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PLANNING FOR AN AFFECT BASED SOCIETY: PREDICTION, INDICATORS, AND STRUCTURE

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PREFACE

Most activity under the name of planning has been concerned with physical, economic, and social resources. Rarely has the mental health of a population been dealt with as something that you planned for -- especially _positive_ mental health. That is my concern in this paper.

Planning involves an understanding of what was, is, and might be. The importance of the "might be" -- the future -- is significant, and so I begin this essay with a heuristic prediction. To relate the past to the future, I have tried to use the device of indicators of change. Finally, to get some idea of what these global changes will mean on a programmatic and structural level, I have tried to develop some simple models. Readers who have difficulty with algebra should not quit completely at this point, but skip over the algebra. I have tried to summarize the results in "English."

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BEYOND POST-INDUSTRIALISM

I want to describe a discussion of societal forecasting and a heuristic model for understanding (rather than predicting) coherent social change in terms of a theory of crucial resources. Similar models underlie the current set of predictions of an oncoming post-industrial society (PIS). There are some flaws in these predictions, both in the statements that we are in a PIS in America now, and in seeing PIS as a long term trend. (Which part of our society is PIS and whose interests are served by saying that PIS is the wave of the future?). A beyond post-industrial society (BPIS) model should provide a decent prediction of what might be, an accurate reflection of some current trends, and an ideological alternative to PIS.

I shall describe the characteristics of a BPIS based on feeling and self knowledge and suggest possible ways we might measure the state of a society to determine if it is BPIS. Finally, I include an appendix by Peter Marris which is critical of the "newness" claim I make. (I am not sure how to answer Marris' remarks, since I really do not disagree with what he says.) In the next chapter, I discuss the structure of BPIS in more detail.

Predictions

I view future prediction as political and present oriented. The future that is predicted, and the images conveyed by these

predictions, determines the conceptual possibilities for societal direction. When we assert that the society is changing in a certain direction, persons who are convinced by these assertions will act in ways to fulfill the prophesies. It is true that some futures are "impossible," but most are not. People who sketch future societies create determining images of the future. And in doing so they are political for they can affect the power distribution that will be.[1]

Future prediction is certainly present oriented. It tells us about the future so that we may affect our present action. A more subtle point is that future prediction cannot really be about the future since it cannot be tested against future events. Very narrow predictions can be tested. But usually, the process of making a prediction changes the situation in which people act. Sophisticated predictions can take these reactions into account. But even they cannot deal very well with innovations.

One value of predictions for the future is that we can define surprises better. Without modern physics, the fact that a rocket lands on the moon is a surprise; with it, the fact that we miss our landing point by 100 meters is a surprise. We note that such a surprise is used to improve prediction. When this happens for future studies, and I think that it will not occur soon, they systematic prediction can be said to be mature.

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[1] A more cynical view is that those in power control the image making apparatus (the future studiers) and, therefore, futurism is mere legitimation of the present. I think that this control is never perfect, and sometimes legitimating revolutionary images do have the good fortune of being adopted by social changers.

It will not occur soon because so many of our predictions are of, and in, complex environments in which we cannot adequately describe our assumptions. Also, most _ceteris paribus_ assumptions give out too easily. So most of the time, when we make societal predictions, we end up learning about how society works now.

The predictions I will be discussing here are political and present oriented. I will try to show how they select out certain of today's activities for future growth and dominance.

Post-Industrial Society

Currently, it is quite popular to predict the coming, if not current presence, of a post-industrial society (PIS). Preliminary to describing what might be beyond PIS, or alternative to it, I want to examine the discussion of post-industrialism in the literature.

Industrial society, in which the factory was a social force and mechanics and thermodynamics were the basis for physical (as contrasted to political) force, has been around for a long time now. After a few hundred years one would expect that students of society would try to see if different formulations of society, alternative to the industrial model, would be of use. Also, it might be expected that industrialization would not be a completely stable style and would have self-transforming components causing industrial society to be superseded.

The United States has convinced itself by the end of the second third of this century that things have really changed. By the end of the first third, _Recent Social Trends_ had appeared and systematic measures of social change were institutionalized.

In the past few years, these changes have come to be called post-industrial. What are their characteristics?

PIS is one in which theoretical knowledge plays a crucial role. As a result, the institutions of education become the central ones. Concomitantly, the service sector of the economy becomes more significant (in some sense) than the manufacturing sector. Technologically, the rise of electronic technology (transistors and computers), as contrasted to older technologies, becomes the hallmark of change.

Perhaps most curious is the assertion that conventional politics is becoming obsolete. Marxist analysis no longer has its conventional meaning since it was a description of an industrializing society, and we are now post-industrial. Whether or not we are "beyond ideology," we are supposedly in a different place.

Many people are unhappy with the post-industrial model. Some might quibble with the statistics, but the real argument takes place on different fronts -- in terms of politics or humanism.

The political critiques of the PIS model say that it is insufficiently analytic about the nature of power. PIS is advocated by those who are in the university -- this of itself does not vitiate it as an idea, but the source does influence the assessment of the importance of trends. These trends, plainly argued by the advocates of PIS, would result in increasing centralizations of power and even less control over life being exercised by ordinary men. The technical character of government would result in some form of technocracy. Also, PIS seems quite

irrelevant to the underclasses. The poor do not seem to be a part of PIS and more importantly, they will be left even futher behind as time goes on. What is needed is a future which systematically incorporates the left-outs as a product of the predicated trends.[2]

Humanistically, the critiques of PIS take off from the "scientific" character of the knowledge that is used to govern. The limited conceptions of man's abilities implied by the development of a meritocratic intellectual elite and the behavioral science model of society clashes with current conceptions in humanistic psychology.

An amalgam of these objections is found in the more anarchistic critics. They assert that power must be decentralized and men thereby will be humanized. Technical knowledge is only secondary to this goal and, more importantly, might need to be abandoned since it would be in opposition to a more anarchic world.

My own view is that it is not worth arguing with the "facts" about PIS. Rather, one should argue with the assumption that society will be knowledge-based as a long-term trend. Knowledge, like any resource, tends to have a limited ability to substitute for all other resources. For any single cohort, I would guess that it will be a short time for the cohort to get over the knowledge stage. Knowledge and 'scientific' style, if they include some sort of societal self-examination, will be overtaken

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[2] Leiss suggests that the "newness" claim that is made for knowledge as an important factor in production is suspect. Actually, knowledge has been seen as such a factor for a very long time.

by their examiners. A question-asking society will have a hard time maintaining the _status-quo_, and that is why we must try to see what are the alternatives or immediate successors to PIS.

Beyond Post-Industrialism

I suspect that a major problem for planful actors beyond or alternative to post-industrialism will be making policy that is related to affect. How we might justify such a statement is the subject of this section.[3]

In saying that affect will become more important in the future, I mean that affect will be a resource crucial to the functioning and politics of society. The heuristic that I offer for understanding how change occurs is a model that is based on the succession of values (and consequently valued objects, goals and resources). My purpose is not to predict the future in any sense, but to advocate the possibility of an alternative future.

In order to state my principle of succession, we will need a definition of a crucial resource. A crucial resource is one that will be critical to the production of the desired objects or states of the social system.[4] The word "resource" is intended

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[3] This section might be called an effort in "value impact forecasting." Baier, 1969, has a series of seminal articles on how values can be used as predictive tools. Toffler's article discusses the role of the value impact forecaster. Baier and Rescher's articles go into some detail about how we might predict values and use these predictions. Williams, 1967, also discusses the problem of following the changes of values and measuring such. Taviss, 1967, suggests that value changes take place when it becomes beneficial (in a utilitarian sense) to change. This is much like my analysis, in which the concept of a resource incorporates the changing costs of maintaining a value.

[4] "Critical" is used here in the same sense that it is used in "critical path method." Note that there are some activities, like food production, essential to the survival of any society (or

to convey the connotation that is given when one uses the words "natural resources." An object becomes a resource when it is designated by man as being fundamental to some other desired end. No commodity, no material, is objectively a resource. Resource status may come and go, dependent on the needs of men for materials.

With these definitions, it becomes almost a tautology to say that <u>the crucial resources in the society are those resources which are most critical to fulfilling the goals of that society.</u> Crucial resources and their consequent goals are intimately related.

When do the crucial resources change? <u>Changes in the crucial resources and their consequent goals occur when it becomes uneconomic to maintain their present status.</u> A resource may become so plentiful that it is no longer crucial compared to other materials. The goals to which the resource was instrumental are fulfilled. For example, food is no longer a crucial resource in the U.S. and the satiation of hunger is no longer a goal (with some notable exceptions). Another possibility is that a resource may become so costly that the goals to which it is instrumental are abandoned. Land, as a representation of political and social worth for each person or family, was once a goal in this country. Now, most land as a physical good is no longer available and this goal has been abandoned.

This is a peculiar definition of resources (in "crucial resources"). Usually the goals remain fixed and resources are

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individual in this case), but not critical to the goals of a society which does not worry mostly about them, like starvation.

[5]Wilson, 1970, has taken a view similar to this one. However, he assumes that the needs, à la Maslow, are a progression such that satisfying one <u>causes</u> people to go on to the next.

substituted (depending on which are cheapest) over time to fulfill these goals. Crucial resources are defined partly in terms of how they fulfill goals and the substitutibility idea really does not apply. When we talk about the succession of consequent goals below, we shall see that we can define goals in such a way that resources do play a conventional role.

When crucial resources and consequent goals are abandoned, new ones must emerge. Is there a way of understanding the sequence of goals?

What will be the next need for men? Does there exist a hierarchy of needs of men in society? At various times, religions and other philosophies have tried to specify these needs. More recently, psychological research by Maslow & Rogers has suggested that there may be a needs structure that can be "scientifically" determined.

These hierarchies provide us with a means for understanding future goals and crucial resources. As a speculative principle, I will define the following "true" goal: <u>The developmental needs of individual men become the basis for the sequence of developmental goals for our social system.</u> Ontogeny may recapitulate phylogeny, but here we have reversed the picture.

Such a synoptic view of history is easily falsified.[6] In doing this survey we hope to get some idea of what will be the successor to PIS.

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[6] The purpose of this kind of rule is not to offer a new religion. Rather, it is urged as an aid for organizing the argument, and as a means of helping the reader. Historical determinism is neither assumed or desired here.

I want to try to relate some of recent history to the needs
structure of man and thereby set the stage for looking at future
needs.[7] The chart below summarizes the argument.

Historical Period	Crucial Resource	Needs of Men [8]
Traditional	Rituals, Divine Right	Physiological
Pre-Industrial	Agriculture, Nurture, Land	Survival
Industrial	Capital	Security
Post-Industrial	Knowledge	Exploration
Beyond Post-Industrial (Late sensate?[9])	?	Affiliation ⎫ Existence ⎬ Affect Apprehension ⎭

Margaret Mead in offering a perspective on this chart would
say that the first three stages are post-figurative, where the
elders taught the younger; the fourth stage is co-figurative, where
elders and youth learn together; and subsequently, we will be in a
pre-figurative society where the youth teach the elders.

In these models of individual development, individuals
start out with a basic need structure for food, clothing, and

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[7] Galbraith, in Baier, 1969, uses a similar historical sequence to
lead to his "technostructured" society. He is concerned about the
crucial factors of production which are not completely equivalent
to my crucial factors.

[8] Graves has tried to develop an explicit hierarchy in the "third
force" psychology tradition of Maslow and Rogers, and I use his
hierchy here. (Graves, 1969)

[9] Kahn and Wiener, 1967, using an analysis based on Sorokin's ideas
come to similar conclusions. But their perspective tends to be
gloomier than my own. We may have an affluent and self-developing
society, but it will include good measures of alienation and not
the most Maslow-like self-development. (Kahn, 1967, p.217)

"necessities," and subsequently have needs which tend to be expressed in terms of personal development, special kinds of personal experiences, and articulations of sensibility which _may_ be expressed by intellectual achievement. Thus, the question mark posed above for the Beyond Post-Industrial Society suggests that sensual development might well be what we could expect in the future. _Affect_ is what we shall call this crucial resource. Affect will be said to be a resource for the development of society in the Beyond Post-Industrial era.

