INTRODUCTION

The absolute minimum of awareness and concern is required to perceive the horrible condition of human existence. Actually, it seems impossible to avoid such awareness. But human perception and imagination can go further than this - one could find out why we have the kind of world we do and also what kind of world we could and should have. Even more imagination is required to decide on strategies of change and act accordingly. In a nutshell, this is what peace education is all about - to know, imagine, decide, and act.

But - what must be known, imagined, decided and acted upon? And how should it be done? These two questions about means - ends and the relationship between them, direct us to the two most fundamental problems of education. That is what this paper is about.

The means-ends, the how-what, the form-content relationship is a dialectical one in which the form determines the content and the content determines the form. This two-way causality is especially important in peace education because of the recognition that the content is not always known, but is to be known through the process of education\(^1\). This searching for "new" knowledge as opposed to depositing already "complete" knowledge has many implications for the relationship between educator and educatee, i.e. the form\(^2\). Another
major argument about the dialectics between form and content is the realization among progressive scientists that even the cornerstone of knowledge, science, is not value-independent. Scientific research is always done within a frame of human values necessarily leading to value-laden findings\(^3\). The so-called "complete" knowledge we have been handed over by science may be incomplete seen from this angle. The existentialist would certainly applaud any attempt at pointing to the dependence of knowledge and truth on individual values. However, this idea would not be sufficient: The existentialist would also believe that truth can never be known in its totality and it is a requirement of science that it determines not only what we know, but also what we do not know. The consequences of what is not knowable or what is not known with certainty may be as important or more important than the consequences of what can be proved\(^4\). Assuming the dependence of knowledge upon values and that many things are not known, we certainly must encourage search and research of truth by all individuals and groups so that each individual and group can acquire more complete knowledge. This search and research can be done in the educational process depending upon the form adopted.

DECISION-MAKING

Emphasis on Form

From this perspective a general aim of education becomes "conscientization", i.e. "learning to perceive social, political and economic contradictions, and to take action against
the oppressive elements of reality"\(^5\). Briefly stated, it is a question of perceiving and acting in order to create, transform and construct. The aim is to realize values and we as educators are supposed to take the lead, i.e. "educere". So what do we do and how do we do it?

An educator must have an understanding of the scope of reality relevant to social, political and economic contradictions. In Diagram 1 the scope as I see it is presented in visual form.\(^6\)

This diagram serves to typologize reality, and thereby possible contradictions in terms of time and space. Before we proceed it seems necessary to clarify these categories and how they relate. The left half of the diagram (inner space) represents what I know and don't know about myself specifically and man in general in the past, present, and future. Examples are the physiology and chemistry of the body and characteristics of
perception, emotion, morality, cognition, aggression, love, behavior, etc. The right half of the diagram (outer space) represents from left to right a gradual widening of geographic space (e.g. home, peer group, school, local community, political organization, nation, region, world, solar system, etc.). The lower half represents the past and the upper half represents the future. Where the two solid lines cross each other, we find the individual in real time and space. In other words, this is where I am right now, sitting at my desk writing this article. This is the most essential point for the Zen Buddhist because this is the only place and time for direct, real experience of oneself in context with a real situation.

A contradiction between man-made forces is dependent upon values. Such contradictions cannot exist without a tie to the value framework of individuals and groups. Social, political and economic contradictions, therefore, are not perceived and known without perceiving and knowing own values. This does not mean that own values cannot be clarified and/or changed through the process of perceiving outer space reality.

Contradictions existed, exist and can exist. They can also be internal (inner space) and external (outer space). Contradictions can therefore be present in any part of the diagram, but cannot be perceived independent of the quality of individual values. The educator and educatee must continuously clarify values in own inner space. This is a never-ending process because of the changeability and malleability of the individual.

