

A magazine highlighting research at the University of Oregon

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A Message About Research

## Tiny Worm Provides Big Insights into Life and Death

UO research team exploring the genetics of a worm advances fight against colon cancer in humans

## Better Learning through "Green" Chemistry

Instructor revises laboratory course to be more environmentally friendly

## Piggybank Economics

New economic studies target kids' spending and saving habits

## Speaking in Tongues

Linguist helping northwest tribes hold onto their languages, cultural heritage

## Everyday Mind-reading

Researcher investigating empathy finds men can be as sensitive as women -- for a price

## Becoming What We Are

Scientific disciplines converging on a new understanding of humans and our "social" brains

Tech Transfer Update : UO-connected High-Tech Company Blossoming, Catches Intel's Eye

## **Back Issues**

## **About INQUIRY...**

Return to University of Oregon News and Calendar Page.



#### A Message About Research From



Tom Dyke
Vice Provost for Research

Never before have the benefits of knowledge for society been as clear as they are today. University-based research has contributed enormously to our knowledge and understanding -- as the six stories in the following pages make very clear.

Biologists studying a simple worm find genes that may help stop a deadly cancer responsible for thousands of human deaths each year.

A psychologist exploring empathy sheds light on the motivations that make us attune ourselves to those around us.

Researchers in many fields converge on a new understanding of the human brain based in part on how we evolved as a social species.

A linguist works with Northwest Native Americans in an effort to preserve their languages and cultures.

An economist investigates how children develop their sense of spending, saving and sharing.

And a chemist teaches her students the latest laboratory techniques as well as an increased sense of ecological consciousness.

These are just a few examples of the research taking place at the UO. We are dedicated to furthering this effort and bringing still more benefits to society by continually pushing forward the frontiers of knowledge.

Back to INQUIRY home page

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# Tiny Worm Provides Big Insights into Life and Death

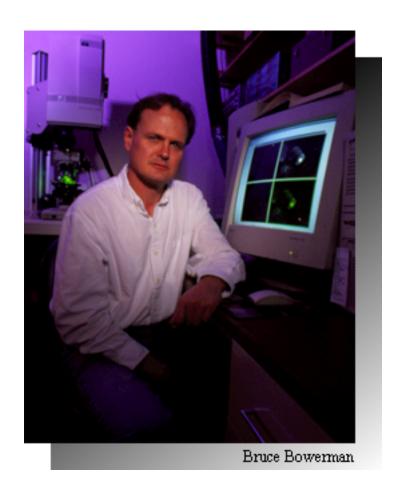
# UO research team exploring the genetics of a worm advances fight against colon cancer in humans

Sometimes big surprises come in small packages. In this case the package is a millimeter-long worm with a life span of about three weeks.

."This little worm, called a nematode, is playing a leading role in a revolution that is about to transform our understanding of biology, probably more so than has any other advance in the history of biological science," says <a href="mailto:Bruce">Bruce</a>
<a href="mailto:Bowerman">Bowerman</a>, a <a href="mailto:University of Oregon biologist">University of Oregon biologist</a> and member of the <a href="mailto:Institute of Molecular Biology">Institute of Molecular Biology</a>.

"We are about to move into an era when we come to understand animals -- including humans -- in terms of their entire genetic make-up."

.The nematode is the first animal for which scientists have compiled a complete genetic makeup, or genome. In other words, researchers now know every one of the roughly 19,000 genes that control virtually every aspect of this animal's growth and development.



In the next few months researchers will complete the fruit fly genome and within a few years the mouse and human genomes. By crosschecking between species, scientists will be better able to piece together an understanding of genes and the controlling effect they exert on development.

A recent advance in Bowerman's lab highlights the value of this crosschecking. In the mid-1990s Bowerman's research group began investigating worm embryos that died because they failed to properly develop intestines. Their research identified six mutated genes that appeared to be to blame for the malformation. In the past two years Bowerman and his colleagues have crosschecked these genes with known human genes and identified human counterparts for five of the six malfunctioning genes -- counterparts that lead to colon cancer in humans.

."Two of the worm genes we found seem to serve as regulators for the other cancer-causing genes," says Bowerman. "If those genes play a similar role in humans, medical researchers may be able to target them as a possible method of cancer treatment."

What is the potential value of this insight into genes? This year, 50,000 Americans will die of colon cancer, the third most common form of the disease. Nearly twice that number will be diagnosed with the disease.

Bowerman's work may have other medical applications as well. In the process of growing and analyzing worm embryos and manipulating their genes, his group has discovered new insights into the fundamental mechanics of how animal cells divide.

."Cell division is one of the most fundamental of all life processes in animals. Through our study we are coming to a deeper understanding of the basic aspects of how this vital process works," he says. "The failure of cells to properly split plays a prominent role in many kinds of cancer as well as numerous other diseases. The more we learn the closer we are to identifying, preventing, or treating a whole host of diseases."

Bowerman, who trained at the Fred Hutchison Cancer Research Center in Seattle, runs a large and active laboratory at the UO. He oversees eight graduate students working toward doctoral degrees focused on various aspects of cell division and development. In addition, two "post-docs" (full-time researchers with Ph.D.s) and a research technician add to the lab's staff.

."Over the years we've had 14 undergraduates work on research projects in the lab," Bowerman adds. "Many of these students have used the skills they gained here as a stepping stone to graduate school, medical school, or professional work in research laboratories."

.The National Institutes of Health are supporting Bowerman's research effort with two major grants worth about half a million dollars per year.

Bowerman believes that the researchers have laid a good foundation for additional productive work with the worm.

#### Developmental Stages of a Nematode

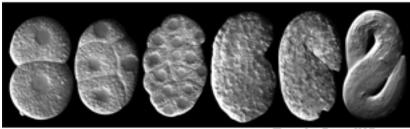


Photo by Bruce W. Draper

."Researchers around the world are discovering enormously valuable information about this small worm, information that is extremely useful in understanding human health and disease. Here at the UO, we plan to continue with our research on the relevant pathways connected to colon cancer."

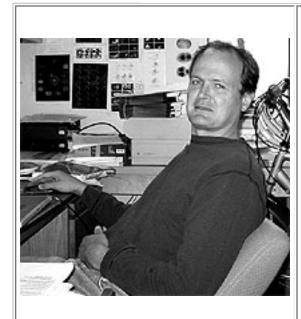
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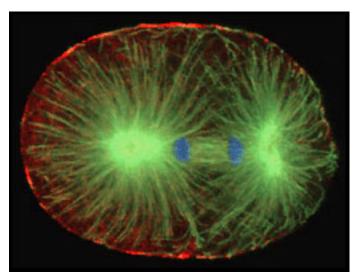
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#### **Research Interests**

The Bowerman lab uses genetics and molecular biology to study cytoskeletal functions relevant to cell polarity and cell division in the early *Caenorhabditis elegans* embryo. The actomyosin cytoskeleton, including NMY-2, is localized to the cell cortex and is important both for generating anterior-posterior polarity, and for the execution of cytokinesis during cell division. The microtubules form the mitotic spindle, with kinetochore MTs capturing and segregating chromosomes, while astral microtubules contact the cell cortex and are important for proper spindle positioning. We are interested in understanding the functions of both the microfilament and microtubule cytoskeleton in the early embryo. Research projects in the lab focus on studies of cytokinesis (both positive and negative regulation of contractile ring activity), mitotic spindle orientation in early embryonic cells, polarization of embryonic cells along the anterior-posterior axis, and the regulation of cell cycle progression in early embryonic cells. For recent publications addressing some of these topics, see selected publications below.



Photograph shows fluorescent imaging of the microtubule and microfilament cytoskeleton in a fixed one-cell stage *Caenorhabditis elegans* embryo late in mitosis (during anaphase).

Microtubules are shown in green, chromosomal DNA in blue, and the non-muscle type II myosin NMY-2 in red. Anterior is to the left.

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## Better Learning through "Green" Chemistry

# Instructor revises laboratory course to be more environmentally friendly

The chemistry laboratory class was over and the 60 students headed out the door with a valuable hands-on lesson learned. But their teacher, <u>University of Oregon chemistry</u> instructor <u>Deborah Exton</u>, was troubled by what was left behind: the results of the students' experiments, including hazardous material destined for a landfill in a certified chemical waste disposal site.

.Compounding the problem, these students represented only a fraction of the 500 enrolled in General Chemistry that term who, together, produced about 80 gallons of hazardous waste material from this one experiment.

."The large number of students taking General Chemistry can create a colossal amount of waste," Exton observes.



Even so, she is adamant about the importance of students doing hands-on chemistry -- so much so that her labs are designed to enable students to perform experiments individually rather than working with lab partners.

."The hands-on experience is so valuable that I insist on it. But the waste bothered me, and I began to wonder if there might not be a more environmentally benign way to teach chemistry," she says.

That was five years ago. Since then Exton has completely revamped the way freshman chemistry laboratory courses are taught at the UO. With the assistance of laboratory preparation assistant Lynn Woolfe, she has adapted old experiments and exercises or created new ones. Now 23 out of 28 experiments that first-year chemists conduct are "green." Exton refers to these as "down-the-drain labs"

where experimental residue is so harmless it can literally be poured down the drain or handled with a minimal amount of waste disposal effort.

Exton says that this approach sits well with UO students, who she describes as generally quite environmentally concerned.

How does "green chemistry" work? The student experiment that spurred Exton's thinking five years ago teaches a central technique of chemical analysis. In the past, students analyzed a liquid containing heavy metals that can be damaging to the environment and toxic to humans.

."But the point of the experiment was not the heavy metals, it was the analysis," Exton explains. "It occurred to me that many compounds would work, including environmentally benign compounds such as the red dye #40 in Kool-Aid. So why not substitute?"

.And that's just what she and UO instructor Chris Grant did.

Other universities have addressed the problem of waste from chemistry labs in a variety of ways. Some have switched over to what is sometimes called "microscale chemistry," where reduced quantities of all compounds used in an experiment are shrunk by, for example, ninety percent. Smaller quantities result in proportionately less waste.

."That is a nice idea," Exton says, "but it has a big drawback. Microscale training is probably not going to be applicable in real-world working situations. In other words, it provides students with a less useful education as compared to what we offer with our green labs."

Some institutions have taken another approach by conducting virtual labs in cyberspace. While these labs create zero hazardous materials and allow students to perform procedures that might otherwise be too dangerous, they too are not without problems.

."When students only have exposure to computer simulations instead of real laboratories, they miss out on a hugely important part of chemistry," Exton says. "With green chemistry, our students work in a real lab and gain hands-on experience that is vital to truly understanding chemistry, which, we must remember, is an experimental science."

Exton observes that students respond much more positively when presented with practical applications.

."My goal is to continue developing experiments that more fully engage students by integrating the laboratory with the outside world," she says.

One experiment students seem to find especially interesting, Exton says, is separating the iron filings from iron-fortified breakfast cereal, followed by an analysis of how this nutrient is chemically available

to the body. "When students remove those filings with a magnet, they really seem to make the connection between chemistry and everyday life," she says.

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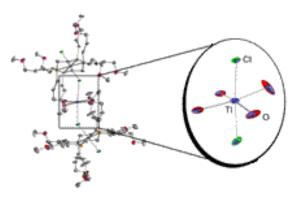
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Photo of Mt. Hood by Bernd Mohr. **WEBMASTER:** lynde@uoregon.edu

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## **UO Lab Discovers Method to Assemble 1-D Coordination Polymers**

Researchers in the Tyler lab recently demonstrated how "arrested" chloride abstraction reactions can be used to assemble 1-D coordination polymers.

PDF: Arrested chloride abstraction from trans-RuCl<sub>2</sub>(DMeOPrPE)<sub>2</sub> with TIPF<sub>6</sub>; formation of a 1-D coordination polymer having unusual octahedral coordination around Thallium(I). Nathaniel K. Szymczak, Fusen Han and David R. Tyler, Dalton Transactions, 2004, 3941 - 3942.

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## Deborah B. Exton

## Senior Instructor

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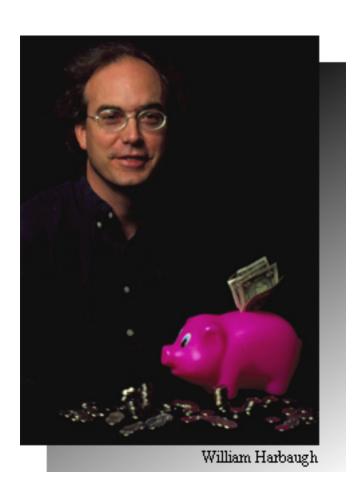






# **Piggybank Economics**

## New economic studies target kids' spending and saving habits



Any parents who pay their children an allowance, or who worry if their kids are learning important lessons about saving money, might think that studying children's economic behavior is an obvious idea. But until recently the subject has never been systematically explored, according to <a href="William Harbaugh">William Harbaugh</a>, an assistant professor of economics at the University of Oregon.

When Harbaugh was in graduate school, he and classmate Kate Krause were the only students with young children. They would jokingly tell their friends that they were using their children as research subjects for a paper on "Economic Experiments that You Can Perform at Home on Your Children." When colleagues told them the idea was a good one, Harbaugh and Krause took the encouragement to heart.

."The textbook definition of economics," Harbaugh says, "is the study of rational agents with insatiable desires and limited resources. Every parent agrees that at least the last two parts of the definition

apply to children. Rationality, on the other hand, is an open question."

So he and Krause, who teaches at the University of New Mexico, began studying rational behavior in children. Their research revealed that even six-year-olds demonstrated the decidedly rational and adult behavior of changing their consumption choices as prices change.

."It's sort of surprising. These are kids that can't even count reliably yet they have very little trouble making some pretty complicated choices in a rational way," Harbaugh says.

In one experiment Harbaugh measured what could be called a "savings threshold," the amount of reward children need to be given for them to delay the gratification of consumption. Few parents will be surprised to hear that it's an astonishingly high amount -- 100 times more than most adults require.

."Sometime between the age of six and the age of twenty-six, the rate of return you need to pay people in order to get them to save for the future falls by 100 times. It's a huge change," explains Harbaugh.

To put the importance of this "savings threshold" in perspective, consider that if it fell even slightly more between childhood and adulthood, adults wouldn't be borrowing on their credit cards as they do. If the threshold fell slightly less, adults might choose not to go to college; they'd rather take smaller incomes now than delay their gratification until after college when they would likely earn more.

"Economists simply have no idea why this very basic preference changes so much, and yet not more," he states. "If there is an answer, I think it's to be found by studying children."

While this behavior changes as children grow, other behaviors seem to be fixed at an early age. Economists studying altruism in adults have found that in experimental settings adults given items of value are willing to give away about 30 percent of these items.

."We ran these same experiments with kids and got very similar behavior," Harbaugh says. "So, whatever it is that determines altruism, much of it has already taken place by the time the child reaches the age of six."