Affect will be taken to refer to: (1) the sensuous aspects of life, (2) self-awareness and understanding, and (3) a similar understanding of others. A distinction is often made between affective (feeling) and cognitive (knowing) faculties. I think that this distinction is probably false, and dangerous in any case. How we know is determined by how we feel and our selves. In this sense, affect is distinguished from "objective" knowing and feeling.

Affect seems to be a non-social concept. I think that this is not true. Rather, affective people will result in social organizations which will be very different from those dominant today. My conception of affect is centered on smaller relationships, however. How these work out in the larger world is only partly understood. My guess is that a society which has no sense of social affect will not be able to maintain individual affect production very well.

As a consequence of the development of a new crucial factor in a social system, we would expect to see new modes of differentiation of relationships, and new kinds of reward structures. We would expect that the differentiation of the varieties of affect

would imply new kinds of inter-personal relationships, new varieties
of sexuality, and new kinds of work and play. Significantly, few
if any of these experiences will be "new" to history, but in
intensity and popularity, they would represent a substantial
change.[10]

As for the reward structure of the society, expressive
freedom may be the important reward for the future. Rewards are
now in terms of certain kinds of work which may be intellectually
very freeing or related to mobility. Money suffices for those
still in the industrial age. If artists are those who have tra-
ditionally been the expressive among us, then I would hazard a
guess that the rewards of the future will be in the form of a
life that is lived artistically.

In BPIS, the affective emphasis will result in the greater
importance of psychological dimensions, sensation, and inter-
personal relationships insofar as they yield value to the persons
themselves.[11]

Evidence for and Consequences of BPIS

I want to look at the evidence for and consequences of
affect becoming a crucial resource in our society. Even if post-
industrialism is only a short run phase, those who have tried to
demonstrate that it has happened have had statistics on their side.
Education, manpower, and knowledge statistics are systematically

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[10]Petronius' Satyricon may outdo in intensity the beyond post-
industrial style. Perhaps the new addition for the U.S. will be
distributing this good more equitably among all the population.

[11]The marketers must see this if they are to succeed. "The emerging
American consumer will place emphasis not as much on subsistence
needs, as on psychological and social needs." (Madden, 1969)

and institutionally gathered today. (This is the best evidence
that PIS is around in some form. Perhaps the embodiment and arti-
culations suggested for this phenomenon by its advocates are in-
correct, but the fundamental statistics are there. [Sheldon, Ch. 1,
p. 21]). We are not so lucky for BPIS. So I shall have to rely
on statistics that are only casually gathered and idiosyncratic
cases. How are we to structure this evidence?

Daniel Bell organized his evidence for the post-industrial
nature of our society in a convenient way. I shall paraphrase his
organizational headings for the purpose of this argument. We
expect that the affective society will have a personal service
economy. We expect to see more T-groups, counselors, psychologists,
psycho-therapists and more of the services that they offer. Greater
proportions of our income will be spent on individual development.
We might also expect the society to be organized in terms of a
helping relationship and this would engender new possible careers.
Finally, we might expect that work would tend to become more ex-
pressive and play more instrumental. Thus the nature of the patterns
of recreation might alter dramatically and at the same time we
would see changes in the nature of work and the kinds of occupa-
tions that seem to be growing.

> . . . socially necessary labor would be diverted to the con-
> struction of an aesthetic rather than repressive environment,
> to parks and gardens rather than highways and parking lots,
> to the creation of areas of withdrawal rather than massive
> fun and relaxation.[12] (Marcuse, 1969, p. 90)

Secondly, we should see a growing pre-eminence of a feeling
class. The elite of the future will not be those who are most in

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[12] I am sure that I would not join Marcuse in rejecting the value of
the popular culture, but the general trend of the statement is in
the right direction.

command of intellectual resources, but those who are most capable
of using, creating, and disbursing the affective. Today, more and
more leaders are looked up to as gurus -- new politicians whose
affective attractiveness seems at least as substantial as their
political effectivenes. Jesus had this role also. The big change
is that our future leaders may be less father figures and unique
charismatic types and more like husbands and brothers.

Rewards characteristic of underclasses and once considered
undesirable by the elites are becoming desired by many who would
be part of the elites, e.g. "soul." The "new elites" are demanding
process-affect rewards rather than capital or credentials. The
"new elites" demand mobility, demand to work with people they like,
demand a certain community in what they are doing. Their work, if
it is becoming more expressive, means that the kinds of people
who can lead must be more expressive in and of themselves. The
development of informal networks of individuals, solving problems
in unconventional ways, may be part of the pre-eminence of the new
feeling class. Even the center of post-industrial values, the
university, has been charged with a need to deny, in part, the
desexualized values and become sensual.

The characteristics that lead to valued statuses in a BPIS
will be distributed differently than those in a PIS or an industrial
society. This should make it possible for some power redistribu-
tions to take place. There is no necessary reason to believe that
the elites of today will have the "right" characteristics. But
neither is it clear that they will not. Today's elites are likely
to be affectively more powerful than the non-elites. But these

elites are not in control of, and perhaps do not realize the need to control, some of the affect producing systems. A _coup_ of sorts is required by the left-outs in the near future.

Still, I have little hope that things will be better just because of such a change. The powerful control too much. So even a BPIS will not result in a sufficiently egalitarian world. This is especially the case on the international front. Not much of what I have written here really deals with the world outside of the US. And we see time and again the important effects of international events at home -- Viet Nam and the Mid-East most recently, China and Japan in the future. I do not know what will happen.

We shall also see the growing _centrality of psychological, personal affectivity as a source of innovation and policy formation._ If leaders are more affectively oriented, and technical professionals are more self-conscious, then the nature and content of policy will reflect this. Social planning and social action will be more committed to understanding how people feel about policy. As we realize the importance of subjective evaluations of social change, we enter a stage where affect will be a source of policy. A growing number of people who are concerned about personal psychology have come into the policy-making community.

There is also the possibility of _self-sustaining affective growth._ There is reason to believe that we may develop, in the near future, a substantial fraction of the society which spends a major part of its effort in personal, individual growth. To support these people, we may offer to use them as our teachers and let them spend a part of their time becoming more developed. This is the human potential movement. At the moment, this movement is not

self-supporting and profits from conventional economic financing.

Finally, we are seeing the <u>creation of a new affective</u> <u>technology</u>. This technology takes it form, in part, from today's semi-specific psycho-pharmacology in which people take pills to make them feel a certain way. In literature, the realm of confessional poetry and highly personal writing by Sylvia Plath and Phillip Roth, for example, seems to be a new way of trying to understand our development personally. Third force psychology, with its application to individual change and development, is part of this new technology. Psychoanalysis, which uses affective devices in part (e.g. transference), is one of the early technologies.

On the Data

I had originally hoped to be able to present more concrete evidence for the trends I have discussed. Unfortunately, such data are not collected since no one is asking the right questions yet. Let me suggest the kinds of evidence I would like to have.

1. Personal service economy: number of people in helping professions, how much spent on personal development (counselling, self-help books . . .), new professions related to this, recreational demands by type of recreation.

2. Pre-eminence of a feeling class: profiles of leaders of various activities, images of the desired kinds of work.

3. Affect as a source of policy in society: case histories of how people decide what to do, what are the recommended ways of knowing how to act (training of decision makers).

4. Self-sustaining affective growth: what part of national income goes for growth activities, how many people are being trained for such activities, time devoted to such activities.

5. Affective technology: breakdown in time of "inventions" in
   this field, number being trained in research, amounts being
   spent on this kind of research, new uses of the law with re-
   spect to such activities.

   In the next chapter, I do some systematic analysis which
could be useful for putting such data into a coherent framework.

Conclusion

   A beyond post-industrial society is possible. What we have
to ask ourselves is whether we like the idea of a post-industrial
society. If now, how are we to change things? My guess is that
the best procedure for change is to create new resource situations
and pull the books out from under the PIS.

AFFECT AND SOCIETY

Introduction

In the previous section I argued that affect and feeling are likely to become values of great importance in the future. What I propose to do now is to see if we can develop some indicators for the present and future quantity of affect in the society, and some models of systems for the production and distribution of affect.

When we look into the future, we are looking for: (1) leading innovative, growing, yet still unpopular ideas; (2) groups whose behavior patterns will influence the larger society; (3) economic activities whose magnitude may be small now, but should be growing substantially in the future; (4) life-styles which may not be very viable at this time, but seem promising as to their future viability; (5) activities which can become self-perpetuating and self-reinforcing; and (6) techniques which can enhance affect with sensitivity and efficiency.

The production and distribution of affect are ongoing if not major activities of our society. Resources are devoted to such activities and systems have been developed to maintain them. We want to look at the organizational structure of these activities, distinguish the peculiarities of this structure (contrasted to knowledge related activities), and develop models which suggest how such systems and resources can be best used in an affect oriented society. Ultimately, we might try to write a treatise as Machlup has done for knowledge. (Machlup, 1962)

Affect

We want to measure the extent of activities that contribute to affect in our society and the affective level of individuals in it. To do so, we need a useable definition of affect. Affect will be taken to be emotion, sensitivity, perception of others, perception of self, or sensual involvement with other objects and the world. Affect will be our rubric for the aspects of man characteristic of his human sensual being in the world.

As I have pointed out in other parts of this discussion, "affect" is not meant to exclude cognition as such. If we examine and are aware of ourselves and how we affect others, then our cognitive faculties will need to be used very powerfully. My purpose here is to examine activities which educate our affective selves. Only a small number of these activities will be exclusively affective.

Some kinds of affect are not included in this survey. I want to distinguish between collective and individual affect. Smelser has discussed many aspects of collective behavior which might be called collective affect -- including panics, crazes, and hostile outbursts. (Smelser, 1962) A truly inclusive accounting would have to examine such behavior. This study, however, focuses on the development of individual affect. Some collective experiences, if not all of them, can serve to produce individual affectual change. Insofar as they do affect individuals, such collective behaviors will be included in this study.[13]

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[13]By taking this perspective we avoid double counting which would take place if we counted collective affective experiences and individual affective experiences at the same time. Still, there are some communal experiences which need the perspective of larger

No matter how precise our definition of affect may be, we
have no guarantee that we will be able to measure it. Usually
definitions of measurable quantities need to lead to operational
activities if we are to have some shared agreement as to what we
are measuring. It is difficult enough with cognitive knowledge
to do this and it will be almost impossible to get much agreement
with respect to affective states. The situation is even worse than
it seems at first. Most definitions of affect include words like
feeling and emotion. Feeling and emotion are certain internal
states which do have, it is often said, behavioral equivalents.
So we must go out and measure behaviors that are related to feel-
ing and emotion. But, ". . .the behavior itself will become the
goal and not an indication of the attainment of the goal."
(Eiss, 1969)

An alternative lies in explicitly phenomenological inves-
tigations involving self-reports of feelings and emotional states.
Substantial research has been put into this field, and there are
many who believe that self-reporting methods yield reliable and
useful information about the affective states of individuals.
(Rogers, 1961) I shall use this kind of evidence quite frequently
in order to understand affective states.

I hope that the use of overlapping evidence will serve as
a partial substitute for a precise definition of affect and an
absolutely sure way of proving that it is there. In the end, the
reader will have to compare my measures with his own feelings and
use himself as an ultimate measuring instrument.

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measures. Many of these experiences are positive and self-
reinforcing. I do not know how to assess community affect.

