

a statement made on May 13, 1982 by William E. Tolby, former Director of the Central Intelligence Agency:

"The purpose of verification is not the accumulation of legal evidence for a court of law. It is to protect our nation against Soviet forces and weaponry. If we protect our nation against the threat of another generation of Soviet nuclear weapons through a freeze we would be substantially ahead even if the Soviets were to successfully cheat in a minute and marginal program. Any program which offered the prospect of a strategic advantage to the Soviets by definition would have to be of a size and consequent visibility that we could identify it long before it became a direct threat and take defensive action against it...."

"For these reasons, it is my considered view that a mutual and verifiable freeze on the development of additional nuclear weaponry by the Soviet Union in the United States would be feasible to negotiate. We do not have to, nor should we, 'trust' the Russians."

Matthew Eisentraut, Grad Studies

## Re-register or else!

To: Faculty of Science Students  
From: Dean of Science

Advanced Registration for the 1983-84 Winter Session will begin on March 15, 1983.

Students in either a B.Sc. Specialization or a B.Sc. Honors Program must have their advance registration approved by the appropriate department advisor between March 16 and March 31. Students who are in a B.Sc. General Program and who wish to transfer to a B.Sc. Specialization or Honors Program (or who are in a four-year B.Sc. program and wish to transfer to another four-year

B.Sc. program) should obtain a re-admission form at the Faculty Office at the time when the Advance Registration Form is obtained. These students must also see the appropriate department advisor between March 16 and March 31 for provisional transfer approval and course program approval.

Students who are either continuing in the B.Sc. General Program or transferring from a four-year B.Sc. program to the General Program must advance register between March 15 and April 15.

**It is absolutely imperative that those Science students who are currently attending and who are planning to return for the 1983-84 Winter Session, take advantage of the opportunity to advance register.**

The number of full-time students in the Faculty increased by 16% last year and 20% this year. Similar increases are expected this fall. Because of these increases and budget problems, overcrowding and course restrictions may occur. Only those students who are academically qualified and who advance register can be reasonably certain of enrolling in courses they wish to take in the 1983-84 Winter Session. Students who are eligible to advance register and do not, may have problems in obtaining desired courses at In-Person Registration in September.

It is not only imperative that you advance register, it is also essential that you choose your courses very carefully because there may be limited access to other courses or sections in September.

Only by the full co-operation of the students will the Faculty of Science be in a position to anticipate, plan and provide the courses you would like to take.

W. John McDonald, Dean of Science



thorough, real, and adequate to his circumstances, though there would be no extras and very few accomplishments.

And if to this solitary man entered a second Adam, or better still, an Eve, a new and greater world, that of social and moral phenomena, would be revealed. Joys and woes, compared with which all others might seem but faint shadows, would spring from the new relations. Happiness and sorrow would take the place of the coarser monitors, pleasure and pain; but conduct would still be shaped by the observation of the natural consequences of actions; or, in other words, by the laws of the nature of man.

To every one of us the world was once as fresh and new as to Adam. And then, long before we were susceptible to any other mode of instruction, nature took us in hand, and every minute of waking life brought its educational influence, shaping our actions into rough accordance with Nature's laws, so that we might not be ended untimely by too gross disobedience. Nor should I speak of this process of education as past for any one, be he as old as he may. For ever man the world is as fresh as it was at the first day, and as full of untold novelties for him who has the eyes to see them. And Nature is still continuing her patient education of us in that great university, the universe, of which we are all members—Nature having no Test-Acts.

Those who take honors in Nature's university, who learn the laws which govern men and things and obey them, are the really great and successful men in this world. The great mass of mankind are the "Poll," who pick up just enough to get through without much discredit. Those who won't learn at all are plucked; and then you can't come up again. Nature's pluck means extermination.

Thus the question of compulsory education is settled so far as Nature is concerned. Her bill on that question was framed and passed long ago. But, like all compulsory legislation, that of nature is harsh and wasteful in its operation. Ignorance is visited as sharply as willful disobedience—incapacity meets with the same punishment as crime. Nature's discipline is not even a word and a blow, and the blow first; but the blow without the word. It is left to you to find out why your ears are boxed.

The object of what we commonly call education—that education in which man intervenes and which I shall distinguish as artificial education—is to make good these defects in Nature's methods; to prepare the child to receive Nature's education, neither incapably nor ignorantly, nor with willful disobedience; and to understand the preliminary symptoms of her displeasure, without waiting for the box on the ear. In short, all artificial education ought to be an anticipation of natural education. And a liberal education is an artificial education, which has not only prepared a man to escape the great evils of disobedience to natural laws, but has trained him to appreciate and to seize upon the rewards, which Nature scatters with as free a hand as her penalties.

That man, I think, has had a liberal education, who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold, logic engine, with all its parts of equal strength, and in smooth working order; ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of Nature and of the laws of her operations; one who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of Nature or of art, to hate all vileness, and to respect others as himself.