Harbaugh and Krause have plans to continue their exploration of children's economic behavior. One project will study how parents can use allowances to teach their children about saving, bargaining, and working. Should parents tell their kids they have to save or require that they put some money aside for charity? Should parents pay children allowances only if the kids do their chores?

."As a dad I've struggled with these sorts of issues, with a gut feeling that they might really affect how my children will deal with money as an adult," Harbaugh says. "Yet despite all the anecdotes addressing these questions in children's magazines, there's almost no well-designed research on how this sort of family economic policy affects children's behavior."

Back to INQUIRY home page

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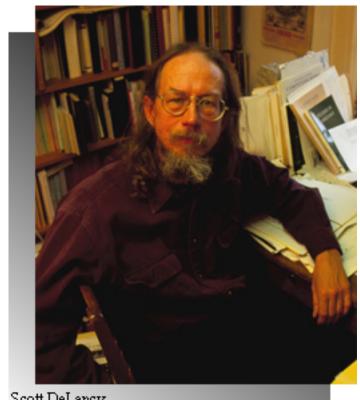
# **Speaking in Tongues**

## Linguist helping northwest tribes hold onto their languages, cultural heritage

When Lewis and Clark trudged into what became present-day Oregon, the region was peopled by Native American groups speaking 25 to 30 distinct languages. Today, less than two hundred years later, all but a handful of these languages are extinct.

."We can't go back and recreate the languages that are already lost, but we can work to preserve those that still remain," says Scott DeLancey, a University of Oregon professor of linguistics.

After joining the UO faculty in 1982 as an expert in the languages of Tibet and Burma, DeLancey noticed that the remaining Native languages in Oregon were receiving little attention from scholars. The attention the languages had received previously was "in most cases a long time ago and often not done very well," he says.



Scott DeLancy

About the same time, Native Americans across the country were growing increasingly concerned about language conservation. Members of the Klamath Tribe from southern Oregon, for example, approached DeLancey for help in preserving their rapidly declining language.

"I started meeting with a few of the remaining speakers of Klamath," Delancey recalls. "I felt a sense of urgency because the language was so close to being lost."

DeLancey began studying the work of M. A. R. Barker, a linguist from the University of

California at Berkeley who worked with the Klamath language in the 1950s. Barker published a dictionary and a grammar for Klamath.

."Unfortunately, he wrote explicitly for linguists in his own idiosyncratic and quite peculiar theoretical framework," DeLancey explains. "So his work is almost incomprehensible even for linguists and completely incomprehensible to anyone else."

A third-generation professor, DeLancey was undaunted by the challenge; he spent two years deciphering Barker's efforts and gaining a working knowledge of Klamath. His translations of Barker's arcane scholarship into a more useful form began to pay off in 1988, when he started teaching a class in Klamath to tribe members in the southeast Oregon town of Chiloquin. With the support of local tribe members, the near-extinct language began to revive.

Recently, one of DeLancey's students, a doctoral candidate named Janne Underriner, helped tribe members write a grant proposal for a Klamath-language revitalization program. The federal Administration for Native Americans approved the grant application, which will pay for two people to spend time with older native speakers of Klamath.

."The idea is for the younger participants to become fluent speakers, then take that knowledge and teach it to the next generation," DeLancey says.

In support of this work, Underriner has developed a curriculum for teaching Klamath to kindergartners. It was used last year at Chiloquin Elementary School. This year she is developing a curriculum for first graders.

DeLancey's efforts have not been limited to the Klamath. He has directed graduate students who have worked with a number of other tribes, including the Siletz, Burns Paiute, Grand Ronde, and Umatilla. For the past two years, DeLancey and his students have run The Northwest Indian Language Institute, an intensive summer program on the UO campus for tribal members.

."We try to get across a useful version of the basics of linguistics," DeLancey says. "We go into linguistic analysis of their language and linguistic teaching methodology. Passing on a language with so few speakers is much harder than, say, teaching a very common language like Spanish. We try to address those difficulties."

About 25 teachers representing eight Oregon and Washington tribes have passed through the summer institute.

DeLancey says he considers these efforts a form of community service.

."The UO is a state institution, and it is appropriate that people in the state who need scholarship or academic support should be able to look to us for help and advice. The members of the tribes have a

heartfelt and admirable desire to preserve their languages. What I have to offer them is my academic skills," DeLancey says. "I was asked to help, so I am helping."

Back to INQUIRY home page

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# Scott DeLancey's Linguistics Homepage

#### Scott DeLancey

Department of Linguistics University of Oregon Eugene, OR 97403, U.S.A 541-346-3901

to the Linguistics Department Page

Primarily an index and guide to linguistic research and professional activities of Scott DeLancey, of the University of Oregon; also includes links to other linguistic pages maintained by DeLancey

## Contents of this page

- my Functional Syntax course for the LSA Institute in Santa Barbara
- Tibeto-Burman, Penutian, and Klamath pages
- DeLancey's CV
- Teaching and departmental matters
- PhD students
- Research activity and publications
  - o Syntax, semantics, and typology
  - o Tibeto-Burman
  - o Klamath, Penutian, general North American
- Links to other Web sites
  - o University of Oregon Linguistics
  - o Other Linguistics Resources
  - o Non-linguistic pages
    - <u>Tibet and Tibetan Studies</u>
    - "Fourth World"/"First Nations" studies and issues

## **Topical Web Pages**

I am trying to build several topical pages; links here for:

- Klamath-Modoc Language [UNDER CONSTRUCTION]
- Tibeto-Burman Languages [UNDER CONSTRUCTION]
- The Penutian Page [UNDER CONSTRUCTION]

### **Teaching and departmental matters**

Office hours this term: Monday 11-12, Tuesday 2-3 or by appointment (<u>e-mail</u> is the best way to contact me).

#### Courses

(Click on live titles for descriptions, syllabi, materials, or whatever I've gotten up).

#### Classes this term (Winter 2005):

- LING 211: Languages of the World
- LING 460: Historical and Comparative Linguistics

#### Other syllabi:

- LING 101: Introduction to Language
- LING 211: Languages of the World
- LING 290: Introduction to Linguistics
- LING 410/510: Semantics
- LING 426/526: Structure of Tibeto-Burman Languages
- LING 450/550: Introduction to Phonology
- LING 451/551: Syntax and Semantics I
- LING 452/552: Syntax and Semantics II
- LING 460: Historical and Comparative Linguistics
- LING 607: Seminar on Case
- LING 616: Semantic Theory
- LING 660: Historical Syntax

### PhD students

#### PhD dissertations chaired

Carol Genetti (1990) A Descriptive and Historical Account of the Dolakha Newari Dialect.

David Hargreaves (1991) The Concept of Intentional Action in the Grammar of Kathmandu Newari.

Anju Saxena (1992) Finite Verb Morphology in Tibeto-Kinnauri.

Lalnungthangi Chhangte (1993) Mizo Syntax.

Sherri Brainard (1994) Voice and Ergativity in Karao.

Insun Park (1994) Grammaticalization of Verbs in Three Tibeto- Burman Languages.

<u>David Watters</u> (1998) The Kham Language of West-Central Nepal (Takale Dialect).

Erik Andvik (1999) Tshangla Grammar.

Myint Soe(1999) A Grammar of Burmese.

Unchalee Singnoi (2000) Nominal Constructions in Thai.

Roberto Zavala (2000) Inversion and Other Topics in the Grammar of Olutec (Mixean).

Janne Underriner (2002) Intonation and Syntax in Klamath.

Connie Dickinson (2002) Complex Predicates in Tsafiki.

Tim Thornes (2003) A Northern Paiute Grammar With Texts.

To the top of DeLancey's homepage.

## Research and publications

I am trying to produce the most useful possible index to my work (suggestions are welcome). You can find a list of my publications, organized (reverse) <u>chronologically</u> or <u>topically</u>. (So, for example, if you are trying to track down an uncited reference to "DeLancey 1986", the chronological list will quickly get you the possibilities). Just for fun, I've also provided a list of <u>my favorites</u>.

Below I have a list of my general areas of research, which can serve as a rough index to the topically-organized list of publications.

#### Areas of active research

- Syntax, semantics, and typology
  - o Theory of Functional/Cognitive/typological linguistics
  - o Argument structure and case theory
  - o Diachronic syntax, especially grammaticalization
  - o Deixis and point-of-view

- o Particular typological structures of interest
  - Case marking patterns
  - Inverse systems
  - Evidentiality and mirativity
- Tibeto-Burman
  - o <u>Tibetan</u> (primarily syntax and semantics)
  - o Comparative verb morphology (primarily verb agreement)
  - o Other T-B languages and miscellaneous
  - o Miscellaneous Sino-Tibetan and Southeast Asian
- Languages of the Americas
  - o Klamath
  - o Comparative Penutian
  - o Western North American areal patterns
  - o Miscellaneous New World

To the top of DeLancey's homepage.

Scott DeLancey, delancey@darkwing.uoregon.edu



**Departmental Colloquia** 

Job announcements

**WORD OF THE WEEK** 

**Undergraduate Studies** 

**Undergraduate Admissions** 

Second Language Acquisition and Teaching (SLAT)

**Graduate Studies** 

**Graduate Admissions Information** 

GTF Application (for internal use) (.pdf file)

• Graduate Studies Handbook (.pdf file)

• Human Subjects Compliance • Faculty and Staff **Graduate Students** • CVs for Past PhD Students NEW! NEW! • The Yamada Language Center • The American English Institute Northwest Indian Languages Institute NILI ««« Back to Logos

## Klamath / Modoc Linguistics Page

This page is under construction; last changes 8/27/1997. Suggestions welcome; contact Scott DeLancey at delancey@darkwing.uoregon.edu

Other linguists who currently work on Klamath include:

- Janne Underriner jlu@darkwing.uoregon.edu
- Noel Rude <a href="mailto:nrude@ucinet.com">nrude@ucinet.com</a>

to the <u>Penutian Page</u>
to <u>Scott DeLancey's homepage</u>

## Contents of this page

- Background on Klamath-Modoc
- Bibliographic resources
- Papers available at this site
- Klamath-Penutian comparative data
- Useful materials for Klamath linguistic research

#### The Klamath-Modoc Language

Klamath and Modoc are the English names of two closely related dialects: Klamath (/?ewksiknii/ "people of the Lake") spoken around Klamath and Agency Lakes in south-central Oregon, and Modoc (/ moowat'aakknii/ 'people from the south') directly to the south around Tule Lake and south to the lava beds in California. (The word "Klamath", of uncertain origin, does not come from the Klamath-Modoc language). Both dialects are nearly extinct, though the Tribes are currently engaged in various language preservation and restoration projects.

The language belongs to the Plateau branch of the <u>Penutian</u> family. The other branches of Plateau Penutian are Sahaptian (Nez Perce and several Sahaptin dialects), Molala, and perhaps Cayuse. It is possible that the Maiduan languages of east-central California have a special relationship to Plateau within Penutian.

Klamath is relatively well-documented, with an extensive dictionary, grammar, and collection of texts by <u>A. S. Gatschet</u> prepared in the 1870's (pub. 1890), and an excellent dictionary, grammar, and texts by <u>M.A.R. Barker</u>, based on work done in the mid-1950's (pub. 1963-4), as well as an important

unpublished collection of mythological and other texts by Theodore Stern (1950-54). All three collections contain extensive mythological material, as well as historical texts dealing both with intertribal and Klamath-White interactions, ethnographic texts describing cultural practices, rituals, food preparation, etc., and autobiographical reminiscences. Gatschet's and Stern's collections also include songs, invocations, and children's games.

There is a short <u>ethnographic description</u> of the Klamath on the Web at the <u>"Centre for Social Anthropology and Computing</u> at the University of Kent at Canterbury.

#### **Bibliographic resources**

#### Klamath-Modoc linguistic bibliography

A list of (mostly) published material on the Klamath language, folklore and mythology. If you know of work not listed here, please send me citations.

#### Penutian bibliography

A pretty complete (as of 1994) bibliography of work on Penutian languages and comparative Penutian, prepared by Victor Golla for the Comparative Penutian Workshop.

#### Modoc bibliography

a bibliography on the Modoc (and Klamath) prepared by the California Indian Library Collections

### Papers on Klamath-Modoc available at this site

DeLancey, Scott. 1987. Morphological parallels between Klamath and Wintu.

J. Redden, ed., *Proc. of the 1987 Hokan-Penutian Conference*, pp. 50-60. Carbondale, IL: Dept. of Linguistics, Southern Illinois University.

DeLancey, Scott. 1988. Klamath stem structure in genetic and areal perspective.

S. DeLancey, ed., Papers from the 1988 Hokan-Penutian Workshop, pp. 31-9.

DeLancey, Scott. 1990. Diachronic Notes on the Klamath Verb Suffixes

presented at the 1989 Hokan-Penutian Workshop. published in S. DeLancey, ed., *Papers from the 1989 Hokan-Penutian Workshop*, pp. 18-27.

DeLancey, Scott. 1996. Argument structure of Klamath bipartite stems

Presented at the 1996 SSILA meeting in San Diego.

DeLancey, Scott. 1996. <u>Penutian in the bipartite stem belt: Disentangling areal and genetic correspondences.</u>

Proceedings of the Twenty-Second Annual Meeting of the Berkeley Linguistics Society: Special Session on Historical Topics in Native American Languages.

#### Klamath-Penutian comparative data

## Useful materials for Klamath linguistic research

Table of contents to Gatschet's Grammar of the Klamath Language.

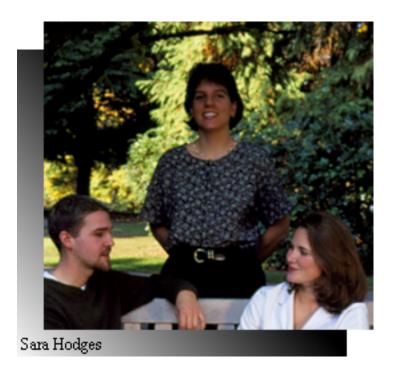
Gatschet's grammar has no table of contents, making it difficult to use as a reference. Here's a list of his chapter and section headings.

Scott DeLancey, delancey@darkwing.uoregon.edu



## **Everyday Mind-reading**

# Researcher investigating empathy finds men can be as sensitive as women -- for a price



.We're all mind readers -- or at least we all come equipped with some ability to infer what other people think or feel. But men and women tend to exercise their empathic powers differently, according to new research by <u>University of Oregon psychologist Sara Hodges</u>.

."What we found is that the variations in performance between men and women in empathic abilities seem to be the result of motivation, not of innate differences between the sexes," Hodges says.

Along with doctoral student Kristi Klein, Hodges conducted three experiments using a total of about 350 UO undergraduates. In preparation

for the experiments, Hodges first created a set of videotaped interviews of individual students being asked about a recent academic setback, for example, failing a test or earning a low grade on an important paper. The students then watched the videotapes of their own interviews and made note of both the moments at which they had specific thoughts or feelings as well as what those thoughts and feelings were.

