Further Reading

What this book needs is not so much a bibliography as an orientation manual. A flood of material explaining, contributing to and/or utilizing this or that aspect of ecoDarwinian science is now available, and more comes out every day. A layman (like myself), wishing to survey the paradigm as a whole, to get a sense of what it is, where it came from and where it is going, has his work cut out. Daniel Dennett's writings are a good place to begin. It was Dennett's Consciousness Explained (1991) that turned me onto this exciting field and I owe him big time for doing so. While some of his positions are considered extreme in neuroscience circles and elsewhere, they are intellectually provocative, and closely reasoned. In general, my approach has been to get my head around Dennett's ideas, read further as seemed appropriate, and then consider why not every one agrees with him, (myself included, on a few secondary issues). That strategy saved me from drowning in the literature – and I can recommend it to anyone whose main interest lies not so much in the science itself as the human "landscape" it illuminates: the implications for our self-understanding of the naturalistic, ecological and evolutionary perspective.

The central reason why Dennett has attracted so much controversy is his insistence that anyone who wants to explain consciousness must not invoke it as part of the explanation. As he says in one of his papers: "To me one of the most fascinating bifurcations in the intellectual world today is between those to whom it is obvious – obvious – that a theory that leaves out the Subject is thereby disqualified as a theory of consciousness (in Chalmers's terms, it evades the Hard Problem), and those to whom it is just as obvious that any theory that doesn't leave out the Subject is disqualified." I know which camp that puts me in: Since it is circular to explain subjectivity and consciousness in their own terms, one must either despair of explanation or face the question of how subjectivity could arise in a material world. Given the rapid progress in neuroscience, it seems pre-mature to despair unless one prefers, as many do, that the "Hard Problem" remain unsolved. The conclusion, accordingly, is not to deny that we are conscious beings, but to refrain from appealing to anything like subjectivity when subjectivity is the phenomenon to be explained. My starting point, then, is that however the details come out, people like Dennett and Nicholas Humphrey are holding the right end of the stick.

However... the Roman poet Lucretius was a naturalistic thinker more than two thousand years ago. The central difference between his self- understanding and ours is that we begin to see how the trick of matter-emergent consciousness is done. *Evolution*, *ecology*, *auto-poiesis*

_

Are we Explaining Consciousness Yet? Available on the Web at http://ase.tufts.edu/cogstud/papers/cognition.fin.htm.

(or *self- organization*) and the underlying concept of *system* are the key ideas. The central metaphor is Gregory Bateson's: Mind is not an immaterial substance, not a kind of engine, and not a computer. It seems most like a kind of ecology: a pattern that emerges in the functioning and interaction of a great many separate cells with no central direction whatever (apart from the general context they produce together), much as a forest emerges from the interaction of a great many living organisms. Anyone wishing to unpack this metaphor and grasp its implications, finds six main strands to follow:

- There is the question of what it means to be a self-constructing, self-maintaining system. As a good part of our understanding of such systems has been gained in attempts to duplicate their functions artificially, some branches of engineering especially communications engineering, cybernetics and artificial intelligence are relevant. (See *Systems Theory and Engineering*, page 332)
- Next comes biology, with a focus on ecology and evolution, of course, but also on the crucial puzzle of genetics and foetal development how a single fertilized ovum becomes an organism of its kind. It turns out, remarkably, that this developmental process is itself Darwinian and ecological in nature. (See *Biology*, *Evolution and Ecology*, page 335)
- Within biology, there must be special focus on the brain and nervous system, especially on their processes of signaling, and on the perceptual and affect systems that evaluate events in the world for their significance to us. This broad field is called neuroscience with its various related specialties. (See *Neuroscience*, page 338)
- We also need to learn what we can about the Mind as such as we experience our own subjectivity, and as we observe comparable effects in others. Psychology (the generic name for this effort) also has numerous sub-specialties. Apart from neuropsychology, concerned with tracing the link of feelings, thoughts and intentions with physiological events in the nervous system, two other sub-disciplines of psychology have special interest for us: One of these is evolutionary psychology, which seeks to work out what it can about "human nature" the aptitudes, propensities and quirks with which evolution has equipped our species. The other is social psychology, specifically focused on the propensities and suggestions that guide our participation in groups, and our relationships with other individuals. (See *Psychology and the Mind*, page 339)
- Corresponding to our human social proclivities, we have sciences relatively primitive ones as yet to study the social institutions that result. In an "ecology of Mind," these must not be over-looked because a mind is more the product of its environment and relationships than of the wetware that supports it. It is conceivable (the idea has been raised) that human personalities may someday be recorded (as we now record appearance and voice) and then uploaded to a server for a kind of immortality in cyberspace. But no one thinks that a mind or personality can be detached from the society in which it was nurtured and educated, from the skills it learned, the work it did, the ideas and prejudices it