Affect Indicators

We can develop some statistics which can be used to monitor the affective level of a social system. These indicators have several characteristics quite common to all social indicators. (Sheldon, 1968; HEW, 1969) Our indicators will tend to measure outputs of affect production systems, such as the affective level of individuals as contrasted to inputs, which may be teachers, or dollars, or classrooms. Indicators may be proxies for measures of these outputs. And some of these proxies may turn out to be input measures. We hope that our indicators will serve as predictors for future change in the society. I would note that a change in any indicator does not necessarily mean that affect only is related to that change. For example, many of the indicators change due to greater prosperity in the society, yet we choose some of these measures of greater prosperity rather than others because we suspect that they correlate better with affect level.

What do we want to measure?[14] We certainly want to measure the degree of emotion and feeling that people have. We also would like to measure something to do with the normative nature of this feeling. Are people happier or are they less happy, for example. I shall spend most of the discussion on degrees of affectivity rather than on the precise nature of the feelings experienced -- this seems to be a more do-able approach.

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[14] Although it is a truism in the natural sciences, the delicate nature of what we are trying to measure here brings up the question of how our measurement alters the situation and process we are measuring. When we ask someone how they feel, do they tell us things to make themselves look good to the interviewer? This is an old problem of survey research. I do not deal with it in detail here. Rather, I believe that if we do want to measure affective states, we shall have to develop a theory of how the measurement affects what we are measuring and correct our data accordingly.

We shall first look at measures of personal reaction to
societal affect production facilities, and then at the quality of
the societal arrangements themselves.[15]

Person Related Indicators

Happiness

Happiness can be measured. I believe that happiness
measures will turn out to be one of the more fruitful products of
social research today.

Most research on the incidence of happiness in society has
concentrated on demographic correlates of happiness, or on which
activities tend to produce more happiness in individuals. (Wilson,
1967; Robinson, 1969) Each of these emphases can suggest possible
indicators for the affective state of society. Both Gurin and
Bradburn and Caplovitz have tried to look at the incidence of
happiness with respect to demographic variables. (Gurin, 1960;
Bradburn, 1965; Bradburn, 1970)

Bradburn and Caplovitz measured both happiness and affec-
tivity in their study. Happiness was defined and measured by
asking people how happy they were. "Were they very happy, were they
happy, or were they not too happy?" At the same time, they ob-
tained data on how strongly people were feeling (degree of affect)
by measuring the quality of their feelings in a period of time

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[15] I would agree to a large extent with Stagner, 1970, when he says:

> . . . the essential unit in the data-gathering activity of an
> urban-intelligence system is the individual person. The crux
> of the whole problem of urban planning, urban renewal, urban
> schools, urban transportation, hospitals, and police security
> systems must be located in the satisfactions and frustrations
> of individual people.

previous to the survey. They could then correlate the degree
of happiness and the degree of affectivity with demographic
variables. They find (Table 2.10 of Bradburn, 1965) that people
who are young, better educated, and richer tend to be happier.
About 24% of their sample was very happy, 60% were pretty happy,
and 16% not too happy. Affectivity shows similar trends. Although
the Bradburn-Caplovitz data do not permit a complete regression
analysis of happiness versus demographic variables, it is conceivable
that this kind of survey could produce this kind of information.
It would then be possible to measure both happiness and affect by
knowing certain information about the demographic structure of the
society. Using the measured correlations, we might even try to
measure the past states of happiness of the society. (Gallup, 1971)

Several pitfalls are inherent in using such procedures to
estimate societal affect level. Structural changes take place in
the society which may change the importance of certain demographic
variables for predicting happiness levels. For example, we cer-
tainly would not want to use the same income level distribution in
evaluating 1920 happiness that we use in 1960 happiness. We need
to adjust measures for changes in the cost of living. In a society
where the mean life span is changing rapidly one would expect
similar problems in looking at the age breakdown of the population.
If there are rapidly changing roles, as will be the case for women,
we may have a similar problem. All these observations imply that we
might need to use new surveys of happiness levels every time we
want to do a measurement rather than use demographic correlations.[16]

[16] A continuing study has been proposed by the Survey Research Center,
University of Michigan, of self-perceived satisfactions with and of
life. (Campbell, 1970) Robert Weiss of Harvard proposes to do a
similar survey. (personal communication)

Certain activities are correlated with states of greater affect and happiness. In Bradburn and Caplovitz' study, they suggest that one of the few correlates with true positive happiness states is social interaction.[17] Other surveys might be able to determine other activities which induce happiness and affectivity. We might then want to measure the extent of such activities to get a handle on the affective level of society.[18] (Krieger, 1969 a)

A serious objection to all measures of happiness is that people's minds are so dominated by the system (the oppressors, etc.) that they really do not know whether they are happy. This may be true. Yet such a perspective precludes believing any evaluation of the quality of personal life based on asking people questions -- for they will always be under some illusory state.

Another critique of happiness measures says that measures of happiness ignore the possibilities of human life. People say that they are happy, although they do not know the real possibilities of their lives. I think this objection has some force. Happiness is related to expectations, and there is a bias of cultural relativity in all happiness measures.

Family Functioning

Much of the cognitive knowledge that children develop is sourced outside the family and inside the school. But many of the

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[17]Alfred Adler also came to this conclusion from his psychoanalytic concerns. "The mode of relationship that lies at the root of effectiveness and happiness is cooperation." (Hemming, 1970)

[18]N. Rescher argues that if we are concerned about the social policy aspects of happiness, we need only worry about the more standard social welfare concerns. I would disagree. (Rescher, 1969)

affective aspects of life still (but for how long?) take place in a family environment.

Whiting has tried to develop a scale for measuring family functioning that might be useful in suggesting how much affect is being produced in the family. (Whiting, 1968) His family functioning scale measures physical health, adult education, parents' perception of children's school performance, adult employment, earned economic status, community contacts, primary family interpersonal relations, extra-family interpersonal relations, condition of housing, and number of legal involvements. A Whiting type scale might enable us to differentiate between families producing more and less affect. Whiting's research, however, does not tell us this.

The value of measures of family functioning may be independent of the apparent structure of a family. If there are new kinds of communal life developing, in contrast to families of the conventional nuclear or extended type, then we will also want to measure the functioning of both.

Self-Actualization

Maslow has defined a person to be self-actualized insofar as he fulfills his potentialities of being human and feeling and being. Although Maslow's definition has an unending infinitude of possibilities, we still use the concept. By abstracting the most salient characteristics of persons who are clinically designated as self-actualized, it is possible to develop survey instruments that could be part of a national measure of actualization. (Argyris, 1965, 1968)

The measures that we have discussed so far have one common problem. No immediate _social_ policy action is implied by any of them, given a normative prescription for well being. We shall discuss some such social actions later in this section.

Before doing so, some behavioral measures of affect level are worth exploring. They imply some narrow actions that might be used to make things "better."

Discretionary Time

We might suppose that people who have greater discretion and choice in their work are likely to be more fulfilled individuals. If work provides them with chances to exercise their personal characteristics, then it is likely that work will tend to produce greater sense of self rather than less. It may be true that the kind of job one has is unrelated to affect production, since it may be that the activities that are not directly related to the job, but associated with work, are more important. Still, it seems likely that jobs with greater discretion and more choice are likely to produce people who are more capable of exercising their feelings. If we accept such a supposition, then we might be able to obtain some measures of the amount of work-related affect by knowing how much discretion people have in their jobs.

Some work has been done on exactly this. (Jacques, 1969) Jacques measured the felt fair pay for jobs versus the individual's time span of discretion in order to develop a rational incomes policy for Great Britain. For our purposes, what is most important is that he relates some measures of felt fair pay to time span of discretion. If I assume that felt fair pay is actually related to

income, then I might estimate that about 30% of all workers in the U.S have substantial amounts of time of discretion (1 month) in their jobs.

This kind of proxy for affect levels relates income levels to affectivity. It is another way of getting a handle on how affect level is related to certain demographic variables.

Kinds of Work

We might also try to look at the kinds of work that people do. To repeat, I would guess that jobs with some discretion and choice offer possibility of self-expression, while those which do not possess these opportunities do not. If we chose those "choice" jobs to be in the professional, managerial and craftwork categories, then it turns out that about 39% of white workers are in this class, while only about 19% of blacks or non-whites are.

Another possible measure of affective level is one which relates status, choice, and freedom to demographic variables. Some problems may make such an indicator useless, however. The relative value of social versus individual choice is not easily determined and we only measure individual choice. Furthermore, if we are trying to measure something like the diversity of roles available to the individual as a measure of the affective level, we have to be sure that diversity of roles implies diversity of affectual types.

If an affective society is in the offing, activities that might be affect producing should be showing different growth behavior than those which are not. Although the evidence is not overwhelming, the sales of florist shops and music stores are

growing somewhat faster than groceries, and art museum attendance
is changing much more rapidly than sport attendance (although
sports watching can be effective affectively!).[19]

Another opportunity for developing indicators or predictors
for future activity may lie in examining the numbers and varieties
of deviant groups in our society. It is likely that the common
will not be the source of the future; innovation for society may
well come from those who do not cope quite so well. (Calhoun, 1969)
The non-copers in a cognitively oriented society are likely to
develop new institutional frameworks which, if affect is going to
have a major impact on our society, may be the institutional frame-
work that will take over. In this light we might spend some time
looking at communal farms, those who have given up the work ethic,
and those who have given up the knowledge ethic.

Social Structural Aspects of an Affective Society

I now want to examine some of the social structural aspects
of an affective society. I will take a modest approach and look
at a few aspects of the production and distribution of affect and
the kinds of institutions that might do so most effectively. I
shall not deal with the value changes that will need to take place
internally. (Maslow, 1968; Rogers, 1961)

The production and distribution of affect in a society may
be viewed as a problem in developing human resources. A very pe-
culiar aspect of human resources, as contrasted to many other
resources, is that we do not know if they are limited at all.

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[19] The substantial growth of the growth center movement may be a
useful indicator. See Koffend, 1970.

Unlike extractive materials, we do not have to concern ourselves
with depletion at this time since we do not know what are the
limitations of an unaugmented human brain. We shall be concerned
about the total resources of the society rather than the develop-
ing of any single individual, yet the resources of the society will
be in some very real sense a sum of resources of individuals.

Some of the inspiration for this section must be laid to
Machlup. Although the treatment will not be completely cast in
a form that an economist would find most satisfactory, some economic
ideas serve usefully in this discussion. This section does not
share Machlup's inclusiveness or exhaustiveness, of course.

The Manpower Problem of Affect Production

How are we likely to change the amount of affect possessed
and demonstrated by members of a society? Does there exist a
mechanical or chemical answer? Or, as I tend to believe, is the
most effective approach based on person-to-person contact?

Before resolving this question, as well as looking at
some specific techniques for affect production and distribution, I
want to develop a more general perspective and model for looking
at the problem.

The model I wish to spend most of my time on is affect
production which arises when people are dealing with other people.
There are a few peculiar aspects of this activity which I think are
worth emphasizing.

1. <u>People who produce affect in others will have affect
produced and enhanced in themselves as a product of their activity.</u>[20]

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[20]Fuchs, 1968, in discussing a service economy, points out how the
served's time is a vital factor in the activity. This contrasts

Unlike most of what is called cognitive teaching, I believe that the process of affective teaching will have an extensive effect on teachers. Teachers of affect teach with affect. It may be true that only extraordinary teachers will learn from their students when they are teaching cognitive knowledge, but it seems to me that it is all but a very few who will not learn from their students when they are doing affective teaching. This means, as I explore more explicitly below, that the most effective way of producing affect in a society is when everybody is teaching everybody.[21]

2. <u>How productive can we be when we are involved in affect production activities</u>? If we are doing affect production by means of people-to-people interaction, then the intervention of "modern" technology is not going to do us much good. As Baumol and Bowen point out in their discussion of the performing arts, the inability of an activity to utilize labor-saving technology tends to make it more expensive as time goes on. (Baumol, 1966) So it would seem that affect production activities should become more expensive and more luxurious as we become more and more technologically capable.