In the first test, researchers showed the videotapes to individual study participants, or "perceivers." The perceivers then filled out questionnaires assessing to what extent they felt emotions such as compassion or grief toward the target. The perceivers watched the video a second time, but now it was paused at the points where the interview subject, or "target," had indicated a thought or feeling. The receiver was asked to infer the content of the target's thought or feeling at that moment.

."We found some differences between the sexes," Hodges says.

Female perceivers had greater empathic accuracy with female targets, but male perceivers did not do better with male targets. All in all, it was more difficult for both sexes to read the thoughts and feelings of men as compared to women.

A second test was similar to the first except that half the perceivers filled out the sympathy questionnaire before viewing the video.

."For women, but not for men, the questionnaire appeared to serve as a motivation for increased empathy," Hodges says. "The women who filled out the questionnaire beforehand were more empathetically accurate. That finding raised the question of whether there was some other manipulation that could motivate men to perform better."

.To answer this question, Hodges conducted a third experiment, in which perceivers -- both men and women -- were motivated to perform well with money. The cash reward was \$2 for each thought or feeling correctly inferred and \$1 for partially correct inferences.

."Money seemed to do the trick for men," Hodges says. "With money on the line, men did as well as women."

What does it all mean? Hodges suggests that empathic abilities constitute a skill. While individuals demonstrate a wide range of aptitude with this skill, there is a general difference between the sexes as to the motivation that will cause an individual to engage his or her empathic skill.

"This research is shedding light on one of the most fascinating abilities of human beings, how we understand each other. The more we know about this basic human activity, the better," Hodges says.

Hodges is currently investigating the empathic connections that surround motherhood. She is comparing three groups: first-time mothers with children two-to-four-months old, women pregnant with their first child, and women who are neither parents nor pregnant.

."There are a great many beliefs about empathy between people who have shared an experience like motherhood -- but very little hard evidence," she notes. "Our work will explore these empathic connections and gather the data we need to come to a better understanding of this bond that plays an important part in social interaction," she says.

Back to INQUIRY home page

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# Department of Psychology





CLINIC

FACULTY

UNDERGRADUATES

**GRADUATE PROGRAMS** 

INTELLECTUAL COMMUNITIES

**OTHER RESOURCES** 

CONTACT US



PSYCH DIRECTORY

SITEMAP

**ПО НОМЕ** 

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SUMMER SESSION 2005

New-- Department Newsletter
Winter 2004



HISTORICAL LECTURE SERIES



Leona Tyler & Trieb Himeave

## Sara D. Hodges

**Associate Professor** 

Department of Psychology

**University of Oregon** 

1227 University of Oregon Eugene, OR, 97403-1227 USA Phone (541) 346-4919 Fax (541) 346-4911

email address: sdhodges@darkwing.uoregon.edu

#### **Education**

B.A., Rhodes College, Memphis, TN, 1989.

Ph.D., University of Virginia, Charlottesville, VA, 1995.

## **Teaching**

Psy 202: Mind and Society (Fall, 2004)

Phil 199: Human Nature College Connections class (Fall, 2004)

**Decision Making Reading Group (ongoing)** 

Psy 303: Research Methods in Psychology (Fall, 1999)

Psy 456: Social Psychology (Spring 2002)

Psy 458: Judgment and Decision Making(Spring, 1999)

Psy 460: Self and Other (Winter, 2004)

Psy 607: Self and Other (with Bertram Malle, Fall, 1996)

Psy 607: The Construction of Attitudes and Beliefs (Spring, 1998)

Psy 607: Perspective Taking and Empathy (Spring, 2004)

Psy 616: <u>Issues in Contemporary Psychology: Social & Personality</u> (Spring, 2002)

2003)

Human Nature Pathway (Fall 2000 to Spring 2001)

Human and Animal Behavior Freshman Interest Group (Fall 2001)

Anthropology and Psychology Freshman Interest Group (Fall, 2003)

#### **Research Interests**

I study how people construct judgments of their social world. I am interested in the "building blocks" we use to form attitudes and make decisions about the people and things around us, and how we organize this information.

#### Feature matching in judgment and decision making

One current line of research investigates how people make decisions between options with shared and unique characteristics, specifically examining how people treat these two kinds of characteristics differently, and how this affects their comparisons. When people try to decide between two options that have both shared and unique characteristics, they match up the shared attributes and concentrate on the unique ones to make their choice. I am studying what happens when they are subsequently given a third option. People appear to cancel out the shared features in earlier options, and do not use them in making subsequent decisions. I am also examining decision contexts that may inhibit or prevent the use of feature matching as a judgment strategy, and whether feature matching is used in self/other comparisons.

#### **Perspective Taking and Empathy**

What does it mean to take another person's perspective? I'm interested in both cognitive outcomes of perspective taking (e.g., empathic accuracy) as well as affective ones (how does it affect our relationship with the person whose perspective we took?). Most recently, I have been looking at how similarity of experience and motivation affect empathy. I am also intrigued by how fiction writers take their characters' perspectives, which I view as a special case of perspective taking, in which the perspective must be totally constructed, rather than simply "taken."

#### **Affective expectations**

If we are really looking forward to a vacation but it turns out to be rather disappointing, will we later remember and evaluate the vacation negatively, or will our memories and evaluations be boosted by our initially positive expectations such that we remember the vacation as being better than it actually was? How much we expect to enjoy something and what we think it will be like can influence later evaluations of the event as well as decisions about whether or not we decide to repeat the experience. It appears that people are often guided by their positive expectations, even when these expectations conflict with actual experiences, but it is not clear whether negative expectations operate in a parallel way.

## **Papers**

Taylor, M., Hodges, S. D., & Kohanyi, A. (in press). Fictional people with minds of their own: Characters created by adult novelists and imaginary companions created by children. Imagination, Cognition, and Personality.

Hodges, S. D., Johnsen, A. T., & Scott, N. S. (2002). You're like me, no matter what you say. <u>Psychologica Belgica</u>, 42, 107-112. (abstract)

Hodges, S. D., Bruininks, P., & Ivy, L. (2002). It's different when I do it: Feature matching in self-other comparisons. Personality and Social Psychology Bulletin, 28, 40-53. (abstract)

Hodges, S. D., & Hollenstein, T. (2001). Direction of comparison in typicality judgments. Social Cognition, 19, 601-624. (abstract)

Hodges, S. D., & Klein, K. J. K. (2001). Regulating the costs of empathy: The price of being human. Paper invited for <u>Journal of Socioceconomics</u>, 30, 437-452.

Klein, K. J. K., & Hodges, S. D. (2001). Gender differences,

motivation and empathic accuracy: When it pays to understand. Personality and Social Psychology Bulletin, 27, 720-730. (abstract)

Hodges, S. D., Klaaren, K. J., & Wheatley, T. P. (2000). Talking about safe sex: The role of expectations and experience. <u>Journal</u> of Applied Social Psychology, 30, 330-349.

Hodges, S. D. (1998). Reason for the referent: Reducing direction of comparison effects. <u>Social Cognition</u>, 16, 367-390. (abstract)

Hodges, S. D. (1997). When matching up features messes up decisions: The role of feature matching in successive choices. Journal of Personality and Social Psychology, 72, 1310-1321.

Hodges, S. D. & Wegner, D. M. (1997). The mental control of empathic accuracy. In W. Ickes (Ed.), <u>Empathic Accuracy</u> (pp. 311-339). New York: Guilford.

Erber, M. W., Hodges, S. D. & Wilson, T. D. (1995). Thought and attitude strength. In R. Petty & J. Krosnick, (Eds.), <u>Attitude</u> strength: Antecedents and consequences (pp. 433-454). Hillsdale, NJ: Erlbaum.

Wilson, T. D., Hodges, S. D. & LaFleur, S. J. (1995). Effects of introspecting about reasons: Inferring attitudes from accessible thoughts. <u>Journal of Personality and Social Psychology</u>, 69, 16-28.

Klaaren, K. J., Hodges, S. D. & Wilson, T. D. (1994). The role of affective expectations in subjective experience and decision-making. Social Cognition, 12, 77-101.

Hodges, S. D. & Wilson, T. D. (1993). The effect of analyzing reasons on attitude change: The moderating role of attitude accessibility. Social Cognition, 11, 353-366.

Wilson, T. D., Lisle, D. J., Schooler, J. W., Hodges, S. D., Klaaren, K. J. & LaFleur, S. J. (1993). Introspecting about reasons can reduce post-choice satisfaction. <u>Personality and Social</u> Psychology Bulletin, 19, 331-339.

Wilson, T. D. & Hodges, S. D. (1992). Attitudes as temporary constructions. In L. Martin and A. Tesser (Eds.), <u>The construction of social judgment</u> (pp. 37-65). Hillsdale, NJ: Erlbaum.

## **Manuscripts**

Hodges, S. D., Klein, K. J. K., Veach, D., & Villanueva, R. Giving birth to empathy: The effects of similar experience on empathic accuracy, empathic concern, and perceived empathy. (abstract)

#### Other U of O Links:

University of Oregon, Dept. of Psychology
University of Oregon, Institute of Cognitive and Decision Sciences

## **Psychological Organizations:**

American Psychological Society

American Psychological Association

Society for Personality and Social Psychology

Society of Experimental Social Psychology

Society for Judgment and Decision Making

Int'l Society for Self and Identity

## **Social Psychology Journals:**

Basic and Applied Social Psychology

Journal of Experimental Social Psychology

Journal of Personality and Social Psychology

Personality and Social Psychology Bulletin
Personality and Social Psychology Review

## Other Psychology and Social Psychology Sites

**Social Psychology Network** 

Psychwatch.com

<u>Psychology Graduate Applicant's Portal</u> (a page designed for those interested in applying to graduate studies in psychology)

Milgram webpage

Jigsaw Classroom (a cooperative learning technique designed to reduce racism)

**Stanford Prison Experiment (the study, not the band)** 

**Encyclopedia of Psychology** 

#### Diversions...

The world as I see it...

Some thoughts on the research process (part of a UO library exhibit).

Can you find my brother in this picture?

Best comments about the tenure process



## **Becoming What We Are**

## Scientific disciplines converging on a new understanding of humans and our "social" brains

John Orbell joined the <u>University of Oregon Department</u> of Political Science in 1967. Supported over the years in his research by more than a dozen grants from the National Science Foundation, Orbell has written or contributed to fifty scholarly papers. In 1997, he was named Distinguished Professor of Cognitive Science and Political Science by the <u>UO College of Arts and Science</u>. The following year he became director of the <u>UO Institute for Cognitive and Decision</u> Sciences.

What are cognitive and decision sciences, and what do we learn by studying them?

JO: This is a new and rapidly developing field that stretches from technical studies of the human brain to questions of how that brain navigates through the complete



John Orbell

questions of how that brain navigates through the complex waters of ongoing social relationships.

How would you describe the current state of this research?

JO: Cognitive sciences have gone through a phenomenal period of growth in the past fifteen years. Convergence of a number of fields -- including cognitive science, evolutionary biology and evolutionary psychology -- has put us in the same kind of place as people in the biological sciences found themselves just before the discovery of the structure of DNA.

DNA was the holy grail of biology. The holy grail of social sciences, the key to understanding human beings, is understanding consciousness. What is consciousness? Where is our consciousness? Why do we have it? How much do we have? Answering these monumentally important questions may soon be within our reach.

How did we come to this exciting place?

JO: Studies in disciplines ranging from biology to psychology to anthropology are laying out a pattern of how the human brain evolved. Many scholars working in this area have proposed that the most critical part of the ancestral environment for the evolving human brain was not the physical environment or the predator-and-prey relationships with other species, but the environment provided by other humans.

.Why are interactions with people so important?

JO: Other humans provide a vast source of cultural knowledge that we can inherit without having to discover it for ourselves. Even more important, they provide opportunities for all-important cooperative relationships. According to the ideas of evolutionary psychology, the human brain is in large part a bundle of special-purpose modules. These modules have evolved as information-processing mechanisms for efficiently solving problems of individuals relating with one another.

Are there other implications of these ideas?

JO: Yes. One line of thought suggests that the whole structure of human cognition -- the way we come to understand things -- might be organized around our need to successfully interact with each other. In other words, our ability to reflect on ideas ranging from black holes and quarks to freedom and justice might be by-products of brains primarily designed to interpret and reason about the likely behavior and responses of other members of our own species.

This raises some interesting questions. How do brains designed in this way over hundreds of millennia in a premodern world select, process, and organize information from the modern social environments in which we find ourselves today? And what kinds of behaviors can we expect in response? What kinds of problems might arise? What opportunities?

How does one go about researching such seemingly intangible qualities of human existence?

JO: I worked for ten to fifteen years with Robert Dawes (formerly of the UO) doing experiments on how humans make choices that are individually beneficial but publicly damaging. A classic example is environmental pollution -- where it might benefit a person's own finances to avoid the high costs of properly treating waste products while it is damaging to society. We, and a great many other researchers, have examined this question, mostly by observing how people play carefully constructed games that illuminate the dynamic between public and private advantage.

And what has this research found?

JO: There are many particular findings, but a central theme of the empirical work is that we are not appropriately understood as "isolated individuals" but as "social animals"-to use Aristotle's famous phrase. We are designed (by evolution) as social animals, hyper responsive, and sometimes responsible,

to others around us. There has been strong evolutionary selection for the kind of brain that allows humans to survive and prosper in social groups. People are fundamentally social in their brain structure and generally make decisions accordingly. Often this is good news since it is the basis for productive cooperation. But it can also be bad news when it leads us to think about "our group" (the good guys) vs. "their group" (the bad guys).

Do you see practical implications in education, law, politics, or other areas where the individual and social intersect? How might the findings of this kind of research affect society in the future?

JO: I think that the immediate consequence for the social sciences -- thus for whatever the social sciences can do to help us with practical problems -- is that we have to accept that simple models of "rational, selfish maximizing" humans are not a sufficient basis for deriving theories about how social and economic systems work. Social policies founded on that "rational selfish actor" model can have perverse consequences. We do respond to incentives, of course, but evolutionary models of the brain can sometimes suggest why social pathologies of one kind or another do not vanish in response to simple positive and negative (usually monetary) incentives -- as it is often expected that they will. A more realistic model can lead to more informed and successful social policy.

