

# FUTURES KIT



## FUTURES KIT

Prepared by Terry McCarthy and Myra Harpham for  
the New Zealand Commission for the Future.

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Terry McCarthy and Myra Harpham would be  
pleased to receive feedback from anyone using this  
kit or wishing to discuss any aspects of education  
about and for the future. Please write to:  
FUTURES KIT, PROGENI,  
Private Bag, Silverstream, N.Z.  
New Zealand

"Anticipa  
simulation  
separate o  
Botkin: e

"Educatio  
transmiss  
and more  
processes  
adapting  
Walz et a



"Anticipation is more than the act of mental simulation. It is a pervasive attitude. It is not a separate chapter. It colours the whole story."  
Botkin: et al: *No Limits to Learning*

"Education will become less and less a matter of transmission of accumulated knowledge and more and more a process of developing the thought processes and values and skills that are needed for adapting to and initiating change."  
Walz et al: *Images*



# FUTURES KIT — INTRODUCTION

An assumption made in a recent report to the Club of Rome entitled "**No Limits to Learning**" is that we are living in a turbulent world; a world which is unpredictable, surprise-ridden and unstable. This kit is based on a similar assumption. It is a key assumption because, once accepted, it leads us to question traditional approaches to learning and, at the same time, suggests a new approach.

The traditional approach to learning has developed in a relatively stable environment. It is largely **maintenance learning** i.e. preparing individuals to deal with the world as it exists and has existed. It develops fixed outlooks, methods and rules for dealing with known and recurring situations. Within this framework, even learning which is oriented towards social change rests on the assumption that society is relatively stable, can be understood, and the future predicted and shaped. In a turbulent world maintenance learning becomes increasingly irrelevant and ineffective. In times of rapid change a different type of learning is required. This is **innovative learning**. The benefits of this type of learning are not new; **renewal, restructuring and problem reformulation** have occurred regularly in the past, but generally as a reaction to shock. People changed in response to shocks from the outside world; an aim of this kit is to avoid shock learning by encouraging **conscious anticipation**.

Conscious anticipation, which is a result of innovative learning, involves responding to possible future situations. For example the simple act of imagining future possibilities is an act of anticipation. This can stimulate a change in attitude, skill or feeling which results in a person taking more control of their own life and how it unfolds in the future. Shock learning can be reduced.

Some assumptions underlying innovative learning are that the future will be different from the past or present; that what individuals think and do now has an affect on our collective future; that the skills of conscious anticipation will improve present decision making and help to bring about the "best" future for us all.

The area of learning known today as "**coping skills**" (human relations, self assertion, communications etc) is a form of maintenance learning. It concentrates on helping people deal with their present situation and its demands. It assists people to make progress in today's society. The turbulence of our environment makes it clear that innovative learning is not merely a desirable addition to maintenance learning but a complementary necessity. Many groups and organizations already concern themselves with maintenance learning in one form or another. This publication promotes innovative learning as a genuine skill for survival now and in the future.

If you have time to explore these ideas further you may like to read "**No Limits to Learning**" by James W. Botkin, Mahadi Elmandira and Mircea Malitza (Pergamon Press: Oxford, 1979).

This Futures Kit has been constructed in the belief that teachers and people who lead and co-ordinate community groups play an important role in developing the processes of thinking that will be used in the future. It is assumed that you share the view that the future can be shaped by human effort, but it is also expected that many of the people you work with will not share this view. The section headed "A Case Study" shows how the kit might be used with a group who hold varying viewpoints.

## SUMMARY

THIS KIT AIMS AT YOU AS A CO-ORDINATOR, TEACHER OR LEADER IN YOUR COMMUNITY. TO USE IT EFFECTIVELY YOU NEED TO BE AWARE OF THE IMPORTANT ASSUMPTIONS WHICH HAVE BEEN MADE IN ITS DESIGN.

- Assumption 1: That the future will be unlike the past and for this reason, learning only from our own experience is of limited value.
- Assumption 2: That the world in which we live is unpredictable and will remain so for some time.
- Assumption 3: That the future is not predetermined. People have a degree of free will which allows them to shape the future.
- Assumption 4: That individual people can be the source of genuine change in society.
- Assumption 5: That personal change and growth are necessary not only to influence the future but also to cope with the present.
- Assumption 6: That there are already many organizations which assist people with coping skills (maintenance learning) but few which concentrate on skills for the future (innovative learning).



# A CASE STUDY

Gary is a volunteer worker with his local citizens advice bureau. He has become familiar with the Futures Kit and has found parts of it useful in his own life. Recently he met with a group of unemployed people; they asked him to help them take positive action to deal with their futures.

Using his initial discussion with the group and the GETTING STARTED part of the kit, he summarizes their viewpoints.

## 1. DICE GAME VIEWPOINT —

to this person unemployment is just a fact of life - it's just bad luck. Sooner or later things will change for the better.

## 2. ROLLER COASTER VIEWPOINT —

this person sees unemployment as being totally out of her hands; she is a victim of a combination of big business, government and world economy forces.

## 3. RIVER VIEWPOINT —

although this person considers that there are forces over which he has no control, forces which lead to unemployment, he does feel that he can DO SOMETHING about it.

## 4. OCEAN VIEWPOINT —

this person considers that the present high unemployment is a result of choices by our society or by sections of it. She believes that if we choose to, other courses are possible and that we can do something to move towards an alternative course.

In planning how he could use the kit with individuals or the group, Gary sketches out some notes on the relevant sections and how they might benefit people in his group. By doing this he hopes to sort out his own ideas about the possible value of certain sections and how he can begin to use them. To simplify things he decides to divide the group into two categories only: those who think that they **cannot** do anything to influence the future and those who think that they **can** influence the future.

## DON'T THINK THEY CAN INFLUENCE THE FUTURE.

### FUTURES FICTION

- could be interpreted as entertainment - BE CAREFUL!!
- make sure I don't adopt this approach (or even seem to adopt it).
  - still, there are some worthwhile possibilities.
- may stimulate ideas by showing how other people 'HOLD ON' in alienating situations.
- may have an 'IMMUNIZING' effect by allowing people to 'LIVE' in a future world before they are carried along into it.
- by getting some glimpses of a possible future some degree of preparedness might occur.
- preparedness might be useful in dealing with strokes of good or bad luck, or rapid change.

### DECIDING ON DIRECTIONS

- would seem to be best used with people who think that they can do something about the future - might help others to:
  - understand their own situation.
  - recognize the implications for themselves.
- provides a skill in anticipation - a buffer against the unpredictable.

### THE PROBABLE FUTURE - TRENDS AND FORECASTS

- would be helpful in a similar way to the previous section. Has a theme of anticipation. (People can help themselves to cope by getting some advance information).
- the section doesn't provide advance information, but it tries to develop the skills of gathering and interpreting information.
- the view of the future unfolding chaotically and randomly comes through in this section but it mainly acts as a tethering point from which to speculate.

### VALUES AWARENESS

- these people mightn't feel they can influence choices but a look at their own values may help them to come to terms with their situation. They may conclude that employment itself is NOT one of their priorities.
- even if chance is seen to play a dominant role, what is 'good' luck or 'bad' luck really depends on individuals' values.
  - a sharper awareness of personal values can help sign up the future as it unfolds.

### DISCOVERING NEW IDEAS AND ESCAPING FROM OLD IDEAS

- these two 'mind-expanding' sections might be good in aiding anticipation and creative ways of coping.
- the ability to escape old ways of thinking and to find new ideas could be useful for people who think the future unfolds randomly.
  - adapt quickly
  - see the possibilities in a chance occurrence.
- could be a good idea to use this section to rethink problems as people bring them up eg: "I feel so helpless" → the "WHY" technique would be a place to start.

## THINK THEY CAN INFLUENCE THE FUTURE

### FUTURES FICTION

- provides some alternative worlds in which people can contrast their ideas and their circumstances with others - may find alternative ways of approaching today's unemployment problems.
- may be able to explore the implications for employment that an alternative world would generate.
- might be able to collectively agree on a preferred future - put it in terms of future fiction - a play, a radio programme. Do something with it.

### DECIDING ON DIRECTIONS

- if some of these people want to take action it would be a good idea to consider the possible consequences.  
a particular sort of employment might look good at first sight but could have negative second or third level outcomes.
- for people who believe that there are limits (the banks of the river) imposed on the individual, it may be necessary to decide from a range of options, which are feasible. This section sets out the options in a clear way.
- for those who see no restrictions, these techniques could be combined with the values section to start looking at the image of their preferred future.

### THE PROBABLE FUTURE - TRENDS AND FORECASTS

- trends are currents in the river -> taking them into account is necessary in any endeavour. (Is there a trend towards more co-operative work groups? Is there a trend towards more young people being unemployed?)
- the strength of a trend could be compared with the people's ability to alter the trend -> what would it take? How can we do it?
- trends can be considered and compared with preferred futures. Are we going that way? How do we change course?

### VALUES AWARENESS

- for people who assume that free will exists, the problem of choice arises. Consideration of personal values is important when a number of courses of action are being thought over.
- for these unemployed people it would be useful not only to help them see how their personal values affect their attitude to work but to have a look at the values of society at large eg: could discuss attitudes to minority groups, student bursaries, marriage, apartheid.

### DISCOVERING NEW IDEAS AND ESCAPING FROM OLD IDEAS

- getting change in a turbulent environment requires flexible and imaginative thinking.
- a start might be made by looking for restrictive patterns of thought which surround employment and work eg: "all unemployed are bludgers." "Everyone should have a job."  
they might hold these views themselves!! -> this may be making them feel apathetic, hopeless.
- have a look at the traditional 'adequate solutions' to unemployment (eg: the dole) -> those which are found wanting might generate new ideas, alternatives.
- then perhaps look to other sections in the kit to help promote or implement the innovative ideas eg: test them against personal values - are they acceptable to generally held values?

### CREATING THE FUTURE

- can act as a guide for other people who feel that they want to influence the future. Also shows the roles that other sections can play.
- it could be the impetus to start a cottage industry, to pressure local authorities, to publicize the plight of the unemployed, to form a coalition with other groups.



# GETTING STARTED



- \* The kit is based on the belief that to achieve a "good" future, individuals need to think and act with a concern for the future. Your future is too important to be left in the hands of other people.
- \* We all use "futures thinking" every day in ways that are enjoyable as well as useful. This kit aims to enhance the futures thinking that you already do.
- \* The kit is **not** a crystal ball. It aims to help people cope with the future, to understand the future and to shape the future.

Which of these four ways of seeing the future best describes your own ideas?

Consider different **times** in your life when you have felt that the future is unfolding like a roller-coaster, a dice game, a river or an ocean.

Consider different **parts** of your life:

- (a) your family
- (b) your work
- (c) your community (think about the town or suburb you live in and the things which happen there that affect your life)
- (d) your nation (think about New Zealand and decisions that affect you and all other New Zealanders)

How does the future unfold in each part of your life? What makes the future seem to unfold in different ways at various times and in various situations?

Depending on which way you see the future unfolding, different skills, abilities and knowledge will be important to you.

To people who see the future unfolding as a roller coaster ride, the things that could be important are "Looking Ahead" skills so that at least they can occasionally see when sharp turns or dips are coming up, and "Holding On" skills so that they aren't thrown out of the car. The sections headed "THE PROBABLE FUTURE" and "FUTURES FICTION" may be useful here.

