

# Change What ?

## How ?

### 10 Issues

#### We Must Change!

1) **Change** is necessary. We agree.

Both **urgent change** and **extensive change** are necessary.

5 The twenty-one nations who participated  
in the United Nations World Commission on Environment and Development  
(WCED), the Brundtland Commission, formulated what they agreed upon:  
**much must change.**

10 The Brundtland Commission states that the relationship  
between environment and development **must extensively change.**

These twenty-one nations were nations with diverse interests  
and diverse principles and policies of government.

Yet, the U.S.S.R., India, China, the U.S.A., Japan, West Germany, France,  
Italy, Brazil, Canada, and the eleven other participating nations agreed.

15 The WCED report, the Brundtland Commission report, clearly states:  
**"We must change** - both the regard we have for the environment  
and the way we develop".

In October 1987, the United Nations General Assembly heard  
and accepted the report.

20 The United Nations ratified the report: "Our Common Future".

The G7 Economic Summit of June '88 endorsed the report.

#### There is No Away to Throw Things

2) Environment and development go hand in hand.

25 We must heed the environment. Global weather patterns are changing.

We have damaged the atmosphere.

We have affected its chemistry.

We have both added quantities of gases,  
which have disbalanced its processes

30 and have added new compounds, which affect its healthy processes.

Greenhouse gases are creating a warming effect.

Ozone depletion is exposing us to ultraviolet B radiation from the sun.

# Change What ?

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Acid rain affects water resources and life in general.  
The oceans are seriously polluted. The Land is seriously polluted.  
35 Life and health is endangered. And we keep on generating waste.  
We still believe in waste.  
We still believe there is resilience and capacity in the biosphere  
to process the waste we generate, regardless of the quantity,  
a quantity which increases with the burgeoning population.  
40 We still believe there is an away to throw things.  
That away, where we throw things, is the same environment  
upon which we are dependent, totally dependent.

environment → development → environment  
45 (as a resource) (human activity) (as a dump)

## urban centralization

### Eliminate the Concept of Waste

50 3) Many practices of human behaviour must be **stopped**.  
We must **diminish** or **eliminate** fossil fuel burning.  
We must **halt** deforestation.  
We must **arrest** soil degradation and soil erosion.  
Land fill garbage dumping practices must be **stopped** or at least improved.  
55 Ocean dumping must **cease**.

**There is no away to throw things.**  
**We must** eliminate the concept of waste.  
**We must** replace the concept of waste  
60 with the reality of residue to be cycled.  
**We must** diminish packaging, storage, and transport,  
when and where that affects the residues of production and use.

## Change What ?

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#### We Cannot Substitute Talking about it for Doing Something about it

- 65 4) Conferences are held. Resolutions are passed. Conventions are ratified.  
Public awareness is heightened. Organizations abound. Laws are enacted.  
The problems are articulated. Advocacy abounds.  
But **we cannot substitute talking about it for doing something about it.**

#### Food, Water, Air and the Radiant Environment

- 70 5) We are losing our capacity to produce food. The drought affects crops.  
Water is unavailable or undrinkable. Beaches are unsafe.  
Seafood is contaminated.  
The air we breathe is becoming more and more foul and toxic.  
Approximately  $10^{-12}$  watts of power per square centimetre  
75 permeates the space in urban areas from power distribution  
and broadcasting.  
This radiation level is sufficient to cause a wide array of symptoms:  
headaches, nausea, dizziness . . .

#### Human Nature - Human Culture

- 80 6) Fundamentally, what is wrong? Why do we humans behave this way?  
What is there about human nature or human culture  
that allows this cascading tragedy?  
Millions of people are starving.  
85 Refugees are fleeing famine, while they can still walk.  
Refugees are seeking a haven, when they can afford travel.  
In the summer they seek shade, shelter, relief from the heat.  
In the drought stricken areas, they seek water.  
In the winter they seek heat, fuel, shelter, warmth.

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# Change What ?

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### The Poor are Most Affected

7) The poor are most affected. The poor can do the least to respond.

The rich are least affected. They can do the most to respond.

It is simply a moral issue.

In this case we can't prefer our individual experience

95 to the experience of others.

We are all affected. We can't locally only benefit ourselves.

