

**Some books are to be tasted; others  
swallowed; and some to be chewed and  
digested. –Francis Bacon (English  
philosopher, statesman and essayist)**

## **ARUN'S CURRENT READING SCHEDULES**

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(a) Designing Information Technology in the Postmodern Age, From Method to Metaphor (LEONARDO BOOK, MIT Press, 1995) --by Prof. Richard Coyne..

(b) How We Became Posthuman, Virtual Bodies in Cybernetics, Literature, and Informatics (University of Chicago Press, 1999) –by Prof. N. Katherine Hayles. Prof. Hayles' forthcoming spectacular ventures would be on *Virtual Bodies: Evolving Materiality in Cybernetics, Literature, and Information*. Book-length manuscript tracing history of cybernetics from 1945-present and relating it to poststructural critical theory and contemporary literature an *Riding the Cusp: The Interplay between Narrative and Formalisms*, under contract to [Routledge Press](#) An essay collection focused on showing the importance of narrative in a series of scientific sites, from game theory to sociobiology and artificial life.

Katherine Hayles also discussed the following thoughts in greater depth in her latest book *How We Became Posthuman* – **which she has also presented at Penn State Conference on Rhetoric and Composition, July 6-9 1997 on [Prosthetic Rhetoric and the Posthuman Body](#)**

- How information lost its body, that is, how it was conceptualized as a reified entity independent of any material substrate.

- How the cyborg was constructed as a technological and cultural entity from 1945-present; and
- How the version of the "human" defined by the liberal humanist subject is being transformed into the "posthuman."

### **Katherine Hayles' online journey of Posthuman:**

**Liberal Subjectivity Imperiled: Norbert Wiener and Cybernetic Anxiety** is available at

<http://www.english.ucla.edu/faculty/hayles/wiener.htm>

**From Hyphen to Splice: Cybernetic Syntax in *Limbo*** is available at

<http://www.english.ucla.edu/faculty/hayles/limbo.htm>

**Virtual Bodies and Flickering Signifiers** which appeared in *October* 66, Fall 1993, © *October Magazine* and Massachusetts Institute of Technology is available at

<http://www.english.ucla.edu/faculty/hayles/Flick.html>

**Constrained Constructivism: Locating Scientific Inquiry in the Theater of Representation** which appeared in *New Orleans Review*, 18 (1991) and was reprinted in *Realism and Representation Essays on the Problem of Realism in Relation to Science, Literature, and Culture* edited by George Levine is available at

<http://www.english.ucla.edu/faculty/hayles/Cusp.html>

**The On-Line graphical travels of Katherine Hayles** begin with "The Human", which can be found at: <<http://online.itp.ucsb.edu/online/colloq/hayles1/oh/01.html>> - This is the starting thread your journey will be beginning from this very hypertext -in all, there are 22 graphical hypertexts are available for the visit. The graphical travel is a beginning of the references regarding "Liberal Humanist Subject" to the next "Dismantling of the Liberal Humanist Subject" there

she tried to classify the \*Cybernetics\* in Two Periods to next the train of graphical hypertext stops at some references regarding "Virtuality" and "The Posthuman" and then the significant "Split" is taken place as, \*How Important is Embodiment to Posthuman?\* and from the slide 6, the travel enters into the era of "Contemporary Literature" explaining the \*Images of the Posthuman\* and \*Materiality\*.

From this very pointer at

<<http://online.itp.ucsb.edu/online/colloq/hayles1/oh/09.html>> you will read an excerpt from his latest book –the Excerpt is about \*How Does It Mean To Be Posthuman?\* and \*What are we to make of the Posthuman?\* The slide further goes to 13 more and by then you will be reading more great and tantalising references regarding the Posthuman.