To someone on the river or the ocean these same skills may be important but also important are "Navigation" and "Steering" skills. The sections headed "VALUES AWARENESS", "DECIDING DIRECTIONS" and "CREATING THE FUTURE" are relevant here.

To **anyone** who wants to have more control over their life and influence the future 'Navigating and Steering' skills are more important than 'Looking Ahead and Holding On' skills. The sections headed 'ESCAPING FROM OLD IDEAS' and 'DISCOVERING NEW IDEAS' are particularly useful for this purpose.

The section headed 'A CASE STUDY' shows how the elements of this kit can be used with people to view the world in different ways.



## FOUR WAYS OF SEEING THE FUTURE

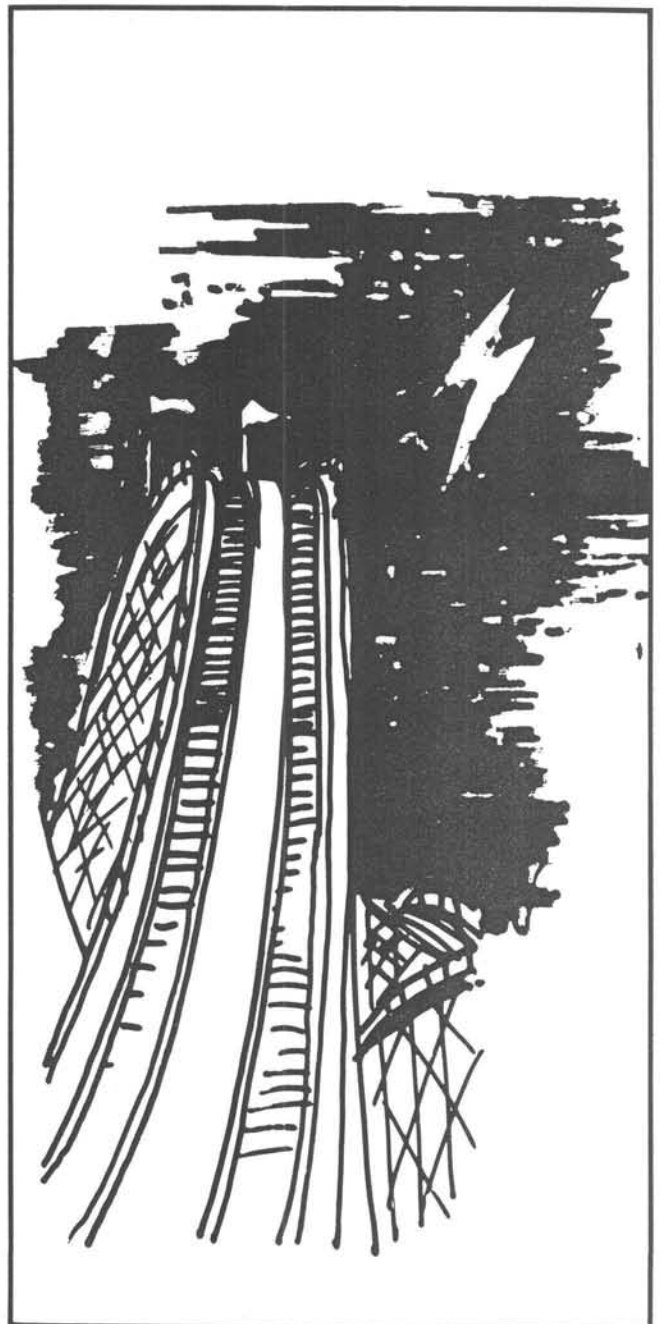
### (1) THE FUTURE UNFOLDS LIKE A DICE GAME

Every second, millions of things happen which could have happened another way and produced a different future. A scientist checks a spoiled culture and throws it away, or looks at it more closely and discovers penicillin. A spy at the Watergate removes a piece of tape from a door and gets away safely, or he forgets to remove the tape and changes American political history. Through such a random series of actions, the future chaotically emerges. **We must accept that chance plays a dominant role, accept the misfortune which comes our way and enjoy any good luck.**



### (2) THE FUTURE IS LIKE BEING ON A ROLLER COASTER ON A DARK NIGHT

All of us are in a car on the roller coaster speeding along the rails. We know that we are on a fixed track which the car must follow, that our future is determined but we don't know where the track is going because everything is dark. Occasionally a flash of lightning exposes an approaching section of the track. We can see for an instant what will happen next. However, this does us very little good because we are locked in our seats and **nothing we do can change the course that is laid out for us.**





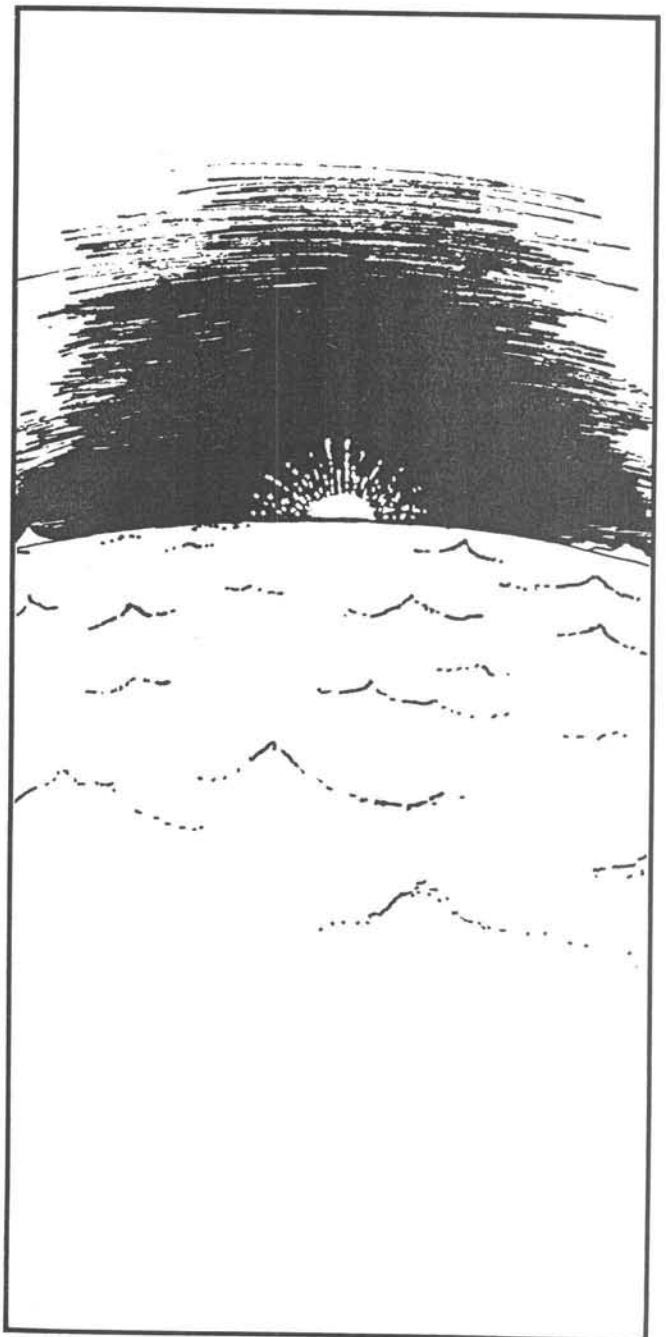
### (3) THE FUTURE IS LIKE A MIGHTY RIVER

We are in a boat on that river. There is a generally predetermined course — the river has definite banks and a strong current — but we have more freedom to steer than on a rollercoaster. **We have to follow the river, but we can look ahead and avoid the whirlpools and sandbars.** If the river forks, we can choose which direction we are to take; we must make a decision and then steer towards our destination.



### (4) THE FUTURE IS LIKE A GREAT OCEAN

We are on a ship in the ocean — there are many possible destinations and many different paths to each destination. **We can choose whatever future we will, if we work for it;** there are currents, storms and reefs to be dealt with but with care we can sail the ship to where we want to be.





# THE PROBABLE FUTURE — TRENDS AND FORECASTS

This section takes the view that the future has some continuity with the past and the present. This is the basis of many of our views about the future. The section aims at enhancing ways of using this assumption to develop and assess forecasts.

Being fore-warned about possible developments is a way of "holding on" more effectively and it can also help you "navigate" and "steer" towards a preferred future.

## BENEFITS OF STUDYING TRENDS

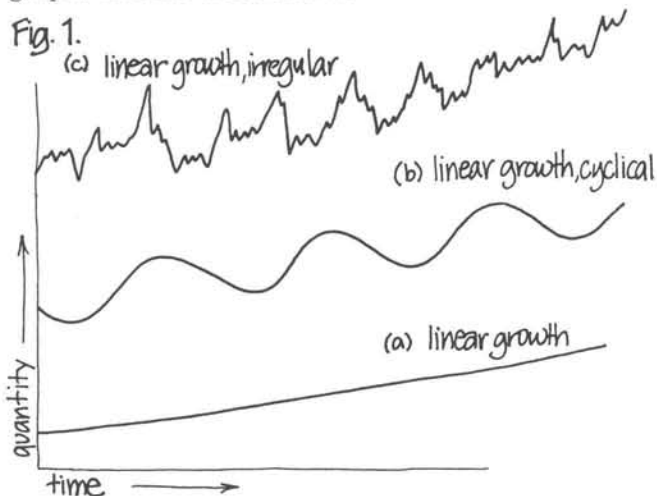
- While it may not be possible to understand the complicated causes of all events, it may be possible to gain an idea of what to expect by studying trends.
- We are constantly presented with trends as indicators of what is happening and what is about to happen. By understanding the sources and meaning of trends we can be more able to critically assess these.
- By observing present trends we can see those which seem to be moving towards a future which we prefer. We can see others which we think should be halted or redirected depending on our values.

## A TREND — WHAT IS IT?

A trend is simply a steady change in the nature of something over time. A trend is observed using past and present information — when this is used to forecast the future it is known as extrapolation.

## IDENTIFYING TRENDS

The usual way of looking at trends is to draw a graph, like the ones below.



A simple type of trend is known as linear growth — this occurs when a constant amount is added to the original quantity over each interval of time (like adding \$50 to your bank account each week). As can be seen above, linear trends do not have to grow in an exactly straight line as long as the tendency of the trend can be represented by a straight line (you

might put \$75 in your account each week and every second week withdraw \$50 for rent). Or the variation may be quite irregular (you may put \$100 in your account this week, \$5 next week, \$40 for the next two weeks).

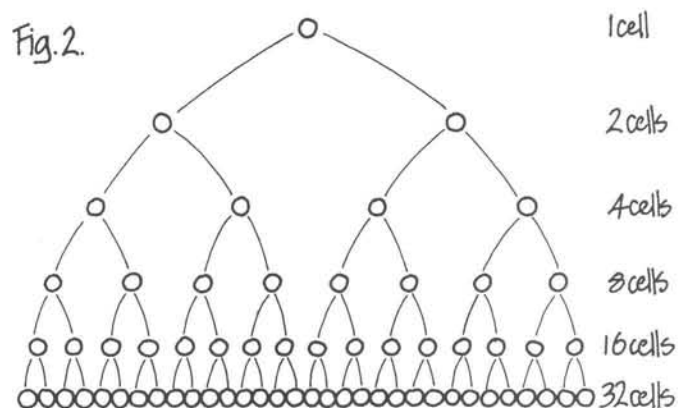
Identifying the **type** of trend that you are dealing with is most important.

