ABSTRACT
        This report describes an instrument recently
developed for profiling self concepts and provides some background
through a discussion of the rationale and development of the
procedure. The Self Concept Profiling Technique (SCPT) has both a
projective and a paired comparisons phase through which are examined
five occupational and occupationally-relevant self concepts: (1)
self-as-a-person-at-work; (2) the ideal person for my job; (3) my
ideal job; (4) ideal self; and (5) self-as-a-person-in-general. It is
felt that this procedure permits vocation, with reference to specific
occupations, to be empirically investigated. Initial results allow
the conclusion that the SCPT has potential value in counseling and
guidance, both in a diagnostic and an educative role, and may also be
useful in educational and clinical contexts as well as in research.
(TL)

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THE SELF CONCEPTS PROFILING TECHNIQUE: .

A PROCEDURE FOR THE EXPLORATION OF SELF CONCEPT SYSTEMS

Terence J. O'Mahoney

Graduate School of Education
Harvard University

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Research in relation to Self and Self Concepts has been inhibited to some degree by lack of adequate instruments or supportive theory. In addition, the whole topic was banished for a while, along with other concepts having a "mentalistic" aura, when Behaviorism came to power in psychology. Activity and interest waned for a time until Allport (1943) revived it by re-introducing the self as a legitimate concept and subject for study.

The report is intended to describe an instrument recently developed for the profiling of self concepts and to provide some background in a discussion of the rationale and development of the procedure. The instrument was designed and developed in close conjunction with a theory of self processes which has been set out in some detail elsewhere with support from the Information System for Vocational Decisions (O'Mahoney, 1968).

The procedure has frequently and less formally been referred to as "O'Mahoney's valuing procedure" or "O'Mahoney's paired-comparisons procedure." I have chosen to label it, the Self Concepts Profiling Technique, or SCPT. It is an attempt to achieve a logical extension into methodology of the model of self concept systems and the ideas about self processes discussed more abstractly elsewhere. In addition, the influence of the works of Murray (1938), Stephenson (1953), and Liggett (1957) are acknowledged.

The Self Concepts Profiling Technique will be discussed in two stages. The first, a projective phase, is directly influenced by projective and Q-methodologies and theories and also by the ideas of Polanyi (1966). The second stage, a more objective phase, utilizes the well-established paired-comparisons technique and makes extensive use of statistics developed for the paired-comparisons method by M.G. Kendell (1962) and H.A. David (1963).

Background

Most, if not all, projective techniques collect responses to ambiguous
stimulus situations in a relatively unstructured fashion. It is believed
that the way in which the subject perceives and structures the situation,
supplying coherence and meaning as and where he sees the necessity, will be
observable or inferrable from his responses. Thus, valuable information
about the structure and dynamics of the individual's personality and his
meaning systems is said to result from projective techniques. This quite
probably is true.

However, in almost every projective technique the "raw" responses
are processed in accordance with some *pre-established* coding and cate-
gorizing schema external to the respondent. Although the subject's own
tacit logic and semantics are allowed to freely influence the structure,
character and organization of his responses, they are nevertheless even-
tually subjugated to the logic and semantics of the investigator and the
designer of the instrument. (Note: for example, the considerable training
required *before an individual is considered to be competent in* the ad-
ministration and *interpretation* of the Rorschach or the Thematic Apperception
Test.)

The SCPT, on the other hand, explicitly requires and enables the
subject to categorize and codify his own responses, thus preserving the
integrity of the data and their relations with the logico-semantic bases
from which they arose in the first place. It is not suggested that the
more familiar procedures are invalid or of little value. Rather 't is
suggested that, because of the ways in which data are handled, it is nec-
essary and valuable to be explicitly aware of limits beyond which inter-
pretation should not be pushed.

The Map is Not the Territory

The distinction between an individual's self concepts and the
investigator's evaluations and characterizations of them is like the
difference between the language used by two communicating individuals
and the language used by a linguist or semanticist observer to describe
the communication; one is the "real" or communicating language, the other
is the meta-language or observer language used in talking about the

communication. In the case of self concepts (or any phenomena studied by projective techniques) the individual's language and behavior may not be perfect reflections of the underlying psycho-semantic structures and organization, but since they are to some extent functions of that deeper logic they are likely to be more representative of it than an outsider's language and behavior. The investigator's analyses and assessments, expressed in terms of *his own* pre-established logico-semantic systems, are meta-language characterizations of the subject's self concepts. They are not the *subject's* self concepts.[1] If such characterizations are adequate to the investigator's purposes there is no reason why familiar procedures should not be of value to him. A different rationale is required if a close resemblance to the subject's psycho-semantics is desired. As long as this distinction is borne in mind the investigator will be less likely to equate his and the subject's logico-semantic systems without further evidence and justification.

This is not a new or unacceptable distinction. The Behaviorists, for example, have been aware of it for some time. Speaking very generally, their solution has been to focus their attentions upon the more directly observable behaviors, and to avoid the more equivocal behaviors where the question of subjective meanings arises. The self psychologist, however, is at least tacitly committed to the idea that subjective meaning is an extremely important variable in behavior and attempts to resolve some of the methodological difficulties encountered in studying it as a facet of self process. The investigator in this field who attempts to force-fit the raw responses into his own logico-semantic systems and to pass these on as the self concepts of his subjects seems to be missing the point of his own efforts.

On the other hand, the difficulties associated with the more idiosyncratic or ideographic approach should not be swept under the carpet. One of the more noticeable and, perhaps, embarrassing of these is likely

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1. For further discussion (and references) on this topic see D.E. Super. *Career Development: Self Concept Theory*. 1963. New York: College Entrance Examination Board. 4-5. Also, see C. Kehas. "A Critical Analysis of Attempts to Denote Self Concept." *Harvard Studies in Career Development No. 95*. Center for Research in Careers, Harvard University, Cambridge, Mass. 1962.

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to be that of communicating with professional colleagues about the results
of investigations of self concepts and self process. The empirical scien-
tist is intellectually and emotionally committed to the gathering of com-
parable data which will enable him to test specific hypothesis, generali-
zations and distinctions concerning populations and individuals in relation
to such populations. Ha is liable to become very uneasy when faced with
idiosyncratic data about which he is not permitted to assume comparability --
where, in fact, the individual *is* the population.[2]

However, it is possible to live with this kind of problem and,
theoretically at least, to get closer to the supposedly "real" situation·
if the investigator is willing to adapt to his problem. In a sense he
needs to take the role of a cryptographer or "code cracker." He must re-
cognize two things. First, the language, grammar, syntax, etc. used by
the subject are strongly influenced by culture and custom and contain a
logic of their own. The use of good grammar and syntax may, in fact, pre-
vent the subject from "telling it like it really is." Secondly, although
the words used by the subject may be very familiar to the investigator
they do not necessarily mean (to the subject) what they appear (to the in-
vestigator) to mean. By recognizing and accepting these conditions and
by putting himself in a "code-cracking" stance, the investigator is much
less likely to make facile, and, perhaps, invalid translations into his
own semantic system. He is also more likely to question the use of appar-
ently familiar terms and to seek answers in the ways in which phrases and
expressions are actually used. He will seek the internal logic, the habits
and patterns in the data themselves and will attempt to retain the integrity
of the data.

Perception and Projective Techniques

Faced with any stimulus, the individual takes account of it accord-
ing to his own unique habits of attending and perceiving, valuing, inter-
preting, distorting and filtering: his Experiencing Style. His beliefs,
impressions, assumptions and understandings of the universe, his Universe
Concept or World·View, also influence his experience and comprehension of

2. For a discussion of the intellectual and emotional orientations of
'method-centering' and 'problem-centering' scientists and the differences
between their methods, see A.H. Maslow. *The Psychology of Science*. New
York: Harper and Row. 1966.

a stimulus. The totality of his assumptions, feelings, impressions, beliefs
and understandings of himself (his self concepts system) should also be con-
sidered as important variables. These three dynamic processes are inter-
related and interdependent. Each influences, and is influenced by, the
others. Thus, the individual's experiencing or taking-account-of a stimulus
cannot be considered to be simply a "mechanical" neurological event depend-
ing mainly upon the physical characteristics of the stimulus object and the
organism's sensory equipment. The subject's past experience, his present
emotional condition, his hopes and plans, his understanding of situation
and self and the potential relevance of the stimulus for self, all are likely
to be involved to some extent in his attending to, assessing and responding
to a stimulus.[3] There are qualities of both interaction and transaction
in this situation -- this *intertransaction*.

The complexity of this perceiving process is at least tacitly re-
cognized in all projective procedures and also in Stephenson's Q-methodology.

> "The assumption is made that the individual's organization
> of the relatively unstructured stimulus situation is in-
> dicative of basic trends in his perception of the world
> and his response to it."
>   (Selltiz, et al. 1959)

L.K. Frank, the originator of the term "projective technique" saw
the technique as involving:

> "...the presentation of a stimulus situation designed or
> chosen because it will mean to the subject not what the
> experimenter has arbitrarily decided it should mean...
> but rather whatever it must mean to the personality who
> gives it, or imposes upon it, his private idiosyncratic
> meaning and organization."
>   (Frank, 1939, 389-413)

Thus, projective techniques operate upon the kind of assumption
which Polanyi (1966, 1968) succinctly states thus: "we can know more than
we can tell." It might also be said that another assumption, a corollary
of the first, underlies projective techniques -- given the right framework
people can tell more than they know they are telling.

This, in effect, is what is done in the SCPT. The subject is pre-
sented with pictures of people in ambiguous situations (in this case,

3. For a fuller exploration of the character and dynamics of Experiencing
Style, Universe Concept and Self System and the interrelationships referred
to here, see O'Mahoney, 1968

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dimension which emerges from the projective part of the SCPT plus addi-
tional sortings for each self concept which the investigator wishes to
include in the study. Consequently, if the number of concepts/dimensions
is 16 and the number of self concepts to be examined is 5, the total
number of sortings the subject will have to make will be twenty-one, with
x comparisons to each sorting. Economy of time and effort and of the
subject's patience and goodwill are adequate reasons for keeping the
number of pictures small.

The second reason why the number of pictures was an important con-
sideration was that the stimuli should be as uninhibiting of projection
and association as possible. Individual subjects should be presented
with a range of stimuli which is as evocative as possible. In terms of
work-situations this means that the opportunity to associate with or
project towards *any* area of the total spectrum of occupational activities
should be inherent in the set of stimuli used. The spectrum of man's
occupational activities is wide in scope and rich in detail. Quite ob-
viously one could only sample it pictorially. When coupled with the lim-
iting conditions discussed above the task of selecting pictures becomes
quite knotty and the result is destined to be a fairly sever compromise
between the desirable and the practicel. The answers to questions about
ambiguity helped to determine the nature of the compromise.

2) Ambiguity

The focus of the ambiguity in the atimulus pictures could be the
people -- as is the case in Liggett's pictorial stimuli[4] or the situation --
as is the case in the T.A.T., or both the people and the situations could
be ambiguous. There are reasonable arguments for either of these approaches.
The choice depends to some extent upon the purposes the designer has in
mind.

