

NIAS NEWS



Vol 13 No 3

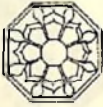
July 2004

JULY 2004



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Editors' Note

Over the last eleven years, NIAS NEWS has provided a critical window for the outside world and for our many friends into the workings at the National Institute of Advanced Studies. This newsletter has also been continually expanding its scope and reach over this time. Our objective is to bring you newsworthy information which will be appreciated by both the specialists in the various disciplines that NIAS researches in, as well as by the more general reader.

Anindya Sinha, Hamsa Kalyani and A Deva Raju,
Editors, July 2004



From the Director's Desk



Three months ago, I entered the portals of NIAS. Although not long enough to come to definitive views and deeper understanding of specific activities and programmes, this period has been most useful in terms of personal enrichment and getting an insiders view of the work of this innovative institution. First, let us look at the Wednesday discussion meetings. These meetings provide an effective forum for assessing the aspiring entrants to NIAS, providing exposure to some of the recent research work of faculty members and others, as well as bringing an awareness of the new developments elsewhere, of potential interest to NIAS. This activity has, over the years, not only sustained itself but has kept a level of quality and excellence that is commendable. The experience of this effort provides several new ideas for future in respect of the choice of themes, criterion for selecting speakers and participation of a larger community of interested people.

Complementing this effort has been the Associate Programmes, held normally on the last Friday of every month. Sitting through the last three talks, I found it to be an effective way of communicating some of the broader aspect of creative thinking which is of interest not only to my colleagues at NIAS, but also among broader cross-section of intellectuals of Bangalore. Some eminent speakers who delivered lectures in this forum, include Mr Mark Tully, Prof S Nurul Hasan, Mr Soli J Sorabjee, Prof Senake Bandarnayake and Dr Arun Shourie. The last three lectures, which I personally attended – The Rise and Fall of Indian Liberalism by Dr Ramachandra Guha, Scientometrics and the Sociology of Science by Prof P Balaram and Software's Success: A Sustainable Story? by Mr Kiran Karnik – are typical of the quality of these series, characterised by an originality in thinking, a multidimensional approach to

discussing specific issues, contemporariness of the theme and, above all, exceptional articulation. I was impressed by the level of interest among the intellectuals of Bangalore through their presence in large numbers at the JRD Tata Auditorium. Sustaining such a programme is certainly going to be a major priority in the coming years.

Two other programmes created a deep impression in me in terms of their originality, innovativeness and impact; the first of these was the two-week summer course on Understanding Science: An Introduction to History and Philosophy of Science, and the other, a series of three lectures on Indian Logic and Epistemology. The former course was attended by about 40 students, of both science and humanities, at the graduate and post-graduate level, from in and around Bangalore. The interest and excitement among these young participants had to be seen to be believed. I feel that the bringing in of a broader perspective in dealing with specific themes in science, technology, or the history or arts, will certainly characterise education in the 21st century. I am sure that these pioneering concepts being developed at NIAS will go a long way in creating a new pathway for education. Equally interesting was the programme related to the series of lectures on Indian Logic and Epistemology delivered on three successive Saturdays by Dr Sundar Sarukkai of NIAS. The participants ranged from young college students to members of older generations, still in search of intellectual pursuits. That all these participants, totalling around 20, spent three Saturday afternoons to enrich themselves and that too by paying Rs.300 each is truly remarkable!

This period also witnessed the visit of the American Ambassador to India and his colleagues, not once but twice, to the Institute. His Excellency Mr David C Mulford displayed considerable interest in NIAS when he was briefed on some of its key activities. While discussing water, for example, His Excellency touched upon a whole range of issues, including the availability of water, problems of unequal distribution, possible strategies for

effective management, their sociological implications and even the question of suitable levies on the consumption of water and its implications for the different strata of society. There were many other interesting programmes that were held during this period, including the two-day Workshop on Nature and Culture organised jointly with the Indian Council for Philosophical Research, a brainstorming session on designing a training programme for science and technology managers to enable effective decision making, and a unique discussion session for evolving a suitable curriculum for a post-graduate degree in elementary education.



In a nutshell, the multidisciplinary research efforts at this Institute coupled to innovative course concepts and applying the research outputs to unique projects in areas like education and gender studies make NIAS stand apart as one of its kind. Let us exploit its full potential!

