This paper presents a theoretical study conducted as part of a larger research project concerning personality as an educational phenomenon. In contrast to most approaches, which view personality from the outside, this approach employs systems analysis to examine how individuals identify their personalities in varying subenvironments of a social environment. According to this approach, an individual is defined with structure, function, and dynamism; personality is assumed given. Self-identification is considered to be a binary decision process with acceptance-rejection behavior according to one's own personality. The social environment is differentiated into dyad, small group, collective, organization, and aggregate subgroups. It is assumed that there is variability of relations between the subenvironments and the identification of personality. A hypothesis for dynamism is constructed: in the dyad, the smallest element of social environment that can function as social environment, the preferential behavior is perceived according to one's personality; in the small group, preferences become ambivalent; in the collective, there is contagion of behavior; in the organization, there is strong binary-decision making; and in the aggregate, no specific conditions of behavior are presumed. The paper establishes the theoretical basis, examines the subject matter in detail, and makes a proposal for quantification and measurement operations for an empirical inquiry. It concludes with some discussion about the connection of the study and education for the development of social skills. The structure measure, function and dynamism measures, and a background information measure in Finnish are appended. (Author/NB)
RESEARCH BULLETIN 80

Raimo Laasonen

SELF-IDENTIFICATION OF PERSONALITY IN SOCIAL ENVIRONMENT
A preliminary theoretical study was conducted concerning the identification of personality in social environment. The approach was the one used in Systems Analysis. A human was defined with structure, function and dynamism and personality was assumed given. Self-identification was considered to be a binary decision process with acceptance-rejection behaviour according to one's own personality. The social environment was differentiated into dyad, small group, collective, organisation and aggregate. It was assumed that there was variability of relations between the subenvironments and the identification of personality. A hypothesis for dynamism was constructed.

In addition to the theoretical examination, measures were developed for the structure, function and dynamism as well as a questionnaire for background information about people's experiences in the subenvironments was compiled. Lastly, there was some discussion about the connection of the study and educating social skills.

Key words: system, structure, function, dynamics, binary decision making, social skills, personality.

Available from: Department of Education
University of Helsinki
Bulevardi 18
SF-00120 Helsinki
Finland
Tel.int. +358 0 1911
Telefax +358 0 1918073
Acknowledgements

I would like express my warm thanks to Professor Erkki A. Niskanen for his guidance in problematics and made it possible for me concentrate on full-time research. I also want to thank Mr Vesa Niskanen, Docent and Mr Toivo Heikurinen, Ph.D., for illuminating discussions on the subject matter.

Author
## Contents

1. Introduction .......................... 5  
2. Starting points ....................... 6  
3. Self-identification of personality ... 9  
4. Self-identification and social environment ....... 10  
5. Work hypothesis .................... 12  
   6.1. Structure measure ............... 14  
   6.2. Function and dynamism measure .... 14  
   6.3. Obtaining background information .... 15  
7. Possible educational implications .......... 16

Discussion

References

Appendix 1 Structure measure
Appendix 2 Function and dynamism measure
Appendix 3 Background information measure
1. Introduction

The theoretical study is a part of a larger research project concerning personality as an educational phenomenon (Niskanen 1990). The systemic framing of the study is based on my thesis (Laasonen 1991). The problem under scrutiny is derived from the two theoretical viewpoints. The objective of the study is to approach personality from new angle as usually is made. A common approach is to see personality from the outside to the inside. In this case the approach is from the inside to the outside. The purpose is to examine how persons identify their personalities in varying subenvironments of a social environment. The reason for taking social environment into account is that a human is an open system with exchange relations to his or her environment. On the other hand, there is variety in the social environment nearly concerning its subenvironments. The differentiation of social environment can be done in many ways. The meta-approach which this paper is based on comes from the Systems Approach, not the General Systems Approach, because there has not been enough discussion about the boundaries of general systems. However, the aim of the GSA-approach is to find “a skeleton” which combines the conceptually divided world. Finding “a skeleton” though is not very enlightening and it hardly can provide information about living processes. This is why it is necessary to discuss the limits of general systems in order to promote theoretical development. It is difficult to discuss these issues in the tradition of the famous four blind men.

The structure of this paper is as follows: first the theoretical basis will be established, then the subject matter will be examined in detail and finally a proposal will be made for quantification and measure operations for an empirical inquiry.
2. Starting points

The meta-initial condition of the meta starting points is that everything changes and modifies. Perceived stable phenomena are dependent on the resolution level of time. On the other hand, the world is seen as an organised monistic entity, which can be conceptually differentiated for various research purposes.