In this case, the primary purpose was to get the subject to project
in terms of "people characteristics." But, at the same time, it was de-
sirable to limit the scope cr "amplitude" of these projections such that

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4. Liggett developed a test procedure (the Liggett Self Valuation Test)
which used head and shoulder pictures of people. Ambiguity was introduced
during photographic processing, perhaps by printing through frosted or
fluted glass.

the "people characteristics" elicited were more relevant to "people-at-work" than, say, "people-at-play." On the other hand, detailed descriptions of the work-situation were not sought. The use of work settings was intended only to create a frame of reference or a set toward the work-world such that, in describing and imposing personalities and characters upon the people in the pictures, the subject would bring to bear his understandings and beliefs about the world of work and the people in it as an integral part of the overall process of relating self to the situations symbolized by the stimuli rather than as primary focus of his response.

In addition, it was argued that people *are* ambiguous phenomena in their own right. That is, the physical appearance of the human being is minimally helpful in revealing the personality, character and temperament, status or occupation of the individual. Usually, cues such as expression, gestures, language, behavior, dress and environmental context are sought as sources of supplementary information. And, in the final analysis, the interpretation will depend a great deal upon past experience, associations and expectations of the perceiver.

Consequently, it was decided to use pictures in which the ambiguity was related primarily to the work situations so that, although the person could be clearly seen, exactly what he was doing would not be so clear. This would allow a smaller number of pictures to "suggest" broader areas of the spectrum of occupation since the ambiguity, in the situations, would allow the subject to interpret according to his knowledge, beliefs, and expectations of the world of work.

What constitutes ambiguity? Theoretically, the more open and undetermined the boundary conditions of a situation or system the larger the number of different ways in which the closure may be effected. An ambiguous stimulus situation is thus one in which the subject is free to effect closure, or to exercise control over the marginal or boundary conditions of the situation. This he does by supplying structure and logic from his own meaning systems.

Operationally and empirically the question "What constitutes ambiguity?" was answered as follows. Several small-scale empirical studies were mounted which resulted in a) an empirical classification of occupations

which was meaningful to young male students in England and, ?) data about
the relative frequency with which these students assigned each of 300 pic-
tures to the 24 categories of this classification scheme. In the assign-
ment task the students were allowed to assign a picture to any of the
categories which they considered "appropriate" or "plausible" in terms of
their interpretation of the pictures. Any given picture could be assigned
to any number of categories.

As a result it was possible to determine, by inspection, which cate-
gory (or categories) a picture was most frequently assigned to by the
group and the range of other categories it was associated with and the rel-
ative frequency of these peripheral associations. Empirical definitions
of "meaning focus" and "meaning range" emerged as a result of this in-
spection and together these provided an operational definition of "ambiguity".
The 300 pictures were sorted in terms of this definition and the group data,
and were reduced to a selection of 92 "ambiguous" pictures which were used
in one final study -- another assignment task. It was found that several
sets of pictures could be selected such that each of the 24 occupational
categories were equally likely to feature in the projections of a group of
subjects using as few as nine pictures in each set. In other words, the
spectrum of occupations was fairly represented by the selection of pictures.
The smallest number of pictures that would guarentee this representativeness
was found to be nine which, although rot small from a paired-comparisons
viewpoint, was acceptable.

Importance of a Theory of Knowing to a Theory of Self

Tiedeman and O'Hara (1963) and Field (1962) have argued that the
basis for a person's choice may be deduced from a careful observation of the
choosing *process* itself. This seems plausible. However, much relies
upon the individual's ability or willingness to be explicit and coherent
during the choosing process and/or upon the observer's observational bias
and the extent to which his logico-semantic system is allowed to influence
the gathering or coding of response materials. At the same time, Super
and his colleagues at Columbia were arguing similarly but in more nomo-
thetic, state-property-type terms. Starishevsky and Matlin (1963) did
approach the problem in terms of "languages" and semantics and the

translatability from one language to another. Kehas (1962) similarly
approached the self *process* from a semantic viewpoint. Tiedeman and
O'Hara also argued in terms of differentiation and integration -- a sim-
ilar semantic-orienting approach.

Polanyi (1966) elegantly assesses the situation in terms of two
different aspects of knowing; tacit and specifiable knowing. And it is
in terms of Polanyi's model of the knowing process that projection can be
quite usefully discussed. It is impossible, Polanyi argues, for speci-
fiable knowing to exist without tacit knowing, although the reverse does
not hold true. Thus, tacit knowing is seen as vital to all knowing.

Tacit knowing is conceived of as being that kind of knowing which
is usually thought of as implicit, intuitive, assumed, axiomatic or habit-
level knowing. Thus, it would include any predisposition to perceive or
attend, to react or to respond to the universe in one way rather than
another. It would include such "automatic" controls and coordinations as
standing, walking, reading and writing, counting and speaking which, al-
though taken so much for granted by the normal adult, at one time required
a great deal of learning and practice to achieve mastery before they be-
came "tacitized". In addition to muscular coordinations and skill pat-
terns, cognitive processes may also result in and depend upon tacit
knowing.

In the course of our lives we acquire much knowledge of facts and
principles which underlies and influences our subsequent learning and
behavior. This too is tacit knowing when it acts as a basis *from* which
we attend *to* the universe. The "good" Catholic perceives, thinks and
behaves in certain ways in the sure, axiomatic, *tacit* knowledge of the
Trinity; the Fascist, equally certainly, "knows" of the inferiority of
any ethnic or intellectual group other than his own. Such tacit knowings
are rarely questioned at an explicit level by the knower but they exert
a strong and pervasive influence upon the ways in which individuals attend
and perceive, interpret, evaluate, and respond to situations.

The effects of tacit knowing upon cognitive processes is not re-
stricted only to ethnic and religious perception and thought. The chemist,
the physician, the artist and the soldier all behave in accordance with

previous learning and "facts" which they "know" to be true. How often is
the specialist in a given field confounded by a child's innocent question
"Why?". Facts and principles which he has taken for granted (has known
tacitly) for years, which have acted as a basis *from* which to attend *to*
more complex matters, may seem to need no explanation. They are truly
habit-level, sometimes almost visceral, tacit knowledge.

However, it is not the case that tacit knowledge need always remain
tacit. One can shift one's focus of attention from a choice or decision
to the bases upon which one made the choice or d :ision. It is possible
to examine the assumptions and axioms upon which a conclusion was based
or in light of which an opinion is expressed or a valuation offered. Perhaps
with a little more difficulty, it is possible to focus attention upon the
sensations and efforts involved in exercising a skill such as walking or
writing. But while doing so, it is not possible to retain in *focal aware-
ness* the choice, decision, opinion, valuation or the overall effect and
intent of a skilled exercise. This overall knowledge or the knowledge of
the integrated or completed complex phenomenon passes into peripheral
awareness while other matters occupy focal awareness. This knowledge of
one's performance or judgment acts as tacit knowledge *from* which to attend
to the details of the subsidiary acts, thoughts, purposes, or knowings
which made up or contributed to the total unit.

Thus knowings are multi-potential in the sense that they may be the
focus of attention (specifiable knowings) or they may be peripheral and
supportive of the focusing of attention (tacit knowings). They cannot, at
the same time, be both. Specifiable knowing cannot exist without some
basis of tacit knowing even though this might consist "only" of perceptual
knowings of color, shape, size, etc. Tacit knowings apparently can exist
without having previously been specifiable knowings. Polanyi points to
evidence in the form of discrimination without awareness or other manifes-
tations of subliminal perception as, for example, in certain types of con-
ditioning. Perceptual learning, in the form of size, distance, and
brightness constancies, and many other early-infancy discriminations and
learnings might also be quoted.

What is important here is the "from-to", dynamic character of
knowing which Polanyi describes, the reliance of specifiable, focal knowing

upon pre-existing, peripheral, tacit knowing. Whether that which occupies
the focus of attention be a landscape, a football game, or a selection of
cans on a supermarket shelf; a mathematical problem, a beautiful girl or
a number of possible alternative job openings, in all cases we attend *to*
the phenomena *from* a basis of accumulated tacit understandings of the uni-
verse and of ourselves.

Thus we find that the various approaches to the problem of self
concepts and occupational choice each have something in common with the
Polanyi view of the process of knowing. It can be said that when Super
and colleagues talk of translating self concepts into vocational self con-
cepts, the individual attends *to* the world of work and occupations *from*
the basis of his tacit knowings of self and the universe. Tiedeman and
colleagues place importance upon the processes of differentiation and in-
tegration in relation to self and career and, without any distortion of
either schema, these processes may be virtually equated with Polanyi's
specifying and tacitizing -- with almost identical relationships maintain-
ing. Field's view of self as process and Kehas' semantic approach to self
processes also are consistent with the from-to view of knowing. And, to
bring us back to the discussion of projection, it is clear that almost every
interpretation or application of projective technique implicitly accepts
the type of knowing processes Polanyi describes.

Tacit Knowing, Self Process and SCPT

We find, therefore, without much surprise, that similar implicit
or tacit understandings underlie the construction of the SCPT. One of the
assumptions which can now be made explicit goes something like this: an
individual attends *to* other people *from* a basis of tacit understandings
which includes knowings of people and knowings of self as a person, accu-
mulated through previous experience, direct and indirect. It is highly
unlikely that the kinds of concepts and dimensions which the individual
utilizes in differentiating people from environment, and one from another,
will be alien to his meaning system and/or have no meaning for him. On
the contrary, the dimensions and concepts which he uses are likely to be
those which have come to have significant meanings for him. In addition,
they are likely to be the same kinds of concepts and dimensions in terms

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of which he differentiates himself from others. Those which he utilizes
more frequently and in a wise variety of situations are more likely to be
those which figure importantly in his self concepts. However, since the
particular concepts/dimensions used in evaluating or differentiating
people are likely to vary as a function of specific context and purpose,
it would be unwise to commit one's self too strongly to the last hypothesis
above without first observing behavior in a variety of contexts and sit-
uations.

Working from such tacit understandings it seems most reasonable to
approach the study of self concepts, initially at least, through a study
of what the individual has to say about other people. In this way the
meaningful dimensions of the subject's self concepts might be identified
and self ratings on those dimensions become possible. This is why pictures
of people are used in the SCPT. Having created a contextual "set" we hope
to bring to light dimensions which are at least relevant to the subject's
occupational life and plans -- his occupationally-relevant self concepts,
and then have him make explicit his tacit understandings of himself in
relation to these dimension-concepts.

The SCPT: Phase I

Having decided upon our materials we can turn to their use. First
the subject is asked to look at a picture and describe the person he sees
in it, in terms of personality, temperament and character as *he sees* that
individual. He is not asked what occupation is depicted or what the in-
dividual is doing and the investigator attempts to offer no clues or leads
in this respect. The person, as a *person* is to be the focus of attention.
The subject's comments are recorded verbatim with no interpretation on the
part of the investigator and no editing or paraphrasing (beyond the omission
of "er's" and "uhm's") since this might change the subject's meaning. When
the subject is satisfied with his description he is shown another picture
and this procedure is repeated until all nine pictures have been described.
Then he is given the opportunity to add any additional comments about any
of the "personalities" he has created before the pictures are set aside and
analysis of the responses begins.