Back to INQUIRY home page

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October 19, 2000

#### **VITA**

#### JOHN M. ORBELL

Professor,

Political Science Department

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97403-1202

E-MAIL: jorbell@oregon.uoregon.edu

FAX: (541)3464860

#### **PERSONAL DATA:**

Born June 3, 1936

New Zealand citizen, U.S. immigrant visa

Married, two children

#### **DEGREES AWARDED:**

B.A. (History) - University of Auckland, New Zealand, 1957

M.A. (History) - University of Auckland, New Zealand, 1960

Ph.D. (Political Science) - University of North Carolina, Chapel Hill, 1965. Dissertation dealing with the origins of the protest movement among black college students in the early 'sixties. Advisor: James W. Prothro

#### **HONORS**

Distinguished Professor of Political Science and Cognitive Science, College of Arts and Science, University of Oregon, 1997-

#### **PREVIOUS POSITIONS:**

1960-61 High school teacher in New Zealand

1961-1964 Teaching and research assistant, Department of Political Science, University of North Carolina at Chapel Hill

1964-1965 Instructor, Department of Political Science, The Ohio State University, Columbus, Ohio

1965-1967 Assistant Professor, Department of Political Science, The Ohio State University, Columbus, Ohio.

1967-1969 Assistant Professor, Department of Political Science, The University of Oregon, Eugene, Oregon

1969-1973 Associate Professor, University of Oregon

1973- Professor, University of Oregon

May, 1973-

Nov, 1974 Visiting lecturer, Department of Political Science, University of Canterbury, Christchurch, New Zealand

June-

Aug, 1975 Visiting lecturer, Department of Political Science, University of Canterbury, Christchurch, New Zealand.

1976-1979 Department Head, Department of Political Science, University of Oregon

1979-1983 Director, Institute for Social Science Research, University of Oregon

1983-1985 Associate Dean for Undergraduate Studies, College of Arts and Sciences, University of Oregon

1985-1986 Visiting Professor, Department of Social and Decision Sciences, Carnegie-Mellon

University, Pittsburgh, PA 15213

1986-1987 Visiting Merrill Professor of Political Science, Political Science Department, Utah State University, Logan, Utah 84322.

Spring, 1993 Visiting Merrill Professor of Political Science, Political Science Department, Utah State University, Logan, Utah 84322.

Spring, 1998- Director, Institute of Cognitive and Decision Sciences, University of Oregon

#### SCHOLARSHIP:

#### In progress:

"The Evolution of Political Intelligence: Simulation Results." With Tomonori Morikawa and Nicholas Allen. Under consideration.

"Rationality and the Design of Machiavellian Intelligence." With Tomonori Morikawa, Nicholas Allen, James Hanley and Cian Montgomery; in draft.

"Social Efficiency and the 'Bottom Up' Formation of Groups: A Laboratory Study." With Scott Crosson and Holly Arrow. Under consideration.

Morikawa, Allen, Hanley, Jason Hartwig and I are in the preliminary stages of sketching a book on the evolution of social cognition that will be based on our simulation results.

#### **Publications:**

"Conflict, Interpersonal Assessment, and the Evolution of Cooperation; Simulation Results." Forthcoming in Trust, Reciprocity, and Gains from Association; Interdisciplinary Lessons from Experimental Research, edited by Elinor Ostrom and James Walker, Russell Sage Foundation. With James Hanley and Tomonori Morikawa.

"Physical Attractiveness, Opportunity and Success in Everyday Exchange." May 1998. American Journal of Sociology 103: 1565-92. With Matthew Mulford, Catherine Shatto and Jean Stockard.

"Individual Experience and the Fragmentation of Societies." 1996. American Sociological Review: 61: 1018-1032. With Langche Zeng and Matthew Mulford.

"The Robustness of Cognitively Simple Judgment in Ecologies of Prisoner's Dilemma Games." 1996.

BioSystems; A Journal of Biological and Information Processing Sciences: 37. With Audun Runde and Tom Morikawa, 81-97.

"Teaching Evolution, Cooperation and Ethics." 1996. Politics and the Life Sciences. March. 121-124.

"The Benefit of Optional Play in Anonymous and One-Shot Prisoner's Dilemma Games." 1995. In K. Arrow, R. Mnookin, L. Ross, A. Tversky, R. Wilson (eds.), Barriers to conflict Resolution. Norton & Co., with Robyn Dawes, 62-85.

"The Advantage of Being Moderately Cooperative." 1995. The American Political Science Review 89: 601-611. September. With Tom Morikawa and Audun Runde.

"Cooperation under Laissez faire and Majority Decision Rules in Group-level Social Dilemmas," with Robyn Dawes. In David Schroeder (ed.), Social Dilemmas; Perspectives on Individuals and Groups, Praeger. 1995.

"Trust, Social Categories And Individuals: The Case Of Gender." 1994. Motivation and Emotion 18: 109-128. June. With Robyn Dawes and Peregrine Schwartz-Shea.

"Hamlet And The Psychology Of Rational Choice Under Uncertainty." 1993. Rationality and Society.127-140.

"Social Welfare, Cooperators' Advantage And The Option Of Not Playing The Game." 1993. American Sociological Review 58: 787-800. December. With Robyn Dawes.

"Simple Dilemmas, Complex Dilemmas, and Experimental Research. 1992. Small Group Research. February, 23: 4-25. With Peregrine Schwartz-Shea.

"Religion, Context and Cooperation with Strangers." 1992. Rationality and Society, July. With Marion Goldman, Matthew Mulford and Robyn Dawes.

"Covenants Without the Sword; the Role of Promising in Social Dilemma Circumstances." 1991. With Robyn Dawes. In Ken Koford and Jeffrey B. Miller, (eds.) Social Norms and Economic Institutions, Ann Arbor: University of Michigan Press. 1991.

"A 'Cognitive Miser' Theory Of Cooperators' Advantage." 1991. The American Political Science Review. June. With Robyn Dawes.

"Response to McLean." 1991. American Political Science Review. December. With Robyn Dawes.

"The Limits of Multilateral Promising." 1990. Ethics, vol. 100, April, 616-627. With Robyn Dawes and

Alphons van de Kragt,

"The Experimental Study of Social Dilemma Behavior." 1990. CogSciNews, Spring, 3, #1, 4-6.

"Collective Rationality in Dilemma Situations for the Benefit of Us--not Me, or my Self-esteem." in Jane Mainsbridge (Ed.), 1990 Beyond Self Interest, Chicago: University of Chicago Press.

"Thinking in Sociality; Authors' Response." 1989. Behavioral and Brain Science, December, 12, No. 4, 727-739. With Linnda Caporael, Robyn Dawes and Alphons van de Kragt. (Our extended response to open peer commentary on "Selfishness examined...".)

"Selfishness Examined: Cooperation in the Absence of Egoistic Incentives." 1989. Behavioral and Brain Science, December, 12, No. 4, 683-699. With Linnda Caporael, Robyn Dawes and Alphons van de Kragt. (A "target" paper with thirty open peer commentators);

"Not Me or Thee but We: The Importance of Group Identity in Eliciting Cooperation in Dilemma Situations: Experimental Manipulations." Acta Psychologica, 1988, 68, 83-97. With Robyn Dawes and Alphons van de Kragt.

Reprinted in William M. Goldstein and Robin M. Hogarth. (Eds.) Research on Judgment and Decision Making. Cambridge, UK: Cambridge University Press.

"Explaining Discussion-induced Cooperation." 1988. Journal of Personality and Social Psychology, 54, 811-819. With Robyn Dawes and Alphons van de Kragt.

"Sherlock Holmes as a Social Scientist," 1988. The Political Science Teacher, 1, Fall, 15-19. With Veronica Ward.

"Are People who Cooperate Rational Altruists?" 1988. Public Choice, vol 56, 233-248. With Alphons van de Kragt and Robyn Dawes

"Understanding and Cooperation in Social Dilemmas." 1988. Public Choice, vol 57, 275-280. With David Goetze.

"Doing Well and Doing Good as Ways of Resolving Social Dilemmas," in H. Wilke, D. Messick and C. Rutte, Social Dilemmas, Frankfurt/Main, Lang. GmbH. 1986. With Robyn M. Dawes and Alphons van de Kragt.

"Organizing Groups for Collective Action." 1986. The American Political Science Review, December. With Robyn M. Dawes, Randy Simmons and Alphons van de Kragt.

Reprinted in: Donald R. Kinder & Thomas Palfrey (eds.). Experimental Foundations of Political Science. Ann Arbor: University of Michigan Press, 1993.

"Response to Calvert and Wilson." 1985. American Political Science Review, September. With Alphons van de Kragt and Robyn M. Dawes.

"Do Cooperators Exit More Readily Than Defectors?" 1984. American Political Science Review, March. With Peregrine Schwartz-Shea and Randy Simmons.

"Two Pedagogical Games." 1984. News for Teachers of Political Science, Summer. With Steven Maser.

"The Minimal Contributing Set as a Solution to Public Goods Problems." 1983. American Political Science Review, March. With Robyn M. Dawes and Alphons van de Kragt.

"Cooperation in Social Dilemma Situations: Thinking About It Doesn't Help," in Research in Experimental Economics, Volume 3, 1982. With Robyn M. Dawes

"Social Dilemmas," in Progress in Applied Social Psychology, Volume I, G.M. Stephenson and J.M. Davis, eds., 1981. With Robyn M. Dawes.

"The Governance of Rivers" 1979. Western Political Quarterly, September. With L.A. Wilson, II.

"The Uses of Expanded Majorities." 1978. American Political Science Review, December. With L.A. Wilson, II. (Note)

"Institutional Solutions to the N-Prisoners' Dilemma." 1978. American Political Science Review, June. With L.A. Wilson, II.

"A Proposal to Establish a Centre for the Study of New Zealand Society." 1974. Australia and New Zealand Journal of Sociology, October. With Geoffrey Fougere.

"Social Peace as a Collective Good." 1974. British Journal of Political Science, Volume 4. With Brent Rutherford (note).

"Can Leviathan Make Life of Man Less Solitary, Poore, Nasty, Brutish, and Short?" 1973.British Journal of Political Science, October. With Brent Rutherford.

"A Theory of Neighborhood Problem-Solving: Political Action vs. Residential Mobility." 1972. American Political Science Review, June. With Toro Uno.

"Intra-Party Conflict and the Decay of Ideology." 1973. Journal of Politics, May. With Geoffrey Fougere.

"Grass Roots Enthusiasm and the Primary Vote; McCarthy and Kennedy in Oregon" 1972. Western Political Quarterly, June. With Robyn M. Dawes and Nancy J. Collins.

"The Structure of Graduate Education in Departments of Political Science," 1972. P.S., Winter. With Alvin Mushkatel and Lawrence Pierce.

"An Information-flow Theory of Community Influence," 1970. Journal of Politics, May.

"The Impact of Metropolitan Residence on Social and Political Orientations," 1970. Social Science Quarterly. December.

"Racial Attitudes and the Metropolitan Context: A Structural Analysis," 1969. The Public Opinion Quarterly, Spring. With Kenneth Sherrill.

"Protest Participation Among Southern Negro College Students," 1967. American Political Science Review, June. Reprinted Bobs Merrill reprint series in the social sciences, 1969.

#### **BOOK REVIEWS HAVE BEEN PUBLISHED IN:**

The American Political Science Review, The Journal of Politics, The Canadian Journal of Political Science, The Australia and New Zealand Journal of Sociology, and others.

#### CONFERENCE PAPERS HAVE BEEN PRESENTED TO:

The Midwestern Political Science Association, The Western Political Science Association, The American Political Science Association, The New Zealand Sociological Association, The Northwest Political Science Association, The Public Choice Association, The American Psychological Association, The American Sociological Association, The Western Economics Association, The Society for Experimental Social Psychology, The West Coast Society for Small Group Research, The Society for the Scientific Study of Religion, The International Society for the Study of Social Justice, and others.

#### RESEARCH GRANTS HAVE BEEN RECEIVED FROM:

National Science Foundation. "The Evolution of Cognitive Capacities for Cooperation and Conflict." PI, with Tomonori Morikawa and Nicholas Allen, Oregon Research Institute and the University of Melbourne. Starting early summer, 1998. \$127,000.

National Science Foundation. "The Formation of Self Organized Groups." Co-PI with Holly Arrow, Psychology Department, University of Oregon. January 1st, 1998. \$190,000.

- National Science Foundation. "Wireless Laboratory for Interpersonal Cognition." Co-PI with Bertram Malle, Psychology Department, University of Oregon. June 1st, 1997. \$40,000
- (All the NSF grants between 1979 and 1987 were in conjunction with Robyn Dawes and Alphons van de Kragt. The 1992 and 1990 grants were with Dawes only.)
- National Science Foundation, "Cooperators' Advantage Through Selective Play," Decision, Risk and Management Program, June 1st, 1992. \$100,000. SES-9208534
- An extension of the above grant through the Research Experience for Undergraduates Program of NSF; to support an undergraduate research assistant
- National Science Foundation, "A cognitive theory of cooperators' advantage." (1990), SES-9008157. \$41,000.
- National Science Foundation "Moral choice under laissez faire and collective choice decision rules." (1986-1987), SES-86052284; \$74,957
- National Science Foundation "The propensity to contribute to public goods." (1984), SES-8308601; \$64,495.
- National Science Foundation "Effects of discussion on cooperative behavior in game theoretic settings." (1983). SES-8308601; \$94,000.
- National Science Foundation to extend the work being done under the '81 grant, SES-8105695.
- National Science Foundation "Experimental research in social dilemmas," (1981), SES-8105692; \$83,753.
- National Science Foundation, "Experimental research in social dilemmas," (1979), SOC-7906131; \$77,492.
- The Ford Foundation for a study of Graduate Education in Political Science Departments in the United States (1970).
- Office of Education for an expansion of the study of graduate education.
- The National Science Foundation for the study of the impact of neighborhood conditions of social and political behavior (1966), \$21,000.

#### **IN PROGRESS:**

A computer simulation with Nicholas Allen, Tomonori Morikawa and Cian Montgomery exploring the evolution of the "social brain"--in particular, our capacities to recognize others cooperative and competitive propensities, and to dissemble those same propensities in the face of others' attempts to read them. Do such capacities evolve in "lockstep" or are some more critical to evolutionary fitness than others?

A laboratory project with Holly Arrow (Psychology, Oregon) studying the formation of groups and using a "social poker" laboratory paradigm. People have distributed resources none of which are sufficient to form productive groups alone, but which, in combination with others, can be more or less productive.

A laboratory project with Misha Myagkov (Political Science, Oregon) dealing with humans' capacity to accurately predict the cooperate vs. defect behavior of others.

#### **ADMINISTRATIVE:**

Director, Institute for Cognitive and Decision Sciences, University of Oregon. 1998-

Member, Honors College Advisory Committee, 1998-

Member of the College of Arts and Sciences Dean's Advisory Committee 1996-97; chair of that committee 1997-98.

Member, State System Task Force on Graduate Education, Fall & Winter, 1995-6

Acting Chair of the Political Science Department, Summer quarter 1995.

Member, University Research Committee, 1993-4; 1994-5.

Member, University Senate Budget Review Committee, 1994-5

Member, Human Subjects Review Committee, 1994-5-6

Member, President's committee on reviewing multi-cultural course requirements at the University of Oregon, 1993-1994

Inside member, review committee, College of Business Administration at the University of Oregon, 1992.

