

In-Depth: UNB'S Arts Forum: Professors and Their Research

Editor: Luke Peterson

On the evening of February 21, four members of the Faculty of Arts talked about their current research in a forum designed to inform members of the university community and the general public about some of the research projects currently under way in the Faculty. The audience included students in English 3110 (Expository Writing), whose assignment was to report what they had heard at the Forum. A selection of their articles follows. Dr. Mary Rimmer, who teaches English 3110, organized the Forum with the assistance of Dr. Diana Austin, Associate Dean of Arts and moderator of the Forum. Dr. Rimmer also acted as editor for her students.

Modelling Airline Behaviour

by Jihong He

Since the 1970s, the idea that government control of air travel should be reduced has become more and more prevalent, and the air-travel market in the United States has become more and more deregulated. Following this deregulation, each airline has open access to air travel routes and to a lesser extent airports.

What does this phenomenon lead to? Are there any problems from the economic point of view? If so, how might these be solved?

These questions have concerned Professor John Rowcroft, a microeconomist at UNB, and his colleagues who are trying to answer

them by modelling airline behaviour. Professor Rowcroft says he and his co-researchers first observed the airline market closely. One of the observations they made is that everyone wants to fly at the same time. Since each airline wants to make the greatest

profit possible and each has open access to every route, problems arise as market-driven airlines interact with the structures provided by government. As a result, at certain hours airports are highly congested, so much so that the

government is often urged to build more airports to accommodate the traffic. However, at other times airports

are so quiet as to be almost out of use.

Another observation Professor Rowcroft's research group made is that many airlines fly most of their passengers to a hub airport by large

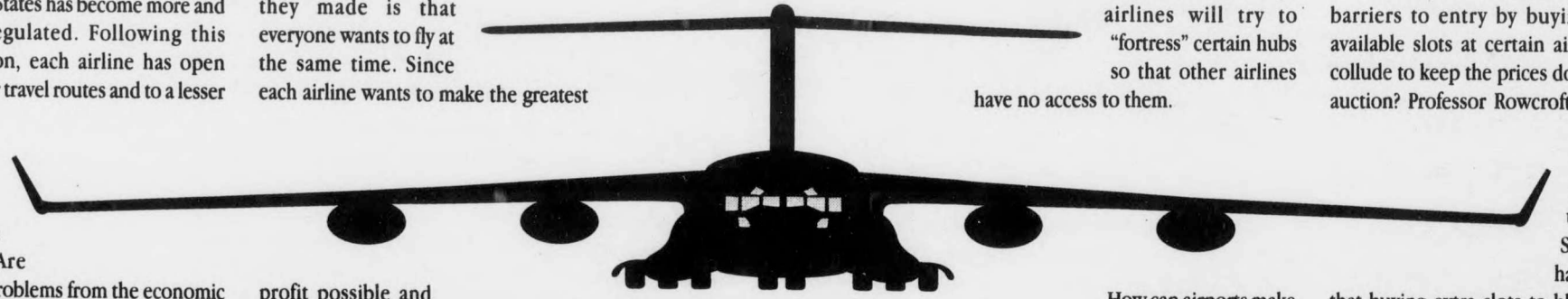
aircraft, and then disperse the passengers from that hub to other destinations, thereby reducing their costs. In order to reduce competition, the large airlines will try to "fortress" certain hubs so that other airlines have no access to them.

How can airports make the best use of their facilities in this deregulated air-travel market? Based on their observations and predictions, Professor Rowcroft and his research group have proposed the idea of periodic auctions of take-off/landing

slots at airports. Each airline would then have to bid for the slots it wanted to use, and would of course have to pay more for slots at peak hours.

But will the airlines set up barriers to entry by buying up all available slots at certain airports, or collude to keep the prices down in the auction? Professor Rowcroft says that

these outcomes are unlikely. Simulations have shown that buying extra slots to block other airlines' entry is not economically worthwhile, and airlines do not usually manage to agree to work together. Professor Rowcroft concludes that if the results of this research are applied, airports can expect to make better use of their facilities.