The natural consequence of the monistic view is that a human can be perceived as an organised whole. Although, we can differentiate between various sides of a human conceptually. From a systems point of view a human can be seen as 1) a biological creature 2) a social creature 3) a cultural creature. Usually, when behaviour is the issue we do not support the entity of resolution levels, but pay attention to those aspects which are essential for behaviour. It is enough to verify that a human’s basic needs are essential for the first viewpoint, including basic affiliations which have been significant for survival in the course of evolution. It is rather easy to make a distinction between the two first classifications but is more complex is to classify the social and cultural aspects realistically.

There is overlapping but that can be crossed conceptually. In this context the distinction between social and cultural is made according to output into the environment. The cultural aspects leave a trace in the environment and the social ones have no output into the environment. For instance, discussion does not leave imprints on the environment, however written words do. Giving exhaustive definitions for social and cultural would take a lifetime. But here it is sufficient to state that social refers to relations between humans and cultural includes the use of tools.

However, there are additional factors which are significant for behaviour: people try to fulfill their desires and they create their goals. So we can say that people behave purposefully (Ackoff, Emery 1972). The question of consciousness will not be dealt with in this context because of the conscious
avoidance of the "ghost in the machine" way of thinking. Due to the organised human there is no need to deny that personality is an organised whole. The defining of personality would take another lifetime and thus personality is assumed to be given. The crucial point of the study is how a human is able to identify his/her personality when in different kinds of social subenvironments. In other words, the question is about how a biologic-socio cultural system which tries to fulfil his/her desires and create objectives can identify its personality in varying social conditions? By defining a human as a system presumes that we say something about structure, function and dynamism. The structure can be defined as a set of relations between the aforementioned classification. Function can be defined as action in a certain subenvironment. Dynamism means purposeful walks between different subenvironments as contrasted with random walks. However, in this context random influences are not denied, yet people are seen to strive for purposeful behavior.

Little has been said about the differentiation of the social environment. Naturally, there are many ways to divide the social environment into subenvironments. Here it is based on the number of members and a kind of looseness-tightness aspect. However, the differences are somewhat hazy between the concepts used. The division is as follows: dyad, small group, collective, organization and aggregate. The pacing of bounds between the concepts is not clear due to the haziness of the boundary conditions among the concepts. Something which makes the matter more complicated is that the concepts do not have clearly limited intensions, instead there are varying intersections among the use of the concepts. The phenomenon in question can be presented in pictorial form as below.
Dyad as a subenvironment is rather clear but not necessarily simple. The matter becomes complex with the small-group due to the lack of knowledge of what is small. Of course, we can limit the number of members of the small group but that is too rigid. One criterion for a small group could be a coalition free group, because then there would not be any subdivisions. Collective usually implies a looser but greater entity than a small group, and smaller entity than an organisation. Organisation, on the other hand, can include the former social wholes and an aggregate can include the former totalities. For instance, an aggregate can be consist of many organisations.

In short, we have constructed a system starting from an all encompassing viewpoint which assumes the world to be an organised whole like a human, too. As a matter of fact, a human system has been constructed and its social
environment has been differentiated but nothing has been said about the system's "journey" in the environment, simultaneously identifying its personality.

3. Self-identification of personality

Many approaches can be used for self-identification. They need not be the ones applied in the behavioural sciences since most people do not become involved in research. Thus these approaches comprehend personality in a different way than researchers. This means that the base of identification also deviates much from the one used in the behavioural sciences. An ordinary way of seeing personality is that it has value loading. For instance, when people say he/she is an "international" person it means that this is a remarkable person, a personality. That is the viewpoint from the outside to the inside. What we do not know is how the personality identifies itself, what are the cues, signs, symbols, events, processes or their combinations which give a "touch" for personality. That is the point from the inside to the outside. In other words, the question is about subjective states which are unobservable to others, except when expressed in some way.