K Kasturirangan

MEETING OF THE COUNCIL OF MANAGEMENT OF NIAS AND ANNUAL GENERAL MEETING

The twenty-seventh meeting of the Council of Management of NIAS and the fourteenth Annual General Body meeting of NIAS Society was held on May 31 at the Institute.

The meeting was attended by Prof M S Swaminathan (Chairman), Prof K Kasturirangan (Director, NIAS), Dr J J Irani, Mr Hom R Khusrokhhan, Mr Xerxes Desai, Dr Devaki Jain, Prof B V Sreekantan and Maj Gen M K Paul (Retd) (Secretary).



Research Programmes



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 behavioural ecology, communication and cognition; science and technology policy; sociology and social anthropology; and theory of numbers.

More specifically, Dr Malavika Kapur has initiated a project on **Innovative approaches for the promotion of psychosocial development of schedule caste and tribal children in Ashram schools**, funded by the World Health Organisation. This project proposes to study about 800 primary school children in Ashram schools in H D Kote Taluk of Karnataka state. Innovative programmes, consisting of 15 sessions using child-to-child approaches, will be adopted to promote motor and cognitive functions including attention, memory, intelligence, language, arithmetic and creativity. The children will also be assessed on psychological tests before and after the programme to evaluate its overall efficiency.

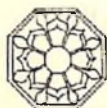
The **Culture, Cognition and Consciousness Unit** has completed two projects in the areas of behavioural ecology and conservation biology.

Sindhu Radhakrishna and Anindya Sinha have completed the project on **Population Survey and Conservation of the Bengal Slow Loris *Nycticebus bengalensis***, supported by Margot Marsh Biodiversity Foundation / Conservation International, Washington DC, USA and Wildlife Conservation Society - India Program,

Bangalore, and have submitted the final report to the funding organisations.

Anindya Sinha has also completed his exploratory project - entitled **In search of the Tawang macaque: A preliminary survey of the status, demography and behavioural ecology of a potentially new macaque species in western Arunachal Pradesh, northeastern India**, supported by the Wildlife Conservation Society - India Program, Bangalore.

The **Sociology and Social Anthropology Unit** has published the summary report of its project entitled **Baseline Study of Elementary Schools in Chamarajnagar District**; the report was released by Dr K Kasturirangan, Director of the Institute, on May 4, 2004. Education administrators from Chamarajnagar were present at the release ceremony and met with Dr Kasturirangan. Copies of the report can be had from the Unit.



Publications



NIAS PUBLICATIONS

I. LECTURES

- L1-04 Myth and the creative process: A view of the creativity in the light of three Indian myths

C R Ananth Rao

BOOKS AND MONOGRAPHS

Balachandra Rao, S. 2004. *Aryabhata* (in Kannada). Gandhi Centre of Science and Human Values, Bharatiya Vidya Bhavan, Bangalore

Balachandra Rao, S. 2004. *Pioneers of Mathematics and Recreations* (in Kannada). Gandhi Centre of Science and Human Values, Bharatiya Vidya Bhavan, Bangalore

PAPERS

Menon, S. 2004. Beyond *what* and what is beyond? In: *Science and beyond: Consciousness, cosmology and technology in Indic traditions* (eds. S Menon, B V Sreekantan, A Sinha, R Narasimha and P Clayton), National Institute of Advanced Studies, Bangalore, pp 185-190

Sinha, A. 2004. A brave new world... Scientific and ethical issues in human cloning. In: *Science and beyond: Consciousness, cosmology and technology in Indic traditions* (eds. S Menon, B V Sreekantan, A Sinha, R Narasimha and P Clayton), National Institute of Advanced Studies, Bangalore, pp 3-13

Srinivasan, S. 2004. Chronology and metal sources of south Indian metal icons. In: *Archaeology as History: South Asia* (eds. H P Ray and C Sinopoli), Indian Council for Historical

Research and Aryan Books International, New Delhi, pp 219-257

Srinivasan, S. 2004. The cosmic dance of Siva: an icon of science and beyond. In: *Science and beyond: Consciousness, cosmology and technology in Indic traditions* (eds. S Menon, B V Sreekantan, A Sinha, R Narasimha and P Clayton), National Institute of Advanced Studies, Bangalore, pp 98-105

CONFERENCE PROCEEDINGS

Shetty, P K. 2004. Socio-ecological implications of pesticide use in India Insights from a field study. *Proceedings of the Fifteenth International Plant Protection Congress*, Foreign Languages Press, Beijing, pp 635