(c) Hamlet on the Holodeck: The Future of Narrative in Cyberspace (MIT Press, 1999) --by Prof. Janet H. Murray..Details can be read at <http://web.mit.edu/jhmurray/www/HOH.html>

(Computer technology of the late twentieth century is astonishing, thrilling, and strange, and no one is better qualified than Janet Murray to offer a breathtaking tour of how it is reshaping the stories we live by. Can we imagine a world in which Homer's Iyre and Gutenberg's press have given way to virtual reality environments like the **Star Trek** holodeck? Prof. Murray sees the harbingers of such a world in the fiction of Borges and Calvino, movies like **Groundhog Day**, and the video games and web sites of the 1990s. Taking up where Marshall McLuhan left off, Murray offers profound and provocative answers to these and other questions...**Hamlet on the Holodeck** is a brilliant blend of imagination and

techno-wizardry that will provoke readers and guide writers for years to come..)

(d)  Holding on to Reality: The Nature of Information at the Turn of the Millennium (University of Chicago Press, 1999) --by Prof. Albert Borgmann [ *Holding On to Reality* is a brilliant history of information, from its inception in the natural world to its role in the transformation of culture to the current Internet mania and its attendant assets and liabilities. Drawing on the history of ideas, the details of information technology, and the boundaries of the human condition, Borgmann illuminates the relationship between things and signs, between reality and information.]

[ *Holding On to Reality* is underscored by the humanist's fundamental belief in human excellence and by the conviction that excellence is jeopardized unless we achieve a balance of information and "the things and practices that have served us well and we continue to depend on for our material and spiritual well-being--the grandeur of nature, the splendour of cities, competence of work, fidelity to loved ones, and devotion to art or religion."  *Holding On to Reality* is an eloquent call for caution and historical understanding, and everyone concerned with the future of information technologies will find their thinking enlivened and enriched by Borgmann's lucid and impassioned exploration.]

An interesting *duet* --interview/dialogue **with Albert Borgmann and N. Katherine Hayles** on *humans and machines* is available at

<http://www.press.uchicago.edu/Misc/Chicago/borghayl.html>

**An excerpt from  *Holding On to Reality*  
 *The Nature of Information at the Turn of the Millennium* by Albert Borgmann** is available at

<http://www.press.uchicago.edu/Misc/Chicago/066258.html>

and **An excerpt from How We Became Posthuman Virtual Bodies in Cybernetics, Literature, and Informatics** by **N. Katherine Hayles** is available at

<http://www.press.uchicago.edu/Misc/Chicago/321460.html>

(e) Database Nation: The Death of Privacy in the 21st Century (O'Reilly Press, January 2000) -by Mr. Simson Garfinkel

(f) Quantum Generation: A History of Physics in the 20th Century (Princeton University Press) --by Dr. Helge Kragh

(g) Slaves of The Machines: The Quickening of Computer Technology -by Prof. Gregory J.E. Rawlins (MIT Press)

(h) Telerobotics, Automation, and Human Supervisory Control --by Prof. Thomas B. Sheridan (MIT Press)

(i) Othermindedness: The Emergence of Network Culture --by Prof. Michael Joyce (known as Granddaddy of Hypertext Fiction) (University of Michigan Press)

(j) CONTEXTUAL MEDIA: Multimedia and Interpretation -edited by Prof. Edward Barrett and Dr. Marie Redmond (MIT Press)

(k) Crossing the Postmodern Divide -by Prof. Albert Borgmann (University of Chicago Press)

An important Quote from the above book:

{The postmodern condition} is still a deeply ambiguous constellation that may be resolved in two very different ways. One, which is the direct descendent of modern

technology and is much more prominent at the surface of recent developments, I call hypermodernism. It is devoted to the design of a technologically sophisticated and glamorously unreal universe, distinguished by its hyperreality, hyperactivity, and hyperintelligence. Hypermodernism derives much of its energy from its supposed alternative, a sullen resignation to the decline of the modern era, a sullenness that is palpable, particularly in this country. There is, however, a way of life beyond sullenness and hyperactivity. It is a recovery of the world of eloquent things, a recovery that accepts the postmodern critique and realizes postmodern aspirations. I call this recovery postmodern realism and point up its emerging characteristics--focal realism, patient vigor, and communal celebration.}