If we change the viewpoint and try to examine the issue from an individual's viewpoint, then some things seem more probable than others. One of the things is likely a question of suitability which means that self-identification can be a binary event. To put it simply a person decides which behavioural modes and contents are suitable for him/her. Thus identification takes place through "Yes" and "No" responses. In this way personality is identified with the pacing of bounds. The question does not follow with certain moral codes or some other modes of behaviour. The issue is on the personal level and answers the questions: "What is suitable for me?", "What matters do I accept or reject?", "What feels strange to me?". It is difficult to think that binary "logic" takes place in other directions than the personality of a human.
As a matter of fact, self-identification can be considered evaluation-based decision making on the personal level. On the behavioral level there is no need for complex evaluations because the pacing of bounds should be active. Thus two alternatives are enough for making appropriate decisions when interacting with social environment.

4. Self-identification and social environment

As was previously mentioned a human system is a dynamic open one which interacts with the social environment. Niskanen differentiates four cases of personality changes: 1) changes during life 2) changes in relation to other people 3) society originated changes 4) changes connected with universe (1990 pp. 36-37). The dynamics dealt with can be considered to belong to the second point in this context since the question is about dynamic relations with social environment.

Dyad is the smallest element of social environment which can function as social environment. One person is an environment to another.

Dyad can be examined from many viewpoints such as roles, dominance, status and norms. They have their advantages but there is not much use for them in this context. It can be assumed that self-identification is a "dialogue" between two binary decision systems in dyad where both are pacing bounds in mutual interaction. Personality as such is often defined as being the smallest element in the social systems but the greatest one in an individual system. The issues somewhat change when we move into a social system, a small group.

This might make one think that when we transfer to a small group self-identification would be without significance because other modes of behavior seem to be more important, such as norms, role differentiation, affective structure and status nets. The issue, however, may be the other way around because there may emerge an emphasis of binary decision-making due to the maintaining other types of behaviors to be in line with one's own
personality. That is why it is necessary to pace the bounds in order to be adaptive but not conformable. It is natural to think that there is a continuous "reading" of the boundaries during which certain distinctive marks are read according to which identification is verified. This in turn determines other behaviour, such as getting involved in group situations and participating in joint activities.

In the case of collective as a social environment it is seen that self-identification fades because in collective behaviour there is contagion of behaviour, such as emotions, formation of common goal and assimilation in the crowd. It is assumed that the binary pacing the bounds occasionally does not function because of the suggestive impact of the collective. Thus binary decisions are not made except by some individual deviations which are capable of resisting the social pressure.

In this context organisation does not refer to order but it is understood in the usual meaning as a large entity with role positions and tasks joining them. One of the features of a large organisation is the impersonal relations prevailing within it, such as in big firms and government offices. Thus it can be presumed that binary decision making is emphasised due to the impersonal settings. This may take place for instance an attempt to change the environmental conditions to correspond more with one's personal likings. Thus binary-decision making is stronger in an organisation.

Aggregate is usually interpreted as a collection of individuals with weak connections. Aggregate as such does not presume any specific conditions of behaviour, for example people gathered at marketplace where everybody is an individual. From the viewpoint of binary decision-making there is no need for continuous decisions and it is probable that the binaring is on the base level.

In short, self-identification is acceptance-rejection behaviour which is assumed to take place according to one's personality. The function of binary decision behaviour was examined in the subenvironments and variability was taken into account, according to the circumstances existing in the
subenvironments. The dynamism of acceptance-rejection behaviour has not yet been dealt with but it will be given in the form of a hypothesis.

5. Work hypothesis

In this context, dynamism consists of actions in subenvironments. It is consistent to think that functions which are based on the frame of personality have tolerances. On the other hand, it is not likely that people behave in the same way in the dyad as in an organisation. Thus changes can be assumed over the subenvironments. The diachronic or structural changes are not hypothesised because a change in the personality structure has very deep influences on behaviour. As a matter of fact, dynamism can be defined as a continuous functional change-sequence through the subenvironments. In the aforementioned journey through the subenvironments it was assumed that the binary decision process functions according to one's personality.

In the dyad the relation was considered a "dialogue", in the small group continuous "reading". In the collective there was no pacing the bounds control, in the organisation accentuated binary decision-making, in aggregate the base level.

The matter is not as straightforward as supposed because the decision-making has to be visible in overt behaviour. Anyway, it is useful to have sound hypotheses but their corroboration or falsification is another matter. It is necessary to say something about the verification of the dynamism in overt behaviour. The crucial question is how are pacing the bounds based on the binary decisions perceived in behaviour? When a person makes decisions, he/she also performs selections, so that the most probable alternative for the verification is preferential behaviour in relation to an actual subenvironment. It is choice behaviour which may be the most revealing. Evidently, dynamism can be perceived through environmental situations which act as stimuli configurations to which a person responds with preferring. Thus pacing the
bounds according to one's personality can be inferred through the preferences a person makes in purposeful walks in a social environment. In a social environment people confront varying situations with which they must cope with, selectively. Selection presumes decision-making and some alternatives are considered better than others.