REPORTS

Radhakrishna S and Sinha, A. 2004. Population survey and conservation of the Bengal slow loris in Assam and Meghalaya, northeastern India. Technical Report 1-04. Ecology, Behaviour and Conservation Group, National Institute of Advanced Studies, Bangalore

DOCTORAL PROGRAMME IN NIAS

The National Institute of Advanced Studies (NIAS) is one of the most unique institutions in the country, conducting advanced research in multidisciplinary areas that bridge the gap between the natural and engineering sciences, social sciences, humanities and the arts. By regularly bringing together its academic community with administrators and managers from industry and government, leaders in public affairs, and eminent individuals in all walks of life, the Institute also aims to create a new leadership that would effectively contribute to solving some of the complex problems facing modern India today.

A limited number of research scholarships are now available in the Institute for bright and



committed postgraduate students interested in pursuing independent research towards a doctoral degree. The specific areas of research for which scholarships may be available this year are agro-ecology; education; history, culture and archaeology; materials science and heritage; mathematical modelling, simulation, artificial intelligence and image processing; philosophy of science and mathematics; primate behavioural ecology; sociology and social anthropology; strategic studies; and systems analysis.

The scholarships are open to those holding a Master's degree in any relevant subject in the natural sciences, engineering, social sciences, humanities and the arts, but with a consistently proven academic record. Some research and/or field experience in the concerned areas may be preferred, but is not essential.

Each scholarship will be initially available for three years. The scholarship amount is fixed at Rs 8000 per month for the first two years and Rs 9000 per month for the third year, with an additional 15% per month as HRA. Book and contingency grants will also be made available to each research scholar as per the rules of the Institute.

Applications on plain paper, including a curriculum vita and a clear statement of purpose detailing the research interests of the candidate and explaining why she/he would like to join NIAS, must be sent to the Controller, National Institute of Advanced Studies, Indian Institute of Science Campus, Bangalore 560 012, India on or before 10 September, 2004. Explicit mention must be made of the research area for which the application is being sent. Candidates short-listed from the national pool of applicants will be subsequently called for an interview, to be held in Bangalore in October 2004.

Anindya Sinha



Honours and Awards for NIAS Faculty

P K Shetty

Invited to chair a session on "Health and Environmental Effects of Plant Protection Products" at the Fifteenth International Plant Protection Congress, Beijing, China, May 11-16

DISSERTATIONS GUIDED BY THE NIAS FACULTY

H K Anasuya Devi

A project entitled "Image analysis for ancient scripts: A case study of Brahmi" by Suresh Kashyap, Uphar Agarwal, Sanjeet Kumar Sahoo and Mohammad Qumar Farooqui for the fulfilment of B.E. degree from Siddaganga Institute of Technology, Tumkur was completed during January to May 2004

A project entitled "Image processing and segmentation of ancient Indian scripts" by V Raghuram, Tarun Lakhota, Sriram Venkataramani, R Siddhartha and Abhishek Kapoor for the fulfilment of B.Tech. degree from National Institute of Technology, Tiruchirapally was completed during May to June 2004



Important Events



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 2004 included:

VISIT OF DR DAVID MULFORD, US AMBASSADOR TO INDIA

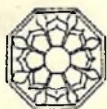
June 21

Dr David Mulford, US Ambassador to India, visited the Institute on Monday, June 21 to interact with the faculty of Institute and hold discussions on their work. He was accompanied by Mr Richard Haynes, US Consul General at Chennai.

Presentations were made by some of the faculty of the Institute; these included "Concerns in water and labour sector" by Dr Shantha Mohan, "Philosophy in a changing world" by Dr Sundar Sarukkai, "Enhancing quality of elementary education" by Dr Padma M Sarangapani, and "Primate worlds: From complex communities to simple minds" by Dr Anindya Sinha. These presentations were followed by extensive discussions and reviews, which continued over lunch.

The Ambassador was highly appreciative of the work being conducted at the Institute and promised to return to continue these discussions at a future time.

A Deva Raju



Associates' Programme

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 2004 included the following event:

April 30

The rise and fall of Indian liberalism

Ramchandra Guha

Bangalore

May 28

Scientometrics and the sociology of science

P Balaram

Department of Molecular Biophysics

Indian Institute of Science

Bangalore

June 23

Software's success: A sustainable story?