- Member, committee searching for Affirmative Action Manager at the University of Oregon, Winter, 1992.
- Member, University Senate, University of Oregon, 1990-91.
- Member, Faculty Personnel Committee, University of Oregon, 1988-1990.
- Associate Dean for Undergraduate Studies, College of Arts and Sciences, University of Oregon, 1983-1985.
- Political Economy Section Head, Western Political Science Association annual meetings, 1981, 1985, 1991
- Member of Editorial Board, American Political Science Review, 1985-1989.
- Chair, Committee reviewing University of Oregon Honors College, 1984.
- Member Academic Priorities Advisory Committee (Advisory to the President), at the University of Oregon, 1983-84.
- Member of committee searching for Vice-President for University Relations at the University of Oregon, 1983.
- Acting Chair of the Political Science Department, Winter quarter 1982.
- Member of committee searching for Athletic Director at the University of Oregon, 1981.
- Member of Editorial Board, Western Political Quarterly, 1981-1982.
- Executive Committee Member of the Western Political Science Association, 1981-1982.
- Chair of committee searching for Dean of College of Arts and Sciences at the University of Oregon, 1979-1980.
- Member of committee searching for Dean of School of Community Service and Public Affairs, 1978.
- Executive Committee Member of the Northwest Political Science Association, 1977.
- Chairer of the Political Science Department, University of Oregon, 1976-1979.
- Convener and chairer, Conference on Health Policy in New Zealand, Auckland, New Zealand, 1974.

Representative from the Ohio State University and from the University of Oregon to the Inter-University Consortium for Political and Social Research (1964-1967; 1967-1969).

#### **TEACHING INTERESTS:**

My teaching interests have moved, with my research interests, from urban politics and public opinion and electoral behavior (during the 'sixties and early 'seventies) to public choice (during the 'seventies and 'eighties), behavioral decision-theory and decision making in general (the late 'eighties), and the logic and theory of interpersonal trust, and evolutionary bases of social behavior (since then).

I teach **Why Government?** that is offered to advanced undergraduates and graduate students and that moves from Hobbes through Buchanan et al.; **Constructing Social Theories** that deals substantially with economic modes of theory construction applied to a variety of political and social topics--as well as more traditional psychological and sociological modes of theory construction; **Political Decision-Making** which introduces advanced undergraduates and graduates to the theory and empirical study of individual and collective decision-making; **Introductory Political Psychology** which introduces undergraduates to the intersection of Political Science and Psychology; and **Introduction to Modern Political Theory** that introduces undergraduates to contemporary political theory.

Consistent with my changing research interests, I have developed **Evolution**, **Cooperation and Ethics** for graduate and advanced undergraduate students. It reviews the developing literature on Evolutionary Psychology and its relevance for social and political behavior, and its ethical implications. I have also taught **The Politics of Everyday Life** that puts together materials from several different literatures that deal, in one way or another, with the complexities of negotiation, bargaining, deception, perceptiveness and manipulation in everyday life.

Between about 1978 and 1992, I taught one or two parts of a three-part sequence in Oregon's Honors College **Introduction to Social Science**. I have taught **Constructing Social Theories** to the Honors College several times during the past few years.

During the Spring semester, 1986, at Carnegie-Mellon, I taught a graduate course on **Public Choice** to the School of Urban and Public Affairs, and an undergraduate course on **Constitutional Choice**; **Modern Democratic Theory** to the Department of Social and Decision Sciences. During the 1986-7 academic year, I taught **Theory Construction**, **Public Choice** and **Introduction to Political Science** at Utah State University.

#### LIKELY FUTURE DIRECTIONS:

I anticipate that my current experimental and simulation work will continue. In particular, I am interested in the evolution of the "social brain"--the hypothesis that our brains have evolved, in substantial parat, to help us negotiate and prosper among others of our highly social species.

Consistent with my evolutionary interests, I have developed computer simulation as a technique for addressing evolutionary issues, and intend to continue that work which has been funded by the National Science Foundation. In general, I am convinced that experimentalism, formal theory and computer simulation offer a peculiarly powerful arsenal of tools for addressing problems of human relationships at the boundaries of cognitive psychology, political science and economics. I believe that the most fruitful research pattern is to follow problems regardless of disciplinary boundaries.

I would be happy to send reprints of any written work of interest.

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#### **EVOLUTION, COOPERATION & ETHICS**

PS: 439/539; CRN

Winter 2001

John Orbell,

jorbell@Oregon; Fax: 503 3464860

**927 PLC** 

Office hours: UH 8-10am

#### INTRODUCTION

What is the relevance of modern evolutionary psychology for the roots of human political and social behavior--in particular, cooperative and ethically-bound behaviors? Classic and modern political and ethical theories (e.g., Hobbes, Locke, Rousseau, Rawls, as well as Modern Political Economy and much Feminist theory) are, characteristically, founded on assumptions about human behavior. Evolutionary psychology lets us evaluate those assumptions and, therefore, provides a basis from which such theories can be reassessed. There are major but often isolated literatures relevant to this issue in Decision Theory, Biology, Experimental and Cognitive Psychology, Economics, Anthropology, Sociology, Ethics and, even, Political Science. We will look at some literature from all of those fields.

#### SOME INTERESTING WEB SITES.

http://157.242.64.83/index.htm Human Behavior and Evolution Newsletter

http://hbes.homepage.com/ Human Behavior and Evolution Society homepage

http://www.science.mcmaster.ca/psychology/ehb/ehb.htm. The journal Evolution and Human Behavior

http://cpnss.lse.ac.uk/darwin/evo/ The Evolutionist

http://online.itp.ucsb.edu/online/colloq/cosmides1/
Some interesting talks by Cosmides and Tooby...

<u>http://www.cwu.edu/~cwuchci/chimpcam-east.html</u> A viewing camera for chimpanzees at a primate center in Washington.

#### REQUIREMENTS

- One midterm test. About one week before this test, I will hand out a set of study questions devilishly designed to cover all the ideas put forward to that point in the required reading. At the time of the test, I will select three questions from this list randomly, and you should write essay answers on two of those. This test will be worth 20% of your total grade.
- Two brief (no more than four page) written responses to questions I will pose. These are "at home" tests, and you're welcome to use the class materials when answering them. I'm interested in your response to some of the themes raised in the materials, and in giving you a different form of test than an in-class essay exam. I will bevery concerned with writing competence in these exercises, so beware! These will each be worth 15% of your final grade. One will be due early, and one late in the term.
- A final examination. This will be organized in the same way as the midterm, except that I will sample five questions and you should write on four of those. This will be worth 50% of your grade.
- 4. Periodic abstract reports to the class (graduate students only). One way of exposing you to more

ideas than you actually read is to have other students read and abstract papers (or chapters) and present those abstracts to the class as a whole. I would like to have each graduate student present, say, five such abstracts during the term. "Present" means to type up a single page abstract of the essential ideas (which you should prepare in multiple copies for the class) and to spend five or ten minutes telling the class what's going on. Abstracts will be public goods provided to all by the graduate students. The list of readings from which to select these papers is at the end of this outline.

• Optional: Extra credit (up to 10%) for a plausible "reverse engineering" analysis of my "Toda's Indicator." More specifics to be given in class.

#### READING

Texts: Darwin's Dangerous Idea by Daniel Dennett, Simon and Schuster.

The Mating Mind; How Sexual Choice Shaped the Evolution of Human Nature, by Geoffrey F. Miller

**Package:** Required weekly reading available from the bookstore.

Reading is organized by week (below), with the "for abstracting" weekly list being papers from which graduate students can select papers to according to their interest. If you start at the beginning of the "required" list and go to the end, you will have read everything that you should read for the class.

#### WEEKLY ASSIGNMENTS

#### WEEK ONE: OVERVIEW AND BACKGROUND

Daniel Dennett, Darwin's Dangerous Idea, chapters 2, 3, 4, 5, 6.

#### WEEK TWO: OVERVIEW AND BACKGROUND, CONTINUED

Daniel Dennett, Darwin's Dangerous Idea, chapters 8, 9, From Chapter 10, pp. 282-299 (on punctuated equilibrium), 16 ("On the Origin of Morality")

#### WEEK THREE: EVOLUTION AND ALTRUISM

Trivers, Robert. The evolution of reciprocal altruism. Quarterly Review of Biology, vol 46, March 1971, 35-57.

Axelrod, Robert. The Evolution of Cooperation, Chapter 2 "The success of TIT FOR TAT in computer tournaments." pp 27-55.

Frank, Robert. Passions within Reason. Chapter 3. "A Theory of Moral Sentiments." Pp. 43-70.

Humphrey, Nicholas, 2000. "Varieties of Altruism--and the common ground between them." Archived in http://cogprints.solton.ac.uk/documents/disk0/00/00/08/43/cog00000843-00/altruism.htm

#### WEEK FOUR: COGNITION AND COOPERATION

Orbell, John and Dawes, Robyn. 1991. "A Cognitive Miser Theory of Cooperators' Advantage." American Political Science Review, June, 515-528.

Orbell, John and Dawes, Robyn. 1993. "Social Welfare, Cooperators' Advantage, and the Option of Not Playing the Game." American Sociological Review, 58: 787-800.

Morikawa, Tom, Orbell, John & Runde, Audun. 1994. "The Advantage of Being Moderately Cooperative." American Political Science Review, September, 1995.

#### WEEK FIVE: VIOLENCE, DECEIT, PREJUDICE AND DEATH--THE DARK SIDE

Daly, Martin and Margo Wilson. Homicide. Chapter 2: "Killing Kinfolks" and Chapter 4, "Killing Children: II Parental Homicide in the Modern West." Pp17-36, and 61-94.

Trivers, Robert. Social Evolution. Chapter 16: "Deceit and Self-Deception." pp. 395-421.

Fox, Robyn. 1992. "Prejudice and the Unfinished Mind: A New Look at an Old Failing. Psychological Inquiry. vol 3 #2, 137-152.

#### WEEK SIX: CULTURE, NORMS AND RULES

Donald Campbell, On the conflict between biological and social evolution, and between psychology and moral tradition. American Psychologist, December 1975, 1103-1126.

Daniel Dennett, Darwin's Dangerous Idea, chapter 12, "The Cranes of Culture."

Tooby, John and Leda Cosmides. "The Psychological Foundations of Culture." The Adapted Mind. Chapter 1, pp. 19-77.

#### WEEK SEVEN: BASES FOR HUMAN INTELLIGENCE? (I)

Humphrey, N.K. "The Social Function of Intellect." in Growing Points in Ethology, Edited by P.P.G. Bateson and R.A. Hinde, Cambridge University Press, 1976. pp 303-317

Miller, Geoffrey, The Mating Mind (Text), chapter 3, "The Runaway Brain;" chapter 4, "A mind fit for Mating;" Chapter 5, "Ornamental Genius;" chapter 6; "Courtship in the Pleistocene."

#### WEEK EIGHT: BASES FOR HUMAN INTELLIGENCE (II)

Trivers, R. Social Evolution, chapter 9: "Parental Investment and Sexual Selection" pp. 203-238.

Miller, G. The Mating Mind, chapter 7; "Bodies of Evidence;" chapter 8, "Arts of Seduction;" chapter 9 "Virtues of Good Breeding"; chapter 10 "Cyrano and Scheherazade;" chapter 11, "The Wit to Woo."

#### WEEK NINE: BIOLOGY & ETHICS--A NATURALISTIC FALLACY?

Daniel Dennett, Darwin's Dangerous Idea, Chapter 16, "On the Origin of Morality," chapter 17, ("Redesigning Morality"); and chapter 18, ("The Future of an Idea")

#### **WEEK TEN: GOOD BEHAVIOR**

De Waal, Frans. Peacemaking among Primates. Chapter 2, "Chimpanzees" pp. 35-87.

De Waal, Frans. Good Natured. Chapters 5 & 6. "Getting Along," and "Conclusion."

Mayr, Ernst. 1997. This is Biology: The Science of the Living World. Chapter 12, "Can Evolution Account for Ethics?" pp. 248-270.

The following are papers, organized by weekly topics,

for abstracting (graduate students only)

#### WEEK ONE: OVERVIEW AND BACKGROUND

#### For abstracting:

Cosmides, Leda and Tooby, John. "Evolutionary Psychology; a Primer." This can be downloaded from the Evolution and Human Behavior site at <a href="http://hbes.homepage.com/">http://hbes.homepage.com/</a>

Buss, David M. 1999. Evolutionary Psychology: The New Science of the Mind. Boston: Allyn & Bacon.

Somit, Albert and Peterson, Steven A. 1998. "Review Article: Biopolitics After Three Decades--a Balance Sheet. British Journal Of Political Science 28: 559-571.

Wright, Robert. 1999. "The Accidental Creationist: Why Stephen Jay Gould is bad for evolution." Atlantic Monthly, December 1999, pp. 56-65.

Jared Diamond, 1997. Guns, Germs and Steel. New York, W.W. Norton. Especially epilogue, "The Future of Human History as a Science."

Futuyma, Douglas J (Editorial Chair). "Evolution, Science and Society: Evolutionary Biology and the National Research Agenda." Updated working draft. <a href="http://www.rci.rutgers.edu/~ecolevol/fulldoc.html">http://www.rci.rutgers.edu/~ecolevol/fulldoc.html</a>

Nicholson, Nigel. 1997. "Evolutionary Psychology: Toward a New View of Human Nature and Organizational Society." The Tavistock Institute, pp 1053

Wilson, E.O. 1998 (winter). "Resuming the Enlightenment Quest" Wilson Quarterly:pp. 16-27. And critical of this: Rorty, Richard, "Against Unity" pp. 28-38; and in support of Wilson, Gross, Paul A. "The Icarian Impulse," pp. 39-49.

Mayr, Ernst. 1997. This is Biology: The Science of the Living World. Chapter 2, "What is Science?" and chapter 3, "How does Biology Explain the Natural World?" Pp. 24-78.

Hooper, Judith. 1999. "A New Germ Theory." Atlantic Monthly, February 1999. Pp. 41-53

Buss, David M. "Evolutionary Psychology: A New Paradigm for Psychological Science. In Psychological Inquiry, 1995, vol 6 No. 1, pp 1-30. (There are also extended commentaries by various luminaries following this paper.)

Winterhalder, Bruce, and Smith, Eric Alden. 1992. "Evolutionary Ecology and the Social Sciences." Pp. 3-24 in Winterhalder and Alden, Evolutionary Ecology and Human Behavior, New York: Aldine de Gruyter.

Darwin, Charles. The Origin of the Species. The first five chapters and chapter 9 "Recapitulation and conclusion."

