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Dec. 8, '88

The student's name is Ronald. He came from Germany, currently majoring in Philosophy. If he is serious I would mention your name.

Dear

I am most interested in your teaching plan for Native Science and appreciated your generosity to share with me. I take it that you are asking me about general philosophy/strategy of Native Science Education. So I shall follow up the "strategy of discourse" that we started to discuss. As to the teaching plan, in technical sense, I am not familiar enough with your education course to comment. I think your prof in the course will help you for that.

1. There is a trap that "teachers" fall into very easily. That is inherent in the Word/Notion of "teaching". We tend to think that we have to "put some knowledge into student's head". But that is the very same "missionary" attitude that victimized Natives. I call that "Intellectual Colonialism". You might find Kipling's poem "Whitemen's Burden" very interesting in this regard. If you "teach" Native children, I recommend that you keep the poem with you all the time.

Having a "good and righteous intention" is not enough. I would think that "Science Education" ought to be distinct from "Religious Education" in the sense "science" is not (ought not to be) imposition of "superior intellect" but a humble help to oneself and people.

Natives, particularly Inuits, feel offensive to offer even help if not asked. They are not individualists in European sense, but respect each person's "Sovereignty of Thoughts and Act". If you see a danger in your friends' plan, you ready yourself for a "rescue" operation, and preferably you help your friends in their back so that they do not know what you have done.

Because of "time scale" and "distance" involved, Inuit Way is not practical in our "modern life". So we have to "tell" our friends about the danger that they might fall into. And results do "teach" their children. But it is preferable that we keep the Inuit code of Etiquette in our mind.

Besides, education is "Empowerment", not subjugation of people under an Authority, however right the Authority is. We engage la "discourse" and create a learning situation in which students hopefully learn "one's own ability to learn". Teachers are "facilitators", not dictators who say "I am the Right, follow me". Interestingly Christ and Lenin were called "Teacher" in the "follow me" sense. Buddha never has spoken in such a "commanding mode language". Native Gods, Wisemen, Wisewomen did not speak like that either, as far as I know. It is a distinct

characteristic of "Judeo-Christian-Islam" mentality to "command". [You note A.J. Ayer in Language. Truth. and Logic says saying anything is "commanding". That is the paradigm of European-Philosophy. I do acknowledge "practical efficiency" of European Way of talking, but there are questions as to such a sense of "Truth" which is distinctively Judeo-Christian-Islamic.]

Native Science Education, in my estimate, is not attempting "Teaching of Native Science." in the Authoritarian sense of European Teaching. I think it is good that "Native Science" is mentioned and recognized, but there is a "Native Way of Education".

We get paid "teaching", therefore we like to assert and claim our "achievements" in teaching. If we are "practicing student teachers", we like to get credit in "teaching". But Education is inherently "invisible". If your students say "I got my idea by my own power. The teacher did not help me", then you are doing the best sense of education.

[It is idiotic and possibly "criminal", but many of us university professors have tendency to "Show Off" how much we know in the name of Teaching. Some profs even make physics course as difficult as possible or adapt texts which look difficult (called "advanced") and think that as evidence for "good teaching". Since how much "Learning" students did in a course is not easily measurable, the deceit often goes through as "real education". The Dean is not knowledgeable nor care enough to see through the "Show Offs" covering up bad education.

Worse yet, the very students who are victimized think that difficult equations are written on black board is "good teaching". If a prof does not do that they think the prof is slacking off etc. They like to be "impressed" by incomprehensibility. They do not know that "making things easy" takes more intelligence and efforts. Unconsciously, perhaps, they do not like to learn anyway, therefore "good show off" is better (in terms of prestige, etc. Thus such a practice goes on.]

In that sense, we should try very hard "not to teach", but let students find out for their own.

[In this respect, I had several of very good teachers who were delighted to have us arguing against them. One of our teacher later received Nobel Prize. We used tell him "You do not know what you are talking about" etc. In order to fight with him, we read texts, references, papers etc., ahead of class time. We were ready to show him different ways to get the same results, at least. Many of us are now

Professors but we do not have students who would dare argue.

We talked about this and came to a conclusion that we are not worthy of the Trust by our students. We are not great teachers like our teachers were.]

2. The irony is, however, you probably find that "Try not Teach" takes more preparation than "Teaching". Since you are not "controlling" students' activities, thinking and feeling, you have to be very sensitive and understand "what is going on".

