

ON THE RELATION BETWEEN ECONOMICS AND STATE IN THE ANCIENT TIMES.

Itaru Kinoshita

The problem of the relation between economics and state, ought to be traced to the origin of the state. The sociologist speaks of human society teach us the economic conditions of the primitive times. They help us make clear how economic activities functioned in that times. Economic activities had developed being connected with the progress of the state. The social order is indispensable to economic activities. Without the order they can not be put forwards at all. Therefore, they were not in their existance until the order of society began to be formed. And yet, to economic activities, the order is so necessary that they may go on rationally. The order is able to operate its function only when the state controls the people. We have the order in the society regulated by the power of the state. Consequently, economic activities have the same origin that the state has. It may be said, we suppose, that Economics and State were combined in the ancient times. We can see an example of this fact in the Greek cities, Athens and Sparta. But economic activities are not so easily and simply united to the state. Economic activities have the character that is opposed to the state. This hostile relation, however, is not one which cannot be loosen absolutely. The mutual operation between them is the impetus stimulating the progress of human society. Indeed, we often find some theories stating that Economics should be free from politics of the state. But we cannot agree with them. Because the good relation between them is found in the ancient states, (polis). They were born simultaneously where the man began to conquer the nature. This unification of Economics and State was disturbed by the Racial Migration. But this fact tells us, not the separation of them but the advance of their relation.

SCOTT FITZGERALD AND HIS FICTIONAL TECHNIQUE OF „THE RICH BOY.”

F. Motoyanagi

1. His character and career ;

He was thought to be the trumpeter of the "Jazz Age" and yet in fact never identified himself with it and was deeply hostile to many of its manifestations. At the very time when he was accepted as a symbol of youthful sophistication, he was essentially unsophisticated naive and romantic, a provincial newly arrived in New York. He was a richly confused character, in which, at least two sharply contrasting and opposed strains can be discovered — lyrical but cynical, a romantist but stoic for himself.

2. Fictional technique of "The Rich Boy"

"The Rich Boy" is the story of a very wealthy boy who made a tremendous success in the society but could not but lead a solitary and cynical life in spite of his longing for a home and an ordinary life. Arthur Misener, biographer of Scott Fitzgerald said exquisitely that "Anson's queer, rich boy's pride deprived him of a home and an ordered life which he wanted most. Hating not to dominate, Anson cannot love those he does dominate, cannot commit himself to the human muddle as he must if he is to have the life he wants".

Specially as fictional technique, the author established a clever but sympathetic narrator in the center of the novel who gave this article countless merits, that is to say, simplicity, urgency and density.

THERMODYNAMICS FOR THE NATURAL SCIENTIFIC CULTURE IN JUNIOR COLLEGE COURSE

H. Imura

Recently in several books of biology or biochemistry published with the object for popular knowledge of natural science, we often find that the conception of the modern thermodynamics based on statistical mechanics is included.

But at high school in our country, we do not relate to the thermodynamics, so the author tried to lecture on it at Junior College course. when it is lectured not in technical course, but for the object for the culture of general student, it must be noticed that the lecture is possibly held within the range of the knowledge of mathematics, physics, chemistry and biology which have been learned at high school.

Instead of a mathematical or abstract method, therefor, a concrete explanation and such a method as explained gradually based on "Entropy" are suitable, and by means of such an explanation the student will be able to understand the fundamental conception of both the modern thermodynamics and the classical and have a higher order's observation on nature.

PHENOMENOLOGICAL ANALYSIS OF COLOUR CONSTANCY

Tosisuke Ohmura

Colour constancy is considered as follows, from the relationship between the perception of surface colour and of illumination in achromatic area.

1. One of the necessary conditions to permit the perception of illumination is coexisting of more objects of different albedo than one in the visual field, and perceiving the colour of the objects as surface colour.
2. So, we can regard colour constancy as the phenomenon resulted from the separation of the illuminated object from the illumination.
3. Illumination can be perceived not only on the surface of object, but also in empty space surrounding it.
4. Hue, saturation and brightness are called a colour value, which belongs to all the impression of colour, independent of the phenomenal modes.
5. Colour constancy is concerned in the system of surface colour of all the phenomenal modes.
6. In the achromatic surface colour, we should notice two perceptual dimensions, *Ausgepragtheit* and *Eindringlichkeit*. The latter is prescribed only by the value of retinal stimulus (luminance). Luminance can be changed by either the albedo of object or illumination. In the perceptual dimension of *Eindringlichkeit*, therefore, so-called constancy in the meaning of phenomenal regression does not occur, though there exists a constant tendency concerning to the combination between retinal stimulus and the response for it. On the other hand, in the situation to permit the perception of illumination, the brightness, one component constituting *Eindringlichkeit*, can be perceived corresponding to the intensity of illumination.
7. The coexistence of two dimensions means the perception of different intensity of illumination in the visual field, and colour constancy is based upon such situation.
8. One may usually estimate the brightness of chromatic colour, according to the degree of whiteness

of it. But strictly, this is concerned with the unit of colour value, and does not mean "brightness" in colour constancy. That is, in the latter, both the brightness of the surface of object and of empty space are depend upon the intensity of projected illumination.

9. Therefore, if one insists on the brightness constancy of illumination, this situation should be the same one as the situation in which not luminance but illuminance can be perceived.

10. If colour constancy may be defined as the deviation from visual stimulus, its qualitative aspect and quantitative one should not be confounded each other. In the impression "white but dark", "white" is prescribed by illuminance (I), and "dark" by albedo (A). Therefore, psychological amount $i' = I' \cdot A'$ as their product keeps the invariant relationship to $i = I \cdot A$ as physical amount. Moreover the base on which we have the selectivity of two psychic sets, subjective and objective one, may be connected with such the fact.

