AN ANALYSIS OF CAUSALITY

Taiyû Nakagiri

Causality, or causal ralation betwixt cause and effect has been regarded as the foundation of our inference from one to the other. Hence our most knowledges concerning the world have been achieved upon it. And we have attained a number of our practical controls of things and events in the owrld by means of causal knowledges. Viewing from these points, causality, or causal relation seems to be one of the most important categories.

But, it is not always clear what is the meaning of causality, or what is the idea of causal relation. In this paper, an analysis and clarification of the proper meaning of causality is attempted. The aim of the early part of our arguments is the analytic clarification of the meaning of our usual statements expressing causal relations.

In the middle part, descriptions and critical inverstigations of empriricist's theories of the meaning of causality are developed. As a whole, various empiricists have proposed similar theories. They may be called the succession-theory. As well known, Hume and Mill are famous representatives of the classical empiricism and kneen critics. Their theories of causality, also, seem to be reduced to the succession-theory. Here, mainly Hume's and Mill's theories are treated.

The representatives of the new empiricism, who are modern logical-positivists, also, try to reduce causality to meer succession. Among them, Schlick is famous. His radical theory of causality is worthy of our considerations. In the last part of our arguments, Schlick's theory is investigated.

In the end, we are forced to say that Hume's, Mill's and Schlick's interpreitations of the meaning of causality, respectively, do not offer the proper clarications of it. Generally empiricist's interpretations seems to be insufficient. In order to offer the adequate and sufficient interpretation, they would need the support of the ontological *Begründung* of the idea of causality.

EDUCATIONAL ANTHROPOLOGY OF JOHN DEWEY

Tetsutaro, Yoshikawa

The educational philosophy of John Dewey could be better understood as a form of educational anthropology, though the term does not appear in his writings. With this assumption, this article has attempted to show his ideas of the dynamic function of educational process and his monistic interpretation of individual growth and social progress. The central issue is that Dewey's philosophy as "the way of life" has two phases: the understanding of life as growth and the procedure to promote the growth, and that these two phases are diffused into the process of one's life.

SOME PROBLEMS OF AUTO-ABSTRACTING
IN DOCUMENTATION

Sadao Yoshida

Documentation is an outgrowth of librarianship. It came out to solve the problems of controlling the flood of literature produced by science and technology in the mid-19th century. While librarianship is mainly concerned with cataloging, storing and lending library materials, documentation is principally connected with the selection and analysis of the subject content of a document through the creation of bibliographies, abstracts, indexes, and so forth. Knowledge and information are recorded in printed form and in other documentary forms, such as film, slides, photographs, tapes, discs and museum collections. The major functions in documentation field are: (1) Acqisition of materials. (2) Analysis of the source documents or abstracts. (3) Encording. (4) Recording. (5) Storing. (6) Reference services.

The aim of the present study is to make clear some problems of mechanical abstracting that has spread in the documentation activity. New abstracting schemes are being devised for classifying and selecting information by means of machines and retrieving the desired information in printed form. Pertaining to the establishment of information searching and retrieval systems are involved the problems of controlling the use of terminology and the selection of various aspects.

Although nomenclature, on the one hand, relates to the objects of research, terminology, on the other hand, relates to general concepts and technical expressions which are newly matched with the changing requirements. Terminology establishes technical expressions which designate properties, while nomenclature deals with names of the objects. In system theory, the differentiation between a system of objects and a system of

properties plays an important part.   A system of objects is build up from the names of the objects but a system of properties is build up from terms and the viewpoints from which the objects are observed.

What, then, are the principles which classification can borrow from system theory?   How are those principles adapted for the purpose of classification in documentation?

STABILITY OF SELF-CONCEPT AND ADJUSTMENT

Masayuki Nobechi

According to Brownfain, J. J. adjustment of one's behavior can be measured by the stability of self-concept, and one's behavior can be understood and foreseen through it.

We intended to examine the adaptability of the inventory which Brownfain measured the stability of self-concept, comparing the scores obtained from the inventory with the scores of the Yatabe-Guilford Personality Inventory and the Picture-frustration Test.