Some children may have already "internalized" Authoritarian Teaching Mode, and ask you "Mr. Teacher. What you want?" And, if you reply "I want nothing", then the children would complain that "You don't care".

You have to understand them too, and have to consider "sensual" needs of humans to "belong" to a group. Not every student even in senior high is like a Native Brave who is aloof of the "collective security". [The extreme Individualism of Native Braves is a "contradiction" to their "Communal Sharing Economy". But let me postpone discussion of "Complementarity of the Opposites" for the time being.]

On one hand we see that Einstein, Edison, Wright Brothers, et al were "Lone Wolf". They did not have "Gang Mentality" --- say like Nazi followers, American Lynch Mob, Bandwagon Riders, Opportunists, or what Nietzsche and Ortega called "Herd" ---.

On the other hand, "Science" is a "Social Enterprise" if not a "Collective Intelligence" of a society/culture. No society will survive without a "Shared Myth" in common. "Science" is a part of the "Collective Subjectivity" which defines "Reality" as the basis/context for social scale actions.

It is not that the "Science Educator" has to know the answer to the dilemma, but the science educator is placing oneself to learn the situation. To "Learn" is to deal with problems. Deciding an "answer" is patently "unscientific", for it means a refusal to learn.

So you go into the "mob scene" and try to make a sense of what your students are doing --- inside their minds, which are enormously complex dynamics for each different ways ---.

How a "teacher" prepare a lesson plan, in such a situation? We say "It is impossible". But somehow we are "responsible". That is to say, we ought to be "able to respond" whatever the situation there is.

The best we might do is to have a "Dream" of what might happen and prepare for it in a "non-specific" way. We are not there to stop what we consider "undesirable" by an exercise of our little "power". [We are not going into Vietnam to teach people how to be "rational", "intelligent", "scientific" etc. Simply because we cannot.] We go into the mess and try to find out Native Science in the mind of children. We appreciate their intelligence, their silence, and pay due respect. Probably, that is the most that we can.

To be sure, we have added complication that our colleagues in teaching profession might not understand this. Yet "Education" is a social action. Each of us as an individual cannot do "education". Your co-workers are essential. We need very best of communication among us. The trouble is, of course, we are not too competent in communicating. Even between a Wife and her Husband, or between the best of friends, we have troubles. We can hardly have the same Dream. We do not feel pains of others. In that, we are completely ignorant and "uneducated".

When we come to think of "Education" as a Social action, we also become aware of problems of parents, society around, racial and ethical differences, etc. "Native Science Education" is nothing, if we are not prepared to take the pain of recognizing the problems.

Of course, we do not talk about such problems directly to our students. But, unless we have some idea as to what we are doing amidst all these problems, we cannot be a "teacher", let alone be an educator. [Or it may be true that we can be a teacher because we are blind to the problems. Sometimes, a Blind Romanticism may be a blessing, and that is how we "fall" in love. We find "love" is very painful thing soon enough. But then it is too late. We are trapped. We put the best of our brave face and pretend that we are burning up in the flame of passion. No matter how good our preparation is, we are always vulnerable. We would

consider ourselves lucky, if we have had a beautiful moment or two. Maybe, such is Being a Human.]

3. The above going is too pessimistic. I know humans have a natural Grace and things work out alright, despite all odds against it. But saying that may not be enough, so I add a "technical" suggestion.

If you are to do Native Science, perhaps it is helpful to consider beyond "Two in comparison/antagonism".

To talk and think "Native Myth" tend to give an implicit meta-geometry of "One against Another". Saying "Native Myth" implicitly implies "European Science" as its opposite. That is the basic "Formula" of Christian-Marxian Dialectics.

Hegelian Dialectics is a bit more complex (in my peculiar reading). It is not Two in Opposition, but a Complex towards Synthesis. And the "Discourse" would be helped by a better Meta-Geometry, say, of (2 x 2) Matrix at least.

The "European Science" contains a vague, implicit, but recognizable "myth, religion" which is held in a tension/contradiction. The meta-geometry of "One Against another" tends to obscure this internal tension/contradiction.

Native Science tends not show the "split" (say knowledge against spirituality). By saying this, we are not comparing "Native Science" against "European Science" but rather seeing "Internal Structures/Relations". (2x2) Matrix let our "metaphors" (perceptions) wonder into subtler things. That is the merit.