Several alternative outs are available. We may decide, with our increased technological productivity, to demand less of

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with valuing the time of some raw material in a manufacturing economy. Also, the productivity of the served contributes to total productivity, even if it is not normally counted. (p. 103)

[21]Melvin Webber, 1968, suggests that "...<u>learning</u> may become the major non-paid occupation of large segments of the population," in the post-industrial era. Only in a beyond post-industrial age will we have united learning <u>and</u> teaching and realize the ambiguity of both of these roles.

what can be bought technologically and spend more of our time on affect. This implies that our consumption levels of conventional goods will not rise substantially and that we will voluntarily decrease our consumption of material goods, and perhaps even of knowledge goods, so that we can spend more time on affect production activity. This would convert affect production activities into merit goods, and make their prices an inaccurate reflection of their value. Another alternative is to develop a new kind of technology, a person changing technology, which will do for affect production what scientific technology has done for material production. Such a hope for technological aid is realistic; a psychology that is oriented to such problems is developing today.

3. <u>A model of affect production which involves people who teach other people while learning from them, may be especially appropriate in a rapidly changing social system.</u> In such a system, where knowledge of how to produce affect may change rapidly as techniques improve, there is no guarantee that the teacher always knows best. Thus, the professional or medical model, in which a teacher does his very best to teach and retains little responsibility for failure, since his technique may just not be good enough, may need to be replaced by a therapeutic or anti-professional model, where a "teacher" is responsible for his action and efficacy in a much more intimate way. (Krieger, 1969 d; Bennis, 1968)

4. <u>This model of affect production highlights the (opportunity) costliness of keeping the teacher up to date.</u> For example, psychiatrists spend about a third of their time, not dealing with their patients, but engaging in activities which have

something to do with keeping themselves up to date. (Whiting, 1969) Yet it turns out that if we wish to do massive affect production we shall have to spend much more of our time relating to each other. If some kinds of relationships do not meet demands for the training of "helpers" then new kinds of interpersonal behaviors will need to be invented (new modes of "teaching").

Certain of these assumptions and conclusions can be explicitly formulated in some simple models, and I want to do that now.

Some Models for an Affect Production System (APS)

In this section I want to explicitly develop some abstract models for an APS. At the same time I want to contrast APS's with ordinary teaching processes (usually of cognitive knowledge).

I assume that in any APS there is a teacher (a guru) and students. The function of the teacher is not to impart the knowledge that he possesses to the students. He is in an almost reciprocal relationship with the student where he has something that the student seeks, and he seeks something from the student. If this blurs the role of the teacher, fine. We can just as well say that in any APS we have at least two gurus (conventional "student" and "teacher" roles). For conventional cognitive teaching, the distinction between teacher and student has played, and continues to play, a very powerful role in characterizing what happens. Finally, we do not assert that those who are older teach to younger, nor do we assert that people do not "learn" from their peers or themselves.[22]

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[22]People do lots of things other than participate in conscious affect production -- they sleep, eat, clean house. These activities

Model 1

In this model I try to look at the relationship between quality, quantity, and style of education. I want to point out the advantages of a person-to-person system in which both persons are assumed to be part of the learning process, as in some APS, as contrasted to a system where, even if person-to-person relationships take place, education is only evaluated in terms of what the "student" receives.

Conventional Case (I). -- Consider a social system where we have N_y young people and N_o old(er) people. Let us say that they spend all of their time in the education process.[23] We are maintaining the convention of the "teaching role" and of the "student role."

We can ask what fraction of the time does each group assume the teaching role, and we call these fractions a_y and a_o, for youth and oldies respectively. Today, we might find that $a_y = 0.05$ at most and $a_o = 0.90$ at least.[24] When people talk about post-industrialism, they suggest that a_o should decrease somewhat (adults should learn), but they rarely suggest that a_y should be increased.[25] (Webber, 1968) Those who are concerned about post-industrialism assume that when one is teaching, one is not learning and vice versa.

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may be most important for APS. To get around this, I shall say that when these activities are part of the APS, they will be included in the model, by treating them as a regular APS activity.

[23] See previous footnote.

[24] Note also that if $a_y \neq 0.0$ then the youth are doing some teaching, whether it be to themselves or the oldies. In 19th century England, and informally today, older students taught younger students.

[25] When this is suggested, the generation gap is cited as a reason. (Mead, 1970)

What amount of time is spent on teaching? It is:

$$(N_y a_y + N_o a_o) \times (\text{Hours in a day}) = \text{Amount of time teaching} = T$$

How much time do the students "receive" in education? It is:

$$(N_y (1-a_y) + N_o (1-a_o)) \times (\text{Hours in a day} = \text{Amount of education received} = E$$

Now. it is not difficult to see that:

$$E/T = s = \frac{N_y (1 - a_y) + N_o (1 - a_o)}{N_y a_y + N_o a_o} = \frac{N_y + N_o}{N_y a_y + N_o a_o} - 1$$

is the ratio of students to teachers in a classroom.[26]

We shall take as our criterion for the amount of education produced, the magnitude of E. For its quality, we use the student-teacher ratio, s. When E is large and s is small, we have an optimal situation.

If we wish to maximize E, then the a's should be small, but if they are small, T is small and then $s = E/T$ is large. Therefore, increasing the amount of education seems to result in poorer education.[27]

APS Case (II and III). -- For the proposed APS, the distinction between teacher and student is not so clear. Teachers are always to some extent students. For the sake of simplicity, we can say here that whenever a "teacher" teaches he is also learning. Still, students are not considered teachers. (Case II)

We get a new value for E, E':

$$E' = (N_y + N_o) \times (\text{Hours in a day}),$$

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[26] We note that for primary schools the $s \approx 20$, while for secondary schools $s \approx 30$. See U.S. Statistical Abstracts 1969, pp. 101, 119.

[27] Recovering such common knowledge says that this model is not beyond belief.

and for s:

$$s = E'/T = \frac{N_y + N_0}{N_y a_y + N_0 a_0}$$

Now as we try to improve quality by decreasing s (increasing T), E' does not change, since it does not depend on the a's. When we designate more "teachers," which is what happens when we increase the a's, we do not lose "students."[28]

A last Case (III) is when all student time is considered partially or wholly teaching also. Then we have:

$$s = 1 \text{ and } E'' = N_0 \div N_y.$$

If we look back to the discussion of the previous section, we see that this model is faithful to the points we made. The greatest amount of education produced is when everybody teaches everybody -- Case III. Technical changes will be needed to realize the productive Cases II and III. If the teacher spends his time on keeping up-to-date, he cannot be part of the educating system and cannot fulfill the possibilities suggested in Cases II and III.

Model 2

The first model has looked at the APS as an economist might. How are resources being allocated among teaching and learning? We may also ask the question, "What kinds of things take place in such processes, as a consequent of the organizational forms that we have?" As a first approximation to an answer to this question, I want to look at the number of interactions that take place in various organizational forms.

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[28]If we say that a teacher is only partly a student and only part of his teaching time is spent in learning, the trade-offs are better than the conventional case, but not so good as in this case.
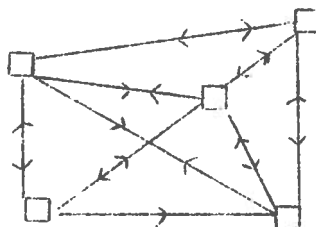
Consider a group of people. They may be organized in two, among other, structures. The first is <u>hierarchical</u>:
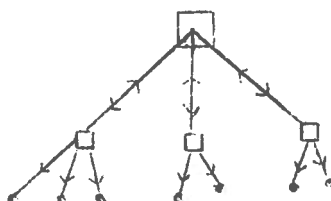
<u>Case A</u>:
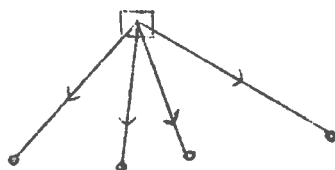
Another form is more <u>mutual</u>:

<u>Case B</u>:

The arrows and lines indicate where interaction takes place. Neither of these pure forms is found in practice, but as archetypes they prove useful.[29]

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[29] For example, the following multiple hierarchy is quite prevalent:

See LaPorte, 1969, for further discussion of complexity.

We denote the number of interactions for a formation, f, by I_f. We note that for n objects, the number of twofold combinations (which are the ones we will limit ourselves to here) among them is:

$$\frac{n(n-1)}{2} = \frac{1}{2}(n^2-n).$$

For formation A:

$$I_A = n - 1,$$

where n is the total number of individuals involved.

For formation B:

$$I_B = \frac{n^2 - n}{2}.$$

Now $I_A/I_B = \frac{2}{n+1}$, which suggests that configuration A becomes substantially less productive, in the numbers of interactions, than configuration B when n becomes greater than 3 or 4. Configuration B is used to characterize APS's in Model 1.

Say one person withdraws from the group. Then for case A, the change in the number of interactions is 1, (unless it is the teacher, and then all is lost). But for case B, the number is n - 1. (Note that the fractional loss is about the same in both cases). B configurations are sensitive to the loss of a member, but survive the loss of any member; A configurations do not.

We have still to address ourselves to the quality of these interactions. Are they one-way or two-way? Which way does authority flow? In any case, is structure really related to the mutuality and equity of relationships? As a first approximation to the quality question, let us deal with the problem of overload.

When individuals interact, they can become so preoccupied with interacting with many people that the quality of the interaction

with any one becomes trivial. On the other hand, multiplicity, of itself, may be fruitful. I want to develop a measure of the total interaction, which weights interaction for overload.

Consider a set of N people who are being formed into two groups of n_1 and n_2 persons ($n_1 + n_2 = N$). What size should these groups be if we want to maximize the total interaction?

Say that $L(n)$ is a function that describes the quality of a single interaction when someone is interacting with n persons. And let J_a be the total interaction strength for configuration $\underline{a}$.

For case A, one person will have to be the teacher in each group. Also the teacher's interaction load (the $n_1 - 1$ others) is different than the student's (the 1 teacher). If we split each interaction half way between teacher and student, we have:

$$J_A = \frac{1}{2} [L(1)(n_1-1) + L(1)(n_2-1)]$$
$$+ \frac{1}{2} [(n_1-1)L(n_1-1) + (n_2-1)L(n_2-1)].$$

The first term is the students' half of the interactions, while the second accounts for the teachers'. Each sub-term is a product of the number of interactions times a weight for each interaction. For example, the first term -- $L(1) \times (n_1-1)$ -- is the interaction strength for any single student who interacts with one teacher <u>times</u> the number of students in the group, n_1-1.

For case B, we do not have the student-teacher distinction, and

$$J_B = L(n_1-1) \frac{n_1^2 - n_1}{2} + L(n_2-1) \frac{n_2^2 - n_2}{2} .$$

What would the load function, L, look like? Ignoring synergism, and mass hysteria, I would guess that $L(1) \sim 1$ and

$L(\infty) \sim 0$. Obviously, a well specified form for L needs to be known before the best configuration is clear.