- Dawkins, Richard. Climbing Mount Improbable.1996. Chapter 2 "Silken Fetters."
- Weiner, Jonathan. 1995. The Beak of the Finch. In particular, chapter 5, "A special providence."
- Donald Symons. "On the Use and Misuse of Darwinism in the Study of Human Behavior." in Barkow, Cosmides and Tooby, The Adapted Mind, pp. 137-162.
- Wilson, E.O. 1995. "Science and Ideology." Academic Questions.
- Elster, Jon. 1989. The Cement of Society. Chapter 2 "Collective Action." pp 17-49.
- Mayr, Ernst. 1991. One Long Argument: Charles Darwin and the Genesis of Modern Evolutionary Thought. Chapter 6, "Darwin's Path to the Theory of Natural Selection." Pp. 68-89.
- Williams, George. 1966. Adaptation and Natural Selection. Chapter 1. Introduction.
- Rotello, Gabriel. 1994. "The Birth of Aids." Out, April, p. 88.
- Dawkins, Richard. "In Defense of selfish genes." Philosophy, 56: 1981. 556-573.
- Simon, Herbert. 1983. Reason in Human Affairs. Chapter 2. "Rationality and Teleology" pp 37-74.
- Tooby, John and Leda Cosmides. 1990. "On the Universality of Human Nature and the Uniqueness of the Individual: The Role of Genetics and Adaptation." Journal of Personality 58:1pp17-67.
- Donald T. Campbell. 1974. "Evolutionary Epistemology." In The Philosophy of Karl Popper, edited by P.A. Schilpp, pp413-63; also in Donald Campbell, Methodology and Epistemology for Social Science; Selected Papers, University of Chicago Press.
- Gopnik, Alison. 1998. "Explanation as Orgasm." Minds and Machines 8: 101-118.

#### WEEK TWO: OVERVIEW AND BACKGROUND, CONTINUED

#### For abstracting:

Cosmides, Leda and John Tooby. "Better than Rational: Evolutionary Psychology and the Invisible Hand." In American Economic Association; Papers and Proceedings, May 1994, pp327-332.

- Pinker, Steven. 1997. How the Mind Works. In particular, chapters 6 & 7, "Hotheads," and "Family Values." New York: W.W. Norton.
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# WEEK NINE: BIOLOGY AND ETHICS--A NATURALISTIC FALLACY?

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#### WEEK TEN: GOOD BEHAVIOR

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#### **DECISION MAKING I**

Political Science 4/592, CRN 34790

John Orbell, 927 PLC 242 Gilbert

Office Hours M,W,F 9-10, and by appt 8:00-9:20 UH

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# INTRODUCTION

This is an introduction to the study of decision-making, an interdisciplinary field with major (but related) literatures in psychology, economics, political science and business. We will review ideas that are basic to all of these literatures, with particular attention to the juxtaposition of normative models (how should decisions be made?) and empirical data (how are decisions actually made?). We will follow these two themes with respect to decision-making at the individual level, and at the collective or group

level.

# **COURSE REQUIREMENTS**

I would like you to stay up to date with the readings--that will make the class sessions more useful to you. I will assume that you are up to date during class sessions. There will be one midterm, a final and a term paper:

- 1. The midterm will be worth 30% of the final grade, and the final examination will be worth 40%. I will hand out a set of study questions before each of these tests and, at the time of the test, I will select questions from this list using a table of random numbers. You should write essay-type answers on three of the four questions selected for the midterm, and on four of five selected for the final.
- 2. The term paper will be worth 30% of the final grade. It requires you to: (a) Select some decision from your personal experience and conduct an analysis (either normative or descriptive) of that decision in S. E.U. terms; (b) Show how theory or empirical findings reviewed in this course help understand what happened (if you are being descriptive) or what problems might disrupt good decision-making (if you are being normative); (c) Review whatever ethical issues are raised by this case.

# **PART 1:**

#### INTRODUCTION.

#### WEEK ONE: CLASSIC DECISION PROBLEMS

Brams, Introduction and, The Creation, and its Aftermath. From Biblical Games.

Orbell, Hamlet and the Psychology of Rational Choice under Uncertainty. Rationality and Society. January, 1993

Breton, & Wintrobe, The Bureaucracy of Murder Revisited, Journal of Political Economy, 1986.

#### WEEK TWO: BASIC PERSPECTIVES & TOOLS

Lave and March, An Introduction to Models in the Social Sciences, chapter 4. A Model of Individual Decision Making.

Simon, Herbert. Human Nature in Politics: The Dialogue of Psychology with Political Science.

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# **Suggested**

Simon, et al. Research Briefing Panel on Decision making and problem solving. Government Publication

#### **PART II**

# INDIVIDUAL DECISION MAKING

#### WEEK THREE: THEORETICAL STYLES

Janis and Mann, Decision Making: A Psychological Analysis of Conflict, Choice and Commitment. Chapter 3 "A conflict model of decision making".

Dawes, Robyn, 1994. House of Cards: Psychology and Psychotherapy Built on Myth. The Free Press. Chapter 2: "Psychotherapy; The Myth of Expertise," pp. 38-74.

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# WEEK FOUR: BEHAVIOR AND S.E.U.

Quattrone and Tversky, Contrasting rational and psychological analyses of political choice. American Political Science Review, September 1988, 719-736.

Gilovich, Vallone and Tversky, The hot hand in basketball: On the misperception of random sequences.

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#### **PART IV:**

# COLLECTIVE DECISION MAKING.

#### WEEK FIVE: GENERALIZED MODELS

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Janis, Groupthink, Chapter 1: Introduction: Why so many miscalculations? and Chapter 8: The Groupthink Syndrome.

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#### WEEK SIX: PROBLEMS OF COLLECTIVE RATIONALITY

Riker, W. Implications from the disequilibrium of majority rule, American Political Science Review, 1980, 432.

Riker, W. The Art of Political Manipulation. Chapter 3: "The flying club."

Orbell and Wilson, Institutional Solutions to the N-Prisoners dilemma. American Political Science Review, 1978

# WEEK SEVEN: EMPIRICAL ANALYSES OF HOWCOLLECTIVE DECISION-MAKING IS ACTUALLY DONE

Anderson, Decision Making by Objection and the Cuban Missile Crisis. Administrative Science Quarterly, 1983.

Orbell, Dawes and van de Kragt: The limits of multilateral promising. Ethics, April 1990.

White, Groupthink reconsidered. Academy of Management Review, 1989.

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# **PART V:**

# **DECISIONS AND PRACTICE**

# WEEK EIGHT: CAN WE MAKE THINGS BETTER?

Janis, Groupthink, Preventing groupthink.

March, James G., "Bounded rationality, ambiguity, and the engineering of choice. Bell Journal of Economics, Autumn 1978.

Campbell, D. "On the conflict between biological and social evolution and between psychology and moral tradition. American Psychologist, 1975.

# WEEK NINE: ETHICS AND OTHER FRONTIERS

Harsanyi, J. "Does reason tell us what moral code to follow and, indeed, to follow any moral code at all? Ethics, October 1985.

Schelling, T. Ethics, law and the exercise of self-command. In Schelling's Choice and Consequence.

#### APPENDIX 1: SOME SUGGESTIONS ON THE

#### ART OF WRITING ESSAY ANSWERS

#### IN MIDTERMS AND FINALS

# **INTRODUCTION**

Because I know that many students don't do as well as they might in essay examinations--don't use the knowledge that they have to good effect--here are some suggestions (gamesmanship, if you like) about writing essay examinations. They are designed to let you make the very most, in terms of your grade, out of what you are learning from this course.

#### **PARAGRAPH ONE**

-- Remember that good examination questions are questions; that is, they require an answer. But unless short answers are explicitly demanded, remember that this does not imply you should write one- or two-paragraph answers. You should provide answers, answers that display the fullness of your understanding of the relevant materials from the course.

#### PARAGRAPH TWO

-- Do NOT, therefore, "hide your light under a bushel." There is no such thing as an essay answer that is "too long"--consistent with the author's revealing his or her literacy with respect to the materials, and sophistication of response to the question.

#### PARAGRAPH THREE

-- Begin with an introductory paragraph that indicates your general response to the question, but that does not go into specifics; an introductory paragraph should arouse the reader's interest in reading further. While it is not a good idea to prepare for a test such as this by memorizing full answers to each question, it can be a good idea to prepare the first few sentences of this paragraph. Doing so will get you started writing, and the rest should flow more easily after that....

#### **PARAGRAPH FOUR**

-- Organize the body of your answer into a succession of paragraphs, each one that develops a different point that bears on the answer. Each paragraph should, of course, have a topic sentence embodying the idea that the paragraph develops (sentences express a thought; paragraphs develop an idea). And each paragraph should also have sentences developing that idea with reference to relevant ideas from the readings.

#### **PARAGRAPH FIVE**

-- A cunning writer can, of course, make learned allusions to "relevant ideas"--thus persuading the reader that he or she has full mastery of those ideas--without actually spelling everything out in full. (The possibilities for deception here are, of courses, endless. "Learned allusions" can be "cunning illusions" in fact!!! But I prefer this kind of deception to failure to demonstrate that you do, in fact, have mastery of the relevant ideas. If nothing else, this kind of deception displays a certain flair that has to be worth some recognition.)

#### **PARAGRAPH SIX**

-- The actual succession of paragraphs ought to have some logic to it, as well. One appropriate method is to have an argument developed in a set of (say) half a dozen paragraphs, and to then have a set of (say) two or three paragraphs making appropriate reservations to that argument. (Remember that an answer to a question is, essentially, an argument.)

#### PARAGRAPH SEVEN

-- Granted that examinations involve time pressures, you might have to be selective about the ideas and reservations that you do embody in paragraphs of this kind. Examinations have time limits mainly to force you to organize your thoughts more or less efficiently.

#### PARAGRAPH EIGHT

-- The cardinal sin in an examination, however, is to leave early when you have the wherewithal to write a more developed answer. What will you do with the time you save? I can't imagine that it could be better used other than writing a more full answer when you have the capacity to do that.

#### **PARAGRAPH NINE**

-- A well-rounded answer should have a concluding paragraph that, essentially, provides a summary of the answer; that comes down on one side or the other, if only provisionally, given the reservations that must be made; and that leaves the reader feeling that there is something here to chew on...that thought has been provoked.

#### CONCLUSIONS

Generally, you should organize a sequence of paragraphs so as to make an argument in response to the question, and do so in a manner that demonstrates (truthfully or otherwise) that you have mastery of the relevant ideas from the course.

#### THE STATE OF THE DISCIPLINE

# Fall, 2000

John Orbell Class time: Thursday, 2-4:50pm

Office: PLC 927

Hours: Tuesday and Thursday, 8-10am,

and by appointment.

email: jorbell@oregon.uoregon.edu

An initial purpose of this class is to introduce first year graduate students in Political Science to the faculty of Oregon's department and at the same time to introduce students to diverse responses that can be--and are, in fact--given to the question: "What should political scientists be doing?" To this end, the second and third hours of every second week's class will be devoted to discussions among two or three faculty members about how they might answer that question. These will not be "debates" since (I believe) most faculty members accept that diverse theoretical and methodological approaches are fully appropriate--even that diversity is desirable. But I do hope that they will be informed and interesting discussions about the strengths and weaknesses that certainly are present in all such approaches.

In the second and third terms of your first year you will be taking department's required methods sequence that introduces you quantitative analysis in political science. Yet quantitative analysis (or any other form of systematic observation on the world) becomes important only in the context of theories of one kind or another, meaning that a prior concern is to understand something about the process by which theories are constructed. A further purpose of this class, therefore, is to introduce you to diverse forms of theory construction in the social sciences. I hope that you will learn some basic skills and techniques, and that through "hands on" practice you will acquire confidence in constructing your own theories. This part of the course is divided into five two-week modules, each presenting a distinct mode of theorizing in the social sciences. Course requirements are:

**Reading**: A collection of xeroxed materials available from the Bookstore; these are organized by week in what follows. Readings for weeks 1, 3, 5, 7, 9 are "how to" readings, showing the technique relevant for the five successive model-building exercises (below). The other weeks will involve abstracts (see below) and materials assigned from visiting faculty.

**Writing**: Five model-building exercises, one due at the end of each two-week period. Each exercise lets you develop your own model to explain some social process that interests you. These social processes might be drawn from your other social science courses. But I am no less interested in models of what you see happening in everyday life, perhaps things with which you are personally involved. Each of these exercises will each be worth 20% of your final grade. They must be no longer than four pages, typed and double-spaced (exclusive of diagrams-- which will normally be needed). In those five pages, you must lay out:

- 1. Why the process is problematic (viz: What's the question and why is it interesting?);
- 2. Why is this particular theoretical paradigm appropriate for capturing this process--as opposed to alternatives we have discussed? (viz: Why would the alternative beless appropriate?)
- 3. What are the key elements involved (viz: What are the variables in your model?);
- 4. How those parts interrelate to produce the outcome you observe (viz: Capturing process);
- 5. What would be critical evidence for testing the implications or predictions of your model? Most important, you should think about what observation would disconfirm those implications, should it be observed in the natural world.
- 6. What are the normative implications of this model, if it is true (viz: What leverage, if any, does it suggest for improving things?).

I will grade these theory construction exercises in terms of: The understanding of the particular technicalities that you reveal; the simplicity, elegance, power of the explanation your model offers; the imagination displayed in your suggestions for testing--and the quality of your writing. Out of respect for your ideas, I will edit your papers without mercy.

Note: If you wish to submit your papers on line, feel free to do so; send them as an attachment to me at <u>jorbell@oregon.uoregon.edu</u>. I'll be able to return them, along with my comments, in the same manner. (But please be careful of viruses!)

**Abstracts**: For each module, there is a set of readings "for abstracting." In each case, I'd like two or three students to present one page abstracts to the class on a paper they select from this list. Presentations should last about five minutes, but you should be prepared to answer questions about the reading. Presenters should prepare a copy of their abstracts for each other student in the class.

# List of faculty visitors to the class:

- Week 2: October 5th Jane Kramer, John Orbell and Rob Darst, "Models of Human action."
- Week 4: October 10th Gerry Berk and Pete Suttmeier, "Policy, Science, and Democracy."
- Week 6: November 2<sup>nd</sup> Jane Dawson and Christine Kearney, "Methodological Issues in Comparative Politics"
- Week 8: November 16<sup>th</sup> Priscilla Southwell and Jerry Medler "Too Much Democracy or Promoting Greater Participation?"
- Week 10: November 29<sup>th</sup> Misha Myagkov, William Baugh, and John Orbell, "Models, Laboratories, and Political Scientists making like 'Real' Scientists."

# **MODULE ONE (1st AND 2nd WEEKS):**

# CAUSALITY, FEEDBACK, AND COMPLEX PROCESSES

**First exercise:** Here I am looking for a paper using either the essential framework set out in Maruyama's paper or the framework set out by Boulding. Of course, if you want a challenge, you might think about using both. If you work from Maruyama's model, you will have to pay attention to feedback loops, their overall Adirectionand to what might change outcomes. If you work from Richardson's model, you will have to pay particular attention to the shape of the reaction functions, and the justification for those shapes. In either case, you will have to be careful in specifying variables, and the exact nature of the functional relationships between them, paying attention to feedback relationships.