**(I) Technology and the Character of Contemporary Life –by Prof. Albert Borgmann (University of Chicago Press)**

**In 'Culture Of Technology' --Prof. Albert Borgmann has also expressed his views and stressed on Consumption, Community and Celebration as in his own words "The Character of contemporary culture is best captured, I believe, by the term technology. It reminds us of the artifacts and procedures that distinguish our time. And, on Consumption he said Consumption is the adversary of community. In a philosophical sense, consumption is the unencumbered enjoyment of glamorous commodities.."**

**Scholar/Philosopher Prof. Albert Borgmann wants you to pry yourself free and grasp actual reality. With its uniqueness, and great in weight and "burden" it will command your serious attention. Virtual reality merely requires your fast-fingered**

manipulation. The flood of Information today threatens to overflow, suffocate and even obliterate actual reality, says the University of Montana philosophy professor Albert Borgmann. The "lightness" of technological information seems bent on overcoming the "moral gravity" and "material density" that real things naturally possess and that demand our mindful engagement. Virtual reality, in this regard seems amoral at best. Professor Borgmann is not asking us to abandon technological information, but he is calling us (giving us a warning --play safe) to link it effectively to "things and practices that provide for our material and spiritual well-being. So, his latest classic..\*Holding On to Reality: The Nature of Information at the Turn of the Millennium\* published by University of Chicago Press, 1999, is a highly recommended classic and brilliant coverage of History of Information, Signals and Technological Information.

In the essay "Trees, Forestry, and the Responsiveness of Creation" written by Brian Walsh, Marianne Karsh and Nik Ansell the authors discussed his works, as –In Crossing the Postmodern Divide, Albert Borgmann contrasts his own version of Postmodern realism with the epistemological despair of post modernity. For complete reading of this essay, please point your browser to

<http://www.crosscurrents.org/trees.htm>

In other essay, "Colonizing the Imagination: Disney's Wilderness Lodge" written by Jennifer Cypher and Eric Higgs --an eloquent written essay, discussed heavily the latest researches of "Albert Borgmann" – as Albert Borgmann, an American philosopher of technology, provides a theory of technology that

accounts for a distinctive pattern underlying contemporary life. His theory of the device paradigm includes a decomposition of focal things --things which affirm bodily and social engagement with things that matter deeply to us --into two constituent parts: a commodity and machinery. For complete reading of the essay, please point your browser to (<http://www.ethics.ubc.ca/papers/invited/cypher-higgs.html>)

(m) **Computers AND THE Humanities –special Issue on SENSEVAL** (Guest Editors: Adam Kilgarriff and Martha palmer) with Editors: Prof. Nancy Ide & Dr. Elli Mylonas –Kluwer Academic Publishers [SENSEVAL was the first open, community-based evaluation exercise for (WSD) Word Sense Disambiguation programs. Before a WSD problem is well-defined, a set of word senses to disambiguate between is required.]

(n) **THE CHILDREN’S MACHINE: Rethinking School in the Age of the Computer** –by Prof. Seymour Papert (author of Mindstorms and creator of Logo) –Basic Books

(o) **Dancing with the Devil: Information Technology and the New Competition in Higher Education** –by Richard N. Katz & Associates –a publication of EDUCAUSE (an international nonprofit association dedicated to transforming education through information technologies)

(p) **Preparing Your Computer for a Networked Future** –ed. Mark A. Luker (Jossey-Bass Publishers)

(q) **Cybernetics & Human Knowing** –a journal of Second-order cybernetics autopoiesis and cyber-semiotics, Vol.7, No.1, 2000 (Issue: The Embodied Mind and the Baldwin Effect) Cybernetics and

Human Knowing is a quarterly international multi- and transdisciplinary journal focusing on *second-order cybernetics* and *cybersemiotic* approaches. The journal is devoted to the new understandings of the self-organizing processes of information in human knowing that have arisen through the cybernetics of cybernetics, or second order cybernetics its relation and relevance to other interdisciplinary approaches such as C.S. Peirce's semiotics.