In short, the self-identification of personality can be seen as an open preferential binary decision system. The dynamism of pacing the bounds can be verified according to preferential variety in the subenvironments. How preferences vary is a crucial question in relation to dynamism on the behavioural level. As in many cases behaviour is conditional and it is implemented in certain conditions which are sometimes known, sometimes not. If we assume personality is given then we can hypothesise that dynamism varies in one's social environment as follows: in the dyad the preferential behaviour goes according to one's personality, in the small group preferences become ambivalent, in the collective behaviour transfers to environmental preferences, in the organisation there is overpreferring, and in the aggregate preferring is the same as alone.

6. Measuring self-identification of personality

One of the shortcomings in behavioural measurement is the lack of quantities. To put it frankly, we do not have SI-standards in behaviour. Usually we say we measure attributes as though they were permanent and tangible. As a matter of fact, we measure processes which seem to be "frozen" for a while. The basic concept in the living world is continuous change with different time resolution levels. An issue which has not received much attention is a spontaneous emergence of a response. This means a response which comes about in the very measurement situation. How do we differentiate between the spontaneous response sequences and the ones which we are to measure? A
comparison point can be people's experience repertoire from which a touch for reality can be obtained. If people have experiences about events then we can conclude that there is another chain of events than the one originating in the measuring situation. It is not a mere rumor that brains have certain plasticity and they can produce spontaneous responses.

In principle it is not useful to have imaginative results unless the question is about imagination. There are also other shortcomings in behavioural measurement but the above one has not been discussed according to my knowledge. However, verbose discussion is not a fertile viewpoint for promoting research. That is why it is good to move onto the construction of the measures for structure, function and dynamism.

6.1 Structure measure

Constructing a useful measure for personality structure would take lifetime. That is why it is fair to adapt an existing one from Eysenck. The Eysenck Personality Inventory (Eysenck 1956) was translated into Finnish and studied the qualities of EPI with factor analysis by Konttinen (1968). The procedure for making the structure measure took place in such a way that, only those items which had the highest structure coefficients in extroversion and neuroticism were included in the structure measure. After that the opposites for the describing terms were obtained and the questionnaire was put together (Appendix 1).

6.2 Function and dynamism measure

In this context function and verbing are considered equivalent. The formerly constructed subenvironmental sequence will be measured with a
test. The basic idea is that function and dynamism can be measured by using a verb-repertoire from which people select the verbs which best describe the situation they see in the characters with speech balloons (Appendix 2). The verb-repertoire is called a verb-box from which the subjects select and form the number of verbs indicated below as they wish. Above the balloons there are the names of subenvironments and the order follows the one presented earlier. This time the terms are more realistic than the mere theoretical terms. The verb-box includes the verbs which have been derived from the structure measure in order to see whether identification follows the lines indicated by the structure. In other words, the subjects construct the entire sequence which forms dynamism.

6.3 Obtaining background information

In order to avoid mere imaginative behaviour we need information about whether people have been in the subenvironments. That is why a questionnaire for background information was compiled (Appendix 3). There is a question for every subenvironment in the questionnaire.

The family represents the small group. The classification of enterprises is for the organisation. Going to see a football or ice-hockey match is for the collective. Socialising with work-mates and friends after working hours is for the small group because everybody does not have a family. The last item is for the dyad.

In this way we shall obtain information if people behave in the subenvironments or if they have experiences about the object matters under scrutiny. If people are included who do not have experiences in the various social groupings, then due to the experienced persons the identification can be verified more clearly by using experienced people as a reference point.

In short, a personality structure measure was compiled on the basis of the EPI questionnaire. A verbing test was made for the function and
dynamism. A background measure was constructed for inquiring whether people have experience and they have behaved in the subenvironments. If not then verification of the identification will become easier.