# Week 1: Papers relevant to the first exercise:

Magoroh Maruyama, 1963. "The Second Cybernetics; Deviation Amplifying Mutual Causal Processes," American Scientist 51, pp. 164-179.

Kenneth E. Boulding, 1962. Conflict and Defense, chapter 2: "The Dynamics of Conflict: Richardson Process Models" pp. 19-40. Harper & Row.

# Week 2: The Art of Doing Science:

Robin Fox, 1997. Conjectures and Confrontations; Science, Evolution and Social Concern. Transaction Publishers. Chapter 8. AScientific humanism and humanistic science.pp. 161-186.

Robin Dunbar, 1995. The Trouble with Science. Harvard University Press. Chapter 10 ADivided loyaltiespp. 176-189.

John Horgan, 1995. The End of Science; Facing the Limits of Knowledge in the Twilight of the Scientific Age. Addison-Wesley Publishing Company. Chapter 6. AThe end of social science pp 143-158.

# First module abstracting: Items dealing with complexity, theory, science and thinking

Robin Dunbar, 1995. The Trouble with Science. Harvard University Press. Chapter 2 "What is this thing called science? and Chapter 9 AThe open society revisited pp 154-175.

Mayr, Ernst. 1997. This is Biology: The Science of the Living World. Chapter 2, AWhat is Science? and chapter 3, AHow does Biology Explain the Natural World? Pp. 24-78..

Garret Hardin, 1977. "The rewards of Pejoristic Thinking," from Hardin and Baden, Managing the Commons, W.H. Freeman and Co., pp.126-134

Lloyd Etheredge, The Case of the Unreturned Cafeteria Trays. The American Political Science Association, 1527 New Hampshire Avenue, N.W., Washington, 1976.

Root-Bernstein, Robert S. 1988. ASetting the Stage for Discovery: Breakthroughs Depend on More than Luck. The Sciences. May/June, pp. 26-34.

Kanigel, Robert and Cowley, Geoffrey. Nd. AThe Seamy Side of Science. Scientific American Staff, January 1997. AScience versus Antiscience?in Scientific American pp. 96-101.

Hubert Blalock, "Recasting Verbal Theories as Causal Models," chapter 3 of his Theory Construction; From Verbal to Mathematical Formulations

Fox, Robyn, 1989. The Search for Society: Quest for a Biosocial Science and Morality. Rutgers University Press. Chapter 10. Consciousness out of Context: Evolution, History, Progress, and the Post-Post-Industrial Society, p. 205-242.

Horgan, John. 1996. The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age. Addison Wesley. Chapter 1, AIntroduction: Searching for an Answerpp. 1-8; and chapter 5, AThe End of Evolutionary Biologypp 114-142.

Wilson, Edward O. 1984. Biophilia. Chapter 6, AThe Poetic Species,pp. 57-83.

# MODULE TWO (3rd AND 4th WEEKS)

#### RATIONALITY AS A BASIS FOR HUMAN ACTION

**Second exercise:** Here I am looking for an exercise using some variant of Subjective Expected Utility reasoning. This might be either the standard format introduced by Lave and March, or it might be a game theoretic version as introduced by Brams. If you work with the Lave and March model, you will have to pay attention to: The choice set, the contingencies that are possible from the so-specified alternatives, the associated probabilities, the values that are attached to Aend statesand --critically, the computation of SEU. If you work with the Brams model, you will have to specify the actors, their values, the pattern of "moves" that possible or likely, and any equilibrium that might (or might not) exist. In either case, you will have to specify actors, choices, values and the constraints that exist for those actors, and to predict outcomes from the model. Why might those outcomes not happen?

# Week 3: Papers relevant to the second exercise

Charles A. Lave and James G. March, 1975. An Introduction to Models in the Social Sciences. Chapter 4, AChoice. Pp. 85-121. Harper & Row.

Steven Brams, 1980. Biblical Games, AIntroductionand chapter 1: "The Creation of the World." Pp. 4-35. MIT Press, Cambridge, Mass.

John M. Orbell, "Hamlet and the psychology of rational choice under uncertainty." Rationality and Society, January 1993. Pp 127-140.

# Week 4: Rationality and some qualifications

Thomas Gilovich, Robert Vallone and Amos Tversky, 1985. AThe hot hand in basketball: On the misperception of random sequences. Cognitive Psychology 17. Pp. 295-314.

Daniel Kahneman, & Amos Tversky, 1982. AThe psychology of preferences. Scientific American, January, pp. 188-124.

For abstracting: Items dealing with rationality and the "A failure of rationality."

Herbert A. Simon, Human nature in politics; The dialogue of political Science with psychology. American Political Science Review, vol 79, p.292.

Elster, Jon. 1989. Nuts and Bolts for the Social Sciences. Cambridge University Press, chapters 3 ARational Choice, App. 22-29; and chapter 4 AWhen Rationality Fails,pp. 30-41.

Muzzio, Douglas. 1982. Watergate Games: Strategies, Choices, Outcomes. New York University Press. Chapter 1. AThe Conspiracy Breakdown Games,pp. 8-57.

Henry Hamburger, 1979. Games as Models of Social Phenomena, chapter 2: "The Language of Games," pp. 12-32. W.H. Freeman and Company.

Jane J. Mansbridge, "Introduction. Chapter 1: The rise and fall of self-interest in the explanation of political life." In Jane Mansbridge (ed.) Beyond Self-Interest, University of Chicago Press, 1990, pp. 3-24.

Dawes, Robyn, 1994. House of Cards: Psychology and Psychotherapy Built on Myth. The Free Press. Chapter 2: "Psychotherapy; The Myth of Expertise," pp. 38-74.

Simon, Herbert. 1986. AAlternative Visions of Rationality. Chapter 5 in Hal R. Arkes and Kenneth R. Hammond (eds.), Judgement and Decision Making: An Interdisciplinary Reader. New York: Cambridge University Press. Pp. 97-113.

Cosmides, Leda and John Tooby. "Better than Rational: Evolutionary Psychology and the Invisible Hand." In American Economic Association; Papers and Proceedings, May 1994, pp327-332.

# MODULE THREE (5th AND 6th WEEKS):

#### **EXCHANGE MODELS**

**Third exercise.** Here I am interested in a paper dealing with exchange relationships, in particular as formalized by the standard Aeconomicmode set out by Lave and March, but a paper that followed out the line of thought started by Trivers would be interesting, too. If you work with the Lave and March model, you will have to specify the Asupplyand Ademand functions, their particular locations, the price and supply predictions from those functions and how the latter might change as a consequence of changes in the former. If you work with the more general model of Trivers, you will have to specify just what is being exchanged, and the cost-benefit implications of that exchange for the (specified)

partiesCas well as the consequences of any Atemptationto cheat. Again, of course, you might think about combining the two paradigms.

# Week 5: Papers relevant to the third exercise

Charles A. Lave and James G. March, 1975. "Exchange." Chapter 5 An Introduction to Models in the Social Sciences. Harper & Row, Publishers, New York. Pp. 157-246.

Trivers, Robert. The evolution of reciprocal altruism. Quarterly Review of Biology, vol 46, March 1971, 35-57.

# Week 6: Exchange in your life and mine, and the lives of other animals

Mckenzie and Tullock, 1981 (3<sup>rd</sup> edition). The New World of Economics; Explorations into the Human Experience, chapter 1. "The economic approach to the study of human behavior," pp. 1-27; and chapter 5, "Sexual behavior," pp. 45-63.

Mulford, Matthew, Orbell, John, Shatto, Catherine and Stockard, Jean. 1998. APhysical Attractiveness, Opportunity, and Success in Everyday Exchange. American Journal of Sociology, May.

# For abstracting: Exchange in a wider perspective

Trivers, Robert L. 1972. AParental Investment and Sexual Selection, Quarterly Review of Biology 46, pp. 35-57.

Dunbar, Robin. 1996. Grooming, Gossip and the Evolution of Language. Harvard University Press. Chapter 6 & 7, AUp through the mists of time, and AFirst Words, pp. 106-155.

Armen A. Alchian, "The Economic and Social Impact of Free Tuition," New Individualist Review 5 no. 1(winter 1968): 42-52.

Armen A. Alchian, "Private Property and the Relative Cost of Tenure," The Public Stake in Union Power, ed. by Philip D. Bradley (Charlottsville, Va.: The University Press of Virginia, 1958), pp. 350-71;

Mckenzie Richard B., and Tullock, Gordon. 1981 (3<sup>rd</sup> Edition). The New World of Economics, chapter 2, "Anything worth doing is not necessarily worth doing well. Pp. 27-41. Richard D. Irwin, Inc., Homewood Illinois.

Axelrod, Robert. 1984. The Evolution of Cooperation, Basic Books. Chapter 2, AThe Success of TIT FOR TAT in Computer Tournaments,pp. 27-54; and chapter 4, AThe Live-and-Let-Live System in

Trench Warfare in World War I,pp. 73-87.

Frank, Robert. 1988. Passions Within Reason: The Strategic Role of the Emotions. W.W. Norton. Chapter 3, AA Theory of Moral Sentiments.

Mealey, Linda, Daood, Christopher and Krage, Michael. 1996. "Enhanced Memory for Faces of Cheaters. Ethology and Sociobiology: 17, 2, 119-128.

Cosmedes, L. 1989. "The Logic of Social Exchange: Has Natural Selection Shaped How Humans Reason?" Cognition, 31: 169-93.

# **MODULE FOUR (7th AND 8th WEEKS):**

#### VARIATION AND SELECTION AS A MODEL OF CHANGE

Fourth exercise. Here I am interested in a paper that deals with evolutionary modeling in some form. This does not have to be narrowly Abiologicalevolution; it could be, for example, to do with the evolution of ideas. If you take this alternative, you should specify the population of interest, the relevant environment, and the fit between that population and the particular environment—and, perhaps, the process by which that fit comes about. As an alternative, you might follow the Dennett line of thought about Aengineeringand try your hand at a Areverse engineeringanalysis of my Wada's Indicator, whatever that is—or, perhaps, some similar puzzle that you know about. If you take this alternative and want to theorize about the Wada=s indicator, you should examine it closely (it will be available in the HC office) for its peculiar pattern of capacities and other attributes, and derive hypotheses about function that are consistent with that pattern and those attributes.

# Week 7: Papers relevant to the fourth exercise

Dennett, Daniel C. 1995. Darwin's Dangerous Idea: Evolution and the Meanings of Life. A section from chapter 8 ABiology as Engineering, in particular, pp. 212-238. Simon & Schuster.

# Week 8: The generality of the model

Mayr, Ernst. 1997. This is Biology: The Science of the Living World. Chapter 9, A<Why? Questions: The Evolution of Organisms,pp. 173-206.

Dawkins, Richard. 1976. The Selfish Gene. Chapters 1 & 2, AWhy are People? and AThe Replicators,

pp. 1-21; and chapter 11, AMemes: The New Replicators, pp. 203-216.

# For abstracting: Papers on variation and selection modeling.

Weiner, Jonathan. 1994. The Beak of the Finch. Chapter 5, AA Special Providence,pp. 70-82. Random House.

Campbell, Donald. 1988. AEvolutionary Epistemology. Pp. 393-434 (chapter 6) in Donald CampbellMethodology and Epistemology for Social Science. University of Chicago Press

Simon, Herbert. 1969. The Sciences of the Artificial. Chapter 1. AUnderstanding the natural and the artificial worlds,pp. 3-29; and Chapter 5, A The Science of Design: Creating the Artificial,pp. 129-159. Cambridge: MIT Press.

Elster, Jon. 1989. Nuts and Bolts for the Social Sciences. Chapter 8, ANatural and Social Selection,pp. 71-81.

Campbell, Donald T. "The two distinct routes beyond kin selection to ultrasociality: Implications for the Humanities and Social Sciences." In Diane L. Bridgeman (Ed.), The Nature of Prosocial Development, Academic Press: New York, 1983, 11-41.

Donald Campbell, On the conflict between biological and social evolution, and between psychology and moral tradition. American Psychologist, December 1975, 1103-1126.

Leda Cosmides and John Tooby, "Cognitive adaptations for social exchange." In Jerome Barkow, Leda Cosmides and John Tooby, The Adapted Mind, Oxford University Press, 1992. Pp163-225.

Daly, Martin and Margo Wilson. Homicide. Chapter 7: "Why men and not women?" pp. 137-157.

Trivers, Robert. Social Evolution. Chapters 13 and 14. "The Evolution of Sex," and "Female Choice." Pp. 315-360.

Robert Wright, 1995. "The Biology of Violence; Is the inner-city violence a response to the social ravages of poverty, or a biochemical syndrome that may be remedied with drugs? ...a school of new Darwinians is proposing an answer that will unsettle both sides." New Yorker March.

Toda, Masanao. 1982. AThe Design of a Fungus Eater; A Model of Human Behavior in an Unsophisticated Environment. Pp. 100-129 in Man, Robot and Society: Models and Speculations. Boston: Martinus Nijhoff Publishing Company.

# MODULE FIVE (9th AND 10th WEEKS):

#### PRIVATE WELFARE vs COLLECTIVE WELFARE

**Fifth exercise:** The theme for this final exercise is the relationship between individual choices and macro (or society-wide, or Aaggregate") outcomes, one common to both Schelling and Hirschman. If you take the first alternative, you should specify the binary choice that is confronting a particular population, and describe (and justify) the functions that relate payoffs to different choosers to the proportion of the population making one choice or the other. If you take the second, you should again specify the environment to which individuals are responding, the incentives toward either AvoiceorAexit (or, perhaps, Adoing nothing) and work out the system implications of individuals' incentives. Of particular interest in both cases are patterns wherein individual incentives lead people away from collective welfare, but that is not necessarily the case, of course.

# Week 9: Papers relevant to the fifth exercise

Thomas Schelling, 1973. "Hockey Helmets, Concealed Weapons and Daylight Saving: A Study of Binary Choices With Externalities," Conflict Resolution, pp. 381-428.

Albert Hirschman, 1970. Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States. Chapter 2: "Exit: How the Exit option works; Competition as Collusive behavior," and Chapter 3: "Voice: Voice as a Residual of Exit; Voice as an Alternative to Exit." pp. 21-43. Harvard University Press.

# Week 10: Do people really defect?

Orbell, Dawes & van de Kragt, 1990. "The limits of multilateral promising." Ethics, April, University of Chicago Press. Pp. 616-627.

Orbell and Uno, 1972. "A Theory of Neighborhood Problem Solving: Political Action vs. Residential Mobility." American Political Science Review, June, 1972. PP.471-489.

# Papers for abstracting

Ostrom, Elinor. 1997. ASelf-Governance of Common-Pool Resources. To appear in Peter Newman, ed., The New Palgrave Dictionary of Economics and the Law.