(r) **RELEASE 2.1: A Design for living in the DIGITAL AGE** –by Dr. Esther Dyson (Broadway Books)

(s) **Planning for Student Services: Best Practices for the 21<sup>st</sup> Century** –Ed. Martha Beede and Darlene Burnett (SCUP: Society for College and University Planning)

(t) **Collaboration: How to find, design and Implement Collaborative Internet Projects** –by Betsy Burgess and Patricia Robertson (BonusPoint Inc.)

(u) ***THE FUTURE DOES NOT COMPUTE:***  
**Transcending the Machine in our Midst** –by Stephen Talbott

(v) **The University: The Knowledge Society** –eds. Peter Baggen, Agnes Tellings, Wouter van Haafter

(w) **Revolutionary Strategy for the Knowledge Age** –by Donald M. Nooris (Published by Society for College and University Planning)

(x) **Transforming Higher Education –A Vision for Learning in the 21<sup>st</sup> Century** –by Michael G. Dolence and Donald M. Nooris (Published by Society for College and University Planning)

(y) Unleashing the Power of Perpetual Learning –by Donald M. Nooris & Theodore Roosevelt Malloch (Published by Society for College and University Planning)

(z) Enabling Technologies for Petaflops Computing – by Thomas Sterling, Paul Messina and Paul H. Smith (MIT Press, 1995)

(I) THE CLOSED WORLD: COMPUTERS and the Politics of DISCOURSE in Cold War America, Paul N. Edwards (MIT Press, 1997)

(II) ARTIFICIAL INTELLIGENCE: The Very Idea by Prof. John Haugeland, MIT Press, 1989 (A Bradford Book)

(III) MIND DESIGN II: Philosophy, Psychology, Artificial Intelligence (revised and enlarged condition) edited by John Haugeland, MIT Press, 1997 (A Bradford Book) [John Haugeland is a Professor of Philosophy at University of Chicago and moreover he is one of the motivated student of Professor Hubert Dreyfus. He is also well known in AI circles as his devoted teacher, Hubert Dreyfus. Mind Design II is the second revised version of his 1981 book **Mind Design** (Mind Design in the sequel). His latest important book is **Having Thought: Essays in the Metaphysics of Mind** Cambridge, MA: Harvard

University Press, 1997) The Mind Design II is a book worthy of careful study of different philosophical perspectives of AI. Any computer scientist and philosopher, who would like to teach, compare different pre-suppositions of philosophy to AI and would like to deliver a course on AI & Philosophy can use this book. John Haugeland also coined the

famous AI term as *GOFAI – Good Old Fashioned Artificial Intelligence.*]

(IV) *Computation & Intelligence* edited by Prof. George F. Luger (MIT & American Association for Artificial Intelligence, 1995)

(V) *What Computers Still Can't Do: A Critique of Artificial Reason* by Prof. Hubert Dreyfus, MIT Press, 1992

(VI) *The Embodied Mind: Cognitive Science and Human Experience* by Francisco Varela, Evan Thompson and Eleanor Rosch (MIT Press, 1993)

(VII) *Computation and Human Experience (Learning in Doing: Social, Cognitive, and Computational Perspectives)* by Prof. Philip E. Agre (CAMBRIDGE University Press, 1997) (This book offers a critical reconstruction of the fundamental ideas and methods of artificial intelligence (AI) research. AI can benefit from new understandings of human nature, and in return, it offers a powerful mode of investigation into the practicalities and consequences of physical realization.)