Even if it is wrong, we say like "Native Science and Native Religion" in comparison to "European Science and European Religion" (heuristics). By simply saying so, it already start mind of people wondering; about "internal structures", not just comparison of "European versus Native". This is a remarkable "Ritual" (Technology) for our thinking/talking. It is an extension of the technology known as "asking a right question at right time". (Let us call it "Seeing a problem in appropriate context".) We use help of "mental geometry" (which is a "mathematics" and hence "science").

It inevitably leads us into thinking what "Science" is for, relative to what "Religion" (Myth, Spirituality) is for. Why the split? Does not Native side also have troubles/tension? Native Americans are also Humans, not "Gods" nor "Beasts". Characteristics of Humans are (i) that they have (if not create) problems, and (ii) that they have ability to learn (to deal with problems). To put the same in another way, "Science" is (i) knowing Reality, and (ii) Changing Reality (even a minimal sense of change in "perception" of Reality). [If you wish to have (2x2)

Matrix, you could multiply Love/Power pair in combination with them.]

The "Knowing" and "Changing" is a pair of Dialectical Oppositions. They can be viewed as "Knowing Reality" as a move towards Stability (conservative) and "Changing Reality" is a move from Sensitivity. What is Sensitive cannot be Stable, which the Grand Inquisitor of Dostoevski explained to Jesus in return. But it can also be viewed as "Complementality". You have seen an example of this in Quantum Epistemology in your Philosophy of Science course. You note that even Love, despite its intent to "preserve" and "protect", changes everything. "Power" forces changes and defend stability. Education (of both Power Way and Love Way) changes "self", yet it is a construction of an "identity".

How to use this (2x2) matrix as a tool for synthesis is a "science". Interestingly, Native American had this science under the name of "Sacred Hoop", consisting of 4 elements arranged in a circle. If we think of "Science" to be "Way Of Thinking" to deal with problems in living, Natives had a better Science than the Science of Christian-Marxist (1x1) Dialectics.

Science of Native is not "Man against Nature" (God and Devil) or "Ego against Object" (Subjectivity against Reality), but rather a Complex Circular Relationships which we recently have come call "Environment" (though we tend to think it as an object still).

To grasp the "Whole" is better achieved by "Hoop" metaphor than European Linear Metaphor. That is to say, Native Science is more sophisticated than European Mechanics,

[A copy of a speech by Chief Sealath is enclosed as example.]

4. Another recent "discovery" in European Science is "Anthropic Principle". The "discovery" is in the sense of Columbus "discovered" America. For Natives have known the principle for a long time. Anthropic Principle says that the Universe in which intelligent being could possibly exist is a Miracle --- the probability of such adverse to emerge is very, very small, one billionth of billionth of billionth. It is so small that the very notion of "Probability" becomes invalid. (A French Mathematician Polson knew that too small a probability cannot be handled by the usual Probability Theory.) Only the Grace of love could have made it possible. Needless to say such a "feeling" does not fit well within European science, and therefore it creates a tension.

The reverence towards "Environment" (Universe) cannot be generated without an appreciation of the Miracle/Grace that Anthropic Principle refers.

Unfortunately European Science stands on an Ideological denial that "There Exist No Miracle/Grace". When you teach Native Science, you are implicitly breaking the "Fundamental Truth" (Dogma, Axiom) of European Science.

5. However, Native Science is not predicated on Linear One-Directional Time. "Time" can be multi-dimensional, or "Two Ways" (flow from the Future to the Past, as well as from the Past to the Future). That is also in agreement with recent "discovery" in Physics. (If you like, call it Metaphysics. But One-Way Linear Time is one metaphysical theory among many others.)

I do not wish to "lecture" on physics here, so I stop. But it seems that Native Science Education cannot be stopped within the "European Convention", let alone within its Ideology. The European Convention for itself is breaking down.

[See for "discoveries" full European side:

J.T. Fraser Of Time, Passion, And Knowledge George Braziller 1975. D.B. Griffin (ed) Physics And The Ultimate Significance Of Time. State U of New York Press 1986.

E. Bergson Matter And Memory Creative Evolution. Etc.]

Rather, I would hope that Native Science will be a great help for the "Science" of the 21st century. It is not "comparison" but "learning on" is the essence of Native Science Education.

Sam K.

c.c. Colorado, Little Bear, Milton.