I now want to compute the interaction functions for cases A and B for two forms of the load function, L. The first form will be a linear representation:
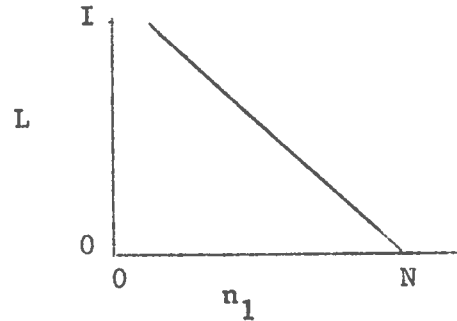
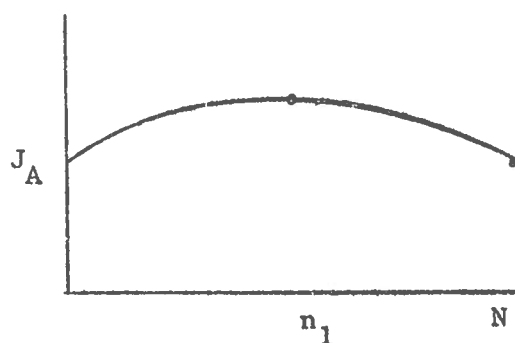A second and simpler form will be a constant L:
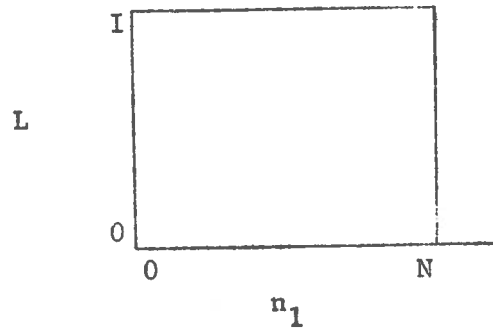
The linear form is somewhat more realistic than a constant, but I include both to give some feeling for the varieties of behavior of the J_a that are possible.

For case A, and a linear form for L (which we approximate by $L(n) \approx 1 - \frac{n}{N}$) we have that:

$$J_A = \frac{1}{2} \, [n_1-1 + N-n_1-1]$$

$$+ \frac{1}{2} \, [(n_1-1) \cdot (1 - \frac{n_1-1}{N}) + (N-n_1-1) \cdot (1 - \frac{N-n_1-1}{N})]$$

$$= \frac{1}{N} + \frac{N-2}{2} + n_1 - \frac{n_1^{\,2}}{N} \quad .$$

$$= \text{constant} + n_1 \, (1 - \frac{n_1}{N}) \quad .$$

Which looks like:

For case A and a constant L, we find that:

$$J_A = \frac{1}{2} \, [n_1-1 + N-n_1-1]$$

$$+ \frac{1}{2} \, [n_1-1 + N-n_1-1]$$

$$= N-2, \text{ a constant.}$$

Now we want to look at case B, linear L. First let us approximate J_B by:

$$J_B{}' = L(n_1) \, \frac{n_1^{\,2}}{2} + L(n_2) \, \frac{n_2^{\,2}}{2}$$

which is equivalent to saying that $n_1 \approx n_1-1$. We now substitute the value for L, $L(n) \approx 1 - \frac{n}{N}$, and get:

$$J_B{}' = n_1^{\,2} \, (1 - \frac{n_1}{N}) + (N-n_1)^2 \, (1 - \frac{N-n_1}{N}).$$

After some manipulation, we find that:

$$J_B' \approx \frac{1}{2} \; [n_1(N-n_1)]$$

and that it peaks for $n_1 = N/2$.
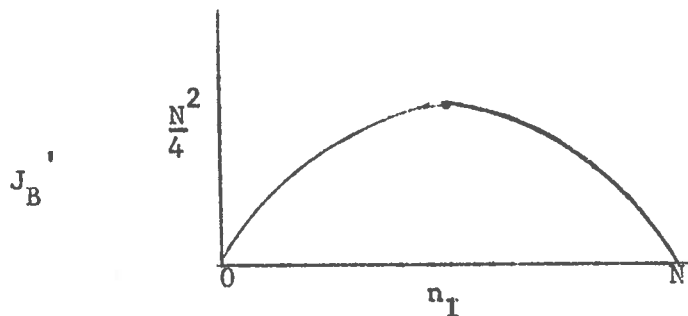
Now if L is a constant (no interaction effect), then we have

$$J_B' = \frac{1}{2} \; (n_1^2 + n_2^2) = \frac{1}{2} \; [2n_1^2 - 2n_1N + N^2]$$

which peaks for $n_1 = 0$ or N. (We assume $L(n) = 1$.)
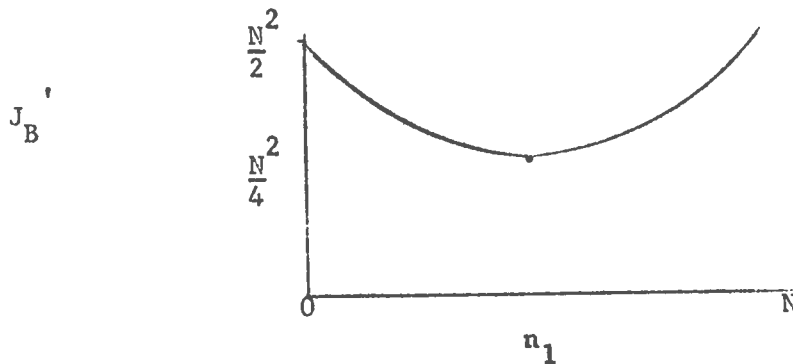
We note immediately the differences between the cases for a linear and a constant L function. In configurations A or B, a linear L leads us to prefer an equipartition of the group if we want to maximize the amount of interaction. On the other hand, a constant L leads us to choose that the group remain together.

What do the L functions represent? They are a convenient way of summarizing one aspect of the technology of group interaction. The change in the behavior of the interaction function can be seen as a consequence of a change in the technology of interactions.

Other Models

There exist several other alternative models which I do not believe will be as useful for affect production as the one proposed above.

One such model will be that of collective behavior. Perhaps we can induce collective behavior states in the society, or in sub-groups of the society which create highly sensitized individuals. (Smelser, 1962) Intentional communities sometimes have this function. However, collective behavior systems are not easily controlled, by anyone, especially over a long period of time. They may not be specific in their effects either. Often they lead to massive catharsis rather than sensitization. Plays and films frequently have this quality. A minor point, but important for those who are not anarchists at heart, is that it is likely that such techniques of affect production will destroy the affect producers themselves.

Another alternative may lie in technology and psycho-pharmacology. Drugs or special mind controlling devices may turn out to be useful, effective and low cost techniques for creating affect in individuals. It is likely that they can be controlled and made quite specific. My objection to the use of such instruments, except in a supplementary role, is that I do value (symbolic) interaction. (Blumer, 1969) Perhaps machines will be able to

offer exciting interactive environments. I might still not be
willing to go along with a scheme of using machines for APS,
however, since I believe that there are many cogent reasons for
the person-to-person model. Among others, it tends to develop a
more shared value conception in the society and some sense of
consensus about major issues. This can be valuable in nation
building and maintenance.

Another affect production model is involvement with in-
animate objects. The production of affect by paintings and by
nature, for example, may well be significant techniques for APS.
But, is it truly an involvement with inanimate objects that pro-
duces such an affective state? Or, is it perhaps, the interaction
with others who have had a similar kind of experience? In any
case, I think that the urgency of interaction with individuals
is not present in the interaction with nature, except under crisis,
and probably is not capable of being directed. Perhaps, a positive
psychological landscape gardening can be developed (as the Japanese
have done) which will actually aim in a very specific way to create
affective states in individuals, but I view this kind of activity
as being at most supplementary to the person-to-person techniques.[30]

Person Changing Technologies and Person Changing Activities

Our discussion of APS, thus far, has been static and has
concentrated on organizational configurations. I now want to
examine how an APS can develop over time and become a viable

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[30] A national sculpture program, giving employment to those who
would be artists and supplying sculpture for the environment might
be a win-win proposition in this light. This is in accord, in
part, with some ideas of Marcuse. (Marcuse, 1969, p. 90)

institution. I also want to look at the substance of the change
that is wrought in people by the APS.

When we talk about deliberate personal change, we must be
aware of the ethical consequences of such an effort. When we act
deliberately on another person, even if we do not treat them as an
object, we must still have some sense of social responsibility for
our action. In a later chapter I discuss the nature of open per-
sonal change, the importance of always leaving the path open to
no change, and how this process differs from brain-washing. In
the end, I do not believe that any criterion will make the dis-
tinction between open and repressive change explicit and clear;
rather, we must be always on the alert to the dangers of repressive
change.

The Stanford Research Institute Educational Policy Research
Center has looked into ways in which people's affective levels can
be altered. They call processes for doing this, if they are for-
malized, person changing technologies. (Morgar, 1967; Harman, 1969)
Person changing technologies cover a broad spectrum of activities
from meditation and psychedelic drugs, to encounter groups, synanon
games, radicalizing confrontations, and deliberate provocations of
instructive encounters. A table on the next page, taken from one
of the SRI reports, suggests the dimensions of person changing
technologies. I would distinguish between person changing pro-
cesses that are person changing technologies (PCT) and those that
are person changing activities (PCA). The technologies are con-
scious processes for causing personal change, while the activities
are the actions we do which cause personal change but which are not
primarily and consciously intended to do that.

TABLE I

Elements of "Person Changing Technology"	Typical Outcomes
Meditation Yoga Psychedelic drugs Hypnosis, autohypnosis Psychosynthesis	Awareness of spiritual dimensions, of transcendental self, of the "hypnotic" or "encapsulated" nature of ordinary life
Sensory awareness	Sensitivity to feelings and emotions, beauty
Self-awareness exercises Psychotherapies Group therapy	Sensitivity to human closeness, self honesty, realization there is nothing to hide
Sensitivity training Encounter groups Gestalt therapy Group nudity, marathons	Spontaneous response to experience, self-expression, individual autonomy, emotional freedom
Psychodrama	Removal of guilt and fear stemming from early training regarding morality and sin
Synanon games New Theater (ridicule of Establishment, crudity and nudity, audience encounter) Forceful disruption of normal social process Underground press Radicalizing confrontations	Ego-reducing experience, awareness of ego-defense nature of social institutions and customs
Deliberate provocation of "instructive encounters" such as police confrontations, black-white confrontations, etc.	Perception of oppressive nature of social institutions

I want to ask the following kinds of questions about PCA's and PCT's. What is the cost of training individuals? What are the foregone opportunities in the process of training them, such as losses of income and friends? How much affect is produced now by this activity? What is the quality of the affect? How does it perpetuate itself? The last question is especially important if an APS is to be viable.

I want to discuss a variety of PCT's and PCA's in varying degrees of detail. The purpose of this discussion is not to be in-clusive, but to suggest how a more inclusive study should be structured.

In discussing each of the various person changing processes I will first discuss the situation of the process, then the training of new teachers, and finally how such a process might be evaluated.

Person Changing Technologies

Personal encounter groups operated under the auspices of the YMCA at Berkeley, California represent a technological development in the use of certain kinds of group processes.[31] A sustaining program has developed which involves between 300 and 400 members of the university community each quarter.

An encounter group is a small group of people which tries to explore the interactions of its members. Problems (not all, or mostly, negative) become defined by means of the interaction of the group members among themselves. The emphasis is on the "here and now" and is sourced in the gestalt therapy movement, phenomenology,

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[31]My source of information for the discussion is interviews with the staff. The director of the survey, Dr. James Bebout, has been especially helpful. See also, Bebout, 1970.

etc. There is one member of the group which provides guidance for the group and who is called the "leader." Leaders have been trained in guidance. They use a battery of techniques, but there is no prescribed method for leading.

