetings during this period included:

#### April 1

Primate social organisation: What choices do individuals have?

Rishi Kumar
Department of Environmental Biology
Delhi University, Delhi

Social structuring in primates is an extremely complex phenomenon, and perhaps the most variable among mammals. It ranges, for example, from the solitary life of the slender loris to the extremely large troops of rhesus macaques, often more than 200 in number. The formation of social organisations in primates depends on the ecology of the area as well as the prevailing social relationships within the group. In certain cases, individual primates may be presented with a choice of the type of organisation it could join. Social decisionmaking of this kind presents a host of interesting problems and some of these were discussed, with particular reference to the newly-discovered unimale and multimale groups of bonnet macaques in the Bandipur National Park.

#### April 30

How do we reason deductively?

Chhanda Chakraborti
Department of Humanities and Social Sciences
Indian Institute of Technology
Kharagpur

Deductive reasoning is an important activity for humans. Validity is a major concern for reasoning in sciences, law, philosophy and in social sciences. But, how do we, humans, reason deductively? How do we actually 'compute' the legitimate consequence from an initial set of premises? Is it exclusively a matter of manipulation of logical forms? What do the 'logical rule-base' mean to us? This talk examined the various answers that have been proposed to these and some other related questions. Some of these answers are traditionally available in philosophical literature, both Indian and Western. Some are relatively recent proposals from cognitive scientists, e.g. the mental model theory. Along with these, the speaker also presented her own proposal as an alternative perspective into the matter. Borrowing the idea of natural selection from biology, she proposed that human deductive reasoning may be envisaged as an evolving search for the conclusion from the given premises. To do justice to the ingrained biological analogy in the model, the evolving computerized search routines of the Genetic Algorithms (the GAs) have been used to develop an algorithm that roughly simulates the process of deductive reasoning as the speaker saw it.

#### May 7

Reforms through legislation

*Harish Gowda*Karnataka Public Services Commission
Bangalore

In a democracy, good administration, directed towards the welfare of the people, cannot be achieved without well-conceived laws. In the absence of proper statutes, the common man suffers in the hands of the people in power, and society as a whole gets exploited by the authorities and interest groups. A democracy, to be a good, one has to enact laws that reform society and prevent such exploitation.

#### May 14

Strategic decision making and women leadership: A case study of South and South-East Asia

*C S Anuradha* Chennai

In an age where more and more women are making their mark in a man's world, their contribution to leadership by way of strategic decision making is of interest. This research plan aimed to analyse the decision making of seven women leaders of South and South-East Asia who have faced critical national security challenges like war or internal strife. The research objective was to understand how being "women" has impacted their decisions, if at all, and this was attempted by measuring the intensity, effectiveness and result of the decisions as well as measuring the levels of the crises.

#### May 21

In the shadow of memory: Israel and the Holocaust

*Dalia Ofer* Hebrew University Jerusalem, Israel

This talk focused on the destruction of European Jewry and their determination to establish a Jewish state in the land of Israel. It demonstrated the influence of Holocaust survivors and the memory of the Holocaust on the identity and self-understanding of Israelis. The talk also examined the impact of the Eichman Trial and the 'Six Day War' of 1967 on modern-day Israel.

#### June 11

Philosophy and the visible

Sanil V Indian Institute of Technology Delhi

How do we understand philosophy's interest in the visible? On the one hand, the visible is



denigrated as one of the untrustworthy senses. On the other, vision is privileged over other senses. The visible lures the thinker to the invisible. What is this mystery of the invisible? How is it different from the hidden? Can we even say what we see? The visible, the invisible and their relationship with languages - these are the issues the author attempted to address here. He discussed the response of four thinkers to the invitation of the visible Descartes, Foucault, Merleau Ponty and Deleuze. Descartes responded to the Baroque and Renaissance explosion of the visible by inventing analytical geometry and a new optics. He proposed a self transparent scene of representation. Foucault discovered the invisible exteriority of this scene not in the works of philosophers but in the paintings of Velasquez and Rene Magritte. Painting here formulates the logic of exteriority which the post-Cartesian philosophy is invited to occupy. In this opening we see two grand engagements with the visible - Merleau Ponty with Cézanne and Deleuze with cinema. Merleau Ponty places the visible under the human condition whereas Deleuze addresses it under the technological condition. These encounters unravel four sides of the logical space of the visible and the complex relationship between art, science and philosophy.