The experimental results concerning to the conditions of the illumination of space and the effects of serial stimulus are as follows.✱

1. When pieces of gray paper with different brightness coexist around Ss, it can't be said, that to an increase in the number of them follows a direct increase in the degree of constancy.
2. The way in which such additive objects existing together around Ss take influences the apparent brightness of Ss depends upon either the assimilative mechanism or the contrastive one. The articulating of the field is especially related to the latter.
3. Such cognitive ability relies remarkably upon the position of the object used as Ss even if the stimulus configuration is the same.
4. The influence which the serial stimuli coexisting around Ss has upon Ss, is conditioned not merely by the brightness in the geometrical mean of all the serial stimuli, but also by the configurational character of the brightness-constellation of each constituent constructing the serial stimuli.
5. Both the contrastive mechanism and the assimilative mechanism are prescribed by the relation of brightness gradient constituted by the appurtenance of serial stimuli.
6. When each constituent constructing the brightness in the geometrical average of the serial stimuli assimilate functionally with Ss, and is grasped as a closed whole, centration is had.
7. Ss is more easily subjected to central tendency when each component of the serial stimuli is arranged continuously in order as regards brightness.
8. The conditions which check the situation where Ss is subject to the centration (or darkening) by the serial stimuli change into the articulating of depth of space. In other words, the articulation of depth and darkening are in an antagonistic relation.
9. Darkening is not merely prescribed by the geometrical mean; therefore the phenomenal level of illumination in empty space which varies together with darkening is not prescribed clearly by such a geometrical mean.
10. In the experiment used serial stimuli, the condition under which causes the articulation of visual field to increase the degree of constancy is the perceptual situation that the perception of surface colour depends upon contrastive mechanism and the perception of illumination upon assimilative mechanism, and that such antagonistic mechanism corresponds to Katz's convariant phenomenon.
11. When the illumination in the space in which a subject stands and that in the space in which Ss is presented are equally dark, the degree of constancy increases remarkably; and on the contrary,

when the illumination in the subject's space and that in the space in which Ss is presented are equally bright, it decreases to almost the same extent. So, darkening effect of the serial stimuli is extremely high in the latter case.

12. This difference can be interpreted by Katz's "laws of field size," and also it can be said that this difference is brought about because in the former case the assimilative lightening of the illumination in empty space is produced and in the latter contrastive darkening.
13. At the white-end which has high reflectance, N-D effect can't be found; but on the other hand, in accordance with a decrease in the reflectance of the object, this effect can be clearly found.
14. In case of the N-D arrangement the degree of constancy increases in proportion as the reflectance decreases, but, in case of the N-H arrangement, the decrease in the reflectance follows a decrease in the degree of constancy.
15. So far as this is concerned, it can be said the N-D effect means antagonism in the direction in the variation of the degree of constancy which is brought about in proportion as Ss moves away from the white-end, either when Ss is presented in a light-room or a dark-room.

✱ See my paper, Experimental studies on Brightness constancy, Kyushu University, 1961,

THE STUDY OF PARENT-ADOLESCENT RELATIONSHIP ON THE PSYCHOLOGICAL WEANING (4)

S. Onishi and T. Kuze

The aim of this article is to verify the meaning of parents, friends and teachers as counsellor of the adolescent. The subjects in this study are 1207 boys and girls in all.

The results are as follows.

- 1) The meaning of parents, friends and teachers as counsellor of the adolescent vary according to the matters to be consulted.

Mothers are chosen as counsellor by the most adolescent and then friends are done by the same adolescent.

- 2) With the increase of age, adolescents, especially in university students prefer friends to mothers.

THE STUDY OF PARENT-ADOLESCENT RELATIONSHIP ON THE PSYCHOLOGICAL WEANING (5)

S. Onishi and T. Kuze

The aim of this report is to verify the emotional closeness-the feeling-of familiarity of parents, friends to the adolescent. The subjects are the same pupils in the study of Parent-Adolescent Relationship-on the psychological weaning (4)-

Obtained results are as follows.

- 1) Concerning from the degree of emotional closeness to adolescent, mothers especially in girl adolescent, rank first to it. Friends rank next and teachers rank the last of all.
- 2) The degree of the feeling of familiarity corresponds functionally to the meaning of parents and teachers as counsellor of the adolescent.

THE KEYBOARD INSTRUMENTS OF THE 16TH, 17TH, AND 18TH CENTURIES

T. Yamane

Some knowledge of the keyboard instruments of the 16th, 17th, and 18th centuries would be a help to understanding of the music of that period. The principal facts about technical capabilities, individual colours of tone and their combinations, and, above all, an account of the practical differences between the old instruments and their modern representatives, can be given in a concise form and may prove very useful, considering the scanty amount of reliable information available on these subjects.

A STUDY OF THE TECHNIQUE OF ETCHING

K. Muto

Etching was first introduced into Japan some four hundred years ago, and came to be employed mainly for the purpose of spreading Christianity. At that time those Christians who lived in Arima, Amakusa and Nagasaki were eager to produce single-sheet prints and publish them as frontispieces of books, which prevailed all over the country. Although there were a rise and decline in the history of etching for a long time, it has always remained only the special technique of a limited number of craftsmen. This may indicate the fact that etching, historically considered, has never enjoyed such popularity as wood-block printing has.

Nevertheless, since much more stress has recently been placed upon the education of drawing and handicraft in our country, the Education Ministry felt it essential to include according to its new guiding principles wood-block printing (in a wider sense—etching included) as a required course in the primary and junior high school curriculum, as a result of which etching is now being taken up with the more enthusiasm.

Of course, I do admit that it is quite difficult to explain well the technique of etching only through writing, but I hope that this paper will give you some idea of what etching is like.