Groups consist of about ten or eleven members and one leader. They meet for one evening a week, plus one weekend retreat. Since they are organized around the university academic quarter system, the duration of the group's identity is about ten weeks. Groups can, but do not often, continue unchanged for a second quarter. About ten per cent of the participants drop out over the ten week period. Participants pay about $20 for a quarter's membership in a group. This covers most of the cost of running the program.[32]

Potential leaders are chosen from members of the group. About 15 per cent of the group's members have the opportunity to become leaders. In order to become a leader, an individual goes through a second quarter of training in special leader groups. Since all members of the leader groups have been in at least one previous quarter of the personal encounter groups, they have some sophistication about what goes on. About half of those who do a quarter of leader training become leaders. Thus, about 5 per cent of the members of any personal encounter group eventually become practicing leaders. We note that since the ratio of leaders to members is about 1 to 10, the mean number of groups a leader leads before he retires from the leadership role is about two. Leaders

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[32]Note that these arrangements imply that little is sacrificed for trying the encounter group compared to psychotherapy. Almost half of the participants tried an encounter group after therapy.

are paid $80 a quarter for their effort, which works out to about
$1.00 an hour. This sum, though not substantial, is significant
for many leaders; if students or wives, it may represent the only
paid work that they do. Unlike some other PCT's, encounter group
leaders go on to other PCT's and related activities -- group work,
Peace Corps, social action -- where their leadership skills are
useful to the ends of their new activities and to the production
of affect.

In evaluating these groups we must take into account their
self-proclaimed purpose.[33] Most people who join personal encounter
groups are not seriously ill. The few that have very difficult·
problems (perhaps 5 per cent) are referred to psychotherapists
(usually by the group leader). In a protean world, of which
Berkeley is a paradigm, it is likely that problems of understanding
the world around you and your own reactions to that world are not
solved by referring to tradition. Members of encounter groups
often view groups as ways of working out some problems they perceive
in their lives. Frequently, the encounter group is used as a pre-
liminary to dealing with some external problem in a more direct
way. Also, many members view encounter groups as means to personal
growth, as contrasted to the remediation of personal problems. En-
counter groups serve some functions that might be easily found (or
even avoided) in traditional societies, functions for which friend-
ship may have worked in an industrial society, and those for which
common kinds of friendship do not seem to be so successful in the
post-industrial society.

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[33]I have not attempted to survey the laboratory training evaluation
literature here.

These considerations suggest that the evaluation of the success of encounter groups may be done in terms of behavioral measures and self reports. For example, the drop out rate seems to be reasonably low, considering the conflicting pressures that tend to occur in an academic community after half way through the term. Also, the continued survival of the program at a substantial membership level from quarter to quarter indicates that the public response to this program is good.[34]

These behavioral measures can be supplemented by psychological tests. A group's evaluation of the change in its members as well as self-evaluation of change can be measured and compared. A self-chosen sample, paid for its effort, goes through systematic tests, including Q-sorts, before and after the group experience in order to develop more comparable measures of self change. This work is currently under way.

Personal encounter groups are a technique for spreading knowledge of self and the affective aspects of life among a large number of people at low cost. It is significant that a few percent of the Berkeley population has been exposed to this process. One can only speculate on the effect of encounter group technology on the general affective quality of the Berkeley community. Do people talk, deal with and feel themselves better in Berkeley? Are they more aware of and willing to engage each other?

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[34]Maliver, 1971, points up many of the difficulties with encounter groups. These include the inadequate training of leaders, the dangers of group pressure, and the possibilities for hurting emotionally ill persons. As I have pointed out above, the dangers from professional practice need to be minimized and presumably this will happen in the encounter business.

Another person changing technology is <u>psychotherapy</u> and psychoanalysis. A variety of professions supply services which could be called psychotherapy. (Schofield, 1964) These include psychiatry, psychology, and social work. Though there is a wide divergence in the amount of training required for these professions and the exact type of therapy offered by each, there are many common aspects among them.

The person who is to receive psychotherapy, frequently called a patient, most often comes voluntarily to the therapist. It is usually the case that some problems in life are bothering the patient and also that the patient wants to ameliorate these problems. He does not view the therapy process as one of growth and positive development. Therapy is administered on a one-to-one basis. The patient is in a distinctly different position than the therapist. On the other hand, it is presumed that the therapist is learning from the patient and a high degree of mutuality is involved in the relationship.[35] The length of treatment is quite variable. It may extend from one or two visits to several years. The cost of treatment tends to be substantial and usually will range anywhere from $15 to $45 an hour for the time of the therapist. The lower figure tends to reflect subsidized services.

Group psychotherapy differs mainly from this in that several people are involved together in the therapy process. Often

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[35]The therapist must be very aware of his own role for there to be mutuality in therapy. It is he who must surrender some power, and it is he who is offering the service. The patient is in a complementary relationship and can demand some mutuality. Yet the success of the therapy process may depend on transferences which will deny the patient the right to have his opinion count much for the therapist. Shelly, 1964, discusses the interchanges in therapy, the cognitive complexity of the therapist-patient interchange, and the meaning of mutuality and "understanding."

the people in the group help each other. In most cases, a therapist is there at the same time. Again the therapist is not an equal to those who are receiving the therapeutic treatment.

The administration of therapy does not lead naturally to the production of therapists. Therapists are produced by post-graduate training of other professionals such as psychiatrists, psychologists and social workers. They consciously choose to be therapists and then they obtain the requisite training. The chart below suggests the variety in training times, costs, and intensity of training available for various therapeutic professions.

<div align="center">

A Comparison of the Training
Of the Three Major Psychotherapists

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Specialist	Total Years of Training Beyond High School	Estimated Cost of Post Graduate Specialty Training[36]	Years of Graduate Training Before Intensive Psychiatric Experience	Estimated Proportion of Graduate Training Years Clearly Relevant to Psychotherapy
Psychiatrist	11-12	$8,000	5	one third
Psychologist	9-10	2,500	2	two thirds
Social Worker	6-7	1,000	1/3	four fifths

The production of therapists and teachers is incidental to the process of therapy. There may be special techniques of therapy for those who are going to be therapists, but this is small effort compared to the resources that go into therapy.

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[36] "These are crude estimates of the direct expense to the student of his training and they are very conservative. They do not include the sizably greater investment of society in the student's education -- the cost of facilities, equipment and teaching staff." (Schofield, 1964 p. 120)

It is quite difficult to evaluate the effectiveness of therapy.[37]
(Lesse, 1968) It is clear that for many it seems to work, What is dif-
ficult to discover is what aspects of psychotherapy are most significant
in effecting change. Some have argued that the most significant aspect is
the "care giving" one. (Schofield, 1964) Others see a great deal of
merit in the specific techniques used by the therapist. And others argue
for the trouble shooting aspects of therapy. If we fall back to self-
evaluation, then the fact that the service is still used, has adherents,
and continues to be used despite the many attacks on it, suggests that it
serves some useful functions (even to the patients). Whether therapy
serves the function of cure or amelioration of the problem state, however,
is another question.

Therapeutic techniques tend to deal with different kinds of pro-
blems, usually of a more intense sort, than those dealt with in encounter
groups. They require intensive extra training for the practitioners. This
training is frequently out of the mainstream of the therapeutic experience;
those who choose to be therapists, will make the choice often before having
experienced therapy. Finally the one-to-one character of the process makes
it extraordinarily labor intensive with respect to the production of an
affect changing hour.

This extended discussion of two kinds of affect production by means
of helping persons was meant to illustrate possible extremes of the affect
production systems available. I have tried to point out the differences in
the cost of training, in the foregone opportunities, the nature of how the

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[37]Within a therapeutic profession one might find a set of internal cri-
teria for success. For example, the patient's acceptance of the thera-
pist's model, and an increased vulnerability in the patient, are such
criteria. Whether these are useful measures of the performance of the
profession, or only measures of the success of a profession in spreading
its dogma, is still an open question.

affect is produced, some brief remarks on the effectiveness and quality of its production, and finally, how such processes produce new practitioners. I shall try to systematically summarize this data after I discuss some person changing activities.

The person changing technologies that I have discussed thus far are all labor intensive; this has implications for their productivity. They require trained personnel whose productivity per person hour seems quite constant with respect to what we would normally call technological improvements. Baumol and Bowen have pointed out that in such a case the cost of providing a service will rise rapidly in a technologically advancing society. (Baumol, 1966) Insofar as mean wage rates and the cost of living are determined by technologically improvable activities and wages are related to productivity, we will find that the mean wages of workers could rise without inflation. This, however, does not necessarily apply to those in affect production activities. Wages certainly could be related to productivity, but there seems to be no likely way of increasing productivity for most affect production activities. The net effect is that the cost of affect production activities will rise rapidly with respect to other items that are sold in this society, or affect producers will be paid considerably less than they ought to be paid, considering their training and status, or a mixture of the two will hold.

If most people in a society were in APS's, then this argument might be avoided. The effects of saturation (see Model 1) of all human resources would make the prices of hard goods a problem more amenable to central control. This implies cheap, durable goods. (Burch, 1970)

If we want to saturate the therapeutic system, we probably would want to deprofessionalize it. Here we have a technological change which avoids scientific technique. There is considerable support for deprofessionalization, aside from arguments for encounter groups.

> Lincoln Hospital in South Bronx sees 600 psychiatric patients in a year and the local spiritualists see 900. The spiritualist naturally talks a different language. (Rabkin, 1970, p. 10)

> Spiritism as practiced by our Peurto Rican patients provides many of them with a means of coping with adversities. (Psychology Today, 1970)

> As far as treatment of the mentally ill is concerned, the foregoing indicates (a) that, owing to the proneness of pre-literate Africans to regress massively to psychotic levels under stress, spontaneous remissions, if not recoveries, in a favorable environment are common, irrespective of what kind of treatment has been administered; (b) that ego support and especially group support, loosely called suggestion, are important therapeutic agents; and (c) that, in accordance with prevailing belief systems, the focus of the therapeutic approach must be on the disturbing agents rather than on conflict resolution. Hence preliterate Africans are poor candidates for insight therapy but are exceedingly amenable to what are, to them, magical procedures.
> From this point of view, the native healer and the prophet healer score over the scientifically trained psychiatrist, especially as there is no cleavage in belief system between patient and healer. As far as the native healer is concerned, factors which can be identified as of curative value are (a) potency of some herbs administered, (b) high prestige of the native healer in his own community and often far beyond it, (c) detection of the supernatural cause of the illness and promise to counteract it, (d) symbolic function of some of the procedures adopted, such as expurgation and ablution of evil spirits, and, (e) reduction of fear concerning real or imagined dangers by means of sacrifice, flagellation, and application of painful irritants which have no expiatory atoning quality but are meant to assuage and to expel evil spirits. (Wentrob, 1968)

Still, things are not so simple that we can all become therapists. The major virtue of professionals, besides residual ones of managing in a system created so that only they can .

comprehend and deal with it, is that they do not make too many major mistakes. Physicians do not kill too many of their patients. The success of a profession lies in its ability to extend the areas of its competence in providing help without causing more harm than good. (Hence the decline of heart transplants as a recommended technique of physicians.)

Similarly the major challenge in designing better techniques of affect production will be to create ways of avoiding disasters, of easily and effectively remediating mistakes, and of feeding back this experience to the system. We are not calling for a technology that will produce more affect, but rather one that is capable of making more people low-risk producers.

What hope is there for mechanical improvements in affect production? Person changing technologies have not been very much explored and so one would think that their productivity should rise or could rise substantially. It seems unlikely to me that we will want to increase the sizes of groups. Also, as I observed in the earlier models, we want the leader or therapist to be a person, and not a machine, since mutual social learning could not occur in the man-machine case.[38] Changes in the quality of therapeutic techniques seem more hopeful. For this to happen, a framework for evaluating the quality of therapies and their relative costs (resource demands) will have to be developed. I try to do the latter further on in this chapter.

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[38] It is possible to conceive of a machine which serves as an intermediary, synthesizing the responses of its patient and using these in developing ways of dealing with other patients. If all the machines in therapy could share their learning, then things might be better. But then we are back to some profession (populated by intelligent machines) and the dangers here are the same old ones.

Some Person Changing Activities

The very conscious and contrived nature of affect production that characterizes person changing technologies can be fruitfully contrasted to the more natural and regularized activities. Person changing activities are not consciously chosen for self change. People choose them only in the sense that they choose to be part of the social structure. Examples of such activities are bringing up children and falling in love.