Some of the rich may seek to preserve only their own comfort.

But some of the consequences befall all of us.

100 Property rights are the difference between the rich and the poor.

The poor are poor and the rich are rich because of property rights

and the art of using property rights  
and conditioned exchanges called contracts -

105 to gain preferential benefits,  
to gain wealth.

We substitute contracts for relationships.

Property rights and contracts require laws and law enforcement.

That puts law makers and law keepers between the rich and the poor -

to make and to keep the laws that preserve property rights.

110 We must affect the attitudes of the rich and the attitudes of the poor.

We are not only dependent upon other life forms,

we are dependent upon one another.

### Use the Advantages Responsibly

115 8) The productivity of the world requires concentrations of wealth.

Concentrations of wealth make planning and development possible.

To lose that concentration of wealth is to worsen the situation.

We don't have time to change political systems or political philosophies.

Anyone, everyone, with the advantages of wealth,

120 have the responsibility of wealth.

# Change What ?

## How ?

Unless we use the advantages responsibly, we will lose the advantages,  
perhaps violently, along with losing life itself.

125 It doesn't matter whether we concentrate that wealth  
in the hands of shareholders or the state, whoever has the wealth,  
must use the wealth responsibly.

## Concentrated Wealth and Ownership

### Laws and their Enforcement

130 9) Bankers, financiers, brokers, stock exchanges,  
all are symbols of concentrated wealth and ownership.

Wealthy people and wealthy nations are shielded, protected,  
guarded from desperate need .

135 They are shielded, protected and guarded from burglars, theft, blackmail  
and terrorism, by laws and their enforcement.

More and more law enforcement is directed  
towards sustaining property rights and the advantages of the wealthy.

Desperate need becomes destructive.

140 With nothing to lose, how can people be restrained by laws?

## Change What? How?

10) Change is necessary. We agree. But **what** are we going to change?

**How** are we going to change?

145 So many are so aware of the difficulties involved in gaining responsiveness  
from politicians, from leaders, from people in general.

So many are so aware of the difficulties involved in creating redirection,  
in getting reform.

150 We tend to be so accountable to the impossibilities of radical change  
and so unaccountable to the converging consequences of pollution  
and our abuse of nature.

It doesn't matter how hard it is to change. We must change - to live.

# Change What ?

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### 17 Points

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#### The Juncture

- 1) In these ten headings, in the foregoing, in these few minutes,  
most, if not all who hear or read these statements,  
can agree upon what has been said, even the questions raised.

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But at this juncture we have to begin to deal with the questions  
of **what to change** and **how to change?**

#### The Unfamiliar and the Familiar

- 2) Even a newborn infant responds more to **the unfamiliar**  
than to **the familiar**.

165

The head turns, the pulse rate quickens,  
when nursing, the sucking rate increases,  
all, indicate the response of the infant to the unfamiliar.

170

With experience, with learning, the unfamiliar becomes familiar.  
The head doesn't turn, the pulse doesn't quicken,  
the sucking rate doesn't increase.

175

Everyone has an alertness to the unfamiliar  
and a dim awareness of the familiar.

What we must do is to be sensitive  
to the relentless changes we are experiencing which affect life and health.

#### An Anchorage in the Familiar

- 3) We explore. We experiment. We are curious. We adventure.

180

We are intrigued by the new, the unusual, the unfamiliar.  
Look at the newspapers, the television,  
we are always probing the unknown.

But we probe the unknown, the unexplained,  
with certain cautions, with reserve, with an anchorage in the familiar.

185

Don't change too much, too fast. Don't go too far, too fast.

# Change What ?

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### The Tide of Consequences

4) None of us on the planet can hold back the tide of consequences.  
190 We, hearing these words or reading them, are perhaps among the  
best informed and best equipped  
to report the tide of consequences.

But no one alone can stay the consequences.  
Few, in small numbers, can diminish the consequences significantly.  
195 Only public information and public education can help.  
Headlines or two minute radio or television spots  
can't contain and convey the message.

People are prone to be angry at the messenger  
for the contents of a message to which they cannot respond.

200 They are angry because they are frustrated.  
They don't know what to do about the message,  
other than to deny it, not believe the contents of the message,  
or else not believe in the credibility of the messenger.