John Orbell and Robyn Dawes, AA > Cognitive Miser= model of cooperators= advantage. American

Political Science Review, Vol. 85 No 2 June, 1991, pp 513-528.

Vanberg, V., and Congleton, R. 1992. Rationality, Morality and Exit." American Political Science Review, 418-431.

Nowak, Martin and Sigmund, Karl. 1993. "A Strategy of Win-Stay, Lose-Shift that Outperforms Tit-for-Tat in the Prisoner's Dilemma Game" Nature vol 364: p. 56.

#### NOTES ON THE EXERCISES

- Normally, diagrams will help. These should be carefully drawn (although not "pretty-pretty"), clear and as simple as possible, with all labels necessary for a non-sophisticated reader to understand.
- A playful approach will often produce interesting and new ideas. This does not mean that you shouldn't take the exercises seriously, or that you should try and be "funny." It does mean that irreverence with respect to standard explanations is often a condition for creativity. Mess around. Try standing things on their heads.
- The analytic tools themselves will often be a lever on your thinking. Once you have mastered them in the abstract, try "fitting" their logic to concrete situations. It might not work; if that happens, you will have discovered the limits of the tool, and perhaps something about the question you are asking.
- Collaboration often helps. Outside the classroom, theorists can use editors of journals, critics and (sometimes even) colleagues to give them feedback in the process of their thinking. I will give you feedback as you develop your projects, but your fellow students are also available for this purpose. And I do not grade on a curve--meaning that help or advice given to a fellow student will not damage your own prospects for a good grade.

#### INTRODUCTION TO CONTEMPORARY POLITICAL THEORY

P.S. 207/34735

JO	HN	<b>ORBELL</b>

**OFFICE: 927 PLC** 

**HOURS:** 

#### What the course does

Political science uses the term "theory" in the context of:

- 1. Positive or descriptive theory--that is, abstract formulations purporting to explain (or model) how some part of the world actually works; this is the standard way the term is used in the physical sciences;
- 2. Normative or prescriptive theory--that is, generalized arguments about how things ought to be. This is more consistent with the way the term is used in Philosophy.

This course is based on the two ideas (a) that the most important issues in contemporary political life are normative and ethical ones; but that (b) those issues cannot be properly addressed in the absence of reasonably confident knowledge about how the world actually works. "Reasonably confident knowledge" means understandings that can be made explicit (formal) and that, in those terms, stand up to systematic observation (empirical test).

It follows that, if we are to address the important normative issues, we have to, also, engage in constructing and testing formal theories of political processes. In the past twenty or so years, Political Science has made considerable advances in both specifying such theories and testing them, and the course will provide an overview of some of the central ideas. A continuing theme will be the relevance of those ideas to the important normative issues of--in alphabetical order--efficiency, equality, fairness, freedom, and justice.

# **Organization and requirements**

I have organized materials in weekly segments and would like you to keep up with your readings in these terms. You need to buy two things:

- 1. The package that is available from the Bookstore; this contains xeroxed papers and articles. Materials are organized by week. It is smart to read ahead, because you will then have an opportunity to ask about things you might not understand during class time.
- 2. de Vaal, Chimpanzee Politics.

There are three requirements:

- 1. A midterm essay-type examination. A week or so before this test, I will circulate a set of study questions and, at the time of the test, will select three from this list using a table of random numbers; you should write on two of those. This will comprise 25% of your grade;
- 2. A final essay-type examination. This will be organized in the same manner, only here you should write on four of five that I will select randomly. This will comprise 50% of your grade;
- 3. A term paper of (about) ten pages, typed and double-spaced. This is NOT a research paper in the normal sense. I want you to demonstrate your control of the materials from the course, by using some of them (say, 8-10 items??) to address either a normative or a positive issue in politics that you are familiar with. I define "politics" broadly to include politics at all levels of social life.

At the end of this handout there is an Appendix with some suggestions about essay writing--I know many people are unpracticed at that. There is also an Appendix containing an in-class game that we will play, and that embodies many of the issues discussed in this course.

# WEEKLY READING ASSIGNMENTS

# WEEK ONE: GOVERNMENT AS A TWO-EDGED SWORD

Breton, & Wintrobe, "The Bureaucracy of Murder Revisited," Journal of Political Economy, vol 94, no. 5, 1986.

Tullock, Gordon: chapters 2 and 3, "The cooperative state" and "The exploitative state" from his The Social Dilemma, University Publications, Blacksburg VA 24060. 1974.

Hobbes, Thomas. "Of Man" from Leviathan 1652, chapter 13, "of the natural condition of mankind as concerning their felicity and misery" and chapter 14, "of the first and second natural laws, and of contracts" and chapter 17, "of the causes, generation, and definition of a commonwealth." The Bobbs-Merrill company, Indianapolis.

# WEEK TWO: THE MICRO-FOUNDATIONS OF POLITICAL LIFE, PART ONE

De Vaal, Chimpanzee Politics, entire.

# WEEK THREE: THE MICRO-FOUNDATIONS OF POLITICAL LIFE, PART TWO

Turnbull, Colin, The Mountain People, Chapters 5, 6 & 7: Family and Death; Self and Survival; Man without Law. pp. 109-182, Simon and Schuster, 1972.

Frank, R. "A theory of moral sentiments." From Passions Within Reason, Norton, (1988), 43-70.

Axelrod, R. Chapters 1 & 4, The problem of cooperation, and The live and let live system in World War 1. From The Evolution of Cooperation. New York: Basic Books, pp. 3-24; 73-87.

#### WEEK FOUR: POLITICS AND STRATEGY: A NEW LOOK AT OLD STORIES

Orbell, "Hamlet and the Psychology of Rational Choice under Uncertainty." Rationality and Society, vol 5 no 1, 1993, pp. 127-140.

Haley, J. "Power tactics of Jesus Christ" from his book The Power Tactics of Jesus Christ, Grossman Publishers, New York, pp. 27-52.

Brams, Steven. "Introduction" and, "The Creation, and its Aftermath." From his Biblical Games, MIT Press, 1980, pp. 10-35

# WEEK FIVE: POLITICS AND STRATEGY: SOME MODERN THEORY

Riker, W. Chapters 2 & 5, The Size Principle, and The Dynamic Model, from The Theory of Political

Coalitions. New Haven: Yale University Press, pp. 32-46, 102-123.

Riker, W. Implications from the disequilibrium of majority rule for the study of institutions. American Political Science Review, 1989, 432-450. Also: Comments by Rae and Ordeshook, and response to them by Riker.

Riker, W. The Art of Political Manipulation. Yale University Press Chapter 3: "The flying club."

# WEEK SIX: SOCIAL NORMS AND SOCIAL COLLAPSE

Campbell, D. "On the conflict between biological and social evolution and between psychology and moral tradition. American Psychologist, 1975.

Gambetta, D. "The Maffia and the price of distrust." From Gambetta, D (ed), Trust: Making and breaking cooperative relations. New York: Basil Blackwell.

#### WEEK SEVEN: RULES AND CONSTITUTIONS: DEMOCRATIC INSTITUTIONS

Downs, A. Part 1 of his An Economic Theory of Democracy. Harper & Row, 1957 Basic structure of the model.

# WEEK EIGHT: RULES AND CONSTITUTIONS: MORE DEMOCRATIC THEORY

Bartlet, R. Chapter 2, "Uncertainty and influence." From Economic Foundations of Political Power. The Free Press

Orbell and Wilson, Institutional Solutions to the N-Prisoners dilemma. American Political Science Review, vol 72, no. 2, 1978

#### WEEK NINE: NORMATIVE ISSUES

Orbell, J. & Rutherford, B. "Can Leviathan make the life of man less solitary, poore, nasty, brutish and short?" British Journal of Political Science, vol 3, pp 383-407, 1972,

Coleman, J. Review Essay: Inequality, sociology and moral philosophy, American Journal of Sociology, November, 1974, 80, #3 pp 739-764

# WEEK TEN: NORMATIVE ISSUES, CONTINUED

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Ethics, October 1985.						

Orbell, Dawes & van de Kragt, Keeping multilateral promises, Ethics, April, 1990.

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**Undergraduate Graduate** Program

Program

Courses and Registration

Department **Directory** 

**Faculty Fields** of Focus

**Undergraduate Program** 

**Graduate Program** 

Courses and Registration

**Department Directory** 

**Faculty Fields** of Focus

# **Political Science: Home Page**

Department of **Political Science** 

1284 University of Oregon 1415 Kincaid St, PLC 936 Eugene, OR 97403-1284

Telephone (541) 346-4864 Fax (541) 346-4860 polisci@darkwing. uoregon.edu



# Announcements for Sunday, March 6, 2005

- Political Science Summer Course Descritpions are available. Plan to join us for an exciting summer!
- Are you a Political Science Major? Take a look at our blackboard site blackboard. uoregon.edu.
- Initial registration for spring term runs between February 21st and March 4th.
- Commencement information and registration for the Political Science ceremony will be available about April 1. Watch this space for the announcement.
- Looking for Scholarship Information?

The **Department of Political Science**, which is a part of the College of Arts and Sciences, offers courses in a variety of subjects, including U.S. politics, international relations, comparative politics, political theory, and methods of social-science research. Areas in which the department specializes include Asian, environmental, Latin American and Eastern European politics.

Our department offers a program of graduate studies that serves around 40 students and leads to Master of Arts, Master of Science, and Doctor of Philosophy degrees.

The department's undergraduate program serves approximately 500 majors, and also offers a minor. Courses are offered in three broad subfields of United States Politics, Political Theory, and World Politics.

# Featured Faculty

Ronald Mitchell



Ronald Mitchell is currently completing two research projects. The first involves development of a database of all multilateral environmental treaties and the application of quantitative methods to associated data to examine the effects these treaties have on the behavior of states and nonstate actors. The second, with colleagues at Harvard University, examines the conditions under which environmental science influences international policymaking. He teaches courses on international relations, international environmental politics, and international regimes.

#### How to use this website

These pages provide program and advising information for new and current students. Links within the documents will guide you to detailed information, or use the links across the top of each page to jump to a main category. The "UO Political Science" logo will bring you back to this home page. Across the bottom are links to other sites that will provide important information for the University of Oregon.

You will need Adobe® Acrobat® Reader to view files designated with ... The reader is available off of the Duckware CD-ROM.



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**Program** 

Courses and Registration

Department **Directory** 

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# UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES



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# The Institute of Cognitive and Decision Sciences

at the University of Oregon

Events!!!

Constitution

Members

Focus Groups

Newsletters

Calendar

Technical Reports

Contact Information

Related Links



The Institute of Cognitive and Decision Sciences is dedicated to exploring the workings of the mind and brain and how they affect human behavior and social interaction. Our goals are to advance the empirical study and theoretical understanding of cognition, culture, and communication from an interdisciplinary perspective. In pursuing those goals, the Institute will promote the integration of diverse methods and theories from the social, human, and life sciences.

# **Focus Groups**

The Institute is organized around the following focus groups:

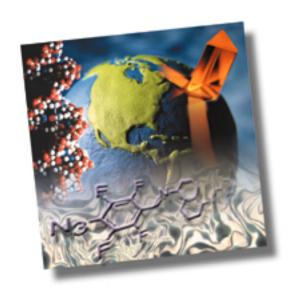
- Group Formation and Collective Action
- Decision Making and Social Cognition
- Event Representation
- Evolution and Cognition
- Language, Mind, Brain
- Other Minds
- Complex Adaptive Dynamical Systems
- Music Cognition

# **INSTITUTE OF COGNITIVE AND DECISION SCIENCES**

<u>Constitution</u> - <u>Members</u> - <u>Focus Groups</u> - <u>Newsletters</u> <u>Calendar</u> - <u>Technical Reports</u> - <u>Contact Information</u> - <u>Related Links</u>

**Room Scheduling** 



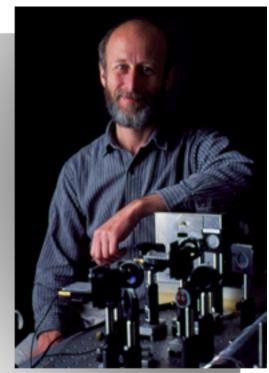


# **Tech Transfer** Update

UO-connected High-Tech Company Blossoming, Catches Intel's Eye

In 1995, technologies developed by <u>University of Oregon</u> physicist <u>Thomas Mossberg</u> became the basis of a new company, <u>Templex Technology</u>, Inc. Since that time the company, which develops innovative, high-bandwidth optical communications, has grown to about thirteen employees. It recently re-located to the Riverfront Research Park adjacent to the UO. The new facility will allow Templex staffing to nearly double in the next year or two.

On September 27, 1999, Templex announced that Intel Corporation has invested an undisclosed amount in the company. Templex intends to use the investment to further its product development, develop strategic partnerships, build company infrastructure, and create market awareness.



Tom Mossberg

Back to INQUIRY home page

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# Department of Physics

University of Oregon, 1371 E 13th Avenue, Eugene, OR 97403, USA

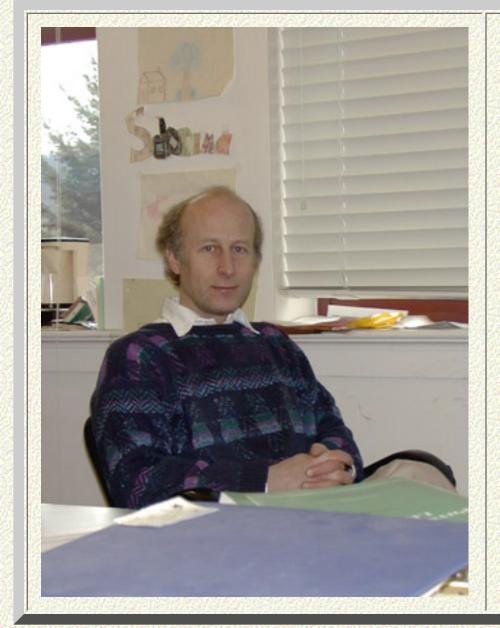
phone 541-346-

fax 541-346-5861 http://physics.uoregon.

- Welcome to our Department (includes directions)
- List of Faculty, Staff, Research Associates, and Graduate Students
- Research in and around the Physics Department
- Course Offerings in Astronomy and Physics
- Information for Undergraduate Students
- Information for Graduate Students
- Applied Physics Masters Program

- Current Events in the Department
- Current Openings in the Department
- UO Home Page
  - College of Arts and Sciences
  - UO Library System
    - Science Library
- The Electronic Universe Project , a Science Outreach Server
- Active Learning Outreach
- Physics Related Links
- Information for Faculty and Students (UO internal only)

Comments or problems? Mail webmaster@physics.uoregon.edu



# Thomas W. Mossberg; Professor; Ph.D. 1978, Columbia

- At UO since: 1987
- Field of Specialization: Experimental optical physics
- Research Interests:
   Quantum Optics; Two
   Photon Lasers; information
   storage technology
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Back to faculty page