Let us look at two ways of bringing up children in Western society. The conventional style of upbringing involves the intimate interaction of a mother and her child. For a period of about three to five years, the mother is the major source of support for the child. In some parts of the society, where there are a large number of children in the family, older children do part of the mothering. But, essentially, this process is one-to-one, with the "mother" being in charge.

Mothers, who are leaders, are trained to be good mothers by their own mothers, the social system, and codified versions of social knowledge such as Dr. Spock.

In the Kibbutz, the situation is somewhat different. A group of children grow up together interacting most of the time with each other. Their real parents provide them with some interaction for a specified period each day and presumably fill some of the mothering roles that are described in the conventional case. There is also a leader, an adult teacher, of each group who is a specialist in handling the children and who guides their activities. But most of the activities center around the children themselves and not their conventional families.

The leaders of these children are technically trained. As for the children, who are their own leaders, their training must be by means of peer social process and the teacher's word.

How can we evaluate either of these two systems of bringing up children? One of the peculiarities of person changing activities is that the evaluation of their success is intimately dependent on the social system in which they occur. We could ask if the children that are trained by either of these PCA's are adequate to meet the needs of their society. We then would find ourselves with the structure-functionalists' problem: is what is, what ought to be? We do need a method of evaluation that is respectful of different cultures. But even in this respect, there are difficulties. Whether Kibbutz trained children were better fighters in the Six Day War than conventionally trained children, for instance, does not seem to be a very useful criterion, especially if the evaluator is a pacifist. Similarly, training in a collective society with collective modes of thought may not do children much good if the society they enter is individualist in orientation. (Bronfenbrenner, 1970; Bettelheim, 1968)

We might try to evaluate these person changing activities in terms of how much affect they produce. The question we face in this case is, affect of what kind? For example, if we are looking for collective behavior patterns characteristic of massive good feeling, one version of upbringing might be more effective than another. On the other hand, if we are looking for capabilities for loving individuals, another kind might be more effective. This does not mean that the affective effectiveness of PCA's cannot be evaluated. It is just that we have to define much more clearly

what kinds of feeling we wish to evoke in a population. The explicit choice of which kinds of affect we wish to evoke in the population is probably very similar to choices about political styles and cultural realities. Such explicit choices seem very difficult, and therefore I would suspect that explicit choices of the kinds of affect we want will turn out also to be very difficult. For if explicit choices of affect are concurrent with changes in politics and power relationships, there is no reason to believe that those who are in power will be willing to give up their special status.

Romantic love, as a widespread activity related and leading to marriage, is a recent invention. It is likely to have been a product of our wealth, our ability to move around inexpensively and rapidly, and our decreased dependence on the extended family.

Romantic falling in love is a very particular set of behaviors. It involves one-to-one interaction, in the context of a peer group doing similar kinds of activities. It happens before formal marriage. And it is the determinant of whether that marriage takes place.

People learn how to fall in love romantically from literature, from the mass media, and from their peers. They also learn from a sequence of experiences of falling in love, each time presumably getting more adept at communicating their intentions. They also learn something about falling in love from their parents.

Non-romantic falling in love is very different. First of all the pairing is arranged by outsiders in a formal way. It is still a one-to-one process, but it takes place after marriage, or as a consequence of the fact that the marriage arrangements have

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already been made. Although it might be said that romantic
falling in love is an adjustment to predetermined social conditions,
non-romantic falling in love is most explicitly such, whether one
needs to be trained to fall in love is another question. Traditions
can provide a set of prescribed behavior patterns which lead to
greater accommodation among those who are to be married. If one
chooses not to fall in love, it does not matter since the marriage
will take place anyway. Since falling in love is a secondary
aspect of non-romantic marriage, we have a situation where training
may be quite randomly distributed.

Again we face the problem of evaluation. It would seem
quite likely that more affect is produced in the case of romantic
falling in love than in the non-romantic case. Yet we do not know
what kind of affect is produced by each activity.

PCA's are distinguished from PCT's by their degree of em-
beddedness in the mesh of society. It is easier to evaluate PCT's
because they are undertaken consciously and, presumably, purposively.
So we are tempted to think of PCT's and their technique as major
instruments of public policy intervention.

Yet PCA's are more pervasive and influential in everyday
life. They determine the context in which PCT's operate. It is
possible to make conscious choice, on a societal level, concerning
PCA's (viz. the Kibbutz and Soviet child rearing). In doing so,
at least at first, a PCA may become a PCT, and the attendant pro-
blems associated with the visibility of technique become important.
Affective changes probably will have to be partly in the form of
technique and partly in the form of societal rules, the mixture
being determined by what is possible.

Having looked at some person changing processes, I want to
see if we can develop a systematic way of synthesizing what we know.

The Economics of Person Changing

Most of my discussion of person changing processes which
might be useful for affect production has concentrated on the input
side of the problem. We have been concerned with people and time.
The lack of commonly useful output measures and, more significantly,
the lack of consensually agreed upon output goals is a reason for
this. The analysis I shall offer next concentrates on inputs and
looks at some of the structural aspects of the production of new
leaders. An evaluation of the kinds of affect produced will have
to wait for further investigation.

For the economic evaluation, I have treated the APS as
embedded in a larger economic system. This means that I have not
evaluated the effects of transferring resources to the APS. I
have ignored the opportunity costs of a concern for love.

A Model

I want to develop a highly simplified model of a PCT (or
PCA) that is an affect producing system. Since we do not know
much about any of these processes, we need to have a model with
few parameters.

A PCT is a process which takes in students $[i(t)$, (for
input), in year $t]$, and discharges them after some years (t_1) of
"schooling," of which a fraction of the students (s) survive (the
rest were dropouts). The number discharged in any one year $[o(t)$,
(for output)] equals the number who came in t_1 years before times
the fraction who survived, s.

$$o(t) = s \cdot i(t-t_1)$$

Some fraction (x) of the graduates each year become teachers [P, (for _professor_)] in the system. The number added in year $\underline{t}$ is:

$$x \cdot o(t)$$

After $\underline{t_2}$ years, a teacher leaves the system. The total number of teachers in the system at time $\underline{t}$ is

$$P(t) = \sum_{T=t}^{T=t-t_2} x \cdot o(T)$$

The total number of students in the system at $\underline{t}$ is:

$$S(t) = \frac{s}{f} \sum_{T=t}^{T=t-t_1} i(T)$$

where f is a "fudge factor," determined by the exact way in which people drop out.[39]

Now we can say that some of the students are also teachers. We define $P' = P + yS$ as the true number of teachers. We could also define $S' = S + y'P$ as the true number of students, but since $P < S$ in general, this will be ignored.

An example should make clear what is going on. Let:

i	=	10 for each year
t_1	=	4 years
t_2	=	20 years
x	=	.05
s	=	0.5, f = 1
P(0)	=	2, S(0) = 0.0
y	=	0.5

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[39] If they drop out immediately upon entering, then f=1. If they drop out the day before graduating f≃s.

The chart below gives the time history of the system.
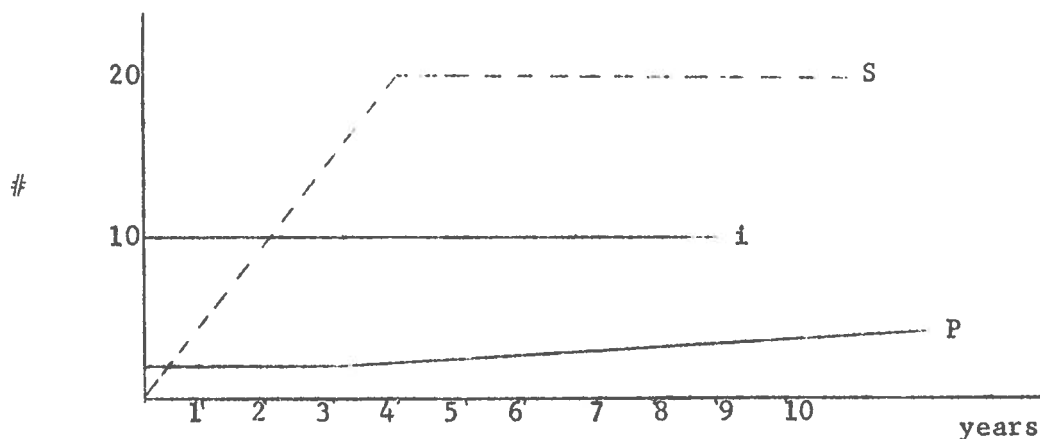
Eventually, all quantities become a constant as a steady state is achieved.

What is the long term behavior of P, S, and P', for constant i, s, x, y, t, and t_2?

$o \rightarrow si$

$P \rightarrow xsit_2$

$\overset{.}{S} \rightarrow \frac{s}{f}it_1$

$\overset{.}{P'} \rightarrow t_2xsi + \frac{ys}{f}it_1$

Using some of these systems measures, we can develop figures of merit for an APS.

Our proxy for quality will be the ratio of students to teachers. This is no assurance of quality, except that, in a person-to-person system, if this measure is too large, there will be insufficient interaction.

Quality

$$\frac{\text{Students}}{\text{Teachers}} = \frac{t_1 \frac{s}{f}}{t_2xs + yt_1\frac{s}{f}} = \frac{\frac{t_1}{f}}{t_2x + yt_1/f}$$

For the productivity of an APS we may define two measures. Both depend on our concern with the long term viability of the APS. If it takes too long to teach someone to be a teacher, then it does not matter how good a teacher he is.

Productivity

$$\frac{\text{Years teaching}}{\text{Years learning}} \quad = \quad \frac{t_2}{t_1}$$

or

$$\frac{\text{Years of teaching from a cohort}}{\text{Years invested in teaching a cohort}} \quad = \quad \frac{t_2 sx}{t_1 s/f}$$

$$= \quad \frac{t_2 x}{t_1 /f}$$

A costly APS is one that takes a long time to train teachers and has a large value of the teacher-student ratio.

Costliness

$$\frac{\#\text{teachers}}{\#\text{students}} \quad x \quad \text{years in training} \quad = \quad \frac{t_2 x}{t_1 /f} \cdot t_1 \quad = \quad \frac{t_2 x}{1/f}$$

An efficient APS is one in which the number of drop outs is small and which is capable of producing sufficient teachers to keep it going.

Efficiency

$$\frac{\#\text{students graduating}}{\#\text{students entering}} = \frac{o}{i} = s$$

$$\frac{\#\text{teachers produced}}{\#\text{ students entering}} = \frac{xo}{i} = xs$$

$$\frac{\#\text{teachers produced}}{\#\text{students entering}} \quad x \quad \text{fraction of students surviving} = xs^2$$
(a truer measure of drop out costs.)

All of these figures of merit are minimal measures. They represent resource inputs that should help to make an APS successful. They are necessary but not sufficient.

We can apply these measures to some of the PCT's and PCA's we have discussed. The chart below gives the values of the parameters (guesses!) and the figures of merit.

Some interesting observations can be drawn from this analysis.

1. PCA's are more intensive in their use of people than PCT's. This may be due to the payment schemes which are set up for most PCT's and which do not exist for PCA's.

2. That the values of the Quality measure tend to be less than one for the y-1 case, suggests that we need a more realistic Quality measure. This should take into account the condition that some teachers become students, as well as that some students become teachers.

3. From the first measure of productivity, we note the obvious split between professional activities and non-professional activities. Professional activities require much more time for training than non-professional ones.

4. The second measure of productivity turns out to give high values for PCA's and lower ones for PCT's. This is because most PCT's do not naturally succeed themselves, while PCA's do.

5. As for costliness, the intensive training required for PCT's makes them substantially more costly than PCA's.

6. Family kinds of activities are more efficient compared to societal kinds of techniques. As soon as one has to worry about training the successors in a profession, in a way that is not identical to the training of those who are served by the profession, efficiency drops rapidly.