Such an one and no other, I conceive, has had a liberal education; for he is, as completely as a man can be, in harmony with Nature. He will make the best of her, and she of him. They will get on together rarely; she as his ever beneficent mother; he as her mouth-piece, her conscious self, her minister and interpreter.

## CHOPPING BLOCK

A guest column  
by Thomas Henry Huxley

Suppose it were perfectly certain that the life and fortune of every one of us would, one day or other, depend upon his winning or losing a game of chess. Don't you think that we should all consider it to be a primary duty to learn at least the names and the moves of the pieces; to have a notion of a gambit, and a keen eye for all the means of giving and getting out of check? Do you not think that we should look with a disapprobation amounting to scorn, upon the father who allowed his son, or the state which allowed its members, to grow up without knowing a pawn from a knight?



Yet it is a very plain and elementary truth, that the life, the fortune, and the happiness of every one of us, and, more or less, of those who are connected with us, do depend upon our knowing something of the rules of a game infinitely more difficult and complicated than chess. It is a game which has been played for untold ages, every man and woman of us being one of the two players in a game of his or her own. The chessboard is the world, the pieces are the phenomena of the universe, the rules of the game are what we call the laws of Nature. The player on the other side is hidden from us. We know that his play is always fair, just, and patient. But also we know, to our cost, that he never overlooks a mistake, or makes the smallest allowance for ignorance. To the man who plays well, the highest stakes are paid, with that sort of overflowing generosity with which the strong shows delight in strength. And one who plays ill is checkmated—without haste, but without remorse.

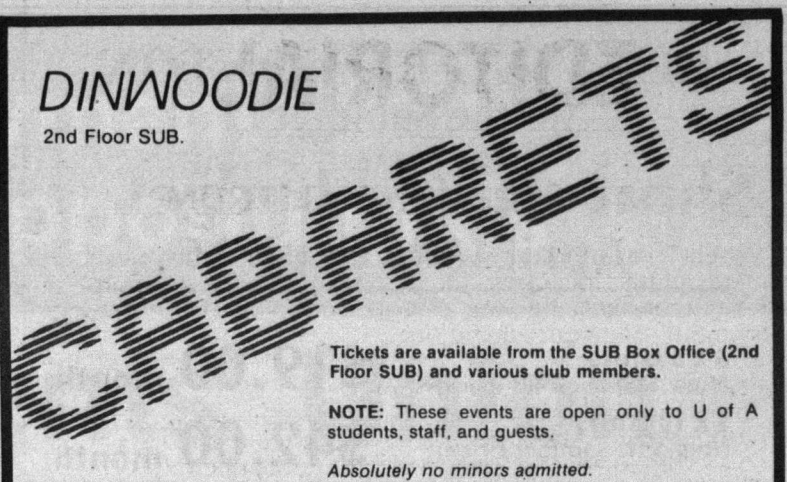
My metaphor will remind some of you of the famous picture in which Retzsch has depicted Satan playing at chess with man for his soul. Substitute for the mocking fiend in that picture, a calm, strong angel who is playing for love, as we say, and would rather lose than win—and I should accept it as an image of human life.

Well, what I mean by Education is learning the rules of this mighty game. In other words, education is the instruction of the intellect in the laws of nature, under which name I include not merely things and their forces, but men and their ways; and the fashioning of the affections and of the will into an earnest and loving desire to move in harmony with those laws. For me education means neither more nor less than this. Anything which professes to call itself education must be tried by this standard, and if it fails to stand the test, I will not call it education, whatever may be the force of authority, or of numbers, upon the other side.

It is important to remember that, in strictness, there is no such thing as an uneducated man. Take an extreme case. Suppose that an adult man, in the full vigor of his faculties, could be suddenly placed in the world, as Adam is said to have been, and then left to do as he best might. How long would he be left uneducated? Not five minutes. Nature would begin to teach him, through the eye, the ear, the touch, the properties of objects. Pain and pleasure would be at his elbow telling him to do this and avoid that; and by slow degrees the man would receive an education, which, if narrow, would be

## DINWOODIE

2nd Floor SUB.



Tickets are available from the SUB Box Office (2nd Floor SUB) and various club members.

NOTE: These events are open only to U of A students, staff, and guests.

Absolutely no minors admitted.

U of A Ski Club  
presents

## Secret Society



Thursday, March 31/83  
Doors 8 p.m.

Downhill Riders' Ski Club  
presents

The Easter Bunny Boogie  
with



## TEENAGE HEAD

& guests  
Yesterdays Papers

\$8 Advance. \$10 Door.

Saturday, April 2/83  
Doors 8 p.m.

U of A Flying Club/P.C. Club  
presents

## The Golden Calgarians & The Draggnetts

Friday April 8  
Doors 8 pm.

Sound by Allstar

U of A NDP Club  
presents

## Rational Youth from Montreal

Cold War/Nightlife Tour '83

with guests:

The Standards (formerly The Mods)

Saturday April 9  
Doors 8 pm.

5 special prizes:  
"city night flights"