Thus far, nothing has been done which is very different from any
other projective procedure. Beyond focusing the subject's attention in a
given direction, little has been done to interfere with the order or
structure of his response. At this point we depart from usual practices.
Instead of taking over the responses at this point and categorizing,
evaluating and weighting them according to some pre-arranged schema we
leave such analysis to him. *His* logic and *his* semantics prevail during
the analysis. He is shown the method but beyond general instructions it
is left entirely to him to decide what goes where *as he understands and
uses his own terms*. He is, in effect, asked to content analyze his own
responses, looking for underlying and recurrent themes and concepts.

Whereas during the projective activities he attended to "people"
from his basis of tacit understandings, now he is asked to attend *to* his
previously tacit understandings -- to look at his responses and focus upon
the understandings and assumptions which gave rise to them. His under-
standings of the stimulus "people", which were previously specified or
explicit, may now act as tacit knowing from which he attends to the basis
upon which they were previously established. Who better to do this since
he alone knows, both tacitly and specifiably, how he *usually* uses the
terms and phrases, the qualifiers and the limits beyond which they are not
applicable as far as he is concerned? He knows best whether the differences,
semantically, between "self-centered" and "boastful", for example, are
great enough for him to treat these as two different concepts or small
enough to treat the terms as synonymous. Nobody but himself can really
"know" whether "outgoing" and "aggressive" fulfill essentially similar
semantic roles or functions in his meaning systems, irrespective of social
agreements (definitions) about the use of these words. No dictionary or
classification system in the world can evaluate or define these idiosyn-
cratic subtleties quite as well as he can.

In the process of analyzing his materials it is likely that he has
had to focus upon his semantic systems and his tacit understandings in a
fashion which is unfamiliar to him. He may have found that he had to dig
deeper than "first level" abstractions to decide whether terms and con-
cepts are really similar or different for him. Thus, this exercise may

in fact continue the projective procedure as well as accomplish the nec-
essary analysis. It may be necessary to organize this procedure into two
or three stages with some subjects, working with progressively more ab-
stract ideas until they are satisfied that they have done as much as they
can or wish to do in abstracting.[5] When the analysis is completed the
subject has identified, organized, abstracted and defined until a list
of "concepts/dimensions" is produced. This shows pairs of labels indicat-
ing positive and negative poles, or extremes for each concepts/dimensions,
as defined by the subject.[6] He is then questioned about his list in order
to establish whether he is satisfied with it as being representative of
the more important aspects of his repertoire of concepts/dimensions for
evaluating and differentiating people. If he feels that any dimension is
mainly a product of the pictures used, or for any reason is not represen-
tative, he may discard it. He may add dimensions which have not been
elicited but which he feels to be important to him. Finally, he is asked
to rank the dimensions roughly in order of importance for him -- whatever
his definition of "importance".

Since words and symbols constitute, in part at least, a set of
conventional signs or shorthand representations of concepts for the purpose
of communication, we might reasonably continue our "code-cracker" meta-
phor a little longer and, in doing so, take the advice of P.W. Bridgman,
the Nobel Prize-winning physicist, who remarked, "The meaning of a term
is to be found by observing what a man does with it, not by what he says
about it." So, as good code-crackers we wish to observe how our enig-
matic "alien" really used his code language. We have already collected
for ourselves a sample of this language and we have contrived to have him

5. In the detailed administration protocol (manual) each step of the
abstracting/analyzing procedure is included. For some subjects these will
not all apply since some individuals go directly to fairly high level ab-
stractions. In addition, it is sometimes found that the subject has become
too abstract for his own comfort and has to rework some of his analysis in
order to have his concept labels reflect "working concepts" rather than
higher level abstractions which resist or confuse practical operations.

6. This process is similar to Kelly's Role Repertory procedure for polar-
izing concepts. Whether the subject crystallizes out the "negative" or the
"positive" term of his concept first he is asked to try to label the other
term in order to have a workable "dimension" which can be applied later in
the procedure.

manipulate it and say things about it. We have had a little opportunity
to observe what he has to say about some equivalences or synonymous rela-
tionships. However, we would be much happier -- in fact, we would be
delighted, if we could get him to operate in a controlled situation where
we can actually watch what he does with some of these terms when faced
with what we hope are standardized stimulus situations. If we can see
how he *applies* them to the "real world," we have a much better chance of
understanding his system of dimension-concepts and we are much more likely
to notice differences between his usage of apparently familiar terms and
the "usual" (our own) usages.

The SCPT: Phase II

We can do this by getting him to apply the concepts to the people
in our pictures such as to "rank" them on each concept in turn. We may
then be able to get the subject to rank himself, indirectly, on the same
dimensions by comparing himself with each of the individuals. In other
words, if the subject values each of the nine pictures in relation to the
other eight, on N different dimensions, we will then have 9 N-dimensions
stimuli amongst which subjectively determined relationships have been
demonstrated. If we then get the subject to order the pictures in terms
of "similarity to self," or some aspects of self, we are in effect getting
an N-dimensional view of those aspects of self, because we now already
know the values of the pictures and the internal relationships in the set
for each dimension. Quantifying the relationships is then a matter of
statistics.

The method of paired-comparisons is one which allows such subtle
"rankings" to be performed very methodically. In terms of our stimuli,
picture #1 would be compared with picture #2 and a judgment made in terms
of one of the subject's dimension-concepts. He would indicate which
"person" was most "ambitious", say. Then picture #3 would be paired with
#1, then #4, and so on, until #1 and #9 were paired and judged. Then #2
with #3, with #4, etc., and #3 with #4...until, finally, #8 is paired with
#9. It is assumed that if the individual judges A better than B he will
also prefer A if the *positions* of A and B are reversed: B, A. Thus,
using nine pictures we will have thirty-six pairings only -- the remaining

36 combinations presumably being redundant. By stating thirty-six
judgments using one of his dimension-concepts the subject is, in effect,
showing what he means by that idea by *using it* as a basis for differen-
tiating Person A from B, from C, and so on. If he is asked to repeat this
exercise for each of his dimension-concepts, using the pictures paired in
exactly the same order each time, we then have a controlled situation in
which differences in preference or application patterns should reflect
differences between personal meanings or usages of the concepts and their
application to the people in the set of pictures.

The basic idea of joining the projective and the paired-comparisons
techniques is, in my experience, due to Liggett (1957). But the value of
this arrangement goes beyond the methodological novelty and convenience when
we look at it from the point of view of tacit knowing and self process.
By the time the subject has applied all of his dimensions to the pictures
systematically and is asked to apply certain concepts of self to them he
has built up fairly complex personalities for the individual depicted and
begins to respond to them as such. (It is surprising and intriguing to
actually watch this happening during an administration of the SCPT.) He
has evaluated and ranked them in relation to each other on N dimensions
which are important to him and which are dimensions in terms of which he
would also rate himself. When we then ask him to look at the picture-pairs
and decide "Which of these two individuals is most like you *as a person
at work, the kind of person you are in your everyday working life?*" He
attends *to* the stimuli *from* a basis of methodically established tacit
understandings and tacit awareness of the values of the stimuli, and also
his tacit understandings of himself. Since he has been entirely in con-
trol of the process of defining and assigning dimensions and values to
the stimuli, this is a unique and powerful extension of projective/Q-sort
procedure.

In his monograph on the paired-comparison method, H.A. David (1963)
points out that the method is best used when the objects to be compared
can be judged only subjectively and when perceived differences between ob-
jects are small or subtle and maximum freedom from extraneous influences
is desired.

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"The method of paired comparisons has some advantages (over ranking and rating methods)...when a fine judgment is needed. It should be remembered that *ranking is quick only when differences are fairly apparent....* Nor is it necessarily possible to achieve a wholly satisfactory ranking...(and).... *Rating is liable to be much less successful when differences are small and grades are hard to define.* The simplest form of paired comparisons reduces the area of possible disagreement between judges to a minimum."

(H.A. David, 1963, pp. 9-10, emphasis mine)

Thus, in the opinion of at least one specialist in the paired comparisons method and its statistics, it would appear to be better suited to the task in hand than ranking or rating procedures, being more sensitive to the subtle differences between applied dimension-concepts which we expect to meet. In addition we are able to take advantage of two very useful statistics which have been developed for use with this method.

Paired-Comparisons Statistics and Self Concepts

The two statistics mentioned above are Kendall's (1962) coefficients of Consistence and Agreement (David, 1963). The coefficient of consistence provides an index of the extent to which the respondent has been consistent in his application of a concept of dimension through a set of 6 comparison-judgments. The coefficient of agreement indicates the extent of agreement between any two, or more, sets of judgments about the same stimuli. These sets of judgments may represent single applications of separate concepts, or repeated applications of a single concept on different occasions.

This coefficient of agreement is powerful and useful. It will readily be appreciated that the degree of association, statistically speaking, between two or more of the subject's concepts and the statistical significance of this association, may be examined in this way.[7] In addition, using two or more applications of the same concept to the pictures at

7. It should be noted that *statistical* association or correlation, and significance does not, *ipso facto*, mean that there is a psychological association, or correlation, or significance involved. For the time being I am prepared to make this assumption, as will be noted and discussed later. However, the possibility that this assumption is invalid, and also the possibility of concept-scale interaction (of the type mentioned by Osgood and others in relation to the Semantic Differential) should be examined more closely.

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different times, it is possible to examine the stability of the concept,
or to check the reliability of the procedure. But much more important at
present is the fact that this statistic will allow the association between
applications of each of the subject's dimensions, on the one hand, and
his concepts of self, on the other, to be evaluated. Thus, he may be
asked to look at each pair of pictures and decide which of the people
pictured is most like himself as "a person-in-general," or as "a person-
at-work" -- emphasising that personality, character, etc., are the important
factors to consider, rather than appearance or settings. As a paired-
comparisons sorting, this is procedurally and statistically, no different
from any other and may therefore be used in computing a coefficient of
agreement.

If a given self concept sorting, (say for "self-as-a-person-in-
general") is matched with the sortings for the subject's dimensions and a
coefficient of agreement computed in each case, the result is a series of
numerical values representing the extent of association between concept
of "self-as-a-person-in-general" and the stimulus personalities as viewed
in terms of a specific dimension in each case. Then it is possible to
draw up a 'profile' of the concept "self-as-a-person-in-general" upon N
scales, representing the subject's N dimensions. The value of the co-
efficient of agreement fixes the point on each scale at which the sub-
ject's concept of "self-as-a-person-in-general" intersects the dimension-
concept in question. This could be done for any number of self concepts,
or, in fact for any number of concepts of any description. For instance,
the investigator might wish to have the subject demonstrate how he would
apply such concepts as "successful", "content-in-his-job" or "well devel-
oped sense of agency." Other concepts, such as ethnic, occupational or
personality stereotypes might also be handled in this way. Thus, the way
in which an individual uses concepts like "Mad Russian," "Latin Lover,"
"Absent-minded Professor" or "Neurotic Female" may be observed by sampling
his behavior in a paired-comparisons sort. Then, if sortings for per-
sonality, temperament and character-related dimensions have been obtained,
the coefficient of agreement will enable the extent of correlation between
the complex stereotype application and individual dimension-concept sort-
ings to be computed. A self concept may be considered as a complex multi-
dimensional concept like the stereotype.