With this diagram as a framework for decision-making as to form and content, we shall in the following outline the
choices confronting educator and educatee in the process of conscientization. In so doing we shall make use of an illustrative parallel to the conscientization process, viz. the process of making an expedition for exploration. We can think of two types of expeditions: (1) an expedition for exploration of some point in time/space where nobody has been before, and (2) an expedition for exploration of some point in time/space where somebody has been before. In either case decisions must be made. The way these decisions are made (form) and what the choices are (content) would be crucial to the outcome of the expedition. Major decisions will center around these questions:

1. What should be the starting point?
2. Which direction (time/space) should the expedition take?
3. In cases when similar expeditions have been made earlier, to what extent and how should we utilize the findings from these?
4. Should we know in advance how far in time/space we should go?
5. If we should not know how far in time/space we should go, when should we make a decision?
6. What is needed in terms of psychological and physical qualities of those taking part in the expedition?
7. What equipment is needed?
8. How long should we be gone?
9. Should we return home and, in case, when?

Answers to the nine questions above could range from one extreme to another depending to a great extent upon the form of decision-making. In the context of conscientization, there-
fore, it becomes essential to find out which forms of decision-making would yield the best results in perceiving, reflecting and acting upon social, political and economic contradictions.

Contrasting with the way decision-making about most explorations have been done, decision-making in conscientization reflects an egalitarian and participatory model which implies that:

"there is no complete knowledge possessed by the educator, but a knowledge object which mediates educator and educatee as subjects in the knowing process.... the educator must "die" as exclusive educator of the educatee in order to be "born" again as educatee of the educatee. At the same time, he must propose to the educatee that he "die" as exclusive educatee of the educator in order to be "born" again as educator of the educator." 7)

This type of decision-making seems similar to the maieutic method practiced by Danilo Dolci at his educational centre in Partinico, Sicily. 8) This method is a group discussion method which in its simplest form is:

"a dialogue through which each individual develops the ability openly to use the group situation to the best advantage, thus working towards the ultimate goal of creating an essentially maieutic society." 9)

As earlier mentioned there is no contradiction without a tie to a value-quality of an individual. If perception of contradictions shall occur, therefore, the link to individual values must be made. These qualities of inner space are, can and should be influenced by external forces (outer space).
The extent to which this occurs shall not be debated here - the argument is simply made that in the process of **perceiving** these qualities (regardless of what they are and how they came into existence) as they change over time, cannot be done through vertical and dogmatic methods of human interaction.

Looking into myself cannot be done **for me** - introspection can be done by myself only. This individual discovery of inner qualities, some of which are unique and all of which are acquired through experiences similar to no other individual's experiences, can be reflected, verbalized and brought into the open through the maieutic group process. But the truth about my inner qualities as they link up with contradictions cannot be told me by a teacher, nor a psychotherapist for that matter.

Another basic argument for choosing a participatory form of decision-making, is the idea that it must be compatible with peace, which not only implies absence of direct, but also structural violence.10) As Galtung points out, although the days of colonialism and corporal punishment are, to a great extent, over, structural violence is still there, symptomized by:

"a highly vertical division of labor which in this case (education) expresses itself in one-way communication; fragmentation of the receivers of that communication so that they cannot develop horizontal interaction and organize and eventually turn the communication flow the other way; absence of true multilaterality in the education endeavor."11)

These structural characteristics must be done away with and be replaced by structures allowing a communication process
characterized by feedback, bringing people together in joint
deanours, general participation and self-generated change.12)
The idea that forms of peace education must be compatible with
the very idea of peace is further explicated in a recent issue
of the Bulletin of Peace Proposals.13)

Emphasis on Content

Let us now go back to the diagram above. Although this
diagram indicates four major categories of reality relevant
to the study of contradictions, it does not imply anything
about the relationships between the different types, nor the
relationships between values and contradictions as discussed
above. The diagram must be seen in a dynamic light, however,
in order to reflect the cause-effect relationships along the
two dimensions of time and space:

1. Along the horizontal axis cause-effect relationships can
go in all directions, i.e. IR → OS, IR → IS, IS → IR,
   OS → IR.

2. Along the vertical axis cause-effect relationships will
go from the past to the present, from the past to the
   future, from the present to the future, and from the future
to the present.