Some Person Changing Processes and Measures of Them

		Psychiatry	Personal Encounter Groups	Bringing Up Children		Falling in Love		High School
				Conventional	Kibbutz	Romantic	Non-Romantic	
x		0.01	0.1	1.	0.05	1.	1.	0.01
s		0.5	0.9	0.9	0.9	0.80	0.75	0.80
t_2		25.	1.	10.	20.	5.	20.	10.
t_1		2.	0.5	4.	4.	15.	15.	3.
f		0.75	1.0	0.95	0.95	0.90	0.87	.90
Q $\dfrac{\frac{f}{t_1}}{t_2 x + y\frac{t_1}{f}}$	y=0	10.7	5.	.4	4.	3.3	.85	33.
	y=1	.92	.82	.29	.8	.67	.45	.98
P t_2/t_1		13.5	2.	2.5	5.	.33	1.33	3.3
$\dfrac{t_2 x}{t_1/f}$		.1	.2	2.4	.24	.3	1.2	.03
C $\dfrac{t_2 x}{1/f}$		.19	.1	9.5	.95	4.5	17.	.09
E s		.5	.9	0.9	.9	.8	.75	.8
xs		.005	.09	.9	.045	.8	.75	.008
xs^2		.0025	.081	.81	.040	.64	.56	.006

These observations seem fairly straightforward. Why should we do a complex abstract analysis of APS's such as the preceding one? One reason for doing so is to try to elucidate the essential aspects of these APS's and thereby suggest likely policy choices available.

For example, the requirement of long and artificial training that is required for psychiatry, compared to the training required for leaders of encounter groups, suggests that psychiatry may be a very expensive technique for changing affect in a society. On the other hand, it could be said that expensive activities may be extraordinarily productive of desirable kinds of affect. So what can we learn from such input data? Under some reasonable limitations of resources, we still may be able to derive useful policy choices. If we conclude that one APS is much cheaper than another and affecting many more people than another, then a much more expensive technique is not likely to be worthwhile. Considerations of equity should make this kind of argument even stronger.[40]

Another very useful aspect of this kind of analysis is that it points out why some activities are so much more costly than others. This analysis of the structure of affect production suggests that the lengthy amount of training required for certain kinds of APS's, and the distance between the leader and the patient may be the crucial variables in determining the effectiveness of an APS.

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[40]Freeman, 1965, makes a point similar to the one made here when they consider the evaluation of poverty programs. "Suppose short-term treatment institutions for delinquent offenders do no better than long-term ones, if they are more economical is this not something that the evaluation researcher has a responsibility to take into account?" (p. 24)

Research and Development

The analysis we have done so far should lead to recommendations for research which would increase the affect production capabilities of society. Systematic models of activities can suggest effective intervention points.

Probably the most significant work will be on changing the nature of the affect production system, diffusing it among all of society. This deprofessionalization will require organizational developments in order to ameliorate mistakes. We will need ways of monitoring various community experiments in helping.

At the same time, we want to have more comprehensive methods of accounting for the various APS that are active. Planful consideration of societal consequences should set the stage for such social changes, especially in our imagerial worlds.

We need to estimate the research resources that are going into studying affect production mechanisms. We want to look at the sources of funds, what kinds of research they are put into, and the likely utility of this kind of investment. For the moment, the data are lacking.

There are some serious problems associated with research on APS's. The most obvious, and probably the most important, are ethical questions. This is the kind of research that is most closely related to people's private lives and the manipulation of their psyches. More significantly, it involves the public manipulation of their private selves. It represents the conscious choice to manipulate where the end is change in people's self feeling. We cannot find easy rationales for such manipulation. The fact is that _we_ are intervening to make _them_ better.

I am not sure whether applied affect production research should take place at all. If it should, then it is almost certain that it should be publicly announced and publicly chosen. This kind of knowledge is too dangerous to be produced in a secret way.

Another aspect of affect production research is the necessity for naturalistic studies. If we are concerned about APS's, then many of our studies are going to have to be done _in situ_. All the problems associated with the evaluation of research efforts involving local communities will be present in this kind of study. (Marris and Rein, 1965)

Conclusion

Affect production and change can be monitored, analyzed, and perhaps altered. We can change the framework in which people help and advise each other. Still, there are many objections to this change, and these objections do not come only from people who have vested interests in the present system. There are many who fear deliberate affective change and their fear has a religious quality.

APPENDIX

(Letter from Peter Marris to Martin Krieger)

May 25, 1970

Marty:

The more I think about it, the more your paper seems to me a restatement of Christianity -- without archaic theological premises and institutional accreations. When you write of the production of affect, you don't mean any affect -- you don't want to make life more painful. Nor, I think, do you conceive affect hedonistically, as pleasure. You are concerned with a quality of relationships -- especially such relationships as friendship, romantic love, parenthood, student and teacher, student and student. And this quality seems to be Christian love (or charity, or compassion).

Your suggestions of how to create love between people are also Christian. You imply, for instance, that love depends on equal relationships -- and Christianity insists on this. (Jesus appears in the New Testament, for instance, to mistrust family relationships, because they are possessive: here and there, he seems to reject the right of parents to assume authority over their children.) The techniques of Christianity correspond to your psycho-therapeutic techniques, more or less. The Catholic Church, at one extreme, has confession (an analogy with psycho-analysis), and a Quaker meeting is not, I think, so very different from an

encounter group. Indeed, there seems to me to be a clear line of evolution from evangelical religion to the Oxford Group to Moral Rearmament to Synanon, Encounter Groups, and such. Christianity has also tried to reconcile two kinds of knowing -- affective planning, and planning for affect. There is a concern with faith, prayer, communion with God, and a concern to institutionalize good relationships and rules of conduct.

You ask two kinds of question: questions about knowledge -- what is it? how do we use it? -- and questions about happiness -- where do we find it? how do we produce it? how do we evaluate it? Both, I suppose, are aspects of the fundamental question of the meaning of life. These questions have been asked, in much the same sense, for two or three thousand years. So it seems misleading to frame your argument as if you were dealing with a new age of man. For some reason, a kind of historicism is in fashion: first there was the neolithic age, then there was civilization, now we are post-civilization (Kenneth Boulding); the end of ideology (Daniel Bell); post-capitalism . . . We are surely at the end of something, and the beginning of something new. (Today is the first day of the rest of mankind's history.) This is fine if your purpose is to dramatize the novelty of our situation. But it tends to discount the relevance of all past human thought and experience. I was thinking of some books I've read from different times and places -- Thucydides' History of the Peloponnesian War, the Tale of Genji, the Canterbury Tales, the Book of Chuang Tzu -- and the problems, the arguments, the anxieties and searching do not seem radically out of date. The relevance of a book does not seem to depend on where, or how long ago it was written, but on its preoccupation

with particular social conventions or systems of thought. (Corneille is boring, because his legalistic problems of honor are specific to a particular code; and I think Simone de Beauvoir's novel, The Mandarins, will soon seem boring, because the characters are preoccupied with intellectual problems of political honor which are largely arbitrary, and of their own making.) Historicism seems to lead to a kind of functionalism since the present is clearly different from the past in its social and economic institutions, the purposes of past societies are derived from the functions of their institutions fulfilled. Thus the purpose of ancient Egypt was to sustain a theocracy, the purpose of 19th century Europe to promote industrialization, the purpose of feudalism to sustain a baronial oligarchy. But clearly these are not our purposes: we want to find the good life. Thus the future is made to appear exaggeratedly different -- as the only society whose purposes are not interpreted as a function of its institutions, since the institutions have not yet been created, but we know what their purposes could be. Cause and effect is reversed. But, of course, Priests and Barons and Capitalists were searching for the meaning of life, too: and, at the time, they interpreted their purposes according to their religion (as we do) not according to their institutional functions. To be sure, religion rationalized institutions -- but not without a continual anxious, critical debate: the times have always been out of joint, society a corruption of ideals.

I think, too, that the questions about knowledge which you raise are also very ancient. The anti-rational tradition is as old as the other. That is, the search for knowledge by awareness is as old as the search for logic systems. I think there is a

cluster of attitudes which go together: the Taoists (let's call them) despise worldly success, technology, etiquette, institutions; they believe in cultivating experience through meditation, drugs and progressive education; they reject any loyalty in relationships which would distort or damage the capacity for feeling; they make fun of rationality by bizarre and shockingly inconsequent statements -- in short, they repudiate the claims of society for order, mutual responsibility and mutual comprehension. But they are neither cynical nor hedonistic. Their home is the hermit's cave -- or a broken-down farm in Northern California, maybe. The Confucians are system builders: they respect success, submit to order, develop an impersonal logic of proper relationships, attach great importance to loyalty and honor. They believe in examinations, social indicators, and filial piety. Everybody, or course, is more or less both a Taoist and a Confucian -- according to his mood, how successful he is being, and the role he is playing. Is it possible or desirable to make a synthesis of these two modes of knowing? Do not sanity and humanity depend on a constant equivocation between them? Every Confucian should bear in mind the emptiness of his system, every Taoist the sterile selfishness of his solipsism. That is to say, the system may be orderly and just, but it is no substitute for love; and the contemplation of experience is no substitute for the arrangements that may protect the possibility of such experiences.

It seems to me that the history of affective planning has been disastrous. Let me suggest why. If you start out from concern with intensity of perception, then what is valuable is bounded by the self which experiences. So long as you are only trying to

heighten perception by drugs, meditation or courses in art appreciation, that's fine. But as soon as you become concerned with relationships between people from this point of view, you can only speak of the effect of others on you -- since this is the only true value. Hence, for instance, romantic love tends to reduce the loved person to a cypher -- the symbol of beauty or goodness which produces love in the lover. Romantic love is characteristically (in the literature) very egocentric (what I feel, how miserable you are making me). Still, it's an exciting and sometimes profound feeling, and can turn into a more humane kind of love. But an ego-centered social or political philosophy is almost a contradiction in terms. When the Taoist turns from contemplation to action, he can only think of the assertion of his will, since will is the active mode of self-bounded experience. But if individual will is the supremely important thing, it cannot compromise with the will of others: it can only treat others as objects to be manipulated, or destroy them. So it leads to nihilism (as with Dostoevsky's characters) or fascism (Nietsche) or holy wars of extermination.

It remains true, though, that Christianity has never found a form in which its conception of life can be realized. The usual explanation is that the costs of Christian behavior are too high -- the sacrifices of wealth, the restraint of aggression, the inhibition of lust and greed are too high a price to pay for indeterminate rewards from loving. (The proposition has been made more attractive by implying that there will be material compensations in another world, but this has never been altogether convincing -- and, in any case, it seems to work like an insurance policy where

you get full benefits, even if you make only one payment just before you die.) I think you are suggesting that the costs may be less in the future, because a very rich society can satisfy most wants without the need for aggressive behavior -- and hence people can be brought up to be gentler without damaging their chances.

I don't know where these comments are leading -- except to say that I think you are trying to make Christianity operational, using techniques of planning, and without, of course, calling it Christianity (which would put people off). It seems worth trying, at least . . .

One other thing seems very important -- you might make more of it. That is, the relative cost of a concern for love. As you say, it does not seem amenable to technology, so the cost of such activities becomes higher and higher, in comparison with the cost of producing a car or refrigerator. American society probably, I'd guess, has fewer people professionally concerned with the quality of relationships than most (could you measure that?). At least, it seems obvious that relationships through which affection might be expressed are being replaced by technologies which fulfill the explicit purpose of the relationship, but not its incidental affection. (Teaching machines can teach, but not love, as teachers can; a vending machine sells, but doesn't ask you how you are, and whether your sister has got over her operation). Hence the impoverishment of affective relationships. How would you plan to correct this, and what would it cost? That's one question you ask. The other is (I think) how do you know when your plan is succeeding?

What sort of empirical research would be relevant?

Peter

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