

STV newsletter

Centre for Society, Technology and Values

Number 20

July 1991

NEW DIRECTOR AND HOME FOR CSTV



CSTV has a new home and a new director, Norman Ball, but the mandate and goals of the Centre remain the same. It is now a part of the Department of Systems Design Engineering. Department Chairman Prof. Muthu Chandrashekar feels the move is a logical continuation of the long-standing cooperation between CSTV and Systems Design.

The move came after long consultation and numerous meetings. "One of the uppermost considerations was maintaining the Centre's strengths, particularly its Advisory Board and interdisciplinary nature, while at the same time having a clearly defined administrative affiliation," states Ball. "We are very pleased that interdisciplinarity will not be compromised and we will continue to offer STV courses to students from all faculties across campus."

Consolidation and building on previous achievements are major challenges facing CSTV and new director Norman Ball. An important part of this is the new STV 100 Workbook [see article on next page -- ed.]

Expansion of courses is also paramount to the Centre's future growth, states the new director. "We need to help more people benefit from the leadership CSTV has provided in the past and will continue to provide in the future." Important tasks ahead include offering STV courses to more University of Waterloo students and reaching out to work with other educational institutions, as well as professional associations.

Ball sees a need for more emphasis on problem-solving in STV courses. "We need to begin to stress the generation of ideas and solutions to problems which go beyond just creating an awareness of the problem. Awareness isn't enough."

He cites as an example a reading course he gave on perceptions of environmental problems and solutions". Students gained an understanding of the different ways groups perceive problems, a key skill for professional engineers.

There is a serious shortage of Canadian-oriented teaching materials in the STV area. Ball sees this as an opportunity for the Centre although he adds that "Paradoxically, many funding agencies exclude the development of educational material."

CSTV would like to offer correspondence courses but "only if it can be done properly," says the new director. "Our ability to expand STV course offerings will depend on resources and our ability to involve many different disciplines and types of professors on campus."

Ball came to UW two years ago as Northern Telecom Professor of Engineering Impact on Society. He is a member of the Systems Design Engineering Department with a cross-appointment to the History Department. His research concerns the interaction between technology and society -- contemporary and historical.

As Northern Telecom Professor, he is writing a textbook entitled *Partners: Engineering and Canadian Society* and an accompanying volume of case studies. The project is funded by a \$100,000 educational materials grant from the Canadian Studies Directorate of the Department of the Secretary of State of Canada.

In addition to research and writing, Ball spends considerable time lecturing at Ontario engineering schools on the subject of professionalism. He also lectures and conducts research at the University of Alberta. As evidence of growing interest in STV issues, he cites the sponsorship of these activities by the Association of Professional Engineers, Geologists and Geophysicists (APEGGA), Alberta Government Telephones (AGT) and the Association of Professional Engineers of Ontario (APEO).

In the summer of 1992, his term as Northern Telecom Professor will end and he will assume a full STV teaching load which will include a new course on engineering and Canadian society in the fall of 1992.

Option Coordinator Leaves Legacy

"It's certainly been an interesting time," remarked David Huron, of his secondment as Option Coordinator for the Centre during 1990 and '91.

Enrolments in STV courses have increased 55% during his time with the Centre despite severe budget problems. "On one hand, the courses are expanding in a very positive way and on the other, our available funds are contracting -- it hasn't been easy."

Huron compliments then-director George Atkinson: "He was a very conscientious director during difficult circumstances."

One of Huron's primary goals was to improve and polish STV 100, the program's introductory course. "We have increased the variety of the curriculum, including the addition of [instructor] Daryl Pullman's moral and ethical perspectives which helped to flesh out the values section of the course."

A lot of time was spent documenting the existing STV 100 curriculum -- "a good legacy to leave behind since it ensures continuity of our academic program." Huron feels particularly good about the upcoming STV Workbook being authored by Pullman. [Details in a separate article in this issue.-- ed.]

With the assistance of Stuart MacKinnon in the Arts Library, Huron increased library holdings in STV-related materials, through a two-year \$5,000 grant from SSHRC's Specialized Research Collections Program. He hopes this will help to increase awareness of STV issues in students across campus.

Citing lack of continuity as one of the major obstacles for the Centre up to this point, Huron is pleased that CSTV's Advisory Board will be maintained and that commitment to interdisciplinary is a priority with all those involved.

Like Atkinson, Huron has concerns about maintaining the balance of students from various faculties in STV courses, particularly STV 100. A partial answer to this, he feels, will be found in the vigorous promotion of STV courses to students in all UW faculties.