(VIII) Gernot Böhme Kants *Kritik der Urteilskraft* in neuer Sicht (Suhrkamp Taschenbuch Wissenschaft 1420) 1999 [Das Ernstnehmen der Beispiele in Kants Analytik des Schönen führt den Leser zu den Lebensformen des Rokoko und eines kulturästhetischen Lebens]

(IX) Jacques Derrida *Vom Geist: Heidegger und die Frage* (Suhrkamp Taschenbuch Wissenschaft 995) 1992 (Übersetzt von Alexander Garcia Düttmann)

(X) *The Concept of Mind* by Gilbert Ryle (Waynflete Professor of Metaphysical Philosophy in the University of Oxford) The University of Chicago Press, 1984 (originally published in 1949) [recommended by Hubert L. Dreyfus, Emeritus Professor of Philosophy, at University of California, Berkeley] (In his famous Ryles' Regress –the philosopher Gilbert Ryle (1949) was concerned with critiquing what he called the 'intellectualist legend', which required intelligent acts to be the product of the conscious application of mental rules. Gilbert Ryle (on page 31) argued that intellectualists legend results in an infinite regress of thought (he writes):

“According to the legend, whenever an agent does anything intelligently, his act is preceded and steered by another internal act of considering a regulative proposition appropriate to his practical problems. [...] Must we then say that for the hero's reflection how to act to be intelligent he must first reflect how best to reflect how to act? The endlessness of this implied regress shows that the application of the appropriatedness does not entail the occurrence of a process of considering the criterion.”

In addition to above, the variants of Ryles' regress are commonly aimed at cognitivist theories.

In his **Concept of Mind** (1949), Ryle argued that the mind is not a non-physical substance residing in the body, “a ghost in a machine”, but a set of capacities and abilities belonging to the body. All references to the mental must be understood, at least theoretically, in terms of witnessable activities. His other works include *Dilemmas* (1954), *Plato's Progress* (1966), and *Collected Papers* (2 vol., 1971)

In “Systematically Misleading Expression” (1932) Ryle proposed a philosophical method of dissolving problems by correctly analysing the derivation of inappropriate abstract inferences from ordinary uses of language. And, dealing with the traditional mind-body problem in *The Concept of Mind* (1949), Ryle sharply criticized Cartesian dualism, arguing that adequate descriptions of human behaviour need never refer to anything but the operations of human bodies.

In his book, Gilbert Ryle has also spelled out against the *Official Doctrine* – “With a doubtful exceptions of idiots and infants in arms every human being has both a body and a mind.” – which was coined by *Descartes*, by saying that *It is a category-mistake*.

Ryle, then further defines the two terms, first the *category-mistake* and then clears the meaning of *category-mistake* within the *Official Doctrine* – to the later – Ryle argues that *Descartes* makes a similar mistake by thinking that there is something called the “mind” over and above a person’s behavioural dispositions.

Thoughts (Gedanken des Ryles) of Gilbert Ryle:

Body and mind are harnessed together, but after death the mind may continue to exist.

**MIND** — Mind is internal, body is external (metaphorically speaking, because minds are non-spatial, non-material entities) – according to Ryle – the workings of the mind are wholly private in two respects: First, a person’s mental experiences can only be experienced by that person; Second, even the agent herself cannot explain how the mind is able to affect the body.

Historically, Gilbert Ryle brought the notion of know how to the forefront of philosophical thought in epistemology and philosophy of mind. In his, *The Concept of Mind*, Ryle is claimed that all human behaviour relevant to psychology could be explained exclusively in terms of know how. Ryle offered a dispositional account of knowledge how, which is now widely discredited. In Ryle's own words:

In judging that someone's performance is or is not intelligent, we have,...in a certain matter to look beyond the performance itself. For there is no particular overt or inner performance which could not have been accidentally or 'mechanically' executed by an idiot, a sleepwalker, a man in a panic, absence of mind or delirium or even, sometimes, by parrot...in looking beyond the performance itself,... We are considering his abilities and propensities of which his performance was an actualisation. Our inquiry is not into causes (and a fortiori not into occult causes), but into capacities,...(Ryle 1949, p.45)