#### **SPECIAL PROGRAMMES**

There was one public tecture and two public programmes organised at the Institute during the period from April to June 2003

#### Public lecture

April 10

The global politics of water: Influence on local and regional water management

Peter P Mollinga Ashutosh Mukherjee Visiting Professor NIAS

#### **Public programmes**

April 30

The salvation of Muchukunda A story-telling performance of Sanskrit literature (katha kala kshepam) in English CR Ananth Rao Visiting Professor NIAS



#### June 6

Girija kalyana

A story-telling performance (katha kala kshepam) in English, based on Kalidasa's Kumarasambhava

CR Ananth Rao Visiting Professor NIAS

#### SEMINAR ON THE HISTORY OF IDEAS

NIAS and Raman Research Institute (RRI), Bangalore, are organising a monthly Seminar on the History of Ideas, meeting usually on the second Friday of every month in NIAS. The organising committee consists of R L Kapur, N Kumar, R Narasimha and M G Narasimhan (Convener). The talks in this series held during the period from April to June 2003 included:

#### April 11

Experience: An Indian perspective

G K Karanth
Institute for Social and Economic Change
Bangalore

The talk discussed the idea of 'experience', in the Indian context. The term 'experience' is simultaneously associated with the notion of 'having to learn lessons from it'. At least four different conceptions of experience were highlighted in the talk. The talk emphasised that the proverbs, values, norms and taboos of Indian society are more concerned with regulating the kind of experience that people come to have. While the scriptures have had their account of what 'experience' is, the subalterns have derived their conception through popular religion and proverbs.

#### May 9

The concept of 'replication' in the social sciences

Vinod Vyasulu

Centre for Budget and Policy Studies

Bangalore

Experimental replication plays a fundamental role in the natural sciences. An experiment should be capable of replication if the underlying theory is to gain acceptance. In the social sciences 'replication' has been used differently: it is used with reference to projects and programmes, often those funded by international donors. It was argued that it is not reasonable for social scientists to work with the idea of replication, not because it is not important to be rigorous in their work, but because a rigorous approach suggests that the idea is not applicable to social sciences.

#### June 13

The phenomenon of globalization

*P Balakrishnan* Indian Institute of Management Kozhikode

Globalization may be approached through different disciplinary windows. For instance, it poses a serious challenge to certain central tenets of Western political theory as originally conceived. Further, when combined with the rapid development of information technology, it can radically unsettle conceptions of time and space vital to a sense of personal identity to human beings everywhere. An economist's point of view, as the progressive integration of erstwhile segregated national economies, was presented. Three aspects of such integration, namely the promises currently being held out to hitherto closed economies, the record of greater global integration for poverty and inequality globally, and the potential for justice in the current rigging of the world economic order, were considered with the recent evolution of India's economy as the backdrop of the discussion.

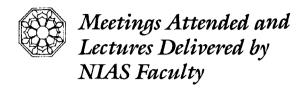
#### NIAS LITERARY FORUM

This forum has been established in the Institute to pursue and conduct literary activities such as playreading, reading of poetry (one's own or others'), reading of short stories and the like. These activities are aimed at providing complementary support to the Institute's more regular work. The activities are open to all members of the NIAS fraternity and occasional guests from outside the Institute as well. Currently, this forum meets on one Wednesday every month. For more details about its activities, please contact **M G Narasimhan.** 



#### CONSCIOUSNESS DISCUSSION FORUM

The Culture, Cognition and Consciousness Unit, in an effort to increase its activities in consciousness studies and to draw upon other existing sources of knowledge and interest in this area, has initiated a Consciousness Discussion Forum. The Forum has decided to meet once in about two months. Following the exchange of ideas in the first few meetings, an e-group on Consciousness has been formed. Those who are interested in this discussion forum can either log on to www.egroups.com/groups/NIAS-forum-on-CONSCIOUSNESS/ and register themselves or subscribe to the group by sending an email to NIAS-forum-on-CONSCIOUSNESSsubscribe@egroups.com. For more details, please contact Sangeetha Menon (smenon@nias.iisc.ernet.in).