Taming the Bear: Russia on the Brink of Literacy

by Pamela Easton

How does a nation invent reading, writing, and literature? This is the question that Professor Allan Reid, of the German and Russian Department, is grappling with. The seventeenth century in Russia is the focus of his study.

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ing to Professor Reid, Russia prior to the seventeenth century had no universities and there was no significant study of law, sciences, or philosophy. In fact, the majority of the population (90-95% percent) were serfs. This situation contrasted with that

of Western Europe, where there were long-standing universities and a tradition of philosophical studies. Russia had only visual arts, architecture, and a tiny amount of literature.

Why was Russia so different? Professor Reid suggested two reasons: geography and religion. Russia was located away from the West and therefore there was no easy exchange of ideas. The Orthodox church, based in Constantinople and then in Moscow rather than in Western Europe, was the church of the Russians. The common element in Russia's geography and religion at the time was isolation. The society that resulted was self-centered, even xenophobic.

By the second half of the seventeenth century the West had experienced the Renaissance, marking discoveries in science, geography, and other fields. Russia, however, had not participated in the Renaissance. Though some try to label periods in Russian history with Western terms (Renaissance, Romantic, etc.), the labels do not work, because Russia did not develop in the same way as the West.

Russia first started developing an education system, literature, and contacts with the West under Peter the Great, who had St. Petersburg built as his "window on the West." Professor Reid is trying to find out just how that development happened, and to trace the growth in Russia of literature, universities, and an educated, literate society.

The Bare Bones of Forensic Anthropology

by Brandi Matthews

At least once a year it seems, some unsuspecting hunter, tramping through a New Brunswick forest, stumbles upon the skeletal remains of someone or something. The police are notified, and they arrive at the scene with cameras, measuring tapes, shovels, and Professor Moira McLaughlin, forensic anthropologist for the Maritimes.

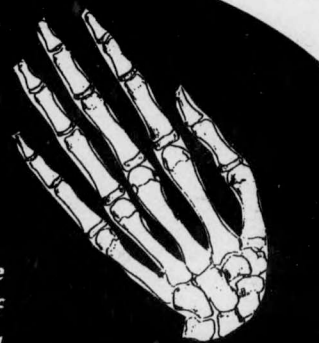
Trained at the University of Toronto and the University of Tennessee, Professor McLaughlin has worked closely with various law enforcement agencies, in the Maritimes. Most recently, she worked with the RCMP during the Marcia LeBlanc investigation. But her expert status does not always mean high-profile cases. She recounted the story of a particular August day when she had to drive two hours from her home in Fredericton, simply to open two large plastic garbage bags filled with the remains of decomposing bear flesh, evidently left there by hunters who had killed the bear out of season.

Professor McLaughlin gave the audience a brief glimpse into osteology, the study of bones, and its application to the law. From the bones, a person's age and sex can be determined, as well as the cause of death in some cases. The "scene" where the body is found is also crucial. Factors such as soil type, the season at the time of death, and predators in the area, affect the rate of a body's decomposition. Accurate recording and observation before the actual excavation takes place are essential, because once started, excavation destroys much of the evidence the scene provides.

Professor McLaughlin was quick to point out a popular misconception about her field—namely, that it is an exact science. Scientific techniques and methods are used for evidence recovery and analysis, but variation between individuals and between populations does not allow for an absolute and exact conclusion. During her talk, Professor McLaughlin

biology lab and see a human skeleton any time you want. But at the scene, it doesn't take long to realize that this skeleton was once a living, breathing human being, who loved others and was loved by them. Humour is the only way to keep emotions from getting in the way of the job. This point demonstrates another drawback to a career in which you

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15 year-old



adult

ghin managed to amuse her audience on more than one occasion, despite the morbid topic. She noted that humour was necessary in order to get her job done. Society has been desensitized when it comes to skeletons, she explained. You can walk down to the

must identify skeletal remains—the elation that comes from a job well done is quickly countered by the awareness that somewhere, someone will soon be told that a missing loved one has been found.