(XI) ALCHEMY AND ARTIFICIAL INTELLIGENCE by Hubert L. Dreyfus, December 1965 (RAND Report, P-3244) (The RAND Corporation, Santa Monica, California) [In the Report, Professor Hubert Dreyfus discussed the early successes in programming digital computers that have exhibited simple forms of intelligent behaviour, coupled with belief that intelligent activities differ only in their degree of complexity, and have led to the conviction that the information processing underlying any cognitive performance can be formulated in a program and thus simulated on a digital computer. Hubert Dreyfus also seriously criticized the research of Herbert Simon and Allen Newell on the *Modelling*

*Human Mental Processes, Heuristic Problem Solving and Information Processing in Computer and Man]*

(XII) Heidegger, Coping, and Cognitive Science (*Essays in Honor of Hubert L. Dreyfus Volume 2*) edited by Mark Wrathall and Jeff Malpas (MIT Press, 2000)

(XIII) The Trouble with **Computers**: *Usefulness, Usability, and Productivity* by Thomas K. Landauer (A Bradford Book, MIT Press, 1995)

In a seminar *Modelling human verbal meaning with Singular Value Decomposition* Thomas Landauer presented that *Latent Semantic Analysis (LSA) is computational model of human acquisition and representation of the meaning of words and passages. It assumes that the meaning of a passage can be approximated as the sum of the meaning of its words. Thus, a body of text can be cast as a large system of (ill-conditioned) simultaneous linear equations, which can be solved by SVD. The surprising result is that a wide variety of linguistic and psycholinguistic phenomena are closely modeled in this way.*

*Examples include simulation of the astounding 10/day rate of vocabulary learning by school-children, and passing final exams multiple choice tests. Moreover, model simulations have been used successfully to replace humans in tasks requiring understanding of text. Perhaps the most dramatic example of the latter is scoring essay exams as reliably as expert human raters.*

[Thomas Landauer is President, Knowledge Analysis Technologies and Professor, University of Colorado

at Boulder. He worked on applications of machine understanding of ordinary text for educational and personnel applications based on basic scientific research in psychology and cognitive science at Bellcore and the University of Colorado.]

XIV) Guignon, Charles B. **The Cambridge Companion to Heidegger** – Cambridge University Press, 1993 [Martin Heidegger is now widely recognized alongside Wittgenstein as one of the greatest philosophers of the twentieth century. He redefined the central task of philosophy as the investigation of the nature of being, and has exerted a profound impact on literary theory, theology, aesthetics, environmental studies, as well as mainstream philosophy. Martin Heidegger was one of the most important philosophers of the 20<sup>th</sup> century. He radically challenged traditional philosophical conceptions of human existence, of knowledge and understanding, and of the nature philosophy itself. Nearly all major European intellectual movements in contemporary times have felt the influence of Heidegger in one way or another. He wrote the *magnum opus* **Being and Time** in 1927.] (Thanks to Charles Guignon and Taylor Carman)

(XV) Merleau-Ponty, Maurice **Phenomenology of Perception** – Translated from the French by Colin Smith. Routledge Kegan & Paul, 1962

(XVI) Understanding Computers and Cognition: A New Foundation for Design by Terry Winograd and Fernando Flores (Addison-Wesley) Pearson Education. (1986 by Ablex Publishing Corporation)

(XVII) Planning for Higher Education (Winter 1999-2000) -The Journal of the Society for College and University Planning <http://www.scup.org>

(XVIII) Virtual University Journal (ISSN 1460-7441): A Unique, International Journal Focusing on Distance Learning ed. Clive Robertson.

<http://www.openhouse.org.uk/virtual-university-press/vuj/>

Tripathi, Arun Kumar. "The Internet and Its Uses in Education" pp. 86-107

(XIX) Learning Related Outcomes of Computer Technology in K-12 Education by Kenneth W. Umbach, Ph.D. California Research Bureau

(XX) The Internet: A California Policy Perspective by Dr. Ken Umbach, California Research Bureau

(XXI) Gernot Böhme *Der Typ Sokrates* (Suhrkamp Taschenbuch Wissenschaft) 1998

(XXII) Gernot Böhme *Ethik im Kontext* (Suhrkamp Taschenbuch Wissenschaft) 1997

(XXIII) Don Ihde *Technology and The Lifeworld From Garden to Earth* (Indiana University Press Bloomington and Indianapolis 1990)