#### **APRIL TO JUNE 2003**

#### Dilip Ahuja

Participated in the consultations on GEF Support for Non-Annex-I Second National Communications to the United Nations Framework Convention on Climate Change, at UNDP, New York, USA, May 22-23

Delivered a lecture on "The case made by liberals for intervention in Iraq", NIAS, May 19

#### **BKAnitha**

Participated in the Inter-State Farmers' Dialogue Meeting on 'From Confrontation to Collaboration: Multi-Stakeholders' Dialogue as a Means for Breaking the Cauvery Deadlock', organised by Madras Institute of Development Studies, supported by IWMI-Tata Water Policy Program, Anand, and NIAS, NIAS, Bangalore, June 4-5

Presented a paper on "The future plans of Violence against Women as envisaged in the project" at the One-Day Consultation on Evolving Local Level Mechanisms to Check and Prevent Violence against Women, NIAS, Bangalore, June 9

Delivered a lecture on "Gender and science" in the NIAS Summer Course for College Students on Understanding Science, June 25

#### Malavika Kapur

Delivered the keynote address on "Child mental health" at the inauguration of the Child Guidance Centre, Prasanna Counselling Centre, Bangalore, May 30

Participated as a resource person at the Workshop on Mental Illness and Mental Retardation, National Institute of Mental Handicap, Secunderabad, June 23 Invited as a guest lecturer to the Department of Psychology and Parapsychology, Andhra University, Visakhapatnam to conduct a Workshop on Child Development and Child Mental Health, June 24-26



#### R L Kapur

Delivered a lecture on "Indian spiritual traditions and psychotherapy" in the course on Work of Culture, Department of Psychiatry, McGill University, Montreal, Canada, May 27

Delivered a lecture on "Sanyasa tradition in Hinduism" in the course on Transcultural Psychiatry", Department of Psychiatry, McGill University, Montreal, Canada, May 29

Participated in and delivered a lecture entitled "'Community mental health movement in India" at the International Conference on Models of Mental Health Services for Multicultural Societies, Montreal, Canada, June 2-3

Participated in the meeting on International Collaboration on Culture and Mental Health Services, University of Montreal, Montreal, Canada, June 5

Interacted with members of the Department of Psychiatry, University of Edinburgh, UK, June 7-25

Delivered a lecture on "Sadhus of India: A study in higher states of mental health", Nehru Centre, London, UK, June 27

#### Sangeetha Menon

Delivered a lecture entitled "Basics, trends and goals of consciousness studies: Current discussions and Indian traditions", Indian Institute of Advanced Study, Shimla, May 15

#### N Shantha Mohan

Conducted sessions on "Constitutional safeguards against sexual harassment" and "Preventive

measures to combat sexual harassment at the workplace" at the National Convention on Sexual Harassment and Gender Justice for senior executives, organised by the National Institute of Public Administration, Bangalore, May 5

Participated in the Inter-State Farmers' Dialogue Meeting on 'From Confrontation to Collaboration: Multi-Stakeholders' Dialogue as a Means for Breaking the Cauvery Deadlock', organised by Madras Institute of Development Studies, supported by IWMI-Tata Water Policy Program, Anand, and NIAS, NIAS, Bangalore, June 4-5

Participated in the SaciWaters Core Group Meeting, organised by NWCF, Nepal and supported by SaciWaters, Hyderabad, at Kathmandu, Nepal, June 20-23

#### S Rajagopal

Participated in the meeting on Small Hydro-power Evaluation, sponsored by the United Nations Industrial Development Organisation, Vienna, Austria, and Government of Arunachal Pradesh at Itanagar, June 29 to July 3. Also participated in further discussions at MNES, New Delhi, July 4

#### Anindya Sinha

Delivered a lecture entitled "Are animals conscious?" at the Summer School for High School Students, Indian Association for the Cultivation of Science, Kolkata, May 28