The messenger is there unwelcomely bearing the message.

205 Do we really want to be the messenger?

To whom do we deliver the message?

The opening line in the Kitchener-Waterloo Record  
reports my advocacy of conditioning aid to farmers  
210 upon reduction or elimination of the use of inorganic nitrogen fertilizers.  
Inorganic nitrogen fertilizers are affecting our water supplies  
and the chemistry of our atmosphere.

Those fertilizers are toxifying our water  
and contributing to the changing global atmosphere.

215 Will the farmers respond?

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220 Will the Ontario Ministry of Agriculture and Food advise farmers  
to diminish or eliminate the use of inorganic nitrogen fertilizers?  
Will the Federal Department of Agriculture adopt the policy?

I'm only someone somewhat informed about the environmental issues  
of water resources, atmospheric chemistry and food security.

225 I'm a messenger.

But perhaps **one difference** between the message we bring  
and the message some others bring is that  
we at DOMAIN practice the alternatives.

230 We use fish manure or goose droppings  
in place of inorganic nitrogen fertilizer.

### Believe What? Believe Whom?

5) I suggested to the farmer across the road that he take pine needles  
from our twelve acres of woods and put them on his strawberries -  
235 to improve the vascular structure of his strawberry plants.

Did he do it? No.

I suggested to la Cit\_ Ecologique that they not put all their cabbage plants,  
with the concentrated aroma, next to one another and attract the moths  
whose larvae were eating their cabbage.

240 I believe they will do what I suggest.

Why will they respond and not the farmer across the road,  
who works for the University of Guelph?

Because of **what they believe** and **whom they believe**.

### 245 Hear, Understand, Believe

6) All of us first must **hear**, then **understand**, then **believe**.

In order to help people **hear**, then **understand**,  
then **believe** Cicero recommends we tell people  
what we are going to tell them, then tell them,  
250 then tell them what we told them.

I like Cicero's suggestion. I find his suggestion is effective.

## Change What ?

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#### I Am Going to Tell You

- 255 7) I am going to tell you that **human life is dependent upon other life forms.**  
I am going to tell you that **there is no habitable room for human life,**  
**without habitable room for other life forms.**
- I am going to tell you that **human beings are separated, isolated,**  
**alienated from the life upon which human life is dependent.**
- I am going to tell you that **people need to hear, to understand**  
**and to believe in this dependence we have upon other life.**
- 260 I am going to tell you that people are separated, isolated, alienated  
from one another.
- We are dependent upon one another.

265 I am going to tell you: **we need to change the nature**  
**of our public information services and our educational patterns.**

I am going to tell you: **we must examine development**  
**in both the developed and the developing world.**

270 I am going to tell you: **we must learn, there is no away to throw things,**  
**there can be no waste, only recycled residues.**

#### A Sigh or Intrigue?

- 275 8) With this list of what I am going to tell you, this incomplete list,  
you may **sigh** in resignation at the duration of this presentation.
- You may alternatively be **intrigued**, alerted and aroused -  
to find out anything to say or do besides nag about the problems  
and the needed changes.

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### In Houses

- 280 9) People often live in houses. I live in a house.  
Often these houses are in a row. Each house has its own patch of property.  
There may be a fence. The fence defines the property.  
Around the house there is a yard.  
In front of the house, there is a road or street.
- 285 There are wires that connect the house to electrical services.  
There are wires that connect the house to the telephone system.  
In the city, there are pipes that deliver water and perhaps natural gas  
to the house.
- There is another large pipe that connects the house to the sewage.
- 290 There is a mail box in front of the house or a mail slot in the door.

### Substances, Energy, and Information

- 10) In bulk, **substances**, **energy**, and **information** arrive.  
Up the street we come, with bags of groceries.
- 295 A truck arrives with oil for fuel or perhaps with wood.  
The mail man delivers **information**. All of these are deliveries in batches.  
**Substance**, **energy**, and **information** come in batches.  
**Substances**, **energy** and **information** also come by line transport.
- 300 Water as a **substance**, is carried into our houses.  
Electricity or natural gas may be transported, by wires or pipes respectively.
- The telephone or cable television brings in **information**.  
Through the air, comes oxygen, as a **substance**, heat and light as **energy**  
305 and radio and TV broadcasts, as **information**.
- What goes out? In batches, in lines, through the air?  
Garbage, in batches, sewage, in lines, smoke, through the air.  
People are the universal batch transporters.