## DECEPTIVE TRENDS

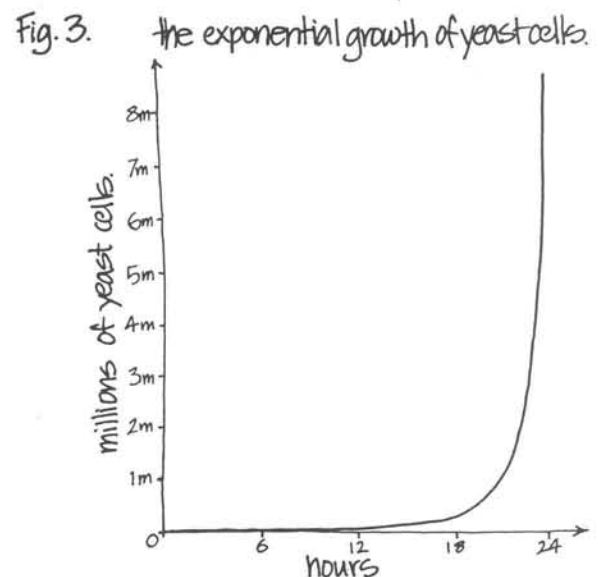
Linear growth is a common and easily interpreted trend, however **exponential** growth is at the centre of many of the world's present and future problems.

In an exponential trend the growth occurs as a multiple of the original amount rather than by adding a constant amount.

For example: each hour a single yeast cell divides to produce two cells.



After a day there are over 8,000,000 cells — a graph of this trend would look like this



The trend begins slowly, almost imperceptibly but it "explodes" very quickly to alarming proportions — this is the danger with things which are growing in an exponential way. (see The Lily Pond).



#### The Lily Pond (One Possible Version)

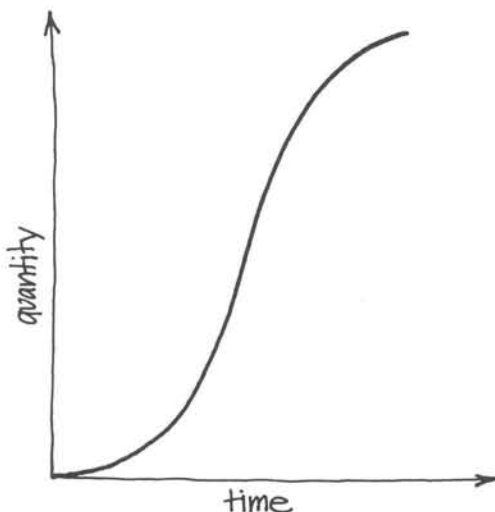
A farmer has a watering pond in which a lily plant is growing. The plant doubles in size every day. His farm adviser tells him that the plant will cover the whole pond in 30 days, and choke it. This will cause the plant to die and leave a large rotting mess. The farmer makes up his mind to visit the pond every third day and to cut the plant back when it covers half the pond. Is this a good idea?

#### The Lily Pond (Another Version)

A farmer has a watering pond in which a lily plant is growing. The plant doubles in size each day. It will take the plant thirty days to completely fill up the pond. The farmer doesn't want this, because the lily plant will choke the pond and die and rot and make a mess. The farmer wants to cut the plant back before that happens so his question is, "On what day will the lily plant fill half the pond?"

Technology can exhibit trends which are very similar to those found in biology. For example railroads in the 19th century developed quickly after their introduction because of their speed and cheapness. As in biological systems, however, there may be limits to growth which result in S-shaped growth trends. In the 20th century growth of railways slowed because they began to saturate their market (as an organism might use up its food resources) and new competition appeared in other transport modes. This kind of growth is shown in the graph below.

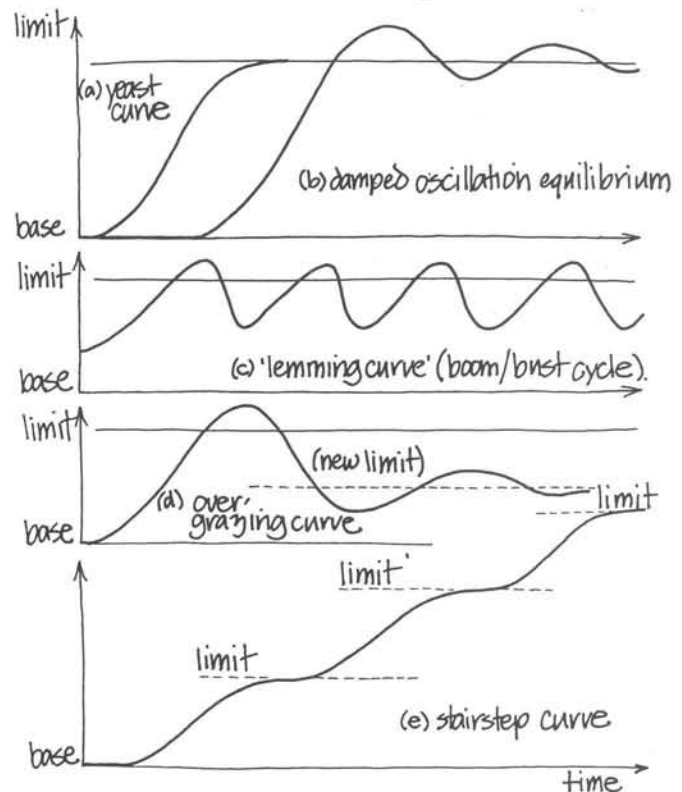
Fig. 4. typical 'S' shaped growth curve.



A number of other things can happen when a trend reaches a limit. (see Fig. 5) Which of these might operate in a situation which affects you? e.g.

- the use of your community swimming pool
- the number of car accidents on our roads
- the number of surf-sailors on the harbour/lake

Fig. 5. different ways in which growth can be limited.



- (a) Population cannot exceed limit or damage environment
- (b) Population cannot damage environment; can exceed limit, causing die-back of more than excess; each successive swing is shorter.
- (c) Same as b), except that each new burst of growth exceeds the limit as much as the first one.
- (d) Population can exceed limit, can damage environment.
- (e) Population approaches and circumvents a succession of limits.

("Population" is used as a reference because these are common population growth patterns in nature, but the curves can describe any growing quantity. "Limit" refers to the long-term capacity of the environment, not the short-term maximum quantity.)

#### FUTURE TRENDS

The business of getting glimpses of the probable future through trend extrapolation is extremely hazardous.

To be confident about forecasts you have to:

1. be sure that you have identified the trend correctly; and
2. be sure that nothing will change the causes of the trend.

The second condition is impossible to fulfil but it can be dealt with by using the condition "If things continue as they have then . . ."





We can also introduce other "ifs" in order to develop alternative forecasts using the trends we have:

"If the ecological limit of the environment is . . . ,  
then . . ."

"If . . . people choose to buy smaller cars, then . . ."

#### **Future Facts**

If the world's population continues to grow at 2% per annum, then it will be seven billion in thirty-five years time.

If the demand for silver remains at the present level, then the world's known reserves will be depleted in about fifteen years time.

If the global need for employment continues, then a billion new additional jobs will be needed by 2000 AD.

If CO<sub>2</sub> levels in the atmosphere continue to rise, then the world will become warmer.



# FUTURES FICTION

Fiction writing which involves speculation about the future is usually labelled as "science fiction". Unfortunately the highly technical, action-packed, alien-threatened societies which this label implies do not do justice to the valuable aspects of this form of fiction.

This section presents a guide to some useful fiction and suggests the place which this might play in thinking about the future.

## FUTURES-ORIENTED FICTION CAN:

- Distance you from your own world by involving you in one which concerns different times, places and people. You may gain a new perspective on your old ideas.
- Give experience of a possible future. It may act as an immunisation against the upheavals of rapid change by providing an opportunity to "live" in the possible future.
- Provide opportunities to clarify your values by having a range of future options presented.
- Act as a "laboratory of the imagination". You can test out ideas in an imaginary future world: "If . . . happens in this world, then . . . is likely to happen".
- Be a method of promoting change. Through discussing and writing fiction you can share your ideas for a preferred future with other people.

## STARTING OR EXTENDING FUTURES READING

Although this section approaches "futures fiction" in a serious way, the sort of reading which gives most enjoyment will be most valuable. If you don't get involved in the world which the writer creates, then your future thinking is unlikely to benefit. For this reason the suggestions made here are just that — suggestions.

Of course reading is only one way of absorbing innovative ideas and extending your imagination. Other media can add depth and breadth of interest.

Films such as "2001: a Space Odyssey" and "A Clockwork Orange" deal with issues and problems in future worlds.

A number of television programmes and series use future settings:

The Survivors: Society after a disastrous epidemic.

The Guardians: a police-state society

Star Trek: a self-contained interstellar community.

In addition, short stories and books are often the subject of T.V. and radio programmes.

The Continuing Education Unit of Radio New Zealand has produced a series of radio programmes on futures fiction called "Breakthink". A pamphlet outlining the content of these programmes is available and tape recordings of the five programmes can be obtained by sending blank C60 tape cassettes (one per programme) and stamped, self-addressed envelopes to the National Film Library, Private Bag, Courtenay Place, Wellington.

1-2 tapes 35 cents postage within NZ

3-6 tapes 60 cents postage within NZ

6+ tapes 90 cents postage within NZ

The School Publications section of the New Zealand Education Department has produced a very worthwhile bulletin called "Science Fiction" by Francis and Patrick Blackburn. It gives a guide to interesting reading and poses many stimulating questions.

## NOVELS

Anderson, P	Tales of the Flying Mountains
Asimov, I	The Caves of Steel
	Foundation ) The
	Foundation and Empire ) Foundation
	Second Foundation ) Trilogy
Bester, A	The Stars My Destination
	The Demolished Man
Brunner, J	The Jagged Orbit
	Stand on Zanzibar
Callenbach, E	Ecotopia
Clark, A	The City and the Stars
Delany, S	The Einstein Intersection
Golding, W	The Lord of the Flies
Heinlein, R	The Moon is a Harsh Mistress
	Stranger in a Strange Land
Huxley, A	Island
Le Guin, V K	The Left Hand of Darkness
MacAllister, B	Humanity Prime
McCaffery, Ann	Dragonflight
Miller, W M	A Canticle for Leibowitz
Orwell, G	Animal Farm; 1984
Panshin, A	Rite Of Passage
Silverberg, R	Son of Man
Simak, C	City
Skinner, B F	Walden II
Stapledon, O	Odd John
Tucker, W	The Year of the Quiet Sun
Van Vogt, A E	Slan
Vinge, Joan	The Snow Queen
Vonnegut, K	Player Piano

## SHORT STORIES

Anderson, P	Details
Bradbury, R	A Sound of Thunder



Forster, E M	The Machine Stops
Heinlein, R	Gulf
	The Year of the Jackpot
	The Roads Must Roll
Jonas, G	The Shaker Revival
Oliver, C	The Ant and the Eye
Silverberg, R	Passengers
Simak, C	The Thing in the Stone
Thomas, T L	The Weather man

## COLLECTIONS

Asimov, I	The Hugo Winners
Boucher, A	A Treasury of Great Science Fiction
Carr, T	The Best Science Fiction of the Year
Harrison, H & Aldiss, B	Best SF
Pohl, F	Best Science Fiction for [year]
Rey, L	Best Science Fiction Stories of the Year
Silverberg	The Science Fiction Hall of Fame
Wollheim, D	The [year] Annual World's Best SF

## NEW ZEALAND FUTURES FICTION

Harrison, C	Broken October
	The Quiet Earth
	Tomorrow Will Be A Lovely Day (Play)
Joseph, M K	The Time Of Achamoth
Stead, C K	Smith's Dream

## GUIDES TO FUTURE FICTION

These books comment on futures fiction in general and also analyse and annotate a number of specific books and stories.