Delivered two lectures entitled "Consciousness: In evolution and in science" and "Animal rights and human obligations: A reflection" at the NIAS Summer Course for College Students on Understanding Science, June 19 and 26

#### C Srinath

Participated in the Inter-State Farmers' Dialogue Meeting on 'From Confrontation to Collaboration: Multi-Stakeholders' Dialogue as a Means for Breaking the Cauvery Deadlock', organised by Madras Institute of Development Studies, supported by IWMI-Tata Water

Policy Program, Anand, and NIAS, NIAS, Bangalore, June 4-5



Presented a paper on "The future plans of Violence against Women as envisaged in the project" at the One-Day Consultation on Evolving Local Level Mechanisms to Check and Prevent Violence against Women, NIAS, Bangalore, June 9

#### Sharada Srinivasan

Participated in a seminar on Indian Crafts for a New Generation, organised by the Crafts Council of India as part of the birth centenary celebration of the late Kamaladevi Chattopadhyay, Bangalore, April 6

Delivered a lecture-demonstration on "Icon of Nataraja" at the Nightingale Elders' Enrichment Society, Bangalore, May 9

Presented a book reading and dance demonstration from "First Floods" for a Dutch Gathering, Bangalore, June 15

Delivered a lecture on "Ancient Indian metallurgy" at the NIAS Summer Course for College Students on Understanding Science, June 19

#### N Sudhamani

Participated in the Seminar on Ten Years of Panchayat Raj: Problems and Prospects, organised by Institute of Social Science, Bangalore, April 24

Participated in the Inter-State Farmers' Dialogue Meeting on 'From Confrontation to Collaboration: Multi-Stakeholders' Dialogue as a Means for Breaking the Cauvery Deadlock', organised by Madras Institute of Development Studies, supported by IWMI-Tata Water Policy Program, Anand, and NIAS, NIAS, Bangalore, June 4-5

#### A R Vasavi

Presented a paper entitled "Emergent new ruralities: Some reflections from schools" at the

National Seminar on Contemporary Social Formations in India, Jawaharlal Nehru University, New Delhi, April 27

#### H Venugopal

Participated in the Inter-State Farmers' Dialogue Meeting on 'From Confrontation to Collaboration: Multi-Stakeholders' Dialogue as a Means for Breaking the Cauvery Deadlock', organised by Madras Institute of Development Studies, supported by IWMI-Tata Water Policy Program, Anand, and NIAS, NIAS, Bangalore, June 4-5

#### VISITS MADE BY THE FACULTY

#### Sangeetha Menon

Invited as a Visiting Fellow to the Indian Institute of Advanced Study, Shimla, May 10-18

#### VISITORS TO THE INSTITUTE

Prof Radh Achuthan, Long Island University, Southampton, UK, visited the International and Strategic Studies Unit on June 2. During this visit, he participated in an informal meeting with the NIAS faculty where a discussion was held on the Global Truth and Reconciliation Commission 911 (GTRC911) and the Millennium Development Contract.





The International and Strategic Studies Unit will organise the Fourth NIAS Course for senior-level Indian Administrative Service Officers during August 25-29. The theme of the course is "Disaster management".



Building and sustaining the intellectual and social foundations of a transforming civilisation

#### **About NIAS**

India has several fine institutions, in the natural sciences, in engineering and technology, and in the social sciences. But these institutions harbour different cultures, and, indeed, are often worlds unto themselves. And there are too few bridges between and among them. The most interesting and challenging problems of the coming century probably lie in the interfaces between these cultures and disciplines interfaces that are studied far too little in our country. It is in these no man's lands that I believe the future of NIAS lies in subjects that do not belong to the tidy little pigeon holes that the current knowledge system of the world has created artificially, and for technical or bureaucratic convenience, not because that is the way the world operates. How to build these bridges, how to bring different intellectual and social communities together, and how to look at the future of our nation and the world with the greatest possible intellectual integrity as well as public and social confidence it is the pursuit of these aims that NIAS is taking up as its mission.