(XXIV) *Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I* by Hubert L. Dreyfus (MIT Press, 1991)

(XXV) *The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet* edited by Ken Goldberg (MIT Press 2000)

(XXVI) Don Ihde **EXPERIMENTAL PHENOMENOLOGY An Introduction** (State University of New York Press, 1986)

(XXVII) Friedrich Nietzsche der Antichrist, Insel Taschenbuch: Versuch einer Kritik des Christentums

(XXVIII) Gilles Deleuze Felix Guattari Was ist Philosophie?, Suhrkamp Taschenbuch Wissenschaft

(XIX) **The Intellectual Appropriation of technology** (Discourses on Modernity, 1900-1939) edited by Mikael Hard and Andrew Jamison (MIT, 1998)

(XXX) Immersed in Technology: Art and Virtual Environments edited by Mary Anne Moser and Douglas Macleod (MIT, 1996)

(XXXI) **BODY and WORLD: Samuel Todes** (introductions by Hubert L. Dreyfus and Piotr Hoffman) (MIT, 2001) **The short review of Body and World is available at**

[http://www.amazon.com/exec/obidos/ASIN/0262700824/qid=997979574/sr=2-1/ref=aps\\_sr\\_b\\_1\\_1/104-0068675-9580772](http://www.amazon.com/exec/obidos/ASIN/0262700824/qid=997979574/sr=2-1/ref=aps_sr_b_1_1/104-0068675-9580772)

(XXXII) **PHILOSOPHY OF TECHNOLOGY**—An Introduction (Paragon Issues in Philosophy, 1993) by Don Ihde

(XXXIII) **WHAT IS A HUMAN BEING?** A Heideggerian View by Prof. Frederick A Olafson (Cambridge University Press, 1995)

(XXXIV) **Dreaming as Delirium: How the Brain Goes Out of its Mind** by J. Allan Hobson (MIT Press, 1999)

(XXXV) **John McDowell Geist und Welt** (Suhrkamp Taschenbuch Wissenschaft)

(XXXVI) **Don Ihde Postphenomenology: Essays in the Postmodern Context** (Northwestern University Studies in Phenomenology & Existential Philosophy, 1993)

### **Following Books related to Human Centered Computing, in which I am interested**

**a) The Information Age Trilogy: Vol 1: The Rise of the Network Society, Vol 2: The Power of Identity, Vol 3: The End of Millenium**

by Manuel Castells, Blackwell Publishers, Oxford, UK, 1996-98.

Essential reading for an understanding of the implications of computing and communications technologies.

**b) The Invisible Computer**

by Donald A. Norman, MIT Press, Cambridge, Mass, 1998.

The latest from the pioneer of human-centered computer design.

Also by Don Norman:

**The Psychology of Everyday Things**,  
Harper-Collins, 1988.

**The Design of Everyday Things**  
(paperback version of psychology..)  
Currency/Doubleday, 1990.

**Turn Signals are the Facial Expressions of Automobiles**, Perseus Press, 1993.

**Things that Make us Smart**, Perseus Press, 1994.

**c) Collective Intelligence**

by Pierre Levy, Plenum Trade Press, New York 1997. Piere Levy picks up the streams of "collective intelligence" and "knowledge spaces" found in the work of Doug Englebart and others and develops a fascinating vision of what society could look like if the potential of computing and networking technologies were realized. This is a philosophical/anthropological rather than a technical perspective, but is more far-reaching for that reason .

**d) The Knowledge-Creating Corporation**

Ikujiro Nonaka and Hirotaka Takeuchi, Oxford University Press, New York & Oxford, 1995. This is already a classic on knowledge management in organizations. It makes a sharp contrast between European and Japanese conceptions of knowledge creation and transfer.