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310 People carry substances, energy and information in and out.  
See this diagram:

I m p o r t		/		E x p o r t			
T R A N S P O R T							
mode:		batch		line		air	
315	in	out	in	out	in	out	
<b>contents</b>							
	substance	food	garbage	H <sub>2</sub> O	sewage	O <sub>2</sub>	CO <sub>2</sub>
		people	people				smoke
320	energy	oil, wood	heat	electricity	heat	light, heat	light, heat
		people	people	CH <sub>4</sub>			
	information	mail	mail	telephone	telephone	television	ham
325	people	people	cable		radio	short wave	

## Another Kind of Human Development

11) DOMAIN proposes **another kind of human development.**

330 (see the documents: Planning Principles and Policies

Centralization and Decentralization)

In order for all of the highly ordered substance, energy and information  
to enter, something must be exported from our homes.

That something that must be exported is human effort and skill.

335 How much of that exported human effort an skill is used for transport  
of products, products required by our remoteness from the life forms  
upon which we are dependent, our remoteness from one another?

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### 340 Uses of Human Effort and Human Skill

- 12) One of the major types of production which uses human effort and human skill is **transportation**, the means of providing the batch **transport**, the line transport and the air transport of substance, energy and information.

345 We make roads, rails, cars, trains, and buses, pipelines, valves, cables, wires, and switches, conduit and fibre optic strands.

### Enslaved by Mass in Motion, by Transport

- 13) We are enslaved by mass in motion.

350 We are enslaved by the necessity to transport the substances, the energy and the information, required to combine human effort, to coordinate.

More particularly, we are enslaved by the necessity of transport -  
355 to sustain our remoteness from the life forms upon which we are dependent and our remoteness from one another.

If, when, and how we bring human life and the life upon which we are dependent, together, we diminish or eliminate transportation of many kinds  
360 and in significant quantities.

We diminish or eliminate the slavery to mass in motion, by means of overcoming our remoteness from the life forms upon which we are dependent and perhaps our remoteness from one another and our mutual dependence.

365

### New Good Neighbours

- 14) The primary producers: plant life, provide the oxygen we need to breath, the water cycling which stabilizes the weather, quenches our thirst, meets the need for water by other life forms, fixes the energy of sunlight  
370 and supplies primary food, gives us shade, shield and shelter.

Other life forms, parasites, predators and decomposers, complete the cycles and not only cycle the residues of life, but provide the energy forms, the fuels upon which we depend, in part.

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### A Need to Know, About Life

- 15) When we connect human life and the life forms  
upon which human life depends, human beings **need to know**  
about those life forms, what they do, what they need, how to care for them.  
This necessity of knowing about and tending other life forms  
380 comes from the latitudes and the geological regions we inhabit.

### Ecoculture

385

- 16) This tending of other life forms or ecoculture,  
implies a kind of corpuscular development,  
where the essentials of life are made immediately proximate  
to the human life which depend upon them.  
This involves a culture, knowledge, a form of knowledge we call ecological.  
Ecology is life which heeds its environment, its dependencies.  
Ecology is physiology extended to the environment.  
390 The practice of ecological life is **ecoculture**.

395

Ecosystemic relations which acknowledge the dependency of human life  
upon other life forms, dependence of human beings upon one another,  
is part of the practice of ecoculture.

### Change in Public Information and Education

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- 17) A whole public information and educational orientational change  
is necessary.  
We must see ourselves and define ourselves, not by isolation, not as objects,  
but as **connected, related and dependent**, upon after life forms  
and upon one another.  
This is another form of culture. This is **ecoculture**.  
This is a foundational subject more fundamental than any other.  
This supersedes in urgency and significance  
405 every other educational goal.  
This can be said because we are committing ecocide.

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Any and all other opportunities will be lost  
if we don't sustain the life essentials:

410 oxygen, water, food, shelter, shield, energy, residue processing.

It isn't optional. We don't have much time.

We must change much, swiftly, or we will encounter the consequences  
of not changing.

We will encounter those consequences violently.

415

End