If we have to achieve these goals it is necessary for us to bring together the best in the natural and social sciences. The late JRD Tata, who conceived of this institution, saw the great need in India to form a new kind of leader he envisioned an institution that could harness creativity and commitment, mathematics and management. With my distinguished colleagues on the faculty of NIAS, and the eminent persons we count among our Associates, I am hopeful that we can carve a unique niche for ourselves in the public and intellectual life of this country and the world, moving in the direction that our founders so clearly saw as essential for the future health of our nation.

#### The appeal

The pursuit of our goals demands a measure of autonomy. We need financial support from diverse sources to ensure and sustain that autonomy. The early generosity of the House of Tatas and the Government of Karnataka has given us some splendid facilities. We now need to build on this foundation, diversify our sources of income and carry out programmes that are sensitive, at one and the same time, to public and national needs as well as to the demands of uncompromising intellectual rigour.

We solicit your contributions to help us to realise our goals. Bequests can be made to the NIAS Endowment Fund in the manner described below.

#### R Narasimha

Director, NIAS, and Chairman, NIAS Endowment Committee

#### How to make Contributions to the NIAS Endowment Fund



All contributions made to NIAS or its Endowment Fund are tax deductible under Section 35, Subsections (i) and (ii) of the Indian Income Tax Act of 1961.

NIAS is registered under the Foreign Contributions (Regulation) Act, 1976, and is entitled to receive contributions from abroad directly (Register number 094420614, Account No. 0100005000200, State Bank of India, Indian Institute of Science, Bangalore 560 012). Contributions must be made by cheques drawn in favour of the National Institute of Advanced Studies; the cheques may be sent directly to NIAS, or credited to the State Bank of India account mentioned above with independent intimation to NIAS.

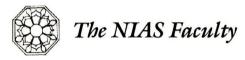
The Institute welcomes contributions of any amount. Typical sums and the purposes for which they can be used and the forms in which acknowledgements can be made are shown below.

#### 1. Books

Can be donated as books or as funds to be utilised for purchase of books
Every book donated or purchased out of donation funds will carry a label indicating the name of the donor

- Objects of art (paintings, sculpture etc.)
   Rs 10,000/ and above
   Will carry a small plaque indicating the name of the donor
- Annual Endowed Lecture (speaker residing in India)
   Rs 2.5 lakh or US \$ 6,000
   May be named with concurrence of donor
- 4. New Office Space Rs 5 lakh per room Room will carry a plaque indicating the name of the donor

- Visiting Professor (from India or abroad)
   Rs 10 lakh or US \$ 25,000
   May be named with concurrence of donor
- 6. Lecture Hall
  Rs 20 lakh or US \$ 50,000
  May be named with concurrence of donor
- 7. East Wing, Main Building
  Rs 40 lakh or US \$ 100,000
  May be named with concurrence of donor
- 8. West Wing, Main Building
  Rs 50 lakh or US \$ 125,000
  May be named with concurrence of donor
- 9. Endowed Doctoral ScholarshipRs 10 lakh or US \$ 25,000May be named with concurrence of donor
- 10. Endowed Fellowship
  Rs 30 lakh or US \$ 70,000
  May be named with concurrence of donor
- 11. Endowed Professorship
  Rs 40 lakh or US \$ 90,000
  May be named with concurrence of donor
- 12. Endowed Research Unit
  Rs 80 lakh or US \$ 187,500
  May be named with concurrence of donor





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The National Institute of Advanced Studies (NIAS) was conceived and initiated by the late Mr. J R D Tata, who sought to create an institution which would conduct advanced research in multidisciplinary areas, and also serve as a forum to bring together administrators and managers from industry and government, leaders in public affairs, eminent individuals in different walks of life, and the academic community in the natural and social sciences. The intention has thus been to nurture a broad base of scholars, managers and leaders who may contribute to tackling the complex problems facing contemporary India in a more informed and effective manner.

The philosophy underlying NIAS is given shape by its research teams, which are drawn from a variety of disciplines in the natural and social sciences. The Institute is unique in its integrated approach to the study of intersections between science and technology and social issues.



Monday Monday



#### Prof R Narasimha Director

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