Multiple Self Concepts

We have talked of Self Concepts and self concept *systems* without
dwelling at length on the question of the multiplicity of self concepts
and complexity in self-system. This is too big a topic to be dealt with
adequately here. However, it is relevant because our concept of "self"
and "self concepts" will influence the way in which we ask our subjects
to relate themselves to the pictures and how we interpret the results.
This writer's view of self process and self concept systems have been set
forth in detail elsewhere (O'Mahoney, 1968) and only a very brief state-
ment is appropriate here.

Impressions, conceptions or images of self are numerous and varied
in their complexity, level of abstraction, coherence, specificity, and
duration. This we know well from personal experience. I have found it
useful to think of self concepts as belonging to three general "types"
which I have called:

> Momentary Self Concepts (MSC);
> Policy Self Concepts (PSC); and
> Core Self Concepts (CSC).

These may be viewed as three different stages in an evolutionary-
type developmental process, the MSC's being the fragmentary, fleeting,
situation-specific, concrete knowings of self which may evolve to PSC's
through the recurrence of similar situations, feedback and recall, gener-
alization and integration, etc. Policy Self Concepts are more generalized
and abstracted, more enduring through time and more related to contexts
and roles than to the specific, momentary, concrete situation. PSC's are
much like role concepts and tend to guide the relating of self to situa-
tions within certain contexts -- like family, work, school, peer groups,
and so on. Thus, it might be proper to talk of "self-as-a-machinist,"
"self-as-a-tennis-player," and "self-as-taxpayer" as policy self concepts
in this schema.

Core Self Concepts are relatively old, ingrained, axiomatic and
deep rooted; very generalized, abstracted and nebulous, very enduring
through time and resistant to change. They are also likely to exercise
broadly shaping, molding influences upon self processes. They are very
likely to be associated with ascribed statuses of a relatively fixed

character such as sex, age, race and nationality. However, they may also
be the result of long-standing developments and evolution of policy self
concepts. For example, to the newly-wed male, the concept of "self-as-
husband" may be a young and unintegrated policy self concept, whereas to
the veteran of forty years of married life, "self-as-husband" is likely to
have achieved core self concept status.

     With this brief and overgeneralized summary as background, it is
possible to state that the SCPT is designed primarily to access some as-
pects of *policy* self concepts, although at the same time core self concepts
may be tapped too. The point to be made is that the writer does not see
policy or core self concepts as being independent and mutually exclusive.
Characteristics of one PSC at a given time may be shared with others or
several PSC's may be related to some aspects of a single core self concept
such as "self-as-Male." We should not be surprised to find that some
dimension-concepts are important to two or more PSC's, while others seem
to be more specifically related to individual PSC's. It has already been
noted that one of the assumptions under ving the SCPT is that the dimen-
sions a person uses when differentiat' g people, one from another and from
self, are psycho-semantically significant dimensions for that individual.
If this is the case, (and it remains to be proved) then these dimensions
are also likely to figure rather prominently in complex self concepts.

     Let us suppose that, in the ideal case, the list of dimension-
concepts resulting from the 'dimensioning' phase of the SCPT contains all
of the psycho-semantically significant dimensions of a person's self con-
cept system. Thus, when he comes to respond to the pictures in terms of
the self concept "self-as-a-person-at-work," some, if not all, of the
dimensions on his list will be involved in the complex self concept. Since
he will by that time have applied each of his listed dimensions to the
pictures, he has in effect created a multi-dimensional personality for
each of the people in the pictures. Of course, he has not been asked to
do so at a specifiable level, but he now has accumulated tacit knowings
of er h personality (as compared with every other personality) on his N
dimensions. Hence, when the person compares his self knowings (both tacit
and explicit) with his knowings (both tacit and specifiable) of the pairs
of picture-characters in order to decide which of them is most like self

as person at work, he is demonstrating the extent to which his self-at-work concept and his picture-character concepts agree. This, then, is another of the assumptions underlying the SCPT.

If our subject's job happens to be auto mechanic, we do not know how many of his self dimensions are actually involved in his concept of "self-as-auto-mechanic." But since he probably has to assess the picture characters in terms of his understandings about being an auto mechanic and people he knows who are auto mechanics, and since to do this he will probably also take into account his carefully accumulated tacit and speci-fiable knowings of these picture characters, then it is reasonable to suppose that we obtain some indication of the extent to which each dimension is involved in the complex self concept by comparing the subject's sort-ings for each dimension with his sorting for "self-as-auto-mechanic." Thus, if we find some measure of agreement between the subject's sortings on his dimensions "Practical Intelligence," "Meticulous" and "Friendly," among others, and the sorting for "self-as-auto-mechanic" then we will feel that those dimensions are to some extent important in the subject's concept of himself as a person at work.

By using the paired-comparisons method, it is possible to obtain just such a measure of agreement between sortings. The coefficient of agreement statistic provides a single numerical index of the extent of agreement between any two sets of sorting responses. In addition, the statistical significance of the coefficient may be tested, thus enabling us to decide to what extent the amount of agreement found might be expected if we assumed chance or randomness of response to have been responsible for the particular sets of sorting responses being compared. We may, thus, formulate a tentative operational definition: whenever a coefficient of agreement between the self concept sorting and a dimension-concept sorting achieves statistical significance at or beyond the $p = 0.05$ level, this will be taken to indicate that the dimension-concept in question is an important variable in the particular self concept. This means that, even though the listed dimensions are all supposed to be important in the in-dividual's self concept system, the paired-comparisons method and the coefficient of agreement statistic will make it possible to determine

whether or not the dimensions are equally important variables in different
specific self concepts.

We return, then, to the topic of multiple, multi-dimensional self
concepts in the self concept system. We have already sain that it is more
likely that people will have multiple self concepts, in relation to the
multiple roles and contexts in which they function, than that they will
have but a single self concept for all occasions, roles and contexts. With
regard to the dimensions of each of these multiple self knowings, there
is no good reason to suppose that each self concept is mutually exclusive
of the others. Just as many kinds of cakes and pastries may be baked with
a few basic ingredients and additional, specific ingredients and processes
to achieve different special kinds of cakes, so it is possible for many
self knowings to involve certain similar dimensions as well as some which
are unique to each self concept.

It was said earlier that if some measure of agreement between a
self concept sort and a dimension sort was found, this would be taken to
indicate that that dimension was to some extent important to the self
concept. Later this was modified in the operational definition by saying
that a coefficient of agreement which was statistically significant at
or beyond the p = 0.05 level would be accepted as an index of an "important"
(psycho-semantically significant) dimension for that self concept. The
point to be made here is that the criterion of *statistical* significance is
a somewhat arbitrary one from the psycho-semantic point of view. It is
possible that a dimension which is very important in self-system may be
involved in a given self concept to only a small extent but have an impor-
tant effect upon the overall tone or character of that self concept. In
terms of our baking analogy, only a very small amount of some special in-
gredient, such as vanilla essence, can make a great deal of difference to
the flavour of the cake. But, to begin with, we need some criterion for
the operational definition.

Occupations as Contexts for Being-Becoming

If we think of self as continual process, on-going in a variety of
contexts, it is much easier to avoid the common tendency to think of "*the
vocational self*" as an independent and mutually exclusive development. The

world of work in general, and a person's occupation and job in particular, are then seen as merely specific contexts for Being-Becoming. The point to be made is that it may be possible to differentiate quite clearly and sharply between different contexts in terms of time, geographic locations and environments, procedures, and so on, but the organism which moves from context to context cannot be so sharply differentiated. Although a person's "work context" may be kept entirely separate (in time and location, etc.) from the "play contexts," it is not so easy to separate the work-self from the play-self for there is continuity and continual procession in Being and Becoming. The "boundaries" of self concepts are not fixed and immutable, and the boundary conditions may be closed in many different ways depending upon contexts and higher order principles such as purpose.

For this reason, speaking of *the* vocational self, as if each individual develops a single concept of self in relation to the work-world context and as if, once developed, this concept persists in essentially the same form, seems to subtly but definitely deny the multi-potentiality, multiplicity and flexibility of self knowings and the continual on-going character of self process. No matter how any of my comments might be interpreted, I do not believe that it is appropriate to think in terms of a "vocational" (occupational) self concept which is independent or mutually exclusive of other kinds of self concept. The Jekyll and Hyde implications of such a concept do not fit too well with the integrated, continually on-going, process view of self.

Elsewhere (O'Mahoney, 1968), I have argued that occupationally relevant self concepts are somewhat resultant in nature, that is, they derive from and develop within a framework established by prior tacit knowings of self. Thus, aspects of several different kinds of self concepts may come to have occupational relevance -- such as "self-as-male," "self-as-*my-father's*-son," "self-as-a-person-who-enjoys-nature-and-the-outdoors," and so on.

As with the development of any policy self concept, that which emerges as a guide for relating self to the world of work, in the specific context of a given occupation, will be the result of differentiations and integrations amongst self knowings and knowings of the world. During this

process, the emerging PSC will be shaped by pre-existing PSC's and core
self concepts (CSC's) and by habits of experiencing, valuing, and inter-
preting (Experiencing Style). Thus, in many ways, an occupational PSC is
likely to be a derivative of prior self process as well as the specifics
of experience and contact with the work-world at the time when the indi-
vidual is "choosing" an occupation. For this reason, the choice of occu-
pation is better thought of as a time-extended *process* in which many prior
decisions, choices, preferences, and time-effort investments contribute
to the character and form of the final commitment which is usually referred
to as choosing or choice.

        If a young male has some fairly clear-cut impressions of certain
jobs or occupations as being "feminine" and discounts them as valid alter-
natives for him on the basis of his concept of "self-as-male," then it
can be said that "self-as-male" is a self concept which has occupational or
vocational relevance for him. In a similar way, if his Ideal Self concept
includes being like his father in certain ways which influence his relating
of self to the world of work, then "self-as-my-father's-son" or 'ideal-
self" may be said to have some occupational relevance.

        The world of work is simply another context in which Being-Becoming,
or self process, takes place. Also, it should be clear that "the world
of work" is really a particular way of looking at the world in general.
As individuals, in our non-work activities, many of us engage in activities
for which other people, somewhere, are paid a regular salary. What is
"work" and what "work" means differs from individual to individual. The
individual's concept of the universe and his experiencing style as well
as his self concepts systems play a large part in determining his concept
of "work" and his ways of relating self to the "work" world. In this sense,
too, occupational self concepts are derivative or resultant.

        In one other sense, an occupational self concept may be derivative.
The ways in which an individual relates himself to the world of work may
be significantly influenced by his economic, familial, politico-religious
commitments and aspirations. His "life style," or desired life style, may
exert influences upon his relating of self to work-world such that other-
wise desirable or valid alternatives have to be denied or foregone.

Primary and Secondary Occupational Self Concepts

Thus far, terms like "vocational", "occupational" and "work-world"
have been used rather loosely and this makes for some confusion in talking
about self process in the context of work. I will attempt to clarify some
of my term-referent associations.