- entertained. (See Anthropology and Social Science, page 343)
- Finally, there are traditions of religion and philosophy. From one perspective these are obstacles, rival accounts that our inquiry must overcome and clear away. But they are also sources of concepts, questions and values that are still valid, and of suggestions that have directed and that still direct our lives and institutions. They are part of our history, part of our minds, part of who we are. Even in overcoming them we remain in many ways attached to them. In any case, it is vital to understand them: what we can keep of this heritage, and what we shall have to discard. (See *Religion and Philosophy*, page 346)

For a survey of the kind undertaken here, the Internet is a superb tool. Any errors of detail that a more scholarly approach would catch and correct are more than compensated by the sheer convenience of access to this global archive of information and opinion, and by the vivid graphics often deployed in its presentation. In painting a landscape, the leaves on each tree are less important than the sweep and mood of the prospect before you. Surfing on the Web, you can get a sense of the landscape that would be much harder to obtain in a library. Moreover, in a field evolving as rapidly as this one, the materials available – and many details – are changing on a weekly basis – and web sites are easier to update than books. So, for further reading, I suggest you go on-line and explore for yourself. Merely to help in getting started, a few books and sites, organized under headings that correspond to the strands just mentioned, are listed below. To save space, I've suppressed most of the Wikipedia entries, which usually provide excellent introductions to the topics mentioned. Lifetimes of study begin with the first mouse click, and the main question is, "How deep do you want to go?"

Systems Theory and Engineering

Adaptive Systems

www.calresco.org/lucas/cas.htm www.eas.asu.edu/~kdooley/casopdef.html www.casresearch.com

Artificial Intelligence

 $http://users.erols.com/jsaunders/papers/aitechniques.htm\\ www.cse.msu.edu/dl/SciencePaper.pdf$

Biomimicry

http://en.wikipedia.org/wiki/Biomimicry

Butterfly Effect (see also Chaos Theory)

www.cmp.caltech.edu/~mcc/chaos new/Lorenz.html

Chance and Necessity

http://dannyreviews.com/h/Chance_and_Necessity.html http://en.wikipedia.org/wiki/Random

Chaos Theory, Edge of Chaos

http://users.viawest.net/~keirsey/eofchaos.html http://users.viawest.net/~keirsey/Inv.html

<u>Collective Intelligence – Swarm Logic and Stigmergy</u>

Out of Control, Kevin Kelly – see www.kk.org/outofcontrol/ch2-g.html

www.advancedlab.pe.kr/wiki/index.php?CollectiveIntelligenceIn SocialInsects

www.sce.carleton.ca/netmanage/tony/swarm.html

http://pespmc1.vub.ac.be/Papers/Distr.CognitionFramework.pdf

www.stigmergicsystems.com/

www.geocities.com/fastiland/Teaching/acs/swarm.html

www.red3d.com/cwr/boids/index.html

www.casresearch.com/

Complexity, Science of

http://complexity.orcon.net.nz/ www.santafe.edu/index.php

Cybernetics

http://pespmc1.vub.ac.be/TOC.html#CSTHINK www.asc-cybernetics.org/foundations/timeline.htm

Holarchy and Emergence

www.worldtrans.org/essay/holarchies.html

http://arxiv.org/ftp/nlin/papers/0506/0506028.pdf

http://llk.media.mit.edu/projects/emergence/index.html

http://www.panarchy.org/koestler/holon.1969.html

Fractals, Self-Similarity, Re-entrant Form

A Recursive Vision, Peter Harries-Jones, 1995 http://library.thinkquest.org/26242/full/index.html www.taos-telecommunity.org/epow/EPOW-Archive/archive_ 2003/EPOW-031117.htm

Fuzzy Logic

Fuzzy Thinking, Bart Kosko www.fuzzy-logic.com/

Information, Concept of & Problems With

www.capurro.de/infoconcept.html http://okmij.org/ftp/Computation/limits-of-information.html www.capurro.de/trialog.htm