Huron is particularly happy that long-time Advisory Board member Sally Lerner will assist director Norman Ball as option coordinator. The responsibilities of the role have been redefined with the major duties being split by Lerner and Kathy Sharpe, the Centre's administrative assistant.

"It would have been nice to have achieved more," sighs Huron, adding that teaching was the most rewarding part of his role.

He will be teaching STV 200 this fall to approximately 15 students. The course is organized as a group-oriented project on a specific theme. The theme for this term will be "Technology and Culture Industries."

Calendar of Events

October 22, 1991

Hagey Lectures

Humanities Theatre, University of Waterloo
8:00 p.m.

Dr. Abbyann Lynch, director of the Westminster Institute for Ethics and Human Values in London, Ontario, will speak on "Biotechnology and bioethics: collaboration or combat."

February 6 - 9, 1992

7th Annual Technological Literacy Conference

National Association for Science, Technology and Society
Radisson Mark Plaza Hotel
Alexandria, VA

Conference themes include Health and biomedicine; Moral, ethical and philosophical perspectives; and Technology, industry and work.

Proposals are being solicited by October 1, 1991 for hands-on workshops and activities; papers, tutorials or case studies; panel discussions; and posters.

Registration fee: \$80.00 US before Dec. 1, 1991
\$95.00 US after Dec. 1
\$40.00 US for students

Information: (814) 865-9951
FAX: (814) 865-3047

New Workbook for STV 100

CSTV has contracted with Dr. Daryl Pullman, veteran STV 100 instructor, to author a workbook intended to complement the lectures given in the introductory course.

A textbook has never been included as part of STV 100; course notes were used in past terms to provide supplementary reading material to lectures.

Pullman is confident that the proposed workbook will standardize the curriculum while assisting students to acquire and organize the course materials.

It will be printed on three hole punched loose leaf paper and inserted into binders to enable students to add other materials such as readings, additional notes and assignments.

Dr. Pullman will begin the compilation of materials this summer. The finished project will be ready for the next offering of STV 100 in January 1992.

Outgoing Director Maintains Close STV Ties

"Positive feelings" are the words used by George Atkinson, CSTV's director for 1989-91, to describe his thoughts on the Centre's recent move to Systems Design Engineering.

Atkinson sees many challenges ahead for new director Norman Ball, not the least of which is recruitment of students from all UW faculties to STV courses. That the Centre's Advisory Board will continue to function with representatives from all UW faculties and maintain its position on the Interdisciplinary Program Board is reassuring to Atkinson.

Atkinson began his association with CSTV in 1985, when he was invited to be part of a committee to develop a proposal for the STV Option. He accepted, joining John Stubbs, Robin Cohen, Sally Lerner, Steve Smith and Barry Wills.

When STV 100 was first offered in the Winter '87 term, Atkinson was involved in team-teaching along with Lerner, Wills and Russel Legge. He served on the Advisory Board until September 1989, when he returned from a sabbatical leave to become director.

As new director, he identified two projects which merited immediate attention: filling the need for an option coordinator and exploring external fundraising options for the Centre.

David Huron was seconded from Conrad Grebel College to oversee the STV Option. "David has indeed proven to be a valuable asset to the Centre, working intensively with STV students, instructors and teaching assistants and obtaining a special grant for STV-type books in the Arts Library," says Atkinson.

As for external fundraising, "the impending Campaign Waterloo made it impractical to embark on fundraising for CSTV at that time."

At the request of the Dean of Arts, CSTV surveyed faculty members across the campus with the goal of fostering interdisciplinary research. The responses generated were published in a *Profile of Faculty Interests* in March 1990. "Although we were hopeful, this did not result in any joint work being organized in cooperation with the Centre," Atkinson stated.

Atkinson has enjoyed his last two years as director of CSTV, a role which he deftly juggled into an extremely busy schedule which included being director of the Liberal Science program, undergraduate and admissions officer for Chemistry and teaching undergraduate chemistry courses.

Atkinson will continue to be a member of CSTV's Advisory Board and maintains a strong interest in STV issues.

STV Option and Courses

"The STV Option is definitely alive and well. New students are signing up for the option every week," enthuses the Centre's outgoing option coordinator, David Huron.

Sixty-four students participated in this Spring's offering of STV 100. Dr. Daryl Pullman was course instructor with the help of two teaching assistants: Gail MacCrimmon from Environmental Studies and Sarah Arulanandam from Engineering.