Aldiss, B W	Billion Year Spree: The History of Science Fiction
Ash, B	Faces of The Future; The Lessons of Science Fiction
Blieler, E F	The Checklist of Fantastic Literature
Carter, P A	The Creation of Tomorrow
Clarkson, T D	Science Fiction Criticism; An Annotated Bibliography
	S.F.: The Other Side Of Realism
	Many Futures, Many Worlds: Theme And Form In Science Fiction

## YOUR OWN FICTION

The process of writing "future fiction" is valuable as a way of developing futures thinking. By combining a knowledge of trend extrapolation with creative imagination (see sections — **The Probable Future — Trends and Forecasts** and say **Escaping from Old Ideas**) the future effects on people of known trends can be explored. Possible new trends and unforeseen

events can also be explored in this way. Good writing can create a world which is consistent, believable and therefore thought provoking whilst being quite different from the one we know or have known.

## NON FICTION PUBLICATIONS ABOUT THE FUTURE

The following is a short list of publications which are useful non-fictional sources of ideas for creating the future.

### BOOKS

Bell, D	THE COMING OF POST INDUSTRIAL SOCIETY
Brown, L	BUILDING A SUSTAINABLE SOCIETY
Elgin, D	VOLUNTARY SIMPLICITY
Henderson, H	CREATING ALTERNATIVE FUTURES
Jones, B	THE SLEEPER WAKES, TECHNOLOGY AND THE FUTURE OF WORK
Kahn, H, et al	THE NEXT 200 YEARS
N.Z. Commission For The Future	NETWORK NEW ZEALAND, COMMUNICATIONS IN THE FUTURE
Robertson, J	THE SANE ALTERNATIVE
Servant-Schreiber, J	THE CHALLENGE OF THE FUTURE
Theobald, R	BEYOND DESPAIR (revised edition)
Toffler, A	THE THIRD WAVE
Valaskakis, K, et al	THE CONSERVER SOCIETY
Zepke, N, et al	CLARIFYING VALUES — CONTEXTS FOR DEVELOPMENT
M. Harpham et al	PICTURES OF THE FUTURE

## MAGAZINES AND NEWSLETTERS

COEVOLUTION QUARTERLY FUTURES	Point, California
FUTUREWATCH	Butterworth Scientific Ltd, London
THE FUTURIST	Myra Harpham, Private Bag, Silverstream, N.Z.
WHATS NEXT	World Future Society, Washington
	US Congressional Clearing House for the Future





# ESCAPING FROM OLD IDEAS

'While changing a wheel a man lost all five of the securing nuts, which vanished down a road drain. He had no idea what to do and set about thumbing a lift to the nearest garage. A little boy happened to be passing by and asked what the matter was. When he was told he said, 'Oh that's easy, you just take one nut each from the other wheels and that should see you to a garage.'

Before new ideas and ways of thinking can take hold old ones need to be loosened.

One way of imagining the mind and the way it works is to think of the mind as a jelly on which drops of hot water (impressions or perceptions) are spilled. The drops melt some of the jelly and create impressions on its surface. As more drops are spilled, the patterns which already exist channel the later drops and are made deeper.

In order to openly accept new patterns of thinking it is necessary to attempt to 'level out' the surface so that new patterns can emerge independent of the old patterns.

## IDEAS WHICH DOMINATE

The aim of this section is to help you escape from thought patterns which dominate and restrict thinking. However it is much more difficult to escape something which is vague, rather than something which is definite. Unless you can pick out the dominant ideas which shape the way a situation is seen, then you are likely to be dominated by them. Dominant ideas are the deepest impressions on the jelly surface.

The dominant idea is the one which is **behind** what a person says.

For example: the reaction of a group of children to the problem of designing a machine to pick apples may reflect the dominant idea of "getting the apples". However the solution offered by a group of industrial engineers may reflect the dominant idea "obtaining an advantage over manual labour".

There are many chances in everyday life to practice identifying dominant ideas. It helps to write them down so that you force yourself to be definite.

Magazine and newspaper articles provide perfect material.

Documentaries, the news or interviews on TV can be useful for jotting down dominant ideas.

At a meeting try to identify the dominant idea that speakers are basing their arguments on (i.e. what is it that dominates the way they look at an issue: it may be the financial well-being of the organisation; it may be the health of members, etc.)

## ESCAPING FROM RESTRICTIVE PATTERNS OF THINKING

Choose a topic or area of interest which you have a concern for and definite opinions about. Either:

(a) write down; or

(b) tape record

as many concerns, thoughts, arguments, descriptions regarding this area as you can. Use the headings below, to help you identify your own restrictive thought patterns.

### (1) Incomplete Patterns:

For example: "The purpose of the education system is to train job-seekers and to produce happy, well-rounded citizens". But doesn't education also socialize people towards society's norms? Doesn't it also act to hold down unemployment by keeping teachers employed and keeping young people out of the job market? Doesn't it also allow parents to work? Once an incomplete pattern has been identified an important step has been made towards building more complete patterns e.g. what is the **real** purpose of education?

### (2) Generalized Patterns:

Ways of thinking which sweep all before them with wide ranging assertions. For example, on the environment: "Nature knows best" or "We must always do things nature's way."

### (3) Negative patterns:

It is much easier to be destructive than to be constructive. This is because we are traditionally taught to be critical and fault-finding. Making critical statements about a person, idea or thing can make us feel superior, even though we may not be capable of improving on what exists.

Negative ways of viewing the world need to be balanced with positive ways which attempt to improve the world rather than merely find fault with it.

Identifying negative patterns of thinking can also save us from passing over the positive aspects of something because of our preoccupation with some fault.

### (4) Polarizing Patterns:

These are patterns of thinking characterised by "either-or" statements which artificially establish alternatives at opposite ends of a scale. For example: "You are either a teacher or you are a student". "Something is either good or it is bad".

Arising from this is the argument that if one thing is good, then its opposite is bad. If capitalism is good, socialism is bad.

### (5) Patterns Involving Absolutes:

These thought patterns often arise as a way of justifying morals, emotions or a political stance. They involve polarizing too. These thought patterns make it easy to interpret the world and even easier to praise self and discredit opponents. However, they can lead to a certain amount of trouble illustrated by the remark of a young child to her teacher.



"Can God do everything?"

"Yes child, he is all powerful so he can do everything"

"In that case, can God make a stone so heavy that God cannot lift it?"

#### (6) Patterns Restricted by Moral and Legal Boundaries

These involve thought patterns shaped by what conventional wisdom considers legal, ethical or proper. They contain the phrases "have to" "ought to" "must" and "should". For example, on politics: "Politicians have to respect the beliefs of their voters". But why can't they use their offices to shape the voters' beliefs?

#### (7) Patterns Restricted by Space and Time

These include fixed ideas about **where** things "must" happen ("All learning takes place inside the classroom") and also **when** things "must" happen ("You have to take the prerequisite before the advanced course").

### THE "WHY?" TECHNIQUE — A Challenge to Assumptions

It is possible to use the repetition of the question "Why?" in a way which opens up an idea in an exploratory fashion.

The "Why?" technique is not easy. There is a tendency to run out of explanations or circle back to an earlier explanation or to say "because" if something very obvious is questioned. But nothing should be regarded as too obvious, and nothing is sacred.

Suppose you are a hotel manager and interested in the profitability of your establishment. The questioning is begun with some statement concerning this area of interest. The "Why?" can be focussed on a particular part of the statement.

"The most important point in running a hotel is to keep the occupancy rate above 60 percent."

"Why do you use that figure?"

"Because overheads are covered by this rate of occupancy and above it the takings are almost sheer profit."

"Why are overheads only covered at this figure?"

"Because fixed items like staff and kitchen facilities cannot be varied according to demand."

"Why can't they be varied?"

"Because in the case of the staff you could never keep them except on the basis of full employment."

From this point, one could then take off to consider methods whereby the guests could serve themselves, methods of rotating staff, utilizing their capacity more fully, and so on.

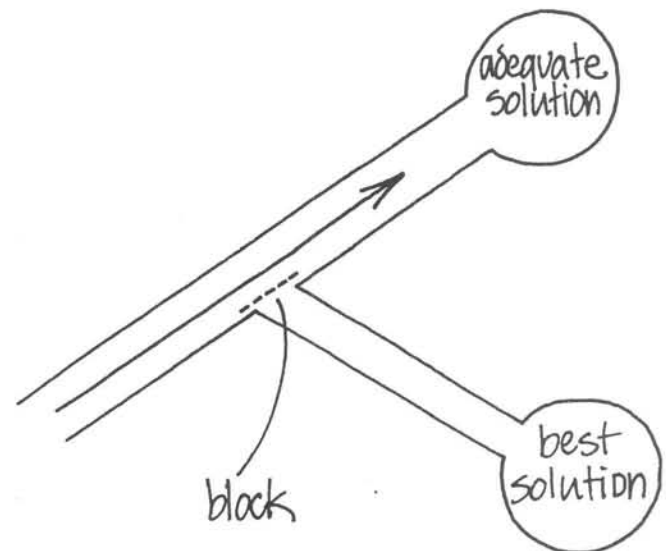
The usual intention in asking "Why?" is to seek an explanation, to be comforted, however the "Why?" technique is a refusal to be comforted. It aims at

breaking down old assumptions and patterns of thinking so that new patterns may emerge.

### BLOCKED BY ADEQUATE PATTERNS

After having some friends staying in our house for a week, I noticed that the reading lamp would not work. I checked the bulb and the fuse box but still the lamp would not work. I was just about to dismantle the plug when it occurred to me that one of our friends might have switched off the lamp by the switch on the lamp base and not at the wall, which is what I usually do. This was, in fact, what had happened.

Patterns of thinking often produce perfectly adequate answers to problems and for that reason better answers are not sought.



It is only when something goes wrong that we look for other alternatives.

It is difficult to be aware of alternative pathways when the present path is open. Becoming aware of **what are** the alternative pathways is the purpose of creative forms of thinking. At this stage it is worthwhile to be aware that alternatives **do** exist even if the present path seems reasonable.

The story used at the beginning of the section concerning the wheel nuts is an illustration of an adequate pathway (thumbing to the service station) blocking the creation of an alternative (using nuts from the other wheels).

Think of other examples in your own experience which illustrate that adequate patterns of thinking can block recognition of better alternatives.



# DISCOVERING NEW IDEAS

Thinking about the future inevitably requires the use of imagination. We use this sort of thinking every day. When we go on a family picnic, we imagine the possible mishaps, opportunities and problems which may arise. We prepare to deal with possible and probable events and we take actions to ensure our enjoyment. It is this imaginative type of thinking which this section aims at developing.

The main advantage of imaginative thinking is that it helps you **anticipate**. It can also help you cope with very unexpected events when they arise by increasing the flexibility of your mind.