The content of peace education, therefore, is to be found
within these general parameters of time and space. Obviously,
the scope of conception along the two axes varies greatly from
the new-born infant to the great philosopher. Nevertheless,
the common element regardless of level of conception is that
education should, in my view, provide for a continuous expan-
sion along the two dimensions; thereby revealing the dynamics of etiology to the individual. This pedagogic expansion presumably occurs in many ways. However, in order to contribute towards freeing the mind to seek new frontiers for even greater awareness and understanding, this process must meet certain requirements, i.e. we must avoid forms of education that lead the student to a circle of certainty and fear of freedom. 14)

In this context, however, we shall not focus on the characteristics of ideal educational form, but on what clues we can gain from educational content in determining the form.

The general idea, as mentioned above, is to expand one's "horizon", so to speak, along the two axes in order to become aware of causal relationships in time and space. Our understanding of the dynamics of causal relationships will constitute the structure of knowledge/non-knowledge and consequently have impact upon educational form. My understanding of this structure involves two major categories, viz. (1) to be in real time/space and (2) to be in non-real time/space.

To_be_in_real_time/space

This is the existensialist situation in the pedagogic process. Above all this is the situation which acknowledges that some of our understandings of society and man do not come from metaphysics or logic, but from within ourselves. This situation requires attention to three basic characteristics of existensialist thought, viz. human subjectivity, the individual's paradox of being of importance and at the same time no importance, and the anxiety that arises from profound existensialist analysis. 15)
Real time and space as perceived by an individual is constantly changing. As noted earlier, individual real time and space can be influenced by inner space, outer space, past and future. The perception of real time and space, therefore, comes about through a complicated web of factors. Without knowing exactly how this occurs, we shall now discuss some important characteristics of the situation as these characteristics relate to the pedagogic task of conscientization.

Social, economic and political contradictions in real time and space should be the easiest to perceive because of the direct observations that can be made. Nevertheless, it seems as though such direct observations are impeded by many factors. One factor is the way traditional education seeks to avoid handling conflicts and contradictions by emphasizing harmony in groups and society, and by the above-mentioned vertical decision-making and form of education. Another important factor closely related to the first is the acquired disposition of people to view the present situation as part of the natural order of things and thereby take one's existence for granted - sometimes God-given. Religion, for example, can serve to reinforce this disposition or serve to liberate people's minds to see the contradictions. A very good example of these two ways of implementing religion in real time and space was given in the television programmes produced by Swedish Radio (1973) in which the Brazilian Pentecost Church is shown to use religious dogmas to give poor people in Brazil the idea that "God wants us to be poor", but will reward us in life after death. The other program was entitled "Freedom must be conquered" and shows the way the Catholic Bishop Dom Helder Camara interpretes
religion to enhance the people's perception of societal contradictions. This example from religious experience seems to be a good reflection of the two diverse roles education can play in either freeing the mind for encouraging changes in reality or programming it for acceptance of status quo.

It should be noted that although real time/space constitutes the most essential learning resource for the majority of the world's people, a minority of us living in the industrialized countries live under information implosion from non-real time/space advanced to us by technologies. This has led to less concern about our immediate surroundings and more attention is paid to remote conditions and problems. Regardless of our relationship to real time/space, the pedagogic value of searching and researching our immediate existence or "paramount reality" seems to be obvious. If we do not perceive inconsistencies and contradictions in our own real context, how can we then expect to perceive same in a context more remote from us? How can I understand racism in the U.S. before I perceive racism in my own context?

The process of being in real time and space is therefore a neverending pedagogic process that can and should contribute towards conscientization. In order for this to happen, the educator must regard the reality of the educatee to be worthy of attention. Closely related to this is the condition that the educator knows and accepts the media of expression practiced by the educatee. The process of being in real time/space also involves the vernacular and other media of expression that are part of this reality. A second condition for conscientization is the understanding that real time/space can be altered.
by taking initiatives to alter it.

