

SIMON FRA
SPRING (C
Octobe

Convo
By Dr. C.

Celebrated ecologist, renowned for

An honorary Doctor of Science was conferred
Business and Faculty of Environment ceremony
Dr. Holling's convocation address.

Madame Chancellor, Mr. President, my guests, my honorary Doctor
speaks with warmth and the sense of
relatives arrived yesterday
are graduates

Sixty years in the same
time I got some six or seven
myself: that understand people
simple & . Funny even
attention some puzzling
gradually opened the world to me
new territory that had been created

I had a particularly overarching
precision, realism and holism, and
were not quite available, they can
different organisms to answer different
deer mice, birds, stalking lions in
some of these questions concern

Then when the computer came a
computer languages suddenly
what I have been discovering eventually
eventually to the point where we
understanding that systems don't
indeed, that's the way the world
And what's more important than

Understanding those has become more and more evident. We could have predicted for example, the cod collapse off Newfoundland some decades before it occurred and had done something about it. And yet it occurred and destroyed a changed dramatically the social and economic livelihood of communities in Newfoundland.

A similar example of reaching a critical tipping point has been the Lodgepole pine beetle outbreaks in this part of the world and throughout British Columbia and even into Alberta. The same sudden appearance of a surprise, an unexpected event, the roots of both those surprises, both those crises, are traced to a slow phenomenon occurring unconsciously and unaware.

You and we have a great ability to deal with fast events, immediate events. We are less visionary in dealing with those slow events that accumulate, that have consequences of our fast actions. But it's those slow events that invisibly increase the fragility, the loss of resilience of the systems we live in and depend upon. It's forcing a new paradigm, a new paradigm that's led to these theories of resilience, to adaptive complex systems, to integration across scales from the mouths of rivers on the west coast are right up to the arctic, from the small and fast to the slow and the big, from needles on trees functioning over days and months to the whole boreal forest over millennia and to management of resources that is adaptive. That's all part of complex adaptive systems theory. It reflects human intellectual knowledge and the fast inventions that deal with these and generate these surprises.

We are now living in a time when those surprises and those collapses, have emerged on a global scale. They have been the financial collapses, collapses in banks, the deep structural

Africa, in Europe and other parts of Canada and the US as a collegium of global experimentation driven by the enterprise of young people like you. Many of those experiments will fail, that's what experiments are about: you learn when some fail. But a few will succeed. You need them to search for those few successes that synergize between them, to propagate a new phase in our world.

As we begin to accumulate the results of these experiments, already ongoing, we've got to begin to encourage non-violent protests—those protests that in our world that really started, I think with the Arab spring, that are emerging now in the Occupy Wall Street movement. I'm told that on Saturday here in Vancouver an arm of that protest movement, non-violent but articulate, is emerging at the Woodward's building, 10:00 am. 10am at the Woodward building in Vancouver there will be a general assembly—quiet—no—noisy, non-violent protestors. If you have any chance of doing so, go there and contribute that expression and that voice. Make it a big Arab Spring. Open a new world!

Thank you very much.