## HELPING IDEAS SURVIVE

Being "right" isn't very important when you are trying to think imaginatively. In fact over concern with finding **the** right answer can restrict the exploration of many possibilities.

The aim is to generate **many** ideas. Once a number of ideas have been generated, then selection of the best ones can take place. Ideas which seem ridiculous or irrelevant at first may become useful later if we help them survive, rather than rejecting them.

Helping ideas survive involves behaviour such as:

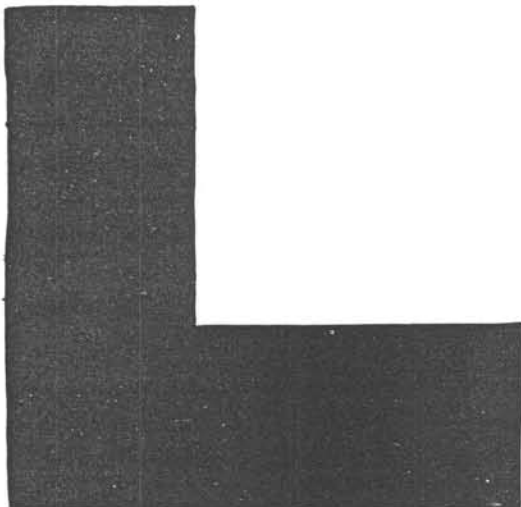
- not rushing to dissect an idea to show why it won't work;
- not rejecting an idea even if it is clearly "wrong" from the outset;
- helping other people not to hold back ideas or reject ideas too soon;
- resisting the temptation to trim an idea to make it suit a particular plan of action.

## LIMBERING UP THE MIND

Here are a couple of ways to help ideas to flow.

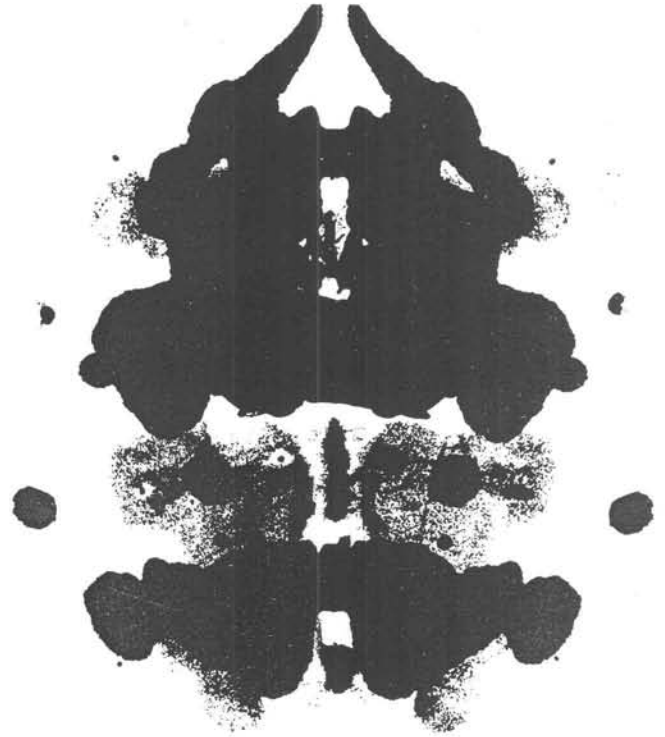
### 1. Alternative Ways of Seeing

Using this shape give yourself one minute, and think of as many ways of describing it as you can.



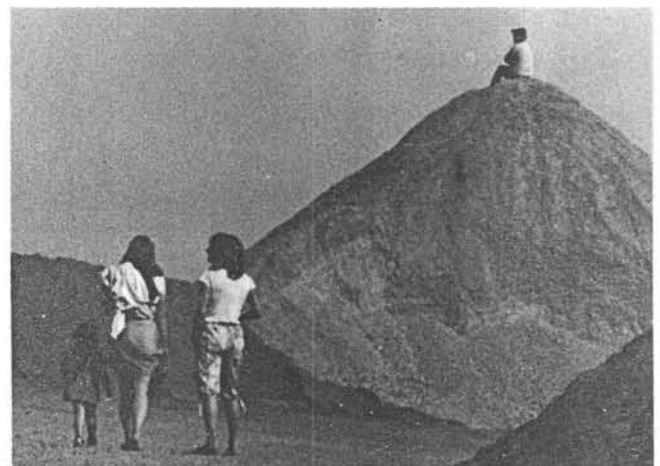
What does this ink blot represent to you?

What could it represent to a child? to a President of the USA? to a starving refugee?



### 2. Alternative Ways of Understanding

Describe four different things that could be happening in this picture.

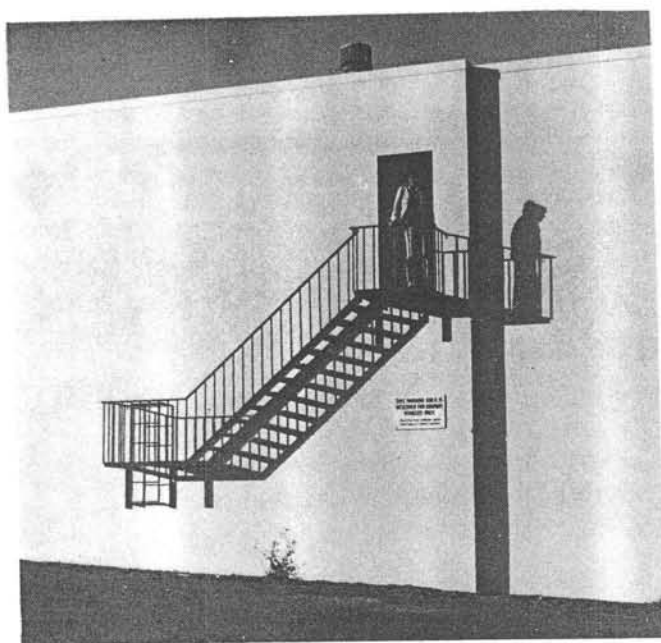


Don't be blocked by the most "obvious" explanation — explore all the possibilities.

Look at these photographs (see next page). Think of different descriptions of:

- what is shown;
- what has happened;
- what is about to happen.





## QUOTAS

When you are attempting to think of alternative ways of looking at a situation, it is useful to set yourself a quota. Quotas of ideas up to five are usually sufficient; quotas that are too large usually result in the same approach being used with slightly different variations. The emphasis should be on the **differences** between the alternatives. Setting quotas has these advantages:

- It ensures that even if a very exciting or promising alternative is hit on immediately, that other possibilities are still considered.
- Attention is directed towards finding a number of different approaches rather than the best approach.
- Different approaches, although of little use in themselves, may combine together or spark off a useful approach.

The most important thing is that the **effort** is made to look at things in a different way.

## BEING IMAGINATIVE WITH A PROBLEM

In this section an example problem is used but you could practice using this technique with any real problems you have.

The first part of the technique is to **state the problem in alternative ways**.

Example: The problem of children getting separated from their parents in large crowds.

Alternative statements:

- the problem of preventing separation of children from parents;
- the problem of preventing children being lost;
- the problem of finding and/or returning lost children to their parents;
- the problem of making it unnecessary to take children into large crowds.

Some of these restatements themselves suggest alternative answers. **The second stage of this technique is to devise more alternative answers.**

- attach children to parents (dog collar?);
- identification discs on children;
- provide creches so that children don't have to go into large crowds;
- have rendezvous points for children and parents who have lost sight of one another;
- display lists of lost children.

## STIMULATING IDEAS

Often thoughts are stimulated by chance events and unrelated experiences. It is possible to artificially introduce this stimulation through the use of randomly chosen words.

An ordinary dictionary can be used. Select any two numbers; the first is a page number and the second is the position of the word down the page. Nouns are the best stimulators, so move down the page from your selected position until you get to the first noun.

Once selected, this word must be used; it is no use moving on to another one because the first word didn't look very promising.

Hold the random word and your area of interest in your mind and let a link develop between them. The random word may suggest a song and something in the song is relevant to the problem; it may lead to another word and this word links with the problem.

Three to four minutes is long enough to spend working with a random word. Don't immediately select another random word. If you do then you may settle into a routine of searching for a "useful" word. The aim of the random word technique is to break up patterns of thought and reform them, not to reinforce patterns which already exist.



## USING A RANDOM WORD

**Area of Interest:** the need to provide housing for a future population

**Random Word:** noose

noose — tightening noose — execution — what are the difficulties in executing a housing programme — what is the bottleneck, is it capital, labour or land?

noose tightens — things are going to get worse with the present rate of population increase.

noose — rope — suspension construction system — tentlike houses but made of permanent materials — easily packed and erected — or on a large scale with several houses suspended from one framework — much lighter materials possible if walls do not have to support themselves and the roof.

noose — loop — what about adjustable round houses which could be expanded as required — just uncoil the walls — no point in having houses too large to begin with because of heating problems, extra attention to walls and ceilings, furniture, etc — but facility for expansion as need arises.

noose — snare — capture — capture a share of the labour market — capture — people captured by home ownership due to difficulty in selling — lack of mobility — houses as exchangeable units — classified into types — direct exchange of one type for similar type — or put one type into a pool and take out a similar type elsewhere.

## TURNING THINGS UPSIDE DOWN

The method of choosing random words is a way of provoking thoughts. Turning ideas upside down is another way of doing this. This method can lead to some unusual results, it may be necessary to consciously help the ideas survive. Although the ideas may seem illogical the process of imagining possibilities is vital for making the best decisions about the future.

Ideas can be turned upside down in a number of ways e.g.: A traffic officer controls traffic

→ the traffic controls the traffic officer

→ the traffic officer causes the traffic to go out of control.

The act of turning something inside out or upside down is a starting point, not a solution. For example the traffic officer causing traffic to go out of control may lead us to consider which is more effective: natural flows, lights, or a person. Could the roads be redesigned to aid natural flow? Could the advantages of a person on point duty be incorporated into lights? Are traffic officers all equally talented in aiding traffic flows?

## BRAIN STORMING

Brain storming is one of the most widely known methods for generating new ideas to solve a problem. Of the techniques in this section it is the only one which requires a group approach (although some of the other techniques can work well in

groups). Groups of between six and twelve people are recommended.

### The Chairperson

The chairperson is responsible for the beginning and the ending of the session and its organisation. She/he should define the subject and help the ideas to flow without judging them in any way. When everyone is comfortable and relaxed the brain storm can begin. People should contribute their own ideas freely and allow the ideas of others to trigger new thoughts in their own minds.

### The Time

Brain storming sessions can go on for too long and ideas can dry up. Aiming at a maximum of thirty minutes is a good idea. People can be given an opportunity to add further ideas after the main session if they wish.

### The People

Although a number of the group may have a concern with the particular problem at hand, it is a good idea to invite some people whose interests are quite different. This can add depth and variety to the pool of ideas.

### The Attitude

It is essential that ideas produced in the session are not judged at all. Individuals must make a special effort not to pre-judge their own ideas before they share them with the group.

### The Notetaking

It is important to have a blackboard or large sheets of paper and felt pens so that the essence of each idea can be recorded and displayed as it arises. The notetaker should record all the thoughts even if they seem at first to be illogical or repetitious. A tape recorder is a handy back-up.