Kiran Karnik

NASSCOM

New Delhi



Lectures and Seminars



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**, 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 2004 have included:

April 7

East India Company paintings and textiles

M B Rajani

This illustrated lecture explored how the Company paintings of the British East India Company of the 18th-19th centuries came to be made, the development of various styles of paintings with a focus on their depictions of textiles, costumes and local customs, and the purpose which these paintings fulfilled for their patrons. The lecture especially discussed, with slides, the Company paintings from the region of Tanjore and Trichnopoly in Tamil Nadu from the collection of the Victoria and Albert Museum, London.

April 21

Improving school quality: What has been tried and what works

Padma M Sarangapani

There have been a small but significant number of efforts to improve the quality of government schools in the country. This

presentation was based on about 22 case studies which were commissioned to study efforts in different parts of the country by Sutradhar, a Bangalore-based NGO, in which attempts have been made to understand issues of what has been tried and what works.

May 12

The hopes, dreams and delusions of the Mathematical Modelling Unit of NIAS

Prabhakar G Vaidya

There is a fond hope, expressed by J RD Tata and others, that mathematics can play the role of the 'best supporting actor' in a wide range of subjects from politics to biology. At the minimum, Maynard Smith claimed, mathematics will help us understand the 'consequences of our assumptions'.

This talk described, without too many mathematical details, the achievements and failures experienced by the Mathematical Modelling Unit in the last five years.

May 19

FNN approach to Brahmi recognition with results

H K Anasuya Devi and students from Siddaganga Institute of Technology, Tumkur

Fuzzy logic is the science to quantify non-random uncertainty (imprecision, vagueness, fuzziness) in physical processes, which are close to the real world problems. Epigraphy is the study of the inscriptions engraved on materials such as stones, rocks, on manuscripts, palm leaves, coins, copper plates, and silver plates. Some of the characters in these inscriptions have worn out with time. This makes the reading and recognition of characters ambiguous and difficult. It is in this context that the use and application of fuzzy concept is important in the analysis of epigraphy texts, beginning with Brahmi script.



Brahmi script is lucid and contains more characters than does English. Its character set contains 30 consonants and 5 vowels. Using combinations of this set, any number of valid characters can be formed. The size of the characters is not uniform. This makes the problem of identification of Brahmi characters all the more complicated.

The images containing Brahmi Scripts are scanned and stored as a bitmap. This input is fed into the three sub-modules, namely (1) character recognition module, (2) syntactic analyzer module and (3) word processor for generating the final product. One of the most important aspects of character recognition is extraction of individual characters from the script image file, using pattern recognition techniques. Fuzzy Sets and Rough Sets in combination with Neural Networks are used for resolving the ambiguity between characters that closely resemble each other, an example being "sa" and "ta".

May 26

Flip-flop behaviour by individuals and organisations

Dilip Ahuja

The motivation for this talk came from seeking an explanation for the observed construction, removal and re-construction of speed breakers at the same locations in Bangalore. Other examples were presented where flip-flop (or oscillatory) behaviour is displayed the decisions of some NRIs about where to live, some aspects of the relationships between Mahatma Gandhi and ashram women, and one instance from fiction. A model was proposed that attempts to "explain" flip-flop behaviour. Instances were cited where this model "fails" and where it might provide possible insights. By merging fiction and non-fiction, this talk attempted to combine the regular Wednesday morning and the Literary Forum talks.

June 2

Engendering institutions of science: A myth or reality?

B K Anitha

After more than a century of attempts by women to enter science, a male bastion, the scientific workforce today does not reflect the gender distribution seen in society. The vertical segregation within a discipline still assigns women to low status positions in comparison to men; and patterns of horizontal segregation across disciplines assign particular areas of inquiry as 'women's' and others as 'men's' fields. Do women as a group opt out of certain disciplines? It may be interesting in this context to examine the structural and societal factors that contribute to this process. Are these institutions of excellence aware of this exclusion? Is it possible to study this process as a rise in higher education and expanded employment opportunities on the one hand and the growth, bureaucratization and professionalisation of the discipline on the other? This talk focused on some critical questions about the participation and career paths for women in science and technology.

June 14

Image processing and segmentation for ancient Indian scripts

H K Anasuya Devi and students from National Institute of Technology, Tiruchirapalli

June 16

Promotion of psychosocial development of rural school children

Malavika Kapur

Government schools, particularly in rural areas, continue to provide children with education of abysmally poor quality. This is due to the paucity of funding, poor infrastructure and poor teacher-pupil ratios. This has resulted in poor motivation to provide quality education among the teachers, pupils and the community alike.