7. Possible educational implications

The subject under scrutiny deals with educating social skills. It would not be surprising if the results indicated that binary decision-making is rigid. Depending on what kind of results will be obtained it is possible to try to implement means education for improving coping with social environment, if necessary. Flexibility is not a drawback in relation to social environment. Broadening social skills, e.g. through simulated activities improves the ability to cope with one's social environment and simultaneously may make one's personality more versatile and produce more realistical binary decision-making which will increase behavioural quality.

Discussion

The purpose of the paper was to apply the Systems Approach to personality as an educational phenomenon. In addition, the precise formulation of the problem under scrutiny and the making preliminary measures for the hypothesis for reality were applied. What the processual practices will be is a matter for future.
References


Konttinen, R. 1968 EPI-loamakkeen (Eysenck Personality Inventory) suomennoksen faktorirakenne, Jyväskylän Yliopisto. Psykologian laitos, N:o 77.


Vastataan kysymykseen kukin omalta kohdaltaan "Millainen ihminen olen" ympyröimällä rasti kustakin vaihtoehto parista.

<table>
<thead>
<tr>
<th></th>
<th>hermostuva</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>rauhallinen</td>
<td>x</td>
</tr>
<tr>
<td>2</td>
<td>eriarvoinen</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>samanarvoinen</td>
<td>x muiden kanssa</td>
</tr>
<tr>
<td>3</td>
<td>hyväntuulinen</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>pahantuulinen</td>
<td>x</td>
</tr>
<tr>
<td>4</td>
<td>masentuva</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>tasainen</td>
<td>x</td>
</tr>
<tr>
<td>5</td>
<td>haluava</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>haluton</td>
<td>x</td>
</tr>
<tr>
<td>6</td>
<td>väsyvä</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>jaksava</td>
<td>x</td>
</tr>
<tr>
<td>7</td>
<td>innostuva</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>kyllästyvä</td>
<td>x</td>
</tr>
<tr>
<td>8</td>
<td>vaivautuva</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>vaivaantumaton</td>
<td>x</td>
</tr>
<tr>
<td>9</td>
<td>vapautunut</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>sulkeutunut</td>
<td>x</td>
</tr>
<tr>
<td>10</td>
<td>vilkas</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>tyyni</td>
<td>x</td>
</tr>
<tr>
<td>11</td>
<td>eloisa</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>hillitty</td>
<td>x</td>
</tr>
<tr>
<td>12</td>
<td>sanavalmis</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>tuppisuinen</td>
<td>x</td>
</tr>
<tr>
<td>13</td>
<td>sosiaalinen</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>vetätyvä</td>
<td>x</td>
</tr>
<tr>
<td>14</td>
<td>sukkelapuheinen</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>harvapuheinen</td>
<td>x</td>
</tr>
<tr>
<td>15</td>
<td>hauska</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>ikävä</td>
<td>x</td>
</tr>
</tbody>
</table>
Kahdestaan 2 verbia
Ryhmessä 3 verbia
Innissä 4 verbia
Isossa firmassa 5 verbia

Työmaatikkeen järjestys
6 verbia

Verbilaatikko

hermostuttaa
olla tuppisumnen
jaksaa
puhua sukkelaan
tehda hyvantuuliseksi
vääntua
olt olt tasahan
olla sosiaalinen
rauhottaa
tehda samanarvoseksi
olla hauska
sulkeutua
olla eloise

innostaa
olla kova
vikaustutta
olla tyyni
puhua harvakeen
tehdä eriarvoseksi
haluta
olla haluton
kyllästutta
tehdä pahantuuliseksi
olla sanavalmis
masenta
vasyttää
vetaytya
Nainen  x  Mies  x

Perheenne jäsenten lukumäärä  

Olette tai olette ollut  
  a) pienyrityksessä (3-10 ihmistä)  x  
  b) keskisuuresssa yrityksessä (15-50 ihmistä)  x  
  c) suuryrityksessä (yli 100 ihmistä)  x  
  d) ammattijärjestössä  
  e)  
  jokin muu, mikä  

Seuraatteko urheilua paikan päällä esim. jalkapallo, jääkiekko  
  a) kyllä  x  b) en  x  

Oletteko tekemisissä työkaveritten kanssa työnajan ulkopuolella  
  a) kyllä  x  b) en  x  
  Monenko ihmisen kanssa  

Käyttekö ulkona ystävienne kanssa  
  a) en  x  b) kyllä  x  
  Monenko ihmisen kanssa  

Vietatteko paljon aikaa tytööä/poikaystävänne kanssa  
  a) kyllä  x  b) en  x