**To be in non-real time/space**

For the existentialist the opposite of being is non-being; the former to be understood only by realizing the latter. So in a sense non-being belongs in category 1, viz. to be in real time/space. The present category is not opposite to being *per se*, it is rather a special category of being - this time in non-real time/space. The idea is that I can to a certain degree experience (both cognitively and affectively) situations in other places and at different times than the existential moment. If this is true, it would mean that I have, theoretically at least, an infinite number to choose from. Practically, the number of choices might be smaller because some non-real situations are easier to "be" in than others. Generally, it might be true that it becomes more and more difficult the further away in time and space the situation is from my real situation. However, many other factors determine why one non-real situation is more easy than another to "be" in, factors such as language, cultural codes, available resources, etc.

The movement itself between different places and times in the diagram will be discussed later. Here I would rather discuss the typology of non-real time/space situations apparent from the diagram and point out two necessary combinations of situations:

viz. the horizontal and vertical combinations.

**The horizontal combination.** In this combination, situations
are chosen for experience at various points along the space axis at the same moment in time. The reason for this criterion of content dispersion is that inherent in any contradiction of social, political, and economic nature is a two-way horizontal chain of causality. A contradiction in a certain spatial context will be a reflection of and a further cause of similar contradictions in other contexts. In other words, the contradiction within a limited context cannot be understood without understanding its wider context.

An example of this dialectical causality between spatial units at the same point in time is the local Bantustan community in South Africa, the macro-society in the nation of South Africa, the industrial community in Japan and the consumption community of Western Europe. At a certain point in time (say, 1975) all these communities exist and each one of them cannot be understood separately without reference to the other exactly because of this two-way, horizontal chain of causality. The industrial community in Japan could not exist without input of cheap labour from some place and a large market somewhere. This means that the rule of dispersion of content along the space axis at a certain point in time is formulated (1) to ensure identification of what factors condition the situation in a certain place; and (2) to trace the connecting links between one place and another. To be in non-real time/place, therefore, means more than being; it means moving back and forth on a horizontal axis. Before we describe this movement in more detail we shall discuss the vertical combination.
The vertical combination. A rule of dispersion must also take into account the two-way vertical chain of causality. If we keep the spatial limits constant, any present contradictions in that place must have its history and its future. The contradiction cannot be fully understood without knowing it from past, present, and future perspectives.

An example would be the contradiction between economic growth and equality in a nation such as Iran. The contradiction as it appears must be seen and understood in its historical context as well as in the context of prognostic futures (will be) and alternative futures based on prescription (ought to be). The way this contradiction is understood as it exists today depends not only upon experiencing this situation at this particular point in time, but also upon experiencing the situations leading up to this situation; situations that would logically follow if we assume the continued existence of the contradiction (prognostic reality); and alternative situations to present and prognostic reality. To experience a situation means to be in the situation. And to be in a situation that is non-real to me both in space and time requires movements away from my own real time/space. It requires horizontal and vertical movements and possibly diagonal as well. To these movements we now turn because they are prerequisites to being in non-real time/space. Nevertheless, it has been established that the movements must be such that in their totality they shed light on the horizontal as well as vertical chains of causality associated with any contradiction. We can go as far as saying that content or knowledge is sui generis a factor that should influence decision-making - the reason
being the dynamic structure of causality central to this view of knowledge.

**Emphasis on Form Again**

Just as we had two major categories of **being**, I shall mention two major types of **movements**. These are: (1) to move between real and non-real time/space and (2) to move in non-real time/space.

It has previously been established that both the moving and the being aspects of an excursion have pedagogic value. In the search/research of some social, political, economic contradiction, visits to various places along the space axis and also to various times along the vertical axis are required. Only by a certain dispersion of visits will it be possible to view the contradiction in its totality. This means that we must identify factors determining the movement, its starting point, direction and so on.

**To move between real and non-real time/space**

The starting point. Nothing has been stated above to determine starting points for the horizontal and vertical movements. This means that I have avoided a discussion of inherent logic in the development of a contradiction without denying that there is such a logic. If there is a logical development between the past, the present, and the future as well as between various points along the space axis, I think it is extremely important to grasp it. I also think, however, that this part of knowledge, i.e. its inherent logic, can be grasped through
many different approaches, i.e. I do not deem this inherent logic to be of paramount interest in the discussion of the starting point for movements between real and non-real time/present space. Thus, the excursion might begin in reality and move to past reality even though the actual presence of a contradiction must be conditioned by the past and not vice versa. The point is that insight into the relationship between the visited stops along the two axes can be arrived at even though the combination of stops do not reflect the "true" or correct chronology of the development of the contradiction.