### The Evaluation

During the session no evaluation is allowed. A time gap should be left between the brain storm and any evaluation, it may even be done by a completely different group of people.

Unlike the original session which emphasises non-evaluation, this part of the exercise sorts ideas into logical groups, picks out the valuable ones and identifies useful leads.

Three lists can be generated:

1. Ideas for immediate use
2. Areas for further exploration
3. New approaches

### Brainstorming References

Adams, J. L. (1974) *Conceptual Blockbusting*  
W. H. Freeman & Co.: San Francisco  
Pages 115-117

De Bono, E (1977) *Lateral Thinking*  
Penguin Books: London Pages 131-147



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- Jackson, K. F. (1977) *The Art of Solving Problems*  
Hodder and Stoughton: London  
Pages 113-117
- Stein, M. I. (1975) *Stimulating Creativity*  
Academic Press: New York  
Pages 25-141

## IDEAS IN OTHER SITUATIONS

All the methods included here use the visual or language parts of your understanding. You may find these aids useful in generating new ideas, but it is important to realise that there are many other ways that ideas may arise.

They may not necessarily be new language ideas, they may be new emotions, they may be new ways of behaving, or new ways of perceiving.

Some people find that imaginative ways of thinking come to them in dreams, or when they are in crowds, or when they are alone; when they are listening to music, or perhaps dancing; some people need time and space, while others revel in pressure situations.

The vital thing is to be open to many ways of being imaginative. Experiment, and find situations which help ideas flow for you . . .





# VALUES AWARENESS

Parts of this kit help people to imagine **possible futures**.

This particular section is the pivot for anyone who believes that the future can be deliberately shaped by making consistent decisions, it is concerned with your **preferred future**.

## WHY VALUES?

Being faced with a choice is always difficult; the wider and more diverse the range of options, the harder it is to decide. Clearly the future, with its huge range of possibilities, presents one of the most daunting choice areas of all.

Every day we weigh up alternatives, make choices, forego one thing for another.

Having a clear idea of what we value can be a great advantage in a world bombarded with overchoice.

The more sure we are of what we value, the more certain and consistent we can be with the choices we make. The aim of this section is to help you consider what you think is valuable so that the choices you make, do indeed help you not only to survive in the present, but to progress towards a future which you prefer.

### The Road Not Taken

Two roads diverged in a yellow wood,  
And sorry I could not travel both  
And be one traveller, long I stood  
And looked down one as far as I could  
To where it bent in the undergrowth;

Then took the other, as just as fair,  
And having perhaps the better claim,  
Because it was grassy and wanted wear;  
Though as for that, the passing there  
Had worn them really about the same.

And both that morning equally lay  
In leaves no step had trodden black.  
Oh, I kept the first for another day!  
Yet knowing how way leads on to way  
I doubted if I should ever come back.

I shall be telling this with a sigh  
Somewhere ages and ages hence:  
Two roads diverged in a wood, and I —  
I took the one less travelled by,  
And that has made all the difference.

Robert Frost

## YOUR VALUES

It is easy to live and make decisions without being fully conscious of what you value. A problem here is that you may be making choices which work against each other. For example: you drive a large, energy wasting car at the same time as you belong to a group promoting the idea that the nation should become self-sufficient in transport fuels as quickly as possible. Becoming conscious of what you **really** value can help you achieve what you **really** want.

A two-stage process can be used to achieve this. The

first stage is a search for clues and the second stage uses the clues to sort out important values that you hold.

### Stage I

Reflect on a day in your life. Think, in detail, of the actions you undertook from when you got up in the morning until you went to bed. Get right down to details.

- What did you choose to wear? Why?
- Did you drive to work? walk? bicycle?
- What did you eat during the day?
- Why did you go for a jog at lunchtime?

Each of these actions can give you a clue about what you value.

BE HONEST . . . and ask yourself:

- Do I really approve of all my actions and decisions?
- Do I want to stay as I am, or would I like to change?

### Stage II

Many of the actions that you have identified above, will be indicators of values. Some of these values have been passed on to you by your parents; others have developed from your own experience of life. To be **useful** in a world of rapid change, values need to be constantly examined and reassessed. This checklist can help determine whether a particular behaviour or idea you identified in Stage I indicates a useful value.

### A VALUE SHOULD BE:

1. Chosen freely  
Behaviours which are coerced do not indicate values. For example: Some people wear a tie to work because it is expected and not because they see any intrinsic value in tie-wearing. Other people do see value in tie-wearing. The important characteristic of a useful value is that it is chosen, not imposed.
2. Chosen from Alternatives  
Values arise from having options — the more rich and diverse these options are, the more likely that a value will emerge. If we are aware of no other options, a consequent behaviour cannot be value-based. For example: the decision to walk to a particular place does not involve a value if the person is not aware of any other means of transport.
3. Chosen after Careful Consideration  
To be an indicator of a value, an alternative must be given careful consideration. Selection of an alternative impulsively or just to be like everyone else does not fit into this category. Making a useful value decision involves a conscious commitment.
4. Prized/Held Dear  
Values are things we are content with, they are things we hold dear, that we prize. A choice,



even when it is made freely and thoughtfully, may be a choice we are not happy to make. We may choose to fight a war but be sorry that the circumstances make that choice reasonable. Values, however, flow from choices that we are glad to make.

5. Affirmed  
When all the above conditions have been met, it is likely that we will be pleased that others know about our values. Openly affirming a choice is another hallmark of a value.
6. Acted Upon  
A value should show up in aspects of our living, in our behaviour. We may form friendships or join organisations that nourish our values. We may spend money on things we value or set aside time and energy for them. A value helps to shape your life-style.
7. Persistent  
True values tend to persist. They guide your decision making in many situations.

## VALUING

Valuing is the act of forming values. Everyone has their present values and hopefully you are becoming more aware of yours. But values are constantly changing and evolving. (Witness the sort of choices you make now as compared to when you were fifteen or when you were seven).

This continuing process of valuing can be aided by self-conscious questioning.

### Be conscious of weighing alternatives and making choices.

For example: deciding to vote for a new political party at the next election.

ASK YOURSELF: Where and when did I get that idea?  
What other choices did I reject and why?  
What did I expect to happen?

### Decide what you prize and cherish.

For example: being married.

ASK YOURSELF: How long have I wanted it?  
Do I feel glad about it?  
How would my life be different without it?

### Give yourself opportunities to publicly affirm your choice.

For example: practising transcendental meditation

ASK YOURSELF: Whom have I told about my decision?  
Will I stand up for what I feel?  
Would I tell everyone at work?

### Behave and live by your convictions.

For example: forming a neighbourhood food cooperative.

ASK YOURSELF: What am I going to do about it?  
Who else will work with me?

### Be aware of things that influence your choices.

For example: the decision to flat on your own.

ASK YOURSELF: Are you the only one you know who thinks this way?  
What do your friends, colleagues, parents think of your choices?  
Is your choice a form of rebellion?  
Are there some things that you have to choose?

## YOUR VALUES, OTHER VALUES, WHOSE PREFERRED FUTURE?

At a city council meeting, an ordinance to ban the sale of nonreturnable beverage containers is to be voted upon. Before the vote is taken, the mayor reads letters received from three concerned citizens.

Dear Mayor:

As a consumer, I urge that the council defeat the proposed ordinance that would ban the sale of non-returnable beverage containers in the city. Many of my favourite drinks are not available in anything but throw-away bottles or cans. It would be an inconvenience for me to drive to the next town to buy them there. Besides, this is supposed to be a "free country" This law would take away my freedom to buy the beverages I like in my home town.

Signed,  
Bert Crust

Dear Mayor:

Please tell the city council to vote for the ordinance to ban non-returnable beverage containers. As you know, we have a litter problem in the city, and the ban would reduce it considerably. Besides, it costs less to buy drinks in returnable containers. Our city should be a leader in doing something about our nation's refuse problem.

Signed,  
Betty Smith

Dear Mayor:

As a member of the Chamber of Commerce, I would like to voice my opposition to the proposed law to ban the sale of non-returnable bottles and cans. Many people in our community will drive to neighbouring towns to purchase non-returnables. Our businesses will suffer from the ordinance and some people will lose their jobs and be inconvenienced. Please vote "no" on this issue.

Signed,  
Philip Harding

A common problem with arguments is that many of them are not recognised as being due to differences in values. The preoccupation with facts without reference to values can lead to long and futile conflict.

This is because in a given situation certain facts will be relevant to people who hold one set of values, while other facts are relevant to a group with different values. For example, consider the issue of using New Zealand's remaining wild and scenic rivers for hydro-electric generation. This is an area of



value dispute. One group of people might value clean, cheap energy. The important facts for them might be the energy needs of New Zealand, the dollar costs of alternatives, the renewable nature of hydro electric generation. Another group might value the preservation of free-running rivers. To them the important facts might be the scarcity of wild and scenic rivers, the increased demand for outdoor recreation, the disturbance of ecological balance through damming rivers.

The most useful aspect of a dispute involving values is that it provides an opportunity for parties to become more aware of their own values and those of others.

A value-based stance is highlighted and tested when it comes into contact with other stances. This can help clarify the values which people hold. Once this is achieved, the relevant facts can be gathered and these can be used to come to practical conclusions.

If the value-component of a dispute is not recognised this can result in prolonged conflict and decisions which may lead away from, rather than towards, a preferred future.

## BOOKS USEFUL FOR VALUES AWARENESS

Raths, L. E., Harmin, M. and Simon S. B.; *Values and Teaching* Charles E. Merrill; Columbus, Ohio, 1978

Simon, S. B., Howe L. W. and Kirschenbaum, H; *Values Clarification: A Handbook of Practical Strategies*; Hart Publishing Co: New York, 1977

Zepke N., et al; *Contexts for Development: Clarifying Values*; NZ Commission for the Future, Government Printer, 1981.

Place pluses next to words or phrases that you agree with and minuses next to words or phrases that you disagree with.

### A Conservationist's Lament

The world is finite, resources are scarce,  
Things are bad and will be worse.  
Coal is burned and gas exploded,  
Forests cut and soils eroded.  
Wells are dry and air's polluted,  
Dust is blowing, trees uprooted.  
Oil is going, ores depleted.  
Land is sinking, seas are rising.  
Man is far too enterprising  
Fire will rage with Man to fan it,  
Soon we'll have a plundered planet.  
People breed like fertile rabbits,  
People have disgusting habits.  
Moral: The evolutionary plan  
Went astray by evolving Man.

### The Technologist's Reply

Man's potential is quite terrific,  
You can't go back to the Neolithic.  
The cream is there for us to skim it,  
Knowledge is power, and the sky's the limit.  
Every mouth has hands to feed it,  
Food is found when people need it.  
All we need is found in granite  
Once we have the men to plan it.  
Yeast and algae give us meat,  
Soil is almost obsolete.  
Men can grow to pastures greener  
Till all the earth is Pasadena.  
Moral: Man's a nuisance, Man's a crackpot,  
But only Man can hit the jackpot.

Kenneth Boulding



# DECIDING ON DIRECTIONS: SORTING OUT ALTERNATIVES AND IMPLICATIONS

The sections in this kit entitled "ESCAPING FROM OLD IDEAS" and "DISCOVERING NEW IDEAS" aim at stimulating imaginative thinking about the many possible futures. The section headed "VALUES AWARENESS" aims at helping you become aware of your own ideas about what is really worthwhile. This section aims at filling a gap between these by providing some ways of sorting out ideas so that you can decide on directions.