Neural Networks and Computational Neuroscience

www.doc.ic.ac.uk/~nd/surprise_96/journal/vol4/cs11/report.html http://vv.carleton.ca/~neil/neural/index.html www.cs.dartmouth.edu/~brd/Teaching/AI/Lectures/ NN/neural.html

www.shef.ac.uk/psychology/gurney/notes/index.html www.neurocomputing.org http://diwww.epfl.ch/mantra/tutorial/english/index.html

Power Laws

www.shirky.com/writings/powerlaw_weblog.html http://complexityworkshop.com/sun/PLaw/index.html http://econophysics.blogspot.com/2006/07/tyranny-of-power-law-and-why-we-should.html

Production Systems

http://edutechwiki.unige.ch/en/Production_system http://cogprints.org/1477/ www.thymos.com/tat/cognitio.html

Self Organization, the Self-So (zi ran and wu wei)

www.physicsdaily.com/physics/Self-organization http://cscs.umich.edu/~crshalizi/notebooks/ self-organization.html www.calresco.org/index.htm www.santafe.edu/

Self-programming and Self-Reference

www.idsia.ch/~juergen/goedelmachine.html http://informatics.indiana.edu/rocha/kampis.html www.december.com/cmc/mag/1997/dec/langham.html

Simulation, Ecological Simulation

www.csi.uoregon.edu/nacse/ecosim/ www.red3d.com/cwr/ibm.html www.exetersoftware.com/cat/Trinity/ecosim.html www.ecobeaker.com/

Suggestion and Influence

http://en.wikipedia.org/wiki/Suggestion www.rickross.com/reference/brainwashing/brainwashing20.html http://changingminds.org/index.htm www.clinicalsocialwork.com/dealing.html

Systems, Closed and Open

www.panarchy.org/vonbertalanffy/systems.1968.html http://en.wikipedia.org/wiki/Open_system_%28systems_theory%29 www.managementhelp.org/systems/systems.htm

Trans-humanism and "The Singularity"

www.dailygalaxy.com/my_weblog/2007/09/ai-singularit-2.html www.wtec.org/ConvergingTechnologies/ www.nickbostrom.com/ www.kurzweilai.net/articles/art0134.html?printable=1 http://bioethicsnews.com/category/nanotechnology/

Biology, Evolution and Ecology

Baldwin Effect and Niche Construction

www.st-andrews.ac.uk/~seal/niche/ www.geocities.com/Athens/4155/edit.html http://ase.tufts.edu/cogstud/papers/baldwincranefin.htm

Bio-semiotics

www.library.utoronto.ca/see/pages/biosemioticsdef.html www.nbi.dk/~emmeche/cePubl/2003a.bs01entry.html www.ento.vt.edu/~sharov/biosem/ www.zbi.ee/~uexkull/biosem.htm

Cell Biology

http://library.thinkquest.org/12413/ www.geocities.com/jjmohn/endosymbiosis.htm www.cellsalive.com/

Cladistics

www.fossilnews.com/1996/cladistics.html www.ucmp.berkeley.edu/clad/clad1.html

Cooperation, Evolution of and Game Theory

http://endeavor.med.nyu.edu/~strone01/altruism.html http://pespmc1.vub.ac.be/COOPEVOL.html http://users.tpg.com.au/users/jes999/5.htm http://taumoda.com/web/PD/setup.html

Culture, Non-human

(cultural primatology, biological anthropology)
The Evolution of Culture in Animals, John Tyler Bonner
http://biologybk.st-and.ac.uk/cultures3/articles/deWaal.html
www.geocities.com/CapeCanaveral/Lab/9893/
http://www2.gsu.edu/~psysfb/Manuscripts/McGrew%20
Review%20AJP%202006.pdf

Developmental Biology (Evo-Devo)

http://www.newyorker.com/archive/2005/10/24/ 051024crbo_books1 www.ucalgary.ca/UofC/eduweb/virtualembryo/dev_biol.html www.acs.ucalgary.ca/~browder/dydev_at_glance.html www.kli.ac.at/theorylab/Areas/DB.html www.cellmigration.org/science/ www.sciam.com/article.cfm?articleID=0005D708-2F7C-123B-AF7C83414B7F0000