A new reading course was offered this spring by Norman Ball to two STV Option students. The course is entitled "Perceptions of Environmental Problems and Solutions" and is listed as STV 201B.

Three students are completing their STV Option requirements with STV 400 this term. Wayne Heasman (E.S.) is exploring "Criteria for Urban Sustainability" under the supervision of Sally Lerner. Calvin Lantz (Arts) will discuss "The Medieval Village and the Normative Narration of History" with Larry Haworth supervising. James Saper (E.S.) will air a series of radio shows on CKWR on the topic "Society, Technology and our Environmental Crisis: exploring the links". His supervisor is Greg Michalenko. For information on these projects, please contact the CSTV office at ext. 6215.

STV 200 will be offered in the Fall '91 term. It will be taught by David Huron [see separate article on this page -- ed.] STV 400 will be offered to students completing their option requirements.

The Centre is exploring the possibility of cross-listing SCI 263 (Science in Society) with Liberal Science in the Fall term. More information will be available in the next few weeks.

The Winter 1992 offerings include at least STV 100, STV 200 and STV 400. The former will be taught by Prof. Daryl Pullman.

The Centre plans a vigorous promotion campaign in the Fall aimed at students of all faculties. Included are a new brochure, a poster and addresses to new students.

Canada-wide Interest in STV Issues

Dr. David Long, former STV 100 instructor, informed us earlier this year from King's College in Edmonton that he will be introducing a course there this fall entitled "Technology and the transformation of work". In 1992, he will be involved in teaching science-technology-society courses at Kings as well as the University of Alberta.

The Centre was recently visited by Dr. Jim Mason of the University of Regina's Faculty of Administration for information on UW's STV courses. Mason hopes to introduce a similar program at Regina.

Thanks to all our *Newsletter* readers who responded to our readership questionnaire and to Todd Ruthman, a UW Engineering student who submitted the Beynon Award article. *Photo courtesy of UW Central Photographic.*

The *CSTV Newsletter* is published three times a year by the Centre for Society, Technology and Values, University of Waterloo. Your letters and comments are welcome. Please contact Kathy Sharpe, Centre for Society, Technology and Values, University of Waterloo, Waterloo Ontario Canada N2L 3G1. (519) 885-1211, ext. 6215; FAX (519) 746-4791.

Recent CSTV-sponsored Events

CSTV has co-sponsored two events in the last few months.

In March of this year, Dr. Paul Beam of UW's English department addressed the topic "Technology, Imperialism and the Iron Ring Ceremony: Kipling's contribution to Canadian engineering." This brown bag lunch discussion was co-sponsored by CSTV, the Liberal Science program and the English department.

The event drew a small but keen group of faculty and students and sparked lively argument about imposing ethics on engineers.

Once again the acclaimed BBC film series "Connections" was run Thursday noonhours from May till July. Episodes included "The Trigger Effect" which explores our dependence on complex technical networks as illustrated by the New York city power blackout in the 1960s, "Faith in Numbers" describing the invention of the printing press, and "Yesterday, Tomorrow and You" which questions our present situation and prospects for the future.

This series was co-sponsored by CSTV, the Sandford Fleming Society, the Dean of Science and several student societies.



Recycled Paper

New Award Encourages Humanitarianism in Engineering Students

Applying engineering knowledge for the benefit of society is a noble pursuit. The William J. Beynon Memorial Award rewards engineering students who do just that. The Award is financed by the family of the late William J. Beynon, an engineer, in honour of his humanitarian contributions to society.

To be eligible for the award, a UW undergraduate engineer must be active in applying engineering knowledge in the service of society. "In the service of society" encompasses a wide range of activities. These could include increasing ecological awareness, aiding the physically and cognitively challenged, and improving the welfare of industrial employees. Activities can take place on a work term or an academic term.

However, the judging committee overseeing the award is looking for more than just a work term in the ergonomics department at GM or a project course designing a visual telephone for the deaf. The committee wants to reward those dedicated and enthusiastic students who take the time to do more than is expected of them.

The award of \$900.00 is available each term. Students can apply themselves or be nominated by others. Contact the Awards Office, Needles Hall, University of Waterloo, Waterloo, Ontario N2L 3G1. Telephone (519) 885-1211, ext. 3583.

Centre for Society, Technology and Values
University of Waterloo
Waterloo, Ontario
CANADA N2L 3G1