53 Rothsay Avenue  
Kingston  
WELLINGTON

Dear Mike

Thanks for your letter — you're right, we really should do more letter writing. Work's going well at the moment — just got a big back-pay, over \$3000!!! Trouble with money is, you've got to do something with it — not worth holding on to these days. I've been wanting to do some renovations to the house but then again Anna and I have been talking about going overseas for a long time too. And of course there's the car — the old bomb is going great but it would be nice to have something a bit more respectable; reliable etc. Decisions, decisions . . .

## MAPPING IDEAS

This is a method of setting out a number of possibilities in a visual form. It doesn't provide any more information than a list of alternatives, but it can make the choices more obvious. It is simple, and can be used with any area of your future life. Take, for example, your future job. There may be four important areas worth considering:

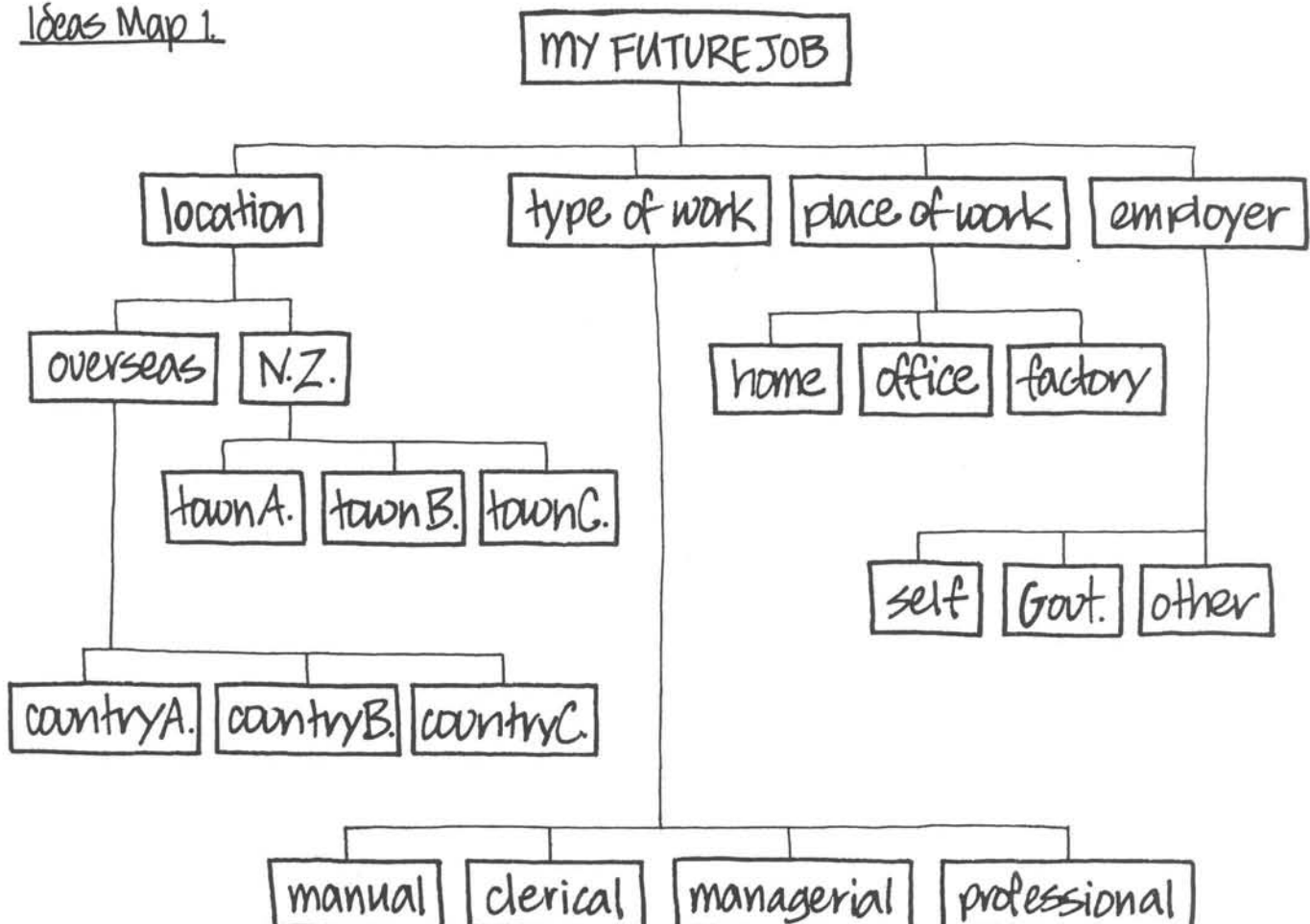
- the location
- the type of work
- the place of work
- the employer

Within each of these areas, you may imagine a number of possibilities and these can be represented in this way:

(see Ideas Map 1. below)

In no way does this "map" tell us what the future will be but it does clarify what the future could be. It sets out a "menu" of alternatives which we can use to formulate a preferred future and a plan of action. Another ideas map for choosing a new car is set out on the next page

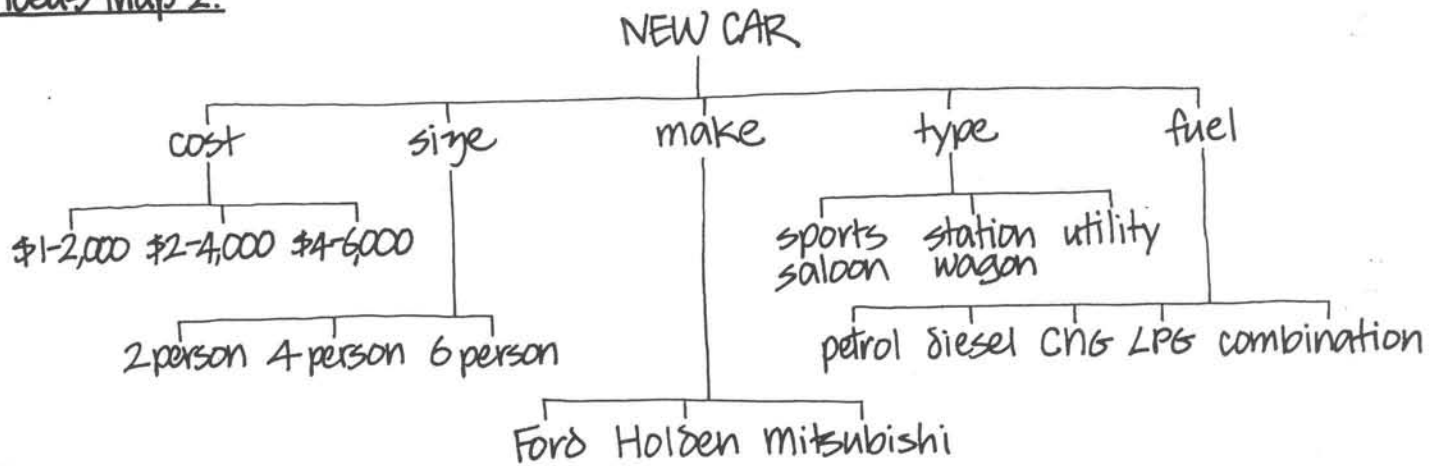
Ideas Map 1.



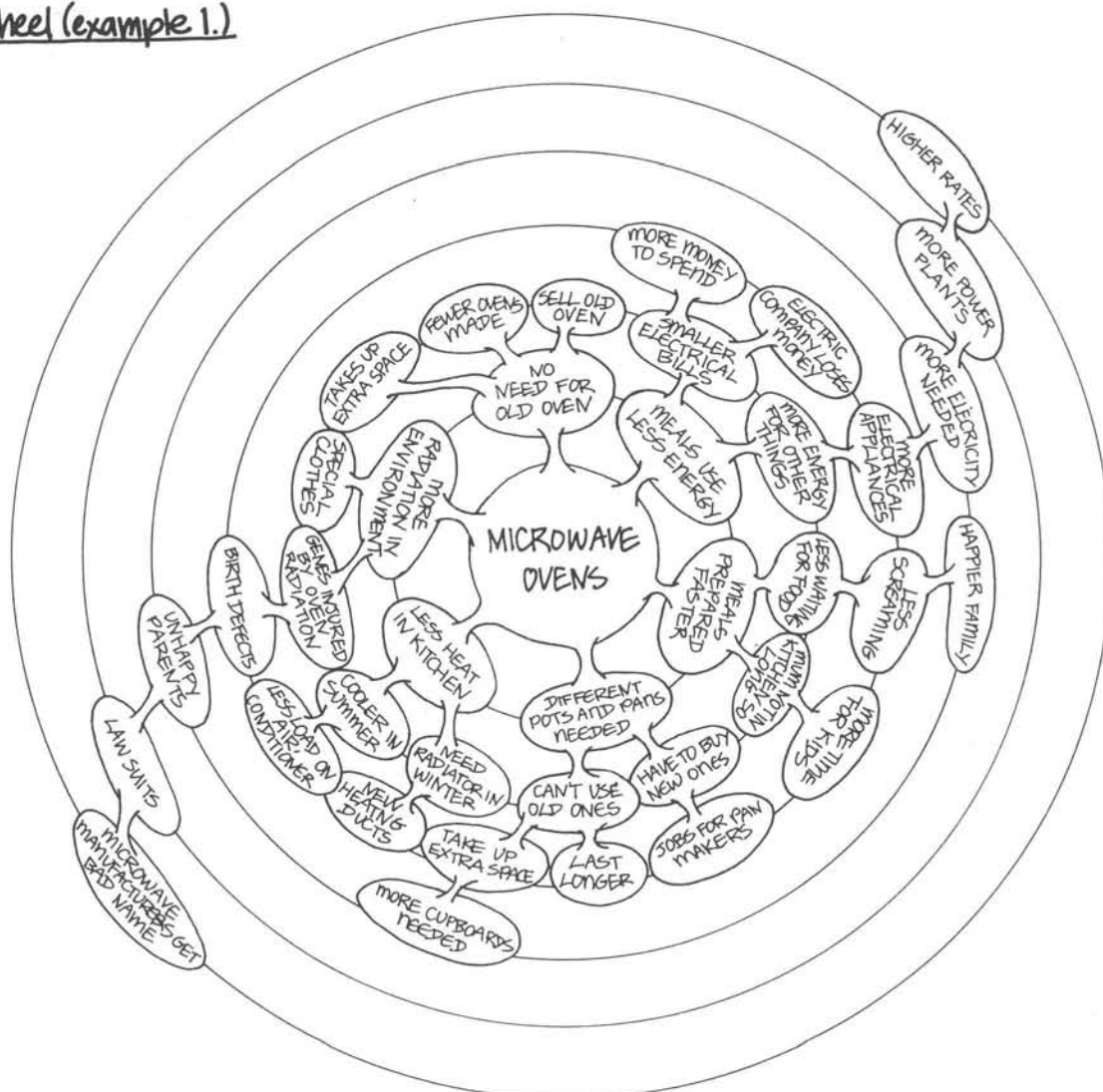




## Ideas Map 2.



## Futures Wheel (example 1.)





## IMPLICATIONS, RAMIFICATIONS, CONSEQUENCES

A common error when future possibilities are discussed, particularly when these involve plans to cure problems, is that the implications and ramifications are not fully considered. Situations can develop where a plan of action, based on certain values, ends up working against those values. For example:

Aim: to relieve the congestion of a narrow road  
Plan: enlarge the road

Result: more drivers are attracted to the improved road and it is even more crowded than the old one.