To begin with, I find it useful to think of a person's concept of
the world of work as being a sub-set of his universe concept. As such it
can be considered simply as a special case when we talk of the process of
relating self to universe in the context "work". Thus, the influence of
experiencing style upon the perceiving of and relating to the work-world
may be considered as being essentially similar to the general case as des-
cribed by O'Mahoney (1968). Thus, the individual's concepts, impressions,
and beliefs about particular occupations are part of his universe concept,
and his habits of perceiving, attending, interpreting, ingoring and eval-
uating (his experiencing style) have influence upon the initial emergence
of these concepts and upon the ways in which they are brought into relation
with self knowings at that time and subsequently. At the same time, self
concepts have an influence upon experiencing style and upon feedback into
universe concept and emergent self concepts. Thus, we are dealing with a
process comprising mutually interdependent sub-systems.

Consequently, facts and data about the world are operated upon by
experiencing style which in turn is responsive to self knowings which, in
their turn, are developed in relation to prior and current understandings
of self in relation to the universe. With so many complex and subtle feed-
back, feedforward and filtering mechanisms and process operating in the
system, it is patently inadequate to conceive of a single "occupational"
or "vocational" self concept as an independent development in the normal
course of events.

Nevertheless, there is good reason for our thinking in terms of
the individual having a concept of himself as a person at work in his own
job or occupation. For this reason, I find it useful to talk in terms of
the individual's "current, primary, occupational self concept" as distinct
from his concept of "self-in-relation-to-the-work-world-in-general."
"Current" implies that change is possible and "primary" is intended to

imp) that it is possible for secondary occupational self concepts to exist.
These would comprise all the more or less well developed knowings of self
in relation to other occupations than the current one. It is possible for
the overall affective tone -- the feeling tone of any self concept to be
either positive or negative. Thus primary or secondary occupational self
concepts may be either negative or positive in their feeling tone.

It is usually expected that, when an individual "chooses" an occu-
pation he will do so in such a way that the general, overall feeling tone,
(the sense of rightness or fit between self knowings and world-of-work
knowings) will be positive. In other words, it is not usually expected
that an individual will choose a job which he feels is wrong for him or
which he expects to dislike -- unless he has a specific reason for doing
so. Thus, we tend to expect that the "sense of fit" existing when self
knowings are brought into relation with knowings of chosen occupation will
be positive and stronger than when other occupations are considered. We
then continue to expect that the policy self concept which emerges in
relation to that chosen occupation will be positive in its overall feeling
tone. Thus, current primary occupational self concept is usually expected
to be strongly positive in character while it is accepted that secondary
occupational self concepts (concepts of self in relation to non-chosen
occupations) may be of either positive or negative, strong or weak feeling
tone. Generally speaking negative feeling tone in relation to non-chosen
occupations is supportive of the primary occupational self concept in
much the way that dissonance reduction supports a choice or decision. On
the other hand, positive affect associated with secondary occupational
self concepts may effectively weaken or conflict with primary occupational
self concept.

This conflict between the positive affect of secondary and primary
occupational self concept is likely to be greatest when the strength of
the feeling tone is approximately equal and when the occupations are dif-
ferent enough to be mutually exclusive in some or all aspects. When the
respective occupations are similar in many aspects there is usually much
more possibility that the individual can eventually achieve a compromise
which includes some aspects of both occupations — at least in a mobile
social system.

In addition to these specifically occupational self concepts, it seems worthwhile to talk of "occupationally relevant" self concepts. These are the non-occupation-specific knowings of self which nevertheless influence the relating of self to occupations and to the work world generally. Amongst these may be "self-as-male/female", "self-as-intelligent", "self-as-inventive", "self-as-sociable" or any other self concept imaginable. The point is that trying to predict which self concepts, or which aspects of some self concepts, will come to have occupational relevance is a frustrating pastime in the absence of specific instances -- i.e., specific individuals or self processes.

So far we have talked about concepts of "work" and the "world of work", about self in relation to the world of work in general and specific occupations, and about concepts of self which have occupational relevance as they might influence any of the above (either directly or by way of experiencing style). These aspects of occupation-choosing and relating self to work are the everyday grist for the vocational/educational counselor's mill. It may have been noticeable that I have deliberately avoided mention of "realism" and "vocation" as far as possible. I would like to tackle those topics now.

Realism in Relation to Universe Concepts and Self Concepts

Usually, when talking self process I tend to consider whatever the individual believes, feels or knows to be true or real, as being "reality" for him at that time. This is true no matter what he may think or feel later. In casual terms, the subjective reality which he responds to at any given time is the important consideration. The "objectivity" or "realism" of this subjective reality is a secondary question.

Thus, a counselor or teacher, parent or employer may be exasperated or depressed by an individual's insistence that a given job is "right for him. In effect the individual is expressing his sense of the fitness which he gets when he brings *his* knowings of self into relation with *his* knowings of the universe in the context "work" or "occupation" or "job". The exasperation (or depression) on the part of others apparently reflects a divergence between what the individual believes and feels to be 'real' and what the 'others' believe and feel to be real as far as the universe and the individual are concerned.

There are several ways in which such discrepancies may be reduced. The individual may be persuaded to change his concept of the universe (work-world) and/or his style of experiencing, interpreting and evaluating it in relation to self and/or his concepts of self and/or his style of making decisions. The counselor, educator, employer and the parent are in some-what different positions with regard to their potential influence over each of these processes. However, it is probably as bad for them to blindly apply *their* unquestioned beliefs about reality as it is for the individual whose "realism" they are trying to change (or "improve").

The general point, however, is that understanding of the processes, the very subtle and complex self-sub-processes, which underlie and support an occupation or job choice may vastly improve the effectiveness of coun-seling, teaching, parent-advice or guidance or hiring and utilization of skills and ability. If it is possible to trace the lack of agreement about reality to universe concept, experiencing style, self concept or decision-making processes, it should be possible to decide on rational grounds whether information about the world, work visits, experience, remedial ed-ucation, decision-making instruction, simulation, self evaluation and objective testing, or even therapy, are most appropriate means. It should also provide an opportunity for the adviser/counselor to reevaluate his own view of reality in terms of its relevance to this specific case.

The counselee's response to and acceptance of the attempts to change his "reality" may depend greatly upon the particular mode and ap-proach taken. In general it would seem that the easiest approach would be by way of information (or, more precisely, facts and data). If the facts and data are relatively neutral vis-a-vis the self knowing and ex-periencing style, purposes and goals of the individual, it is probable that slight but cumulative changes in universe concept may be achieved which will eventually have effects upon self concepts, decisioning and experiencing style. However, many facts and data pertain to phenomena and areas of the universe concept which are value-laden and are closely inter-related with experiencing style and self system. Examples of such may be found associated with ethnic, religious and ideological beliefs and meaning systems where self concepts and universe concepts may be so closely . inter-related and experiencing style have become so adapted to defending

the other systems from contradiction and invalidation that the simple pre-
sentation of facts and data about the world will have little impact of a
positive character. In such cases the processes of contact, experience,
feedback, and so on (propaganda, brainwashing, indoctrination, therapy)
may be much more effective since they tend to bring about changes in ex-
.periencing style and universe concept by affective and associative rather
than verbalized logical and rational means. As the educational world is
finally coming to *accept*, there are more ways than one of presenting facts
and data to an individual. The emphasis upon individualized learning
tacitly recognizes the idiosyncratic character of the universe concepts
and experiencing styles of the learners and the need to present facts,
data and experiential opportunity in ways which will be allowed through
the filters of experiencing styles.

Thus, in considering the realism or otherwise of an occupational
choice or preference, or a primary or secondary occupational self concept,
or an occupationally-relevant self concept more than a consensus of opinion
about reality needs to be taken into account. This is even more true if
the intent is to change one of these features of self-universe relation-
ships.

The "Sense of Fit" among Multiple Work-Relevant Self Concepts

In distinguishing concepts of work, occupations, jobs, from con-
cepts of self in relation to these contexts, and in distinguishing between
occupational self concepts and occupationally-relevant self concepts I
talked in terms of the feeling tone of the relationship between self
knowings and sub-sets of universe knowings. The term, "sense of fit" or
"rightness" was used. If the "fit" was not good or did not "feel" right
the feeling tone would be negative, a good fit would have a positive feel-
ing tone about it. The worse or better the fit the stronger the negative
or positive feeling tone. Thus, we can talk of an individual having a
strong, positive sense of fitness when his self knowings are brought into
relation with his knowings of an occupation and he feels that there is no
contradiction or discrepancy when he imagines himself Being-Becoming in
that context.

At this point I find it useful to use the term "vocation" since it
is now possible to use it in a fairly specific fashion and to distinguish

it clearly from occupation. All too frequently, in the literature of coun-
seling and guidance, "occupational" and "vocational" are used interchang-
ably. Thus, "vocation" will be used here to refer to: "the sense of
fitness existing when knowings of self are brought into relation with know-
ings of the universe in a context of occupations and work." In this way
we may talk of strong positive vocation or of mild negative vocation in
relation to a given field of work, occupation, or job.

In this sense, then, a person may have, experience, or develop vo-
cation in relation to many specific defined occupations or positions in the
work-world. In each case we may find Polanyi's model of knowing to be ex-
emplified in that the person's particular specifiable knowing of "self in
relation to (a specific occupation)" is likely to be based upon many and
various tacit understandings of self and universe and of relationships and
consequences. Even though he is not focally aware of these knowings in-
fluencing his reactions, nevertheless, they contribute to the feeling and
the focal awareness he has of self in relation to this aspect of the work-
world. This is not to say that he is unable to bring these peripheral,
tacit knowings into focal, specifiable awareness. In many cases he can do
so, after having made a choice or stated a preference or opinion. But at
the time of prefering, choosing and opinioning these are usually not in
focal awareness. By shifting his attention from the specifiable (the stat-
ing of a feeling or preference) to the previously tacit in order to examine
the bases for his response, he will often succeed in tracing some of these
influences -- bring them into specifiable, focal awareness.

Thus, if a young man is asked to consider nursing as an occupation
alternative for himself and rejects it as an inappropriate alternative (i.e.,
he has a strong negative vocation in this direction), many different as-
pects of universe concept and self concepts may be functioning as tacit
bases for his response. Let us suppose that he understands the occupation
to be an exclusively female one. He has nothing against females, but to
consider himself in the role of nurse creates a conflict with his strongly
developed concept "self-as-male." In addition, he conceives of nursing as
requiring the nurse to come in close contact with wounds, blood, and ex-
crement and to be aware of pain and suffering in others. Perhaps knowings
of self as being made very uncomfortable by the pain and suffering of others

and perhaps also as being repulsed by putrefaction, blood, and excrement,
all contribute to a strong sense of contradiction and revulsion. The over-
all feeling tone of this bringing of self knowings and universe knowings '
into relation is a quick and decidedly strong negative reaction. This is
not to say that he despises or relates negatively to the occupation in gen-
eral terms (though he may) but rather that he does not feel that it is an
appropriate alternative for *him*. This will be true whether or not his con-
cept of nursing is realistic in the view of others. The strength and value
of vocation in relation to nursing may be modified by information or ex-
perience but it may never get to be strong, positive vocation. On the other
hand, his vocation in relation to "Boy Scout Leader" or "Probation Officer"
or any other helpful, supportive role which he sees as "masculine", "clean"
and "enjoyable" may be strong and positive. If he sees such roles as
being closely related to nursing the story may be different; they may not
be viewed as "masculine", for instance.