The present study is an attempt at providing intervention in the rural schools to promote the psychosocial development of children in a most economic and effective manner. The study attempts to CREATE and EVALUATE programmes adopting child-to-child methods. The sample consisted of 1088 children from classes 1 to 9 in 15 schools, in one cluster of schools in H D Kote taluk of Karnataka state. Psychological assessment was carried out before and after the intervention, consisting of 20-30 sessions. The results were discussed briefly, followed by a video demonstration of the programme.

June 23

Strategy, foreign policy and technological choices in southern Asia

Arvind Kumar

The term southern Asia implies the regions of south Asia and also includes China in the north, Afghanistan in the west and Myanmar in the east. The talk focussed on India, China and Pakistan specifically. An attempt was made to provide a theoretical framework on matters related to strategy and foreign policy, and their linkages. The threat perception of China, India and Pakistan suggests that all the three are vulnerable. It might also be because of the change in global defence arrangements, which has taken place after the event on September 11 in 2001. Such changes certainly have a direct bearing on the security of the countries falling in the southern Asian region. How strategy and foreign policy of India and Pakistan get affected through the dominant role of the third party formed a major part of the debate.

The role of technology becomes paramount in establishing the linkages between strategy and foreign policy of any country. It gives an extra edge in deciding about the future course of strategy and foreign policy. In the current era of strategic uncertainty and high vulnerability, the technological choices left

before India, China and Pakistan also formed a part of the discussion.

SPECIAL PROGRAMMES

There were six special lectures organised at the Institute during the period from April to June 2004.

Special lectures

April 28

The role of the lotus in the religious art of Hinduism and Buddhism

Santona Basu

The depiction of lotus in the Hindu and Buddhist art of ancient India is the visual interpretation of thoughts contained in the ancient Indian scriptures starting from the earliest of Indian literature – the Vedas. Lotus flower as the seat or pedestal of a divinity in art goes back to the Vedic conception, where lotus is seen as the support of the creation. Thus, the lotus comes to signify the cosmic lotus and in art one sees Hindu or Buddhist deities sitting or standing on an open lotus.

The idea of lotus as a seat continues in the Buddhist iconography. But there the negative relation of the lotus to water, a symbol of non-attachment to the sensual world, is the prevalent thought. Besides this, the lotus as a seat goes back to the Vedic idea, where the lotus is imagined as a support of divinities. These two ideas – one Vedic and the other Buddhist – fired the imagination of the artists to carve lotus-seats or pedestals for the Buddha and the Buddhist deities.

Highly polished stone pillars with lions atop lotus capitals are metaphysical symbols of the "Axis of the Universe" and figuratively represent the Buddha and his preaching of the Law. The notion of the "Axis of the Universe" or the "Cosmic Pillar" is a Vedic notion that was

adapted for the Buddhist sculptural imagery and iconography and we have pillars with lotus capitals.



The mythical wish-granting creeper, kalpalata, was non-existent in nature. The sculptors expressed that idea in the shape of lotus scrolls, the lotus also being a symbol of prosperity from the Vedic times. The lotus scroll or kalpalata embodies the idea of fulfilling the wishes of prosperity of a devotee.

Lotus petals or tongues of flame on the nimbus of a deity first appeared in Buddhist art and later on was adopted by Hindu iconography and made statutory by the writers of the manuals of Hindu iconography.

In order to be able to appreciate the role of the lotus in Hinduism it is necessary to understand its position in the Vedic literature. Some of the iconographic conceptions of Buddhism, particularly of Mahayana Buddhism are influenced by Vedic thoughts; the influence of Hindu icons, which have their roots in the Vedic notions, can be seen in the fashioning of the deities of Mahayana Buddhism with lotus seats symbolizing the cosmic lotus. On the other hand, some iconographic innovations in Buddhist art were adopted by Hindu iconography as in the case of nimbus around the head of a deity.

April 29

Politicising religion to spiritualising politics: V D Savarkar and M K Gandhi

Raghuram Raju

Department of Philosophy

University of Hyderabad

Hyderabad

June 9

Esperanto: Utopia or realisable dream?