Ecology and Ecosystems

www.linnaeus.uu.se/online/eco/darwin.html

http://library.thinkquest.org/11353/ecosystems.htm

http://en.wikipedia.org/wiki/Ecosystem

http://plato.stanford.edu/entries/ecology/

www.greenleft.org.au/back/1991/19/19p10.htm

www.ecologyandsociety.org/

 $www.wikisummaries.org/The_Tipping_Point$

www.wordspy.com/words/tippingpoint.asp

www.iht.com/articles/2007/11/16/opinion/edmoon.php

Evolution, Theory of

www.talkorigins.org/origins/faqs-evolution.html

www.pbs.org/wgbh/evolution/

http://evolution.berkeley.edu/

www.becominghuman.org/

www.blackwellpublishing.com/ridley/a-z/

Genes and Genetics, Genome Project

www.accessexcellence.org/AE/AEPC/NIH/gene03.html

www.mun.ca/biology/scarr/b4241d.html

www.ornl.gov/sci/techresources/Human_Genome/publicat/

primer2001/index.shtml

http://nobelprize.org/educational_games/medicine/gene-code/

www.americanscientist.org/amsci/issues/Comsci98/compsci9801.html

http://sandwalk.blogspot.com/2007/02/real-genetic-code.html

http://www.americanscientist.org/template/AssetDetail/assetid/37228

http://homeobox.biosci.ki.se/

http://en.wikipedia.org/wiki/Body plan

http://en.wikipedia.org/wiki/Evolutionary developmental biology

Geology, the Age of the Earth and Plate Tectonics

www.talkorigins.org/faqs/faq-age-of-earth.html

http://home.entouch.net/dmd/age.htm

www.ucmp.berkeley.edu/exhibits/geologictime.php

www.moorlandschool.co.uk/earth/tectonic.htm

www.ucmp.berkeley.edu/geology/tectonics.html

Group Selection

www.blackwellpublishing.com/ridley/a-z/Group selection .asp

www.physorg.com/news115476686.html

www.bbsonline.org/Preprints/OldArchive/bbs.wilson.html

Hypersea

www.medobserver.com/aug2002/hypersea.html

www.test.earthscape.org/r3/mcmenamin/mcmenamin12.html

http://discovermagazine.com/1995/oct/hyperseainvasion571

Life (What is it?)

www.panspermia.org/whatis2.htm http://academic.sun.ac.za/medphys/life.htm http://dieoff.org/page150.htm

www.newton.dep.anl.gov/askasci/bio99/bio99171.htm

Medicine, ecoDarwinian

http://evolution.berkeley.edu/evolibrary/article/medicine_01 www.evolutionandmedicine.org/ www.sehn.org/ecomedicine.html

Social Insects

www.ndsu.nodak.edu/entomology/topics/societies.htm http://ai-depot.com/Essay/SocialInsects.html http://evolutionofcomputing.org/Multicellular/Stigmergy.html

Sociobiology

See "Human Nature" in Anthropology and Social Science

Neuroscience

Neuroscience (Introductory)

http://faculty.washington.edu/chudler/hist.html www.thebrain.mcgill.ca/flash/index_d.html http://en.wikipedia.org/wiki/Neuroscience Neurophysiology (how brains work) www.cyberpunks.org/freeside/mab_neuro1.html www.cyberpunks.org/freeside/mab_neuro2.html www.cyberpunks.org/freeside/mab_neuro3.html

Neuroanatomy (how human brains are configured)

http://library.med.utah.edu/WebPath/HISTHTML/ NEURANAT/NEURANCA.html www.portfolio.mvm.ed.ac.uk/studentwebs/session2/ group10/Neuroanatomy.htm

Neuropsychology (the brain – mind relationship)

The Synaptic Self, Joseph LeDoux
The Feeling of What Happens, Antonio Damasio
The Neuroscience of Psychotherapy, Louis Cozolino
www.humphrey.org.uk/papers/2000MindBodyProblem.pdf
http://en.wikipedia.org/wiki/Category:Neuroscience
www.apa.org/monitor/nov05/neuroscience.html
www.acsu.buffalo.edu/~emiii/index.htm
http://psyche.cs.monash.edu.au/v4/psyche-4-10-taylor.html
http://gustavus.edu/academics/philosophy/lcogsci.html
http://www.brainsource.com/neuropsy.htm

Psychology and The Mind

Affect and Emotion

Shame and Pride, Affect Sex and the Birth of the Self, Nathanson www.affectivetherapy.co.uk/news.htm www.hedweb.com/bgcharlton/damasioreview.html www.jnd.org/dn.mss/CH01.pdf

Affordance Theory

www.learning-theories.com/affordance-theory-gibson.html www.jnd.org/dn.mss/affordances and.html