Thus, we can see implicit in this example the potential complexity
of the interplay between occupationally-relevant (self as male, for example)
and secondary and primary occupational self concepts. It is possible that
some occupationally-relevant self concepts will, for many individuals, have
a broadly orienting influence in relation to the world of work as conceived
by those individuals. Broad categorizations such as male-female work, rou-
tine-creative work, menial-responsible work, etc., may be related to ex-
periencing style and apparently non-occupationally oriented self concepts.
The problems of the counselor, guidance worker, rehabilitation worker or
anyone who deals with individuals experiencing difficulties in choosing,
finding, or keeping a job, are those associated with analyzing the problem
in terms of what the individual assumes, feels, believes, or knows himself
and the universe to be like and his styles of experiencing and choosing or
deciding. If the counselor/therapist is able to analyze the problem in
these terms and pinpoint discrepancies within this system or between this
system and the external consensus of opinions about reality then he is in
a powerful position to effect change or compromise. To do this, an in-
strument which would provide an index of the value (positive or negative)
and the strength of vocation in relation to given occupations would be a
powerful tool. The Self Concepts Profiling Technique can do this.

The SCPT as an Instrument for Evaluating Vocation

It was earlier mentioned that the coefficient of agreement statistic
for paired-comparisons was powerful. Besides allowing an index of assoc-
iation between a given dimension sorting and a self concept sorting, it may
equally be applied to two, or more, self concept sorts.

In the context of vocation, it may be used to give an indication of
the extent of agreement between self concept sorts and occupation concept
sorts. In fact, this was one of the analyses performed with the data from
the pilot studies using the SCPT. Thus, "self-as-a-person-in-general" and
"Ideal Self" sortings were compared with "Role Ideal for my own Job" and
"self-as-a-person-at-work" and "ideal-job-for-me" sortings. In addition,
with a little more statistical complexity, a single coefficient for the
overall agreement between the five sortings was obtain   his way, the
overall or generalized vocation, as well as vocatior   i to spec-
ific occupations concepts and occupational self conce   measured.

The coefficient of agreement may take eithe: e or negative
sign value, indicate close agreement (or fit), or disa   t (divergence).
In addition, the numerical value of the coefficient inc   the strength
of the association in either direction. The cut-off   statistical
significance at $p = 0.05$ and $p = 0.01$ may be used as   nts for as-
signing ratings such as "strong", "mild" and "weak" or   ole".

This facility may eventually prove to have valu   unselors and
guidance personnel despite the present length of the SCP   those in-
dividuals who are dissatisfied or maladjusted in the   jobs it is
possible to find pointers, sometimes very clear indic   to where the
difficulties lay within the matrix of related self-oc   concepts.
Sometimes the dimensionality of the concepts, the fee   e and the
"realism" of them may be the problem. In other cases   ing to know
the realities of the job by Being-Becoming in that   incumbent
has had to change his pre-job beliefs or knowings of   oth self
and job to such an extent that he now has developed   ocation in
relation to his job.

In the case of an individual who has not yet   he world of
work and is having extreme difficulty in selecting ar   ly attractive
(strong vocation) alternatives, or in crystallising an,   natives, the

significanre at p = 0.05 and p = 0.01 may be used as cut-off points for
assigning ratings such as "strong", "mild" and "weak" or "negligible".

This facility may eventually prove to have value to counselors and
guidance personnel despite the present length of the SCPT. For those
individuals who are dissatisfied or maladjusted in their current jobs
it is possible to find pointers, sometimes very clear indications, to
where the difficulties lay within the matrix of related self-occupations
concepts. Sometimes the dimensionality of the concepts, the feeling tone
and the "realism" of them may be the problem. In other cases, in getting
to know the realities of the job by Being-Becoming in that context, the
incumbent has had to change his pre-job beliefs or knowings of either or
both self and job to such an extent that he now has developed a negative
vocation in relation to his job.

In the case of an individual who has not yet entered the world of
work and is having extreme difficulty in selecting among equally attractive
(strong vocation) alternatives, or in crystallizing any alternatives, the
SCPT may be useful too. In the first case, the approach-approach conflict,
sortings for the alternative occupations may be conducted and profiles
drawn and compared both with each other and with Ideal Self and General
Self, etc. This can be done in terms of the dimensionality of the con-
cepts: are they equally attractive on identical dimensions or is the
vocation centered on differing dimensions in different concepts? On the
other hand, the coefficients of agreement between self concepts and oc-
cupations concepts may indicate whether the strength and value of vocation
is accounted for by agreements with Ideal Self in some cases, and Self in
General in other cases. Finally, the profiles for the various self and
occupations concepts may provide clues upon which the counselor may decide
whether re-education of occupational information, or re-evaluation of self
and therapy are called for.

More sophisticated statistical techniques, such as factor analysis or
canonical correlations, may be feasible and increase the utility of the
SCPT data. For the time being the interpretive and diagnostic promises of
the procedure look encouraging and its heuristic values for the individual
should not be overlooked.

RELIABILITY AND VALIDITY OF THE PROCEDURE

The following remarks concerning reliability and validity should be
treated as tentative only. The pilot studies, using the prototype pro-
cedure, were not specifically designed to test these important aspects of
the instrument. However, some encouraging indications came to light as the
procedure proved to be viable. These are described here since some attention
should be paid to such characteristics of an instrument, however meagre the
evidence. More methodical and specific investigations of validity and
reliability are being planned and should be implemented during the fall of
1969.

Reliability

If the theory upon which the procedure is based bears no correspondence
to actual behavior then the procedure should:
  a) prove to be unreliable, or
  b) be reliable, but yield dimensions which relate to other, apparently
     related dimensions, in ways which are little different from what
     might be expected by chance..

In the unreliability case, (a) we would expect to find that the dimensions
elicited by the procedure would not be acceptable to the subject as repre-
sentative of the dimensions of his self concepts any more frequently than
could be expected if we assume nothing more than chance causes. Thus, we
would expect his responses in the paired-comparisons part of the procedure
to be essentially random in character if the dimensions used have no partic-
ular significance for him. This fact would be reflected in the coefficients
of agreement for the sets of 36 pair-wise comparisions. The individual
should be as frequently inconsistent as he is consistent. Thus, one form
of reliability is the consistent application of a concept among many oppor-
tunities for the expression of that concept. Another point, of course, is
that the subject could reject dimensions on the list before going on to the
paired-comparisons procedure. The evidence relating to reliability of this
type is supportive and is discussed more fully in the following discussion
of validity.

A second type of reliability would be reflected in the ability of the
procedure to produce similar results on two or more administrations. Of

course, the questions of learning and recall have to be considered in
testing this type of instrument reliability. In this case, it is argued
that the paired-comparisons phase is complex and indirect enough (in rela-
tion to the self concept profiles) for these problems to be minimized.
In the studies conducted with the prototype procedure, the projective phase
was conducted only once, during the first administration. The dimensions
elicited were then used for both administrations.

Test-retest reliability was checked by calculating the coefficient
of agreement between first and second response matrices for a given concept.
This was not done for every dimension but only for the self concepts
response matrices. Thus, "Self-in-General" (test) was matched with "Self-
in-General" (retest) and the coefficient of agreement computed, and simi-
larly for each of the other self concepts.

As Table 1 shows, the reliability for the group rated "high" on
vocation is generally higher, and more consistently so, than for the 'Average'
and 'Low' groups. Also, the 'Average' group coefficients are generally
higher and the values less viable within the group than the 'Low' vocation
group. Nevertheless, only 7 of the 74 available data failed to achieve
significance at or beyond the p = 0.05 level. Thus, 90.5% were so signi-
ficant and 82.4% were even significant beyond the p = 0.01 level.

It is stressed that these are only indications. The pilot studies
were designed mainly to see if the procedure would work as a procedure
and were not set up as stringent reliability tests. Such tests are
currently being planned, particularly to check the reliability of the pro-
jective phase of the procedure.

Validity

In discussing the validity of test procedures, Thorndike and Hagen (1961)
liken the testing of content validity to the careful checking of the in-
strument or artifact against the blueprint with reference to which it was
constructed. In this instance the analogy is an appropriate one since a
blueprint was established in the form of a rationale derived from theory
and care was taken to ensure that the administration protocol of the pro-
cedure followed the rationale closely.

As far as logic and inspection will allow, the instrument appears
to adequately and truly reflect and embody the constructs and theory upon

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TABLE 1

RELIABILITY AS INDICATED BY COEFFICIENTS OF AGREEMENT
BETWEEN SELF CONCEPTS FROM TEST TO RETEST

SUBJECTS	SELF IN GENERAL	SELF AT WORK	IDEAL S.C.	IDEAL JOB	IDEAL FOR OWN JOB	GROUPS AS RATED RE: VOCATION
1b	0.78	0.89	0.89	0.84	0.84	
2b	0.84	0.89	0.73	0.95	0.95	
3	0.73	0.84	0.61	0.89	0.89	HIGH
4b	0.84	0.84	0.89	0.89	0.89	
5	0.89	0.73	0.89	0.73	0.67	
6a	—	—	—	—	—	
8b	0.73	0.73	0.78	0.67	0.67	
7	0.73	0.89	0.78	0.95	0.95	
10	0.89	0.84	0.84	0.89	0.84	AVERAGE
9 :::	0.84	0.33**	0.73	0.89	0.50*	
11 :::	0.89	0.73	1.00	0.73	0.78	
12 :::	0.61	0.39**	0.45*	0.69	0.39**	
16 :::	0.84	0.55*	0.73	0.78	0.50*	
13 :	0.39**	0.67	0.61	0.45*	—	
14b :	0.89	0.11**	0.51*	0.17**	0.17**	LOW
15	0.78	0.78	0.78	0.73	0.73	

a No retest data available for this subject.

b Case in which subject named own job as 'Ideal Job', thus 'Ideal for own Job' matrix is same as 'Ideal Job' matrix.

* Significant at 0.05 level.

** Not significant at 0.05 level. All others significant at or beyond 0.01 level.

: Subject has three part-time jobs in addition to full-time job.

:: Subject recently attempted to change occupational field, and failed.

::: Subject in process of changing jobs and settling in. Same occupational field.

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which it is based. It also appears to do what it is intended to do: to
elicit into specifiability the important psycho-semantic dimensions of a
selected group of potentially occupationally-relevant self concepts, to
utilize these dimensions in such a way that their applicability (or their
meanings in terms cf usage) are demonstrable in relation to the stimuli,
and, finally to obtain comparable data by demonstration concerning the self
concepts themselves such that the relationships between self concepts and
dimension concepts may be demonstrated and examined in statiatical and
graphic-profile form.