One way of searching for the implications of some possible future to see if it is entirely consistent with your values, is to construct a "Futures Wheel". This involves simply noting a possible future and then constructing a network of possible outcomes.

(see Futures Wheel example 1.)

First level, second level and even third and fourth level consequences can be explored and taken into consideration when evaluating a possible future.

This method can be especially useful in analysing a proposed future. Although, on the surface, the proposal may appear to advance your values, a closer examination may reveal that there are consequences which are not consistent with your preferred future.

develops a plot which covers a number of events and their consequences.

Scenarios can be constructed around world problems (e.g. world energy scenario, 2001AD) or they can be quite close to home (e.g. a national intercity transport scenario).

Writing your own scenarios can make future possibilities more realistic, more immediate and more engaging.

Quite often scenarios are written in pairs; one being a "best case" scenario, the other being a "worst case" scenario. This approach can act as a way of helping you see your own values.

### Best Scenario

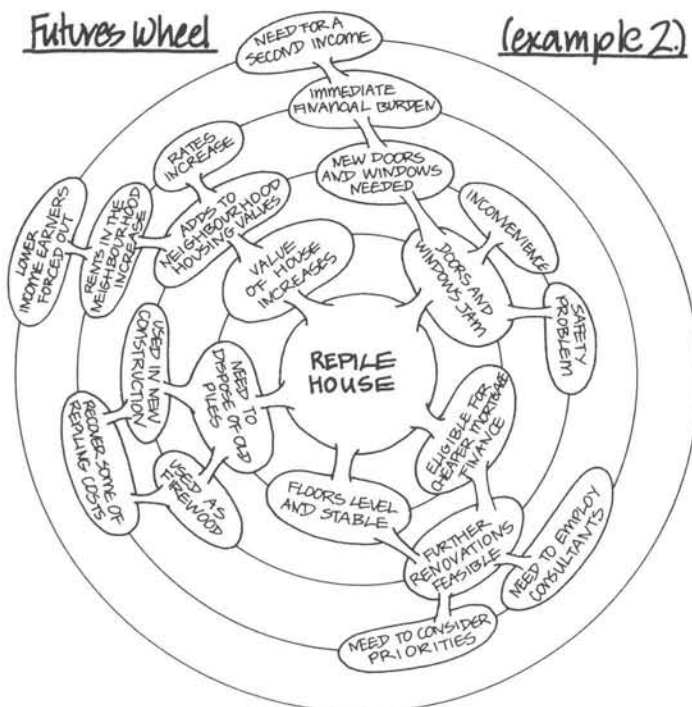
We travel via L.A. to London, spending 6 weeks camping around England. Cross to Europe and visit the cities we have read and dreamed about. On the return journey we stop at Hong Kong and get a sample of oriental culture. Return home refreshed with a new outlook on life.

### Worst Scenario

Plane held up by strikes en route to London — stuck in L.A. for 2 weeks. UK and Europe hit by bad weather — colds all round. Everything very expensive; air travel costs increase 20% just before we leave. Pick up a bug on the way home. Glad to get back home.

## Futures Wheel

(example 2.)



## WRITING SCENARIOS

A scenario can "flesh out" the sort of information assembled in a futures wheel. Instead of identifying the consequences of one specific event, a scenario

The New Zealand Commission for the Future publication "Contexts for Development: Clarifying Values" uses a variation on this approach in which the way the future unfolds is linked to values. The contexts provide foundations for writing alternative scenarios for many aspects of New Zealand's future, for example family life, education, community development, government, transport, work, health care, industry, human relations. This could be a useful aid to help you create your own scenarios.

Many scenarios of future society are to be found among works of future fiction. A few of these, particularly relevant to New Zealand today, are listed below. Others are listed in the Futures Fiction section.

## A BASE FOR WRITING SCENARIOS

Zepke, N., et al; *Contexts for Development: Clarifying Values*; New Zealand Commission for the Future, Government Printer 1981.

## FUTURE SCENARIOS

Harpham M. Wilkins P. and Zepke N; *Pictures of the Future*; Mallinson and Rendall, 1980.

Harrison C; *Broken October: A Scenario of Insurrection* Reeds, 1976.

Callenbach, E.; *Ecotopia*; Bantam Books, 1977.

Hackett, Sir J. *The Third World War*; Sidgwick and Jackson Ltd, 1978.



# CREATING THE FUTURE, A PROCESS OF CONSCIOUS ANTICIPATION

An idea contained in the introduction to this kit is that it is possible to influence the future; that the future unfolds like a ship on the ocean. This idea is the basis of this section.

Although active participation in the creation of the future is seen by many people as the most important part of a futurist approach to life, it is in many ways the most straightforward part of the process. By combining an exploration of the many possibilities with a clear view of what is worthwhile (value awareness), the path for action is often clear.

This part of the kit suggests how individuals can have an influence in the creation of the future.

## CREATING THE FUTURE ON DIFFERENT LEVELS

When we talk about creating the future we are talking about actively managing change. Change can take place on a number of levels:

1. on a personal level
2. on a community level
3. on a national level
4. on an international level

The most basic of these levels, and the one which has the greatest potential to influence the others, is change on a personal level. A changed world is the sum of many people individually changed.

Change on a personal level is already taking place if you are imagining possible futures and attempting to become aware of your values.

## WHAT DO I DO?

An active interest in change on the other three levels is a key trait of a futures-oriented person. It is not the aim here to suggest what form of activity may be appropriate to you.

What is offered is a guide to approaching the task of creating the future. This is based on three simple questions that anyone embarking on this journey must answer.

### WHERE AM I?

- an awareness of the present reality
- gathering and interpretation of information
- questioning: why do things operate in the present way?

### WHERE DO I WANT TO BE?

- a combination of values and imagination.

### HOW DO I GET THERE?

- resources
  - information
  - material
  - personal
- understanding your ability to change things and the ability of others
- what role(s) will I play?
- who will help me?

## SKILLS FOR CREATING THE FUTURE

This section of the kit acts as a signpost for those who want to influence the future. It points to a process of self questioning which can initiate change. Other sections of the kit can be useful here.

For example the sections:

- The Probable Future
- Deciding on Directions
- Values Awareness
- Getting Started

could all help in answering the question "Where am I?"

At the same time this section points to resources outside the kit. In answering the question "How do I get there", the kit can only provide a beginning. It can provide motivation, confidence and some useful methods of thinking, but there are many practical skills (eg effective communication, political astuteness) which can only be learned through perseverance and experience. The kit does not try to cover these skills; it does present some ways of thinking which encourage you to act for yourself to gain the skills necessary to shape the future and live successfully in the future.

## PROJECTS FOR A NEW WORLD

Here is an opportunity to consider some general trends in the world today and some ways in which individuals or small groups can try to affect the course of events.

Use the imaginary situation outlined below to help you weight up your priorities and assess your values:

How would you divide 100 units of currency among the four projects outlined below? Equally with 25 units to each? Or maybe 100 units of currency to one project and nothing to the others?

### WORK

There are very few jobs going in this place. Especially young people can't get jobs. We're some of them. There are eight of us. Ages 16-18. We can't get work. The situation is even worse now that one of the biggest factories round here is due to close. The head office of the firm is 3,000 miles away. They couldn't care less about us. They're just interested in what makes money for them.



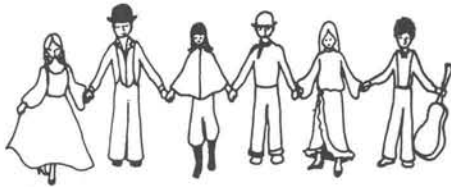
No one is going to help us. We've just got to help ourselves. We want to get our own business together. It won't be anything special. But something's better than nothing. Running a cafe. Decorating, cleaning the town up, some building jobs. Collecting and sorting 'rubbish' and selling it. Growing food on 'waste' land round here. There are lots of things we can do. But definitely we need some money to get us started.



## MUSIC & THEATRE

There are six of us, three men, three girls, we're a pop group, we also act and dance. We've written this musical play about world trade. About how difficult it is for poorer countries to get decent prices for tea, coffee, sugar, copper, sisal, jute, cotton, etc. And about how difficult it is for them to make and sell their own manufactured goods. And also, about how the richer people in these countries often don't do anything to help the poorer.

Our play tries to wake people up to what's going on in the world. So that people won't be sheep, just accepting things as they are. We want to put on our play all over the country. In pubs, schools, canteens, shopping centres, everywhere where there are people. We don't want to charge, so we need some money to cover our transport and food for an eight week tour in the summer.



## FESTIVAL CENTRES



I'm a businessman. I have a lot of experience of fundraising. I want to launch a really big appeal for money. About one hundred million dollars, from people all over the world. And then with this money I want to set up some Planet Earth Festival Centres. Each centre will be a fabulous mixture of funfair, zoo, park, museum, school, holiday-camp. A place where people come to really enjoy themselves. But where they also learn about what's going on on Planet Earth. The problems of the world. And the background to them. And how they can be solved. And how everyone's got a part to play. And there's no need to get miserable and depressed.

But first, I need some money to get an Appeal Committee together, and to start work.

The way you weighed up the following factors in order to reach a decision should provide some clues about your own values, attitudes and priorities for the future.

- status and respectability of the people arranging the project;
- the number of people likely to be deeply affected;
- the number of people likely to be slightly affected;

## SCHOOL

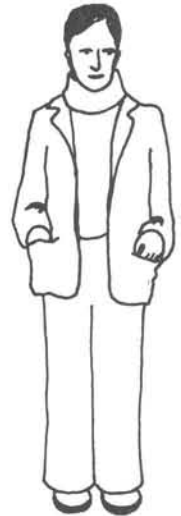
I write as the headteacher of a secondary school, and on behalf of the whole staff.

In our view the worst problem in the modern world is that everything has grown so big. Big blocks of flats, big motorways, big schools, big factories, big firms, big organisations, big cities. Everything's getting so faceless and impersonal. Nobody cares about anybody else. Nobody is able really to be their own boss, live their own life.

The answer is to re-create villages. 'Small is Beautiful'. Human beings need to live in much smaller communities. Back to the countryside — but also we need to break cities up into small communities. Then each community will organise itself in its own way, and have power over its own affairs.

At this school we want to make a start on this task of creating small communities, and giving people more control over their own lives. We should like to grow a lot of our own food here, for a start. We should also like to experiment with non-violent technology — wind pump, a water turbine, a methane generator, a solar collector, etc. So that at least students know how they work. And we should like to accept responsibility for disposing of our own waste.

Slowly and surely we should like to change our school into a much more self-reliant community than it is at present. We want to be pioneers, trying to create a new sort of society. And trying, all the time, to learn. But we need some money to get started.



- the actual subject-matter of the project;
- the political views expressed or implied in the proposals;
- the timescale involved;
- the problems of evaluating the success of the project;
- the problems of communicating information about the project to others;
- the possible harm which the project might do;
- the extent, if any, to which you personally would like to take an active part in the project;
- the extent, if any, to which you might personally be affected by the project.

Projects for a New World is adapted from *Learning for Change in World Society*, World Studies Project, London, 1976. Drawings by Lesley Bailey, CFF 1979.