Attachment Theory

www.personalityresearch.org/attachment.html http://attachment.edu.ar/outline.html

Cognitive Development

www.childdevelopmentinfo.com/development/piaget.shtml www.psy.pdx.edu/PsiCafe/Areas/Developmental/CogDev-Child/

Consciousness

www.tjonard.ws/mind.html

http://en.wikibooks.org/wiki/Consciousness studies

www.klab.caltech.edu/~koch/crick-koch-cc-97.html

www-personal.umich.edu/~lormand/phil/cons/consciousness.htm

www.sciencenews.org/articles/20060211/bob9.asp

http://consc.net/online.html

www.sciencenews.org/articles/20060211/bob9.asp

http://ase.tufts.edu/cogstud/papers/cognition.fin.htm

www.tartanhen.co.uk/mind/zombie.htm

http://users.ecs.soton.ac.uk/harnad/Papers/Py104/searle.prob.html

www.consciousentities.com/index.php

Consciousness, States of – Dreaming and Dreams

www.scholarpedia.org/article/Neural_Correlates_of_Consciousness http://psych.ucsc.edu/dreams/Articles/purpose.html

www.dreams.ca/

http://www.vanguard.edu/faculty/ddegelman/amoebaweb/index.aspx?doc_id=875

ecoDarwinian Psychology, Ecology of Mind

www.oikos.org/psicen.htm

www.danieleastwell.co.uk/body.html

www.csulb.edu/~kmacd/MOTIVATE.PDF

http://home.comcast.net/~reillyjones/consciousa.html

www.psych.utah.edu/stat/dynamic_systems/Content/

examples/E42_Manual/Eco-of-Mind_CNS/

Further-Steps Intro.html

http://ecopsychology.athabascau.ca/

www.psych.utah.edu/stat/dynamic_systems

http://ist-socrates.berkeley.edu/~kihlstrm/mnemosyne.htm

http://cogprints.org/2130/00/dennett-chalmers.htm

Evolutionary Psychology and Sociobiology

See "Human Nature" in the Anthropology and Social Science Section

Flow, Csikszentmihalyi's theory of

www.austega.com/gifted/articles/flow.htm www.unrealities.com/essays/flow.htm

Judgment and mis-judgment (akrasia)

http://plato.stanford.edu/entries/self-deception/

http://www.philosophy.ubc.ca/prolegom/backissues/papers/

Schwartz.htm

http://www.utilitarian.org/akrasia.html

Language, Evolution of

The Symbolic Species, Terence Deacon

http://www.childrenofthecode.org/interviews/deacon.htm

http://williamcalvin.com/LEM/

http://jasss.soc.surrey.ac.uk/5/2/4.html

http://seedmagazine.com/news/2007/09/the_evolution_of_

language.php

Needs, Maslow's Hierarchy of

www.ship.edu/~cgboeree/maslow.html

http://www.xenodochy.org/ex/lists/maslow.html

http://honolulu.hawaii.edu/intranet/committees/FacDevCom/

guidebk/teachtip/maslow.htm

Personality

www.ship.edu/~cgboeree/conclusions.html

www.ship.edu/~cgboeree/perscontents.html

www.ptypes.com/overviews.html

www.personalityresearch.org/

Self, Concept and Evolution of the

www.bizcharts.com/stoa del sol/conscious/conscious3.html

www.accampbell.uklinux.net/essays/skeptic/jaynes.html

www.soton.ac.uk/~crsi/thesymbolicself.pdf

www.soton.ac.uk/~crsi/evololutionofthesymbolicself.pdf

http://pegasus.cc.ucf.edu/~gallaghr/tics2000.html

http://serendip.brynmawr.edu/bb/neuro/neuro99/

web3/Sancar.html

Sensation, Perception, Interpretation

http://ccrg.cs.memphis.edu/tutorial/PDFs/Sensing& Perceiving.pdf http://pagesperso-orange.fr/philospir/Lesson14.htm

Social Psychology (Persuasion and Influence)

www.geocities.com/l_zinkiewicz/socialpsych.html www.LuciferEffect.com http://en.wikipedia.org/wiki/Herd_behavior http://www.trinity.edu/~mkearl/socpsy.html http://webspace.ship.edu/cgboer/socpsy.html www.spring.org.uk/2007/11/10-piercing-insights-intohuman-nature.php