Built into the procedure, at the point where the subject is asked to
modify or accept the list of dimensions, is a test of face validity, or
"credibility". Since 14 of the 16 subjects accepted the dimension lists
without changes (approximately 240 dimensions were involved) and the re-
maining two subjects eliminated only one dimension each, as being not
sufficiently important to retain on the list, there is evidence to support
the claim that the projective dimensioning phase of the procedure has face
validity. This is strengthened by the fact that only one subject (on one
dimension, on one test administration) was unable to apply a dimension
consistently enough over 36 comparisons to satisfy the basic minimum cri-
terion for consistency -- a coefficient of consistence having a value of at
least 0.52 (p = 0.05). Thus, in only one, of almost five hundred instances,
did an individual show less than demonstrable consistence applying a di-
mension elicited by the first part of the procedure. In fact, the working
criterion applied was much more stringent. A coefficient of consistence
of 0.65 is significant at the p = 0.01 level, but for practical purposes
this was still too inconsistent.[8] An arbitrary, minimum workable value
for the coefficient was set at 0.83. If a subject failed to achieve this
degree of consistency he was asked to repeat the sorting. Even with this
much more stringent criterion less than 10 sortings had to be repeated in
addition to the exceptional case already mentioned. Although one or two
individuals were characteristically less consistent than the rest, the
greatest majority of sorings yielded coefficients of 0.91 or more and

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8. See O'Mahoney 1968, pages 551-559, for a more complete explanation
    of this point.

most subjects were perfectly consistent throu,hout. Thus, it would appear
that the dimensions elicited and listed by the first part of the procedure
are certainly meaningful to the individuals to the extent that they can
apply them consistently through 36 judgments of complex, paired-stimuli.

Additional "credibility" evidence was found in the subject's responses
to the profiles of the self concepts. Almost without exception the sub-
jects accepted the profiles and the investigator's attempted interpreta-
tions of them, as being quite close approximations to their own ways of
"seeing" or feeling about themselves, although none had ever attempted to
specify their understandings in quite such a systematic and explicit
fashion. Most of the exceptions consisted of the subject's feeling that
he had a better understanding and interpretation of the profile relation-
ships than the investigator. On only two occasions did inquirers challenge
the relationships shown in the profiles. The profiles were overwhelmingly
accepted as "feeling right" -- (in the words of two subjects, both psy-
chologists). Beyond these encouraging indications, the only systematically
gathered data relating to validity is to be found in the attempt to test
the hypothesis that vocation is related to the intercorrelations among
occupationally-relevant self concepts. Despite the small size of the
sample and the fact that it was not selected solely and specifically for
the purpose of a validity study, the results are strongly supportive of
the hypothesis (see table 2). Since an alternative criterion[9] was used,
the evidence may be considered as contributing to the establishing of the
procedure's validity -- if only in small measure. Methodical validity
and reliability tests are currently being planned.

FROM PROTOTYPE TO GENERAL PROCEDURE

Different Policy Self Concepts and SCPT Variations

The prototype SCPT described here is occupation-specific in one
sense. The stimulus materials used were chosen expressly for their oc-
cupational connotations with the intention of increasing the probability

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9. Three independent judges rated the subjects in terms of vocation, working
   with a careful description and definition of the concept and a list
   of probable observable correlates.

TABLE 2

COEFFICIENTS OF AGREEMENT FOR SELF CONCEPTS
TAKEN FIVE AT A TIME.
ANALYZED BY RATINGS OF VOCATION
AS HIGH, AVERAGE AND LOW

SUBJECT	PENTAD COEFFICIENT	GROUP MEAN	STAND. DEV.	VOCATION RATED	OBSERVED	
1	.81			H	H	HIGH GROUP
2	.89	.77	.11	H	V-H	
3	.72			H	H	
4	.89			H	V-H	
5	.72			H	H	
6	.60			H(M)	M(H)	
8	.48			M	M	
7	.50			M(L)	M	AVERAGE GROUP
10	.52	.48	.07	M(L)	M	
9	.44			M-L	M	
11	.38			M-L	M-L	
12	.45			(M)L	M	
16	.63			(M)L	M(H)	
13	.24			L-M	L	
14	.21	.17	.09	L	L	LOW GROUP
15	.06*			L	V-L	

*Not significant at 0.05 level. All others significant at, or beyond, $p = 0.05$ level

that occupationally-relevant self concepts would be brought into functional
primacy within the self-system. In terms of the views expressed earlier
concerning the role of tacit knowing in projection and experiencing it is
believed that, with occupationally-relevant self concepts in functional
pre-eminence within the self-system, they are much more likely to function
as the tacit terms of knowing while the individual focuses upon the per-
sonalities of the people in the pictures. In this case the dimensions of
personality, temperament or ability which the subject attributes to individual
people will more probably be occupation-relevant than would be the case if
some other self concepts, say "Self-as-lover" or "Self-as-sportsman", were
operating as tacit knowings. However, the procedural rationale is by no
means restricted to this particular embodiment. One obvious possible var-
iation has already been created: a female version of the SCPT has been
made, still using occupational pictures.

Informal explorations with other types of pictures show promise for
the design of additional versions which may access other policy self con-
cepts. Much more systematic exploration of the effects of pictures upon
the lists of elicited dimensions will have to be conducted before the
possibilities and limitations of the method can be stated. In addition,
for the procedure to be economical for widespread use and repeated uses,
(in studying self development for example) attempts must be made to stream-
line the procedure and shorten the administration time. Two such attempts
have been made, one involved modification for group administration by
using a slide projector to show the pictures to a small group, the other
aimed at reducing the time required for administration by reducing the
number of pictures used and limiting the number of descriptors which the
subject could apply to each picture. The group procedure worked quite
successfully. The "short-form", however, was not a very successful exper-
iment. It was discovered, for example, that using a small number of
pictures (5) the procedure became very much less sensitive to differences
between profiles. In order to achieve significance at or beyond the
$p = 0.05$ level coefficients of agreement had to achieve a value of 0.90
or more. Also, scale intervals were greater; a single preference
difference between matrices results in a μ-value difference of 0.20 as
compared with 0.055 when using 9 pictures.

As for versions designed to access and profile other than occupation-related self concepts, no steps have yet been taken at this time in this direction although several are planned. For the researcher interested in other self concepts the possibilities for SCPT variations are limited only by the investigator's ingenuity, patience and purposes. The theory suggests that Policy Self Concepts will be related to significant *contexts* in the individual's life. In relation to these contexts, PSC's function as broad guides to the relating of self to situations within the particular context concerned. Thus, by selecting pictures with a relevant context al bias, the investigator should be able to cause the desired PSC's to be called into functional primacy as the tacit knowing basis *from* which the subject attends *to* or projects *into* the stimulus situations. That is, he creates a context al "response set."

The theoretical model does not predict the specifics of either contexts or policy se $_i$ context $_?$ That is, it does not 'predict that "Self-as-Republican (or Socialist)" will attain PSC status while "Self-as-Amateur Artist" will not. It does not provide detailed expectations for the content or the psycho-semantics of a PSC. For example, even if it is reasonable to expect "Self-as-Counselor" to be a PSC for a given individual, the theory does not predict what psycho-semantics or what personality dimensions to expect as the important dimensions of that self concept. These, or course, are what the projective portion of the procedures is designed to uncover and bring into specifiability.

However, certain hypotheses may be stated, which may be of help to the investigator who wishes to create his own version of the SCPT for a particular study. For instance, sociological and socio-psychological theories and data suggest that in a particular culture or subculture, organization or group, there are structural, functional and normative expectations and constraints which influence the probability that a particular type of role concept would be important or not important. In most societies there is a division of labor on the basis of sex. The extent of the social consequences of this differentiation vary from culture to culture. The probability of the individual's achieving a particular status or position, prestige or authority, for example, may be influenced by his/her sex status. Vertical and horizontal social mobility may also be affected.

Child-rearing practices, etiquette and morals will frequently take account of, and probsbly perpetuate, the sex distinctions. In view of the social importance of the sex role we might reasonably expect the self concept "Self-as-Male/Female"to achieve at least PSC status, and probabl; CSC status in time. If such characteristics as Red Hair, Artistic Ability, or Neuroticism are socially valued and come to have structural or functional significance we might expect related self concepts to achieve PSC status.[10]

The process of transmitting social/cultural values and concepts is, at best, imprecise. The idiosyncratic needs, aspirations, experiences and abilities, etc., of the individual initially guarantee that the details of the psycho-semantics underlying a particular, defined PSC (such as "Self-as-Teacher" or "Self-as-Routing machine operator") cannot be predicted. Certain dimensions, those sanctioned strongly in the defined context, may be expected to feature in the PSC in some form perhaps, but it is not possible to predict all the dimensions that may have become significant to the individual above and beyond these "high expectancy" ones. It is for this reason that the PSC associated with a given social role or position may be expected to differ, to a greater or lesser extent, from the role concept which the sociologist, role theorist, employer or supervisor might define, prescribe or describe. Thus, in building different versions of the SCPT procedure and using them in research, or in counseling and guidance, the investigator should be prepared to live with uncertainty in this sense and to find, perhaps, that although an individual can deliberately view himself in a given role for the purposes of the SCPT this does not necessarily mean that this is one of his policy self concepts. The investigator should be pre-pared to critically examine his assumptions and his purposes while he defines or specifies the types of PSC's he wants to examine. He should consider whether or not the pictures he uses really allow, and require, adequate expression or involvement of the PSC's. It could be that pictures which are inappropriate to the task in hand will, in effect,

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10. See Ruth F. Benedict. *Patterns of Culture*. Boston: Houghton Mifflin. 1954, and other anthropological writings concerned with cultural rela-tivity of valued personality characteristics.

block out a particular PSC which really *is* relevant to the investi-
gator's inquiries.

   To round out this particular discussion let me list a few general
classes of self concepts which suggest themselves as eligible for PSC
status in a western, democratic, pluralistic, industrialized society
such as ours. Whether they actually function as PSC's for a given
individual depends, of course, upon how significant they are in his
life. "Self-as-Male/Female", "Self-as-Son/Daughter", "Self-as-Husband/
Wife", ". . .-as-Fiance/Fiancee", "Self-as-Father/Mother", " . . .-Brother/
Sister" -- all these are examples of a group of sex-related self concepts;
"Self-as-X", where X is an occupation or job title; "Self-as-Taxpayer",
"Self-as-Intellectual", " . . .-as-Craftsman" " . . .-as-Liberal/Democrat/
Republican/Tory/Socialist/Communist" -- or any other political adherent;
"Self-as-Catholic/Methodist/Jew" or any type of religious believer;
"Self-as-an-Idea-Man", ". . .-as-persecuted" or ". . .-as-misunderstood
by all". It will be noticed that a PSC does not necessarily have to
correspond to a defined social role. It may relate to personality or
character and may cut across or subsume many roles. Picture sets which
might be relevant, contextually, to different self concepts could include
such scenes as: a cocktail party, a discussion group, a family meal,
family or social crisis, moments of intimacy, joy or sorrow and so on.
The primary practical requirement which should be met is that a relevant
individual in the picture (a male or a female) be visually-prominent
so that the subject can be clear as to which individual he/she is focusing
upon and comparing, when the time comes.