Trevor Steele

Bangalore

Esperanto is the only planned language to go beyond the stage of a project and become a fully-fledged language. The speaker suggests that the period of its appearance was auspicious, but that the character of the inventor (Zamenhof) was a bigger factor. The structure of the language will be sketched, and an example of prose and poetry given. The more polemic part of the talk will present a comparison of the reigning candidate for the role of a world language, English, with Esperanto (Sanskrit will also be touched on). The talk will conclude with three reasons why the speaker believes Esperanto deserves the role of humanity's common second tongue.

Trevor Steele is an Australian who has lived and worked, mainly as a teacher of languages, on every continent. His most recent position was that of Director General of the Universal Esperanto Association in Rotterdam, the Netherlands. At present he and his wife Katja are in India teaching Esperanto, en route to a new teaching career in Australia.

June 15

Brief overview of deep brain stimulation

Savita Angadi

Central Electronics Laboratory and Research
Centre

Jülich

Germany

June 16

Arts and crafts as aspects of Mauritian cultural
identity with special reference to Indo-
Mauritians

Vijayluxmi Beeharry Panray

Port Louis

Mauritius

June 30



Aspects of non-military dimensions of security

Uttam Sen
Bangalore

The need has been felt since the end of the Cold War for a broader definition of security than its traditional statist dimension. The subject has its roots, among others, in the work of W E Blatz who ultimately projected the case for (individual) self-sufficiency. Its current definition as "safety from chronic threats..." (UNDP 1994) has been expanded to include provision of economic fundamentals. Though traditional security retains its pre-eminence there has been a growing demand, even among its practitioners, for a more comprehensive approach to supplement the pursuit of national security interests and State survival. This translates into security inclusive of the quality of life of the people. A discussion included the development of the idea and its consequences in the current context.

NIAS LITERARY FORUM

This forum has been established in the Institute to pursue and conduct literary activities such as play-reading, 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 **Sangeetha Menon** (prajnana@yahoo.com) or **Sharada Srinivasan** (sharada@nias.iisc.ernet.in).

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-CONSCIOUSNESS-subscribe@egroups.com. For more details, please contact **Sangeetha Menon** (prajnana@yahoo.com).

One discussion meeting was organised by the Forum during the period from April to June 2004.

May 17

Edmund Husserl's criticism of reason

Kenneth Liberman

Department of Sociology

University of Oregon

Eugene, USA

Edmund Husserl was a mathematician who became a philosopher; he wished to establish a philosophy on grounds as secure as those in mathematics. Although he discovered that the task was impossible, he developed an important field of reflection, known throughout the world as phenomenology.

In his seminal text, FORMAL AND TRANSCENDENTAL LOGIC, Husserl called for a new science of "the criticism of reason", which would be directed to the study of the work of formal rationality and the proper uses of logic and reason. He proposed that formal reflection could only avoid the naivete that flows from the routinization of method by adopting what

he called "a radical self-understanding", which continuously examines the presuppositions that are employed by any formal analytic method. In his *CRISIS OF THE EUROPEAN SCIENCES*, Husserl reviewed the consequences of the mathematization of nature, studied scientific reflection, and investigated what properly constitutes reliable evidence. Husserl developed a method for persistent self-interrogation that assists consciousness to attain clarification about how the rational procedures it employs contribute to the understanding of the world that is being investigated.



This talk summarised some of Husserl's most important positions about the performance of reason, and suggested ways that philosophical anthropology can develop methods of rigorous reflection that do not lose their way within their own reifications that is, how formal strategies of reasoning can remain in contact with actual experience.



Meetings Attended and Lectures Delivered by NIAS Faculty

APRIL TO JUNE 2004

B K Anitha

Participated in the planning meeting for the drafting of the chapters on Social Dimensions of the Development Process and Drivers for Development – Human Resources of the Karnataka Development Report, Institute for Social and Economic Change, Bangalore, April 23

Participated in a two-day Workshop on Lateral Thinking, organised for representatives of NGOs and the voluntary sector, Urban Health Research and Training Institute, Bangalore, June 18-19

Delivered a lecture on “Gender and science” at the NIAS Summer Course for College Students on Understanding Science: An Introduction to the History and Philosophy of Science, NIAS, June 23

S Balachandra Rao

Presented a paper entitled “Computational efficacy of Chandrashekhara Samanta's astronomy” at a national conference, Institute of Physics, Bhubaneshwar, June 11

Conducted a workshop for mathematics lecturers on the revised pre-university syllabus in mathematics, Government P U College, Bangalore, July 6-7