**e) America Calling: A Social History of the Telephone to 1940.**

Claude S. Fischer, Univ of California Press, 1994. This is a wonderful study of how one invention influenced society.

**f) Social Network Theory: Methods and Applications (Structural Analysis in the Social Sciences, 8)**

by Stanley Wasserman, Katherine Faust, Cambridge Uni. Press, 1994. This is a good introduction to social network analysis and is very readable for computer scientists.

(Thanks to Dr. Eric Paulos, Professor John Canny and his Human-Centered Computing Seminar Classes)

The book – Buchanan, Richard & Victor Margolin (eds.)  
*Discovering Design: Explorations in Design Studies*.  
University of Chicago Press: Chicago, 1995.  
((This book is a collection of essays which grew out of a conference on the social aspects of design held in Chicago in 1990.))

Ref: [http://www.daaq.net/bibliography/b\\_borgmann.html](http://www.daaq.net/bibliography/b_borgmann.html)

and [http://www.daaq.net/bibliography/b\\_buchanan01.html](http://www.daaq.net/bibliography/b_buchanan01.html)

In the book of Richard Buchanan – **Albert Borgmann**, contributed a chapter on "**The Depth of Design.**"

In the article, Albert Borgmann argues that the province of design is the world of engagement, "the symmetry that links humanity and reality." In his opinion, engagement is declining in the aesthetics of contemporary life, partly as a result of the growing rift between design and engineering. In this system of product creation, engineers focus exclusively on the underlying mechanisms of a product, attempting to improve its functionality and ease of use while shifting away from user engagement at the cost of deskilling the consumer in the use of such products. Conversely, the designer is reduced to producing an aesthetic design that focuses exclusively on a superficial smoothing and styling of the underlying mechanism. Borgmann sees designers as the principle component of humanity's common memory, the trustees and conservators of common values, and the innovators of the exploration and expression of engagement. For a designer to delve only in the superficial is to create a thin gloss that is a poor substitute for the common memory which it has replaced. Rather design must once more fuse engineering and aesthetics to provide the "material setting that provokes and rewards engagement."

One salient quote from the book:--

Design, taken as an objective quality, needs design as a professional practice because the quality of the material culture urgently needs the care and advocacy of professionals. Design as a practice needs design as an object because designers as professionals appear to suffer from an uncertain sense of identity that would be firmed up through the focus on excellence of the material environment. [p. 14]

Besides above books related to the Philosophy, Artificial Intelligence and Cognitive Science – I am also reading following papers, including a thesis such as —

- I) N. Katherine Hayles, **Condition of Virtuality** in *The Digital Dialectic: New Essays on New Media* edited by Peter Lunenfeld
- II) N. Katherine Hayles, **Making a Virtue of Necessity: Pattern and Freedom in Nabakov's ADA**
- III) Paul Kelly, **Self-Organisation in Media Evolution: A Theoretical Prelude to the Internet** (M.A. Thesis, Media Studies New School for Social Research)
- IV) William Gibson, **Neuromancer** –A Mindbender of a read –Village Voice) (ACE BOOKS, NY, July 1984)

The irrelevance of our educational institutions today has been summarized by Albert Borgmann:

"We assume that the increasing length of average education reflects rising requirements of training for typical technological work. But this summary view fails to inquire whether education in this country, for instance, is also of increasing quality; nor, if that were the case, does it ask whether typical labor allows for the exercise of greater

knowledge and training. The answer to both questions is probably negative. To avoid the consequent embarrassment of finding that much of our education is irrelevant to labor, length of education has been put to new purposes which are really foreign to its nature. Since desirable work is scarce, education is used as an obstacle course which is lengthened as such work becomes scarcer. Educational requirements are used as a device to screen applicants. And finally, educational credentials serve to solidify the privileges of professions and the stratification of society." (*Albert Borgmann, Technology and the Character of Contemporary Life: A Philosophical Inquiry, University of Chicago, 1984*) **Who's Killing Higher Education? Corporations and students: the unusual suspects** by Stephen Talbott [Educom Review, March/April 1999]