The starting point must be determined by some other quality than the contradiction itself. As mentioned earlier the starting point should be determined by factors in real time/space, factors that will put limits to possible directions of the movement and its life span. To these factors we now turn.

The first determinant factor is the value system of the individual and the combination of value systems of many individuals. Regardless of the term being used (value judgements, value/system, interests/concerns, valuations, etc.), the basic idea is that the perception of contradictions is dependent upon human value. So the starting point should be determined on the basis of individual and group values.

The direction of the movement is thereby also limited; values would guide the direction towards some place in the diagram. However, more is required than a force in a certain direction. It is also necessary to have the necessary means of communication. Necessary means would vary according to the direction of the movement. This would mainly be apparent in
the difference in conceptual frameworks employed in the understanding of phenomena in as diverse situations as the world political system in the year 2000 and the organization of collective farming in the Soviet Union in 1970. The lack of adequate concepts to describe reality is an inhibitory factor. But then the educational process is also the very process in which concepts should be developed for the purpose of "naming" the world. This naming should not be so much dependent upon sophisticated language as a certain bravery to seek for "new" phenomena in reality.

It also seems as though a highly developed conceptual apparatus can lead to meaningless rhetoric and a simple, conceptual apparatus can lead to meaningful action. An illustration of this would probably be the use of the word "justice" by former U.S. Attorney General John Mitchell and a peasant freedom fighter who never learned to read or write.

The movement from real to non-real time/space must in any case involve the use of symbols at the moment the movement leaves the directly observable field of experience. But as soon as these symbols are used for their own sake without reference to my direct field of experience, they tend to lose in meaningfulness. And maybe this is the difference between John Mitchell and our freedom fighter; the former did not see the meaning of the concept in his own reality (it applies to the street, but not to the corridors of the Department of Justice), whereas the latter defines justice more out of his own reality (the boss grows richer while the peasant grows poorer - and it can actually be observed - and felt).

I shall not in this article discuss various ways, tech-
niques or strategies for using symbols in moving outside real
time/space. Let me only state that any movement away from
real time/space necessarily must be followed by a movement
back to real time/space (which will have changed in the mean-
time due to my being somewhere in non-real time/space).

Let me just add that the movements away from real time/
space unfortunately seems to lead us more into the past than
into the present and future. The movements also go too much
in the direction of those historical and present structures
we are most famili ar with, i.e. those structures similar to
our own. And this results in a biased view of the world be-
cause we tend to see history from our angle. Columbus dis-
covered America!? Who discovered Africa? Or Europe?

To move in non-real_time/place

I mentioned above that excursions outside my small reality
always must return to my own reality in order that this expe-
rience of non-real time/space can be seen in the context of
my own situation. (A fresh example: I was just on an "excur-
sion" to Santiago in Chile September 11, 1973 via the medium
of the Television Theatre of Swedish Radio. After about one
hour's account of the events in dramatized form, I am still in
the process of fitting this affective experience in non-real
time/space into my real time/space. More concretely, this is
exactly what happens when I write what is between these two
parentheses).

I shall now think about movements from one non-real time/
place to another non-real time/place. This would imply the
use of symbols only until the movement would again "drop by"
real time/place. I probably gave the impression that John Mitchell not only applied the symbol "justice" without meaning, but he also seemed to move from one non-real time/place to another in practical application. So this is not a good example of how I believe these movements should occur.

Because non-real time/space can be communicated only by way of symbols, this would be the greatest determinant for how long the "excursion" would last before I go back to real time/space. What is important, however, is that movements in non-real time/space should follow the connecting links between various places as they are perceived at the time. Thus, I saw a possible link between Santiago September 11, 1973 and the copper roof of the building of the Norwegian Council for the Arts and Humanities. A search, research of the link between these two would lead me on to the economic aspects of the Chilean coup, the economic cycles of copper in particular, raw materials in general, and of course neo-colonialism.