Transpersonal Psychology

www.naropa.edu/faculty/johndavis/tp/index.html www.mdani.demon.co.uk/trans/tranlink.htm http://en.wikipedia.org/wiki/Transpersonal_psychology www.transpersonalpsychology.ca/ http://home.wxs.nl/~brouw724/Assagioli.html www.imprint.co.uk/Wilber.htm

Unconscious Mind

www.ayrmetes.com/articles/conscious_and_unconscious.htm http://ist-socrates.berkeley.edu/~kihlstrm/rediscovery.htm

Anthropology and Social Science

Anthropology, Cultural (Ethnology)

http://en.wikipedia.org/wiki/Ethnology www.vanderbilt.edu/anthro/intro http://anthro.palomar.edu/tutorials/cultural.htm www.anthro.net/

Anthropology Physical

See Human Evolution below

Cities

www.ecospherics.net/pages/RoweCities.html

Conflict Theory

www.encyclopedia.com/doc/1088-conflicttheory.html www.d.umn.edu/~jhamlin1/conflict.html www.drnadig.com/conflict.htm

Cultural Evolution and Meme Theory

www.cscs.umich.edu/~crshalizi/formerly-hyper-weird/memetics.html

http://jom-emit.cfpm.org/1998/vol2/rose_n.html http://jom-emit.cfpm.org/1998/vol2/lynch_a.html www.istop.com/~ggrant/memetics/memelex.html www.memecentral.com/Level3.htm http://edge.org/3rd_culture/dennett/dennett_p2.html www.percepp.demon.co.uk/evltcult.htm

Firms, Theory of

www.tinbergen.nl/~buhai/papers/others/incomplete_contracts.pdf www.scribd.com/doc/239542/The-Theory-of-the-Firm http://papers.ssrn.com/sol3/papers.cfm?abstract_id=903746 http://som.eldoc.ub.rug.nl/FILES/reports/1995-1999/themeB/ 1997/97B05/97b05.pdf http://william-king.www.drexel.edu/top/prin/txt/mpch/firm1.html

Government and Society

www.g7.utoronto.ca/scholar/2002/bell11062002.pdf www.thecorporation.com/media/TheRoleOfGovernment.pdf www.caledoninst.org/PDF/553820495.pdf www.wordwiz72.com/govt.html www.heartacademy.org/2006/debakey.pdf

"Human Nature"

The Birth of the Mind , Gary Marcus http://bostonreview.net/BR28.6/marcus.html www.personalityresearch.org/evolutionary.html www.anth.ucsb.edu/projects/human/evpsychfaq.html www.psych.ucsb.edu/research/cep/primer.html www.evoyage.com/http://human-nature.com/darwin/books/tattersall.html www.edge.org/3rd_culture/haidt07/haidt07_index.html http://cscs.umich.edu/~crshalizi/notebooks/evol-psych.html http://www-personal.umich.edu/~kruger/www.cato.org/research/articles/wilkinson-050201.html www.elon.edu/arcaro/titles/partiv.htm

Human Evolution

www.snowcrest.net/goehring/a2/primates/fossils.htm#intro http://johnhawks.net/weblog/topics/evolution/selection/ acceleration_embargo_ends_2007.html www.palomar.edu/anthropology/

Language

The Symbolic Species, Terence Deacon
www.brainconnection.com/topics/?main=fa/evolution-language
http://nationalzoo.si.edu/publications/zoogoer/1995/6/
machiavellianmonkeys.cfm
http://webspace.ship.edu/cgboer/langevol.html
http://jasss.soc.surrey.ac.uk/5/2/4.html
www.metaresolution.com

Meme Theory

see Cultural Evolution

Political Psychology and Political Theory

www.trinity.edu/mkearl/spy-pol.html http://en.wikipedia.org/wiki/State http://economics.about.com/cs/macroeconomics/a/ logic of action.htm

Political Entrepreneurs

http://en.wikipedia.org/wiki/Political_entrepreneur

Public Interest, Concept of

http://en.wikipedia.org/wiki/Public interest

Social/Association Networks

http://en.wikipedia.org/wiki/Social network

Social Hierarchies

see also holarchy in General Systems Theory www.experiencefestival.com/hierarchy

Sociology, Social Psychology and Social Behaviour

http://en.wikipedia.org/wiki/Social_group
http://en.wikipedia.org/wiki/Group_dynamics
www.psych.ucsb.edu/research/cep/primer.html
www.socialpsychology.org/
www.ship.edu/~cgboeree/socpsy.html
www.trinity.edu/~mkearl/socpsy.html
http://changingminds.org/explanations/needs/conformity.htm
http://changingminds.org/explanations/theories/a_conforming.htm
www.usyd.edu.au/su/social/robert/papers/ritzer.htm
www.edge.org/3rd_culture/haidt07/haidt07_index.html
www.elon.edu/arcaro/titles/partiv.htm