The subjects were the college students of both sexes and were divided into two groups—the stable and the unstable groups—based on the scores of the stability index. The properties for them were indicated in Table 1.

The conclusions we obtained were as follows:

1. As for the social-conflict index, the difference between two groups was significant. Especially on the side of female in the unstable group the index was greater.

2. The differences between "Social self" and "Private self" were greater in the stable groups of both sexes.

3. The tendencies to appreciate oneself positively were more remarkable in the stable groups of both sexes.

4. The differences between the ratings on "Private self" in both groups of both sexes were not significant.

5. As for the Yatabe-Guilford Personality Inventory, any significant differences could not be found on the items "emotional stability," "social adaptability," "general activity" and "impulsiveness," but on the items "initiativeness" and "introvert-extrovert" the differences were significant.

6. The scores on the items "cooperativeness," "ascendance," and "social introvertion" were greater in the stable group.

7. As for GCR in the Picture-frustration Test, the differences on the side of female in both groups were significant.

8. As for $M\%$ and $M + I\%$ the differences between two groups on the side of female were significant, but the differences were not significant on other variables.

THE ABSOLUTE AND RELATIVE STRENGTHS
OF EXPERIMENTAL CONFLICT

Haruyo Horiuchi

The aim of the present study is to examine the effect on a certain conflict situation, of the strength, absolute and relative, of the competing response tendencies. The relative strength of conflict was produced by the modified Stroop color-word test, designated respectively as the high conflict card (HC) and the low conflict card (LC). The HC card had no word printed in the corresponding word printed in the corresponding color, while the LC card had the corresponding colors. The absolute strength of conflict was generated by changing the amount of Stroop's color-word designated as the high conflict card (2HC) and low conflict card (1/5HC). The 2HC card had 200 words and 1/5HC had 20 words. In the Experiment I, the HC card and the LC card were used and in the Experiment II, the 2HC card and the 1/5HC card were used. The subject in each experiment was instructed to identify the color of each stimulus irrespective of the color designation. The author framed a hypothesis that the conflict induced by the experiment was a type of approch-approch conflict between two response tendencies: the approach toward reading the word which was motivated by cultural and verbal habit and the other approach toward the color itself which was motivated by the instruction. The reaction time $(1/RT \times 1000)$ on each conflict card was used as a measure of conflict. As is shown in Table 4, there was a significant difference on reaction time between the HC card and the LC card. This fact indicates that the relative strength of conflict affected the conflict performance. No evidence was found for the assumption that absolute strength of conflict would have any effect on the conflict performance. (see Table 2)

EFFECTS OF THE MINUS ION ON
THE WORK EFFICIENCY

Kiyoshi Akita

This experiment is one of the attemptions to study the effect of the minus ion produced by an ionitron on efficiency or fatigue. Exp. groups worked in the room with 2 ionitrons and control groups had no ionitrons. Both groups practiced over 6 sessions on one of three work conditions; that is, an easy-printing work (E–W), a middle difficult-work (M–W) and a difficult-work (D–W). Each session consists of massed 20 trials for 20 min. And 5 min. rest is introduced among sessions except introducing 25 min. rest between 3rd and 4th sessions.

Results were as follows. In spite of the difference of work difficulty, the mean number of printing response of exp. groups were significantly superior to that of control groups from early practice stage over the whole (Fig. 1, 2, 3, & Table 1). The same tendency was fonud in our modified Donaggio response (Fig. 4), but E–W was only signicant. The cff value of flicker (Table 3 & Fig. 5) and the pulse rate (Table 2) did not show the significant differences between exp.—and control groups. This was verified by the subjects' feeling of fatigue (Table 2). On the other hand, experimenters' judgements on a comfortability were more desirable atmosphere on the exp. rooms than the control ones (Fig. 6). The rate of rise in the room temperature was likely to keep down in the exp. rooms (Fig. 7).

Through the consideration for some problems about the amount of minus ion, the method of measure for efficiency or fatigue and so on, it is limited to say that an ionitron seems to be effective on the work efficiency.