APPENDIX 1

The Coming of the Green

...buffalo was no more, and the destruction of the North American environment has accelerated ever since.

We have no written record of Crazy Horse's view of the Europeans; his deeds must speak for him because he was murdered at the age of 35 by people who could never conquer him. But one might imagine that great Lakota Sioux leader would agree with Chief Sealth of the Duwamish Tribe of Washington State, who did leave a written opinion. Sealth, whose name lives on in that of the city of Seattle, wrote in a letter to President Franklin Pierce in 1855:

Every part of the earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. The white man... is a stranger who comes in the night and takes from the land whatever he needs. The earth is not his brother but his enemy, and when he has conquered it, he moves on. He leaves his father's graves, and his children's birthright is forgotten... all Things share the same breath—the beasts, the trees, the man. The white man does not seem to notice the air he breathes. Like a man dying for many days, he is numb to the stench... What is man without the beasts? If all the beasts were gone, men would die from great loneliness of spirit, for whatever happens to the beast also happens to man. All things are connected. Whatever befalls the earth befalls the sons of earth... The whites too shall pass—perhaps sooner than other tribes. Continue to contaminate your bed, and you will one night suffocate in your own waste. When the buffalo are all slaughtered, the wild horses all tamed, the secret corners of the forest heavy with the scent of many men, and the view of the ripe hills blotted by talking wires, where is the thicket? Gone. Where is the eagle? Gone. And what is it to say good-bye to the swift pony and the hunt, the end of living and the beginning of survival.

In spite of the exploitative 'there's always a new frontier' attitude developed by western societies, some members of those societies had begun to appreciate some environmentally negative aspects of the Western notion of 'progress' even before the time of Chief Sealth. Scattered attempts to preserve animals go back centuries before Christ to the time of the Assyrians - but they appear to have been attempts primarily to provide rich hunting for the aristocracy. In 1514, Parliament under Henry VIII, passed the first conservation legislation in the West - an act to protect the eggs of wild birds, in part to serve the interest of nobles in falconry. Sporadic attempts were made in various places, including Britain. To preserve dwindling forests (but not until the nineteenth century did widespread concern for diverse aspects of the environment begin to take shape...

Chief Sealth, in a letter that in some ways anticipated the modern ecological movement, this Indian Chief rebuked the President of the United States for the exploitative behavior and attitudes of white men.

Charles Darwin, Darwin's coherent, heavily documented ideas on evolution inspired an interest in nature and an appreciation for it among many of his contemporaries in Western societies.

APPENDIX 2

THE WHITE MAN'S BURDEN

1899

(The United States and the Philippine Islands)

Take up the White Man's burden—
 Send forth the best ye breed—
 Go bind your sons to exile
 To serve your captives' need;
 To wait in heavy harness
 On fluttered folk and wild—
 Your new-caught, sullen peoples,
 Half devil and half child.

Take up the White Man's burden—
 In patience to abide,
 To veil the threat of terror
 And check the show of pride;
 By open speech and simple,
 An hundred times made plain,
 To seek another's profit,
 And work another's gain.

Take up the White Man's burden—
 The savage wars of peace—
 Fill full the moth of Famine
 And bid the sickness cease;
 And when your goal is nearest
 The end for others sought,
 Watch Sloth and heathen Folly
 Bring all your hope to nought.

Take up the White Man's burden—
 No tawdry rule of kings,
 But toil of serf and sweeper—
 The take of common things.
 The ports ye shall not ender,
 The roads ye shall not tread,
 Go make them with your living,
 And mark them with your dead!

Take up the White Man's burden—
 And reap his old reward;
 The blame of those ye better,
 The hate of those ye guard—

The cry of hosts ye humour
 (Ah, slowly!) toward the light: —
 'Why brought ye us from bondage,
 'Our loved Egyptian night?'

Take up the White Man's burden—
 Ye dare not stoop to less—
 Nor call too loud on Freedom
 To cloak your weariness;
 By all ye cry or whisper,
 By all ye leave or do,
 The silent, sullen peoples
 Shall weigh your Gods and you.

Take up the White Man's burden—
 Have done with childish days—
 The lightly proffered laurel,
 The easy, ungrudged praise.
 Comes now, to search your manhood
 Through all the thankless years,
 Cold-edges with dear-bought wisdom,
 The judgment of your peers!