Studying a Complex Self System

   Since the arguments for the complexity of the self system and the
self process might seem to make their study an arduous and far-off
task, it is worthwhile noting here that steps may be taken in that direction
quite easily and soon. Once several versions of the SCPT have been
developed which enable several aspects of self system to be studied it
is only a matter of organization and time before those several versions
may be used by the same investigator for a single person. It would then
be possible to determine whether similar dimensions recur in connection

with several different PSC's -- whether, in fact, this is the rule or
the exception. Are some PSC's within a given self-system better
developed and organized or more differentiated from others or more
internally integrated than others?[11] Will canonical correlation, factor
analysis or similar statistical procedures allow the character of core
self concepts to be inferred? Could the overall "regnancy" or primacy
of one PSC vis-a-vis others in the self system be demonstrated by these
means? Perhaps longitudinal studies using the SCPT will provide us
with a means of monitoring changes in self-concept and of studying
developmental aspects of self process. Certainly the SCPT should
enhance our ability to pinpoint causes of maladjustments or dissatisfactions
in occupation such .j difficulties in adjusting to roles or expectation
which are incompatible with deep rooted PSC's or CSC's. The SCPT could
be equally useful in clinical, educational, marital or personal counseling
and guidance or in education.

Speaking very tentatively, as an outsider, it seems that the SCPT
might find application in clinical and psychiatric work related to per-
sonality breakdown or dissociation. For example, it is probably reasonable
to expect, in the 'normal', 'healthy' self-system, important dimensions
which cut across or are common to several PSC's. Although it is also
reasonable to expect to find some dimensions being almost exclusively
associated with individual PSC's, we might expect common dimensions to
emerge, reflecting the integrations and inter-relationships within
self-system. If the individual develops PSC's which are unintegrated
and dissociated from the rest of the self system, islands of individuality
or independence, it seems reasonable to suppose that complications will
develop sooner or later. It is also probable that the SCPT will be
sensitive enough to be able to detect such splintering.

Another possible application: perhaps the contrasting personality
"phases" in the manic-depressive psychosis or it the so-called "split" or
"multiple" personality may be profiled and tracked using the SCPT in
the way that the Semantic differential has been used, but using the
individual's own terms and dimensions rather than dimensions factor analyzed
out of group data.

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11. Questions like these, and others, are raised by Super (1963) and
    may be answerable, to some degree, with the use of this procedure.

Educating by Heuristics

Throughout the above discussions the terms 'studying', 'investi-
gating' and 'examining' have been used quite freely without qualification.
Now it is time to qualify. This procedure has been designed in an attempt
to re-establish the individual, as an *individual*, in assessment and eval-
uation procedures. A great deal cf effort has been invested in the
attempt to preserve individuality and idiosyncrasy which, after all,
stamp the individual as unique. In the counseling or guidance situation,
it is the unique individual who is client, not an abstracted and gener-
alized, hypothetical "average guy", with fuzzy edges denoted by standard
deviations or probability coefficients. This real individual is quite
definitely bounded -- by his needs and purposes, his hopes and fears,
his factual knowledge and his tacit knowings, his skills and his emotional
inclinations, as well as many other factors -- even though he is in a
process of continual change.

We have argued, earlier, that the outsider's view of another's self
concept is *not* the self concept. In light of such arguments, this pro-
cedure was devised such that the individual could specify, in his own
idiosyncratic terms, the dimensions/concepts which have functional
importance within his system of self knowings and then to enable him
to demonstrate how these dimensions are represented, contribute to, or
participate in, his various self knowings. To remain consistent with the
principles which underlie the procedure, I must now suggest (in fact, urge)
that the individual be encouraged to participate in the profiling and
interpretation phases of the procedure -- especially when the procedure
is being used to further the processes of counseling, guidance or education.

It has been found in practice that the individual often has a much
better understanding of the relationships which maintain between various
profiles than the investigator does. This, of course, is not surprising.
The individual is an expert on himself in a way that no othe person, how-
ever well qualified, can be. He knows, both tacitly and specifiably, the
feelings, tensions, congruences and incongruences within self. He may
never have considered self, explicitly, in quite such a systematic or
objective fashion, but once he does he is in a very good position to under-
stand what he sees. Functioning as a co-investigator this expertise may

be invaluable -- as a "gagged" subject it can be of no use.

On the other hand, the experience of plotting and interpreting, seeing the profiles emerge and develop, is an extremely insight-provoking one. It is very different from that of looking at a profile sheet on which a mass of color-coded symbols and lines has already been drawn. Getting used to the visual and conceptual complexity of the completed profile requires time and experience. Subjects who were asked to assist in profiling were much more satisfied with the overall results of the procedure than those who were shown their completed profiles. The co-plotters felt that they acquired a much better understanding of the profile *and* of themselves as a result. In a few cases, subjects were able to interpret characteristics which were puzzling to this investigator with his lack of tacit knowledge of the psycho-semantics which gave rise to the data. As an heuristic device for provoking or achieving insights into self process, the Self Concepts Profiling Technique promises to have considerable value.

Technical Questions and Further Research

Bearing in mind that the procedure described in this report is still considered to be a prototype version, there are many technical questions which must be considered. Questions concerning validity and reliability figure prominently, of course. At this time, a method for testing reliability which involves a combined 'split-halves' and 'equivalent-forms' approach. is being explored and elaborated. This will be applied to the projective phase of the SCPT. Test-retest studies should be conducted with this projective phase, as well as with the procedure as a whole.

Validity studies are likely to continue for some time. It will be important to seek suitable independent criteria against which to evaluate these studies.

At the moment it seems somewhat paradoxical to talk of standardizing and norming this particular instrument, but this may be possible given some creative ideas from somewhere.

Other questions which suggest themselves include:

1. How picture-specific are the responses, and hence the dimensions elicited?

ii. Would the addition of more pictures in the *projeotive* phase produce any more valid and reliable dimension lists?

iii. If sets of stimuli with differing contextual biases are prepared for different self concepts, what will be the effect of having *different* individuals depicted in each set, as compared to having the *same* 9 individuals shown in different contexts?

iv. Also, if the *same* 9 individuals are shown in different contexts might it not be possible that recall, of what has previously been said about them, may inhibit the expression of new, context relevant comments? In other words, should we expect the contexts to exercise greater influence upon the dimensions elicited than do the perceived personalities? (Perhaps if the personalities are kept constant across contexts we might expect a small, though noticeable increase in their effect while contexts continued to exercise the greatest influence.)

v. Would it be reasonable to suppose that having once established a "personality" for a person in one context (picture set) the subject would be somewhat consistent in describing that same personality's expression in a different context?

These are a few of the questions yet to be answered in relation to both the procedure and the content and dynamics of self process and its behavioral expressions which might be explored with the help of the self concepts profiling technique.

SUMMARY

A need existed for both a theory of self processes and a procedure or technique for investigating self processes. Projective techniques seemed appropriate to the problem of handling such highly subjective material, except insofar as they usually imposed external logic and rationale upon the data during analysis and coding of responses.

In light of his particular theoretical viewpoint the writer decided
to construct a procedure in which the subject himself was responsible for
categorizing and analyzing his own responses to the stimuli. Thus, although
Liggett (1957) had previously linked the projective and paired-comparisons
methods, O'Mahoney consolidates and extends this idea.

The pictorial stimuli used in the prototype version of the SCPT comprise
9 pictures of male adults in ambiguous work settings. The self concepts
to be examined are five occupational and occupationally-relevant self
concepts: "Self-as-a-person-at-work", "The Ideal Person for my Job",
"My Ideal Job", "Ideal-Self" and "Self-as-a-person-in General".

The procedure has two phases. During the first, projective phase, the
subject describes the personality, character and temperament of each per-
son shown in the pictures. He then content-analyzes his own responses for
recurrent themes and concepts and produces a list of dimensionalized concepts
which, he is satisfied, represent the more important dimensions in terms
of which he differentiates people one from another and from Self.

In the second phase, the paired-comparisons procedure, the pictures
are presented in such a w y that each is paired once with every other
picture. This entails 36 pairings -- a "sorting set" or "sort". Through-
out a given sorting set the subject applies one of his dimension/concepts
to the pairs, each time making a judgment as to which of the two people
he perceives as closest to the positive pole of his dimension. His judg-
ments are recorded in a response matrix. A response matrix is obtained
for each dimension on the list Next, the subject is asked to apply the
five self related concepts to the paired pictures, producing five more
response matrices.

The statistics associated with the paired comparisons technique allow
response matrices to be analyzed and compared producing coefficients of
consistence and agreement. The coefficient of agreement allows the relation-
ships between a self concept sort and each dimension concept sort to be
plotted in profile form. Thus each self concept may be profiled in terms
of the N dimensions on the subject's list, allowing comparisons to be made
and convergences and divergences to be noted. The agreement coefficient
also allows self concept response matrices to be compared directly yielding
a single numerical index of the extent of agreement between any two or more
self concepts.

REFERENCES

Allport, G. W. (1943) "The Ego in Contemporary Psychology." Psychological
    Review.

_____. (1955) "Becoming." New Haven: Yale University Press.

Benedict, R. F. (1954) Patterns of Culture. Boston: Houghton Mifflin.

David, H. A. (1963) "The Method of Paired-Comparisons." Griffin's
    Statistical Monographs No. 2. London: Griffen.

Field, P. L. (1962) "Self as Process: A Revision of Vocational Theory
    Directed Toward the Study of Individual Development in the Vocational
    Situation." Harvard Studies in Career Development No. 26. Cambridge,
    Massachusetts: Center for Research in Careers, Harvard Graduate
    School of Education.

Kehas, C. (1962) "A Critical Analysis of Attempts to Denote Self
    Concept." Harvard Studies in Career Development No. 25. Cambridge,
    Massachusetts: Center for Research in Careers, Harvard Graduate
    School of Education.

Kendall, M. G. (1962) Rank Correlation Methods. 3rd Edition. London:
    Griffin.

Liggett, J. (1957) "A Non-verbal Approach to the Phenomenal Self."
    Proceedings XVth International Congress of Psychology. Brussels.

Maslow, A. H. (1966) The Psychology of Science. New York: Harper & Row.

Murray, H. A. (1938) "Explorations in Personality." Oxford: Oxford:
    Oxford University Press.

O'Mahoney, T. J. (1968) "Self Development Processes: A Model and an
    Heuristic Procedure for Investigating Aspects of These Processes."
    Unpublished Ph.D. Thesis, Leeds University (England).

Polanyi, M. (1966) The Tacit Dimension. New York: Doubleday.

_____. (1968) "Psychology and Logic." American Psychologist.

Sterishavsky, R. & Matlin, N. (1963) "A Model for the Translation of
    Self Concepts into Vocational Terms." in Donald Super. Career
    Development: Self Concept Theory. New York: College Entrance
    Examination Board.

Stephenson, W. (1953) "The Study of Behavior: Q-Technique and Its
    Methodology." Chicago: University of Chicago Press.

Super, D. E. (1963) Career Development: Self Concept Theory. New York:
    College Entrance Examination Board.

Thorndike, R. L. & Hagen, E.   (1961)   Measurement and Evaluation in
     Psychology and Education.   New York: John Wiley & Sons, 2nd Edition.

Tiedeman, D. V. & O'Hara, R. P.   (1963)   Career Development: Choice and
     Adjustment.   New York: College Entrance Examination Board.