Style and Fashion

www.heia.com.au/heia_graphics/JHEIA82-4.pdf
www.wiwi.uni-bonn.de/sfb/papers/1994/a/bonnsfa462.pdf
www.lib.latrobe.edu.au/AHR/archive/Issue-March-1997/
finkelstein.html
http://web.media.mit.edu/~hugo/ideas/fashiondavis.html
www.sfu.ca/~csmith/genstuff/academic/lab/style.html
www.willamette.edu/cla/ler/learningstyles.htm
www.arts.adelaide.edu.au/humanities/wp/jmcmahon/
ThePossibilityofPerceptualStyle.pdf

Religion and Philosophy

Biology, Philosophy of

http://en.wikipedia.org/wiki/Philosophy_of_biology www.kli.ac.at/theorylab/Areas/PB.html www.hps.cam.ac.uk/research/philofbio.html

Categories and Constructs

Explorations in Common Sense and Common Nonsense,
Daniel S. Levine
www.uta.edu/psychology/faculty/levine/EBOOK/

Constructivism

www.constructivism123.com http://repgrid.com/reports/PSYCH/SIM/index.html

Creation Science

http://emporium.turnpike.net/C/cs/www.creationscience.com/onlinebook/

Disenchanted World

http://www-personal.umich.edu/~mmanty/teaching/example4.html

Emergentism

http://progressiveliving.org/emergentism_defined.htm http://home.sprynet.com/~owl1/emergenc.htm www.brynmawr.edu/biology/emergence/stephan.pdf See also Holarchy and Emergence under Systems, Communication and Cybernetics

Evolution and eD Paradigm, Catholic Position on

www.newadvent.org/library/docs_jp02tc.htm www.catholic.com/thisrock/2004/0401bt.asp

Evolutionary Epistemology and ecoDarwinian Paradigm

http://plato.stanford.edu/entries/epistemology-evolutionary/www.bostonreview.net/BR21.3/Orr.html www.thur.de/philo/project/CA1.htm www.mdpi.org/fis2005

Functionalism

www.philosophyonline.co.uk/pom/pom_functionalism_introduction.htm

Gaia Theory and Philosophy

http://en.wikipedia.org/wiki/Gaia_hypothesis www.greenleft.org.au/back/1991/19/19p10.htm

Gnosticism

www.iep.utm.edu/g/gnostic.htm www.webcom.com/~gnosis/gnintro.htm www.newadvent.org/cathen/06592a.htm

Knowledge Science

www.bcngroup.org/area3/pprueitt/book.htm

Meditation

http://deepfreeze9.blogspot.com/2005/11/damasios-theory-of-consciousness.html

Mind-Body Problem

(see also neurophysiology and the brain)

http://home.sprynet.com/~owl1/mind.htm

www.humphrey.org.uk/papers available online.htm

How to Solve the Mind-Body Problem, Nicholas Humphrey

Mind of God, Creative Universe

www.firstthings.com/ftissues/ft9508/davies.html www.pantheism.net/?gclid=CKPl2ZmujoICFRvsPgoddENyDA

Naturalism, Physicalism, Materialism

http://www.iscid.org/encyclopedia/Physicalism

http://plato.stanford.edu/entries/physicalism/

Nietzsche. Darwin's Influence on

http://ndpr.nd.edu/review.cfm?id=4801

www.hichumanities.org/AHproceedings/James%20Birx.pdf

Perennial Philosophy

http://mythosandlogos.com/perennial.html

Philosophical Biology and Psychology

www.nbi.dk/~emmeche/theobiophi.html

https://darchive.mblwhoilibrary.org/handle/1912/1703

http://pagesperso-orange.fr/philospir/

Religion and Science

www.religioustolerance.org/sci_rel.htm

http://plato.stanford.edu/entries/religion-science/

Spirituality, Ecological and Postmodern

 $www.oates.org/journal/vol-05-2002/reviews/lamothe-01.php\\ www.soulfulliving.com/myth_and_meaning.htm$