Invited to be a member of the Experts' Committee of the Rashtriya Sanskrit Vidyapeetha, Tirupati, for preparing the syllabi and study materials for the new Certificate and Postgraduate Diploma courses in Scientific Heritage of India

Malavika Kapur



Invited to be on the visiting faculty for the Post-graduate Diploma Course in Learning Disabilities for May 2004-2005, Spastic Society of Karnataka, Bangalore

Invited to be the chief guest at the valedictory function of the Course on Comprehensive Child Education, organised by the Hindu Seva Pratisthana, Bangalore, May 10

Invited as the visiting consultant for the evaluation of counsellor supervisors at the South India AIDS Awareness and Prevention Camp, Chennai, May 17-19

Invited to deliver the valedictory address at the Training Camp for Female Foeticide Awareness Generation, sponsored by the Karnataka State Social Welfare Advisory Board, Bangalore, June 23

R L Kapur

Participated in the Annual Summer Institute of the Transcultural Unit and presented a paper entitled "Some timeless principles of psychotherapy: Lessons from the Indian spiritual and philosophical traditions", Department of Psychiatry, McGill University, Montreal, Canada,

K Kasturirangan

Delivered the Seventy-sixth Convocation Address at the Osmania University, Hyderabad, April 17

Delivered the Fortieth Founder Memorial Lecture on "Space – A vision for the next 25 years", Shriram Institute for Industrial Research, New Delhi, April 26

Delivered the Nayudamma Memorial Lecture on "Space technology and applications – New directions for the future", Central Leather Research Institute, Chennai, June 16

Delivered a talk on "Indo-US space cooperation – A ringside perspective" at the Public Outreach event in the India-US Conference on Space Science, Applications and Commerce, Bangalore, June 21

Delivered the Keynote Address on "Some innovative initiatives from space" at the Philips TechKNOW 2004, Bangalore, June 30

Sangeetha Menon

Delivered a series of lectures on "Indian approaches to mind" at the Summer Course on Cognitive Studies for postgraduate students, Centre for Behavioural and Cognitive Sciences, University of Allahabad, Allahabad, April 10-18

Delivered two public lectures entitled "Brain-puzzles and self-answers: Recent trends in consciousness studies" and "Mind, experience and self: Indian approaches to consciousness", University of Allahabad, Allahabad, April 12-15

Participated in the Workshop on Patanjali Yogasutras, organised by Department of Management Studies, IIT Delhi, April 25

Delivered an invited lecture entitled "Preceptors of *prakṛti* – the self outside and inside: From Satapatha to Samkhya" at the Discussion Meeting on Nature and Culture, organised by the Centre for Study in Civilizations, NIAS, May 28

N Shantha Mohan

Participated in an executive meeting of the Mahila Samakhya, Vidhana Soudha, Bangalore, April 5

Participated in the preliminary discussion meeting regarding the preparation of the Karnataka Development Report, held under the Chairmanship of Member, Planning Commission, Government of India, Institute for Social and Economic Change, Bangalore, April 16

Participated in the planning meeting for the drafting of the chapters on Social Dimensions of

the Development Process and Drivers for Development – Human Resources of the Karnataka Development Report, Institute for Social and Economic Change, Bangalore, April 23



Conducted sessions on "Constitutional safeguards against sexual harassment and preventive measures to combat sexual harassment at the workplace" for senior executives, organised by the National Institute of Public Administration, Bangalore, May 21

Participated in a discussion meeting with the Centre for Social Research, New Delhi on the Indian Penal Code Section 498A and a study to be carried out in Bangalore and Mysore districts in Karnataka state, NIAS, May 24

Participated in an executive meeting of the Mahila Samakhyas, M S Building, Bangalore, June 11

M K Paul

Invited to participate in an international round-table discussion on South Asian Security, in particular India-Pakistan Relation, South African Institute of International Affairs, Johannesburg, South Africa, April 21

Delivered a lecture on "Implications of Intellectual Property Rights for developing countries including India and South Africa, with particular reference to medicinal plants and traditional knowledge", Department of Political Science, University of Stellenbosch, Cape Town, South Africa, April 23

Participated in the Fourth Annual Forum on City Informatization in the Asia-Pacific Region (CIAPR IV), Shanghai, China, May 19-20

Attended the Regional Meeting of the United Nations Information and Communication Technologies Task Force for Asia and Pacific on "Internet Governance", Shanghai, China, May 21