CONCLUSION

The discussion above has rendered some guidelines for how peace education should be. I shall not repeat here what has been stated above. Let me only make some generalizations.

First, peace education is not a subject to be taught/learned. The subject matter can vary from intrapersonal contradictions to transnational ones depending on factors discussed above. Ideally, though, I would hope that the content would be diverse. Actually it could be more diverse than a student is able to handle intellectually, as long as connec-
tions and cause-effect relationships are understood. One basic attitude necessary in peace education is the student's view of himself/herself as an active, historical subject whose vocation it is to become more fully human.\textsuperscript{25}

It has been suggested here that peace education must include the concern of students for contradictions they see. Also, it has been stated that a contradiction in one place at one time will have connecting links to contradictions in other places and at other times. This exciting web of forces in the social, political and economic areas is the terrain over which the simple map is introduced. The totality of this is important; one part is not actually more important than another. Peace education must be the kind of education in which it is possible for a student to state his/her understanding of the relationship between diverse places and times in this diagram. Here is a good example of a 14-year-old's attempt at integrating knowledge from different places and times: \textsuperscript{26}

The industrial revolution of the 19th century has caused urbanization in Norway. Industrialization, mechanization and urbanization have close connections. 15 small farms are abandoned in Norway every day. This is caused by (1) the farmers have a hard time in surviving financially, (2) there is a close connection between export of food from developing countries and the abandoning of farms in Norway. We produce less and less while we import more and more. If we had not imported so much we could not have afforded to abandon farms and cultivated soil. (3) Many people in the farming areas are unemployed because of mechanization. Therefore they move to cities where they can work in industry. (4) Young people want other types of work than farming so that they can make more money. Therefore they attend schools to receive a better education and then move to the city for work. This leads to a lack of people to take over farms which are then abandoned. In 1969 5000 small farms were abandoned in Norway and 10 000 in Sweden.

In an area that has to do with social, political and economic contradictions, we do not have universal knowledge to distribute around - what we have is a human being who wants to find out something new, to combine things in another way and, most importantly, a human being whose approach is unique and must be respected if he/she shall continue to take an interest in expanding his/her horizon to include knowledge about various types of contradictions. That person would not be bored, I think.
From the perspective of the principles discussed in this article, the quote above shows that the person writing reflects a concern over social, political and economic developments in Norway. She draws connecting links between 19th century world developments trends and local community development in Norway in the year 1975, i.e. real time/space.

The author has apparently done excursions into the past, the present, outer space, inner space, and come back to real time/space. And she has found connecting links between these various excursions. She has covered the perspectives of "what was" and "what is" (vertical combination) at various places along the space axis (horizontal combination). She has not, however, extended the vertical perspective into an analysis of "what will be" and "what ought to be". In my view these perspectives are seldomly included in people's reflection because people's dreams and visions (whether the dreams are practically feasible or not) are put down as "unreal" and of no importance. However, if the perspectives of prognosis and prescription are not integrated with the past and the present, it will have serious consequences for the two remaining stages in peace education, viz. decisions about strategies to transform reality from "what it is" (abandon farms, movement to cities, etc.) to "what it ought to be"; and decisions about action.

Some readers might object to the way this 14-year-old girl perceives reality. And maybe the statement reflects too much simplification of reality. This is not important, however. The important point is that totality is understood regardless of how complex or simple descriptions of it we can give. In three years this girl might describe the same phenomenon differently because of new "excursions" and experiences in real and non-real time/space.
FOOTNOTES:


24. This dynamic is very well described by Kenneth E. Boulding, op.cit., p. 3.


26) This is an extract from an essay authored by a student at Sunndalsøra ungdomsskole, Norway. Translated from *Dagbladet*, Oslo, May 9, 1975.

27) Predictions about "what will be" are available from the Department of Finance, Government of Norway who has published statistics on Norwegian Society in 1990. Even though these are published as publications, they should be classified as prescriptions because they assume certain developmental policies to be followed. These are the only published "predictions" I know of in this special case. But what about all the un-published predictions. We can get these data too if we are willing to ask the question: What do you (I) predict for 1990? and why?