Delivered lectures on "International crisis and disaster management" at the Disaster Management Department and on "The security situation in south Asia after India's elections" at the Political Science Department, Tong Ji University, Shanghai, China, May 21

Participated in an interactive session with members of the China Institute of International Studies on "Important bilateral issues of Sino-India relationship", Beijing, China, May 24

Padma M Sarangapani

Attended the International Conference on Constructionist Approaches to Learning and presented a paper on "Why educationists need a constructivist theory of learning", Udaipur, April 18-20

Attended the meeting of the Editorial Board of the journal Education Dialogue, New Delhi, May 25

Participated as a discussant at the Colloquium on Girls' Education, organised by CARE India, New Delhi, May 26-28

P K Shetty

Participated in the Fifteenth International Plant Protection Congress and presented a paper entitled "Socio-ecological implications of pesticide use in India - insights from a field study", Beijing, China, May 14

Anindya Sinha

Delivered an invited lecture entitled "Of memes and macaques: Behavioural inheritance and gene-culture coevolution in bonnet macaques" at the Discussion Meeting on Nature and Culture, organised by the Centre for Study in Civilizations, NIAS, May 28

Delivered two lectures on "Concept of mind in evolution" and "Animal rights, human obligations" at the NIAS Summer Course for

College Students on Understanding Science: An Introduction to the History and Philosophy of Science, NIAS, June 16 and 24



C Srinath

Participated in the planning meeting for the drafting of the chapters on Social Dimensions of the Development Process and Drivers for Development – Human Resources of the Karnataka Development Report, Institute for Social and Economic Change, Bangalore, April 23

Participated in the Consultative Meeting to Combat Trafficking of Women and Children for Prostitution, organised by Women and Child Development Department, Government of Karnataka and UNICEF, Urban Health Research and Training Institute, Bangalore, June 25

Sharada Srinivasan

Delivered a lecture on “Metals in Indian craft traditions”, India Foundation for Arts, February 28

N Sudhamani

Participated in the preliminary discussion meeting regarding the preparation of the Karnataka Development Report, held under the Chairmanship of Member, Planning Commission, Government of India, Institute for Social and Economic Change, Bangalore, April 16

Participated in the planning meeting for the drafting of the chapters on Social Dimensions of the Development Process and Drivers for Development – Human Resources of the Karnataka Development Report, Institute for Social and Economic Change, Bangalore, April 23

Participated in a two-day Workshop on Lateral Thinking, organised for representatives of NGOs

and the voluntary sector, Urban Health Research and Training Institute, Bangalore, June 18-19

Participated in the Consultative Meeting to Combat Trafficking of Women and Children for Prostitution, organised by Women and Child Development Department, Government of Karnataka and UNICEF, Urban Health Research and Training Institute, Bangalore, June 25

A R Vasavi

Attended the International Conference on India and China: Comparisons and presented a paper on "One Step Forward, Two Steps Forward?: Elementary Education in India", Leiden University, Leiden, The Netherlands, May 27-28

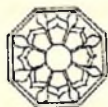
H Venugopal

Participated in the planning meeting for the drafting of the chapters on Social Dimensions of the Development Process and Drivers for Development – Human Resources of the Karnataka Development Report, Institute for Social and Economic Change, Bangalore, April 23

VISITS BY THE NIAS FACULTY

P K Shetty

Visited the Beijing Glorious Land Agricultural Company in Beijing, China and the Singapore National University, Singapore, May 9-20



Upcoming Events



The Eighth UGC-sponsored NIAS Orientation Course on An Integrated Approach to Knowledge and Information for University and College Teachers will be held in NIAS from February 10 to March 2, 2005. Please contact Anindya Sinha (asinha@nias.iisc.ernet.in) for more information.



An Appeal for Funds

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.

K Kasturirangan

Director, NIAS, and

Chairman, NIAS Endowment Committee

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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
2. *Objects of art* (paintings, sculpture etc.)
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Will carry a small plaque indicating the name of the donor
3. *Annual Endowed Lecture* (speaker residing in India)
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Rs 5 lakh per room
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Rs 10 lakh or US \$ 25,000
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Rs 20 lakh or US \$ 50,000
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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
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Rs 10 lakh or US \$ 25,000
May be named with concurrence of donor
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Rs 30 lakh or US \$ 70,000
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11. *Endowed Professorship*
Rs 40 lakh or US \$ 90,000
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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.



Sangeetha Menon



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