The Open Court

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea

Founded by Edward C. Hegeler

VOL. XLI (No. 7) JULY, 1927 (No. 854)

CONTENTS

The Open Court Publishing Company

Wieboldt Hall, 337 East Chicago Ave., CHICAGO, ILLINOIS

Per copy, 20 cents (1 shilling). Yearly, $2.00 (in the U.P.U., 9s. 6d.)

Entered as Second-Class Matter March 26, 1887, at the Post Office at Chicago, Ill., under Act of March 3, 1876

The Open Court

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea

Founded by EDWARD C. HEGELER

VOL. XLI (No. 7) JULY, 1927 (No. 854)

CONTENTS

The Open Court Publishing Company

Wieboldt Hall, 337 East Chicago Ave., CHICAGO, ILLINOIS

Per copy, 20 cents (1 shilling). Yearly, $2.00 (in the U.P.U., 9s. 6d.)

Entered as Second-Class Matter March 26, 1887, at the Post Office at Chicago, Ill., under Act of March 3, 1876

THE UNIVERSITY OF CHICAGO PRESS

5750 ELLIS AVE., CHICAGO

Christianity in the Modern World. *By* ERNEST D. BURTON. $2.00, *postpaid* $2.10.
Popular edition, $1.00, *postpaid* $1.10.

New Testament scholar, leader in denominational and missionary enterprise, and exemplar of the practical Christian life—these aspects of Ernest D. Burton were all reflected in his public utterances. A group of them have here been gathered together.

Jesus and Our Generation. *By* CHARLES W. GILKEY. $2.00, *postpaid* $2.10.

Forty-thousand people in six great student centers in India heard Dr. Gilkey's interpretation of the personality of Jesus. The lectures which we are now publishing present a unique contribution to the understanding of the founder of the Christian faith.

The Nature of the World and of Man. $4.00, *postpaid* $4.15.

"The divine curiosity" about the ways of life and man's part in them has always driven men to seek beyond the boundaries of the obvious. Sixteen men, impelled by this desire and better trained than most of us in the ways of scientific thought, have sought and found and written down for all other inquiring minds the facts about the world and man as they have found them. Their book, *The Nature of the World and of Man*, is a complete picture of the world as it appears today in the light of man's increased understanding.

Principles of Christian Living. *By* GERALD BIRNEY SMITH. $2.00, *postpaid* $2.10.

Ethics is not just a principle about which to theorize; it is one to be applied. This is the theme of Dr. Smith's book on Christian ethics. His aim is to indicate the motives which enter into Christian living as the individual finds himself a member of various groups in actual life.

The Psalms. *Newly translated from the Hebrew by* J. M. POWIS SMITH. $3.00, *postpaid* $3.15.

Dr. Smith's purpose is to express as completely and accurately as limitations of language permit the thought and feeling of the original—to incorporate the scholarship of recent decades. In this clear, uncorrupted version are disclosed, unhampered, the beauties and true meaning of the world's greatest hymnbook.

The New Testament. *By* EDGAR J. GOODSPEED. $1.00 *to* $3.00, *postage* 10c extra.

Continued interest in this modern translation has been met by the publication of seven different editions in styles to suit every purse and every need. The popular edition is bound in cloth, pocket size. The pocket and regular size editions are bound in cloth, leather or morocco.

The Formation of the New Testament. *By* EDGAR J. GOODSPEED. $1.50, *postpaid*, $1.60.

The well-known translator of the New Testament has given us an account of still another phase of the compilation of the New Testament. Here is the complete story of the ebb and flow of the New Testament books through the middle ages, the Reformation, and on down to our own day.

The Story of the New Testament. *By* EDGAR J. GOODSPEED. $1.50, *postpaid* $1.60.
Popular Edition $1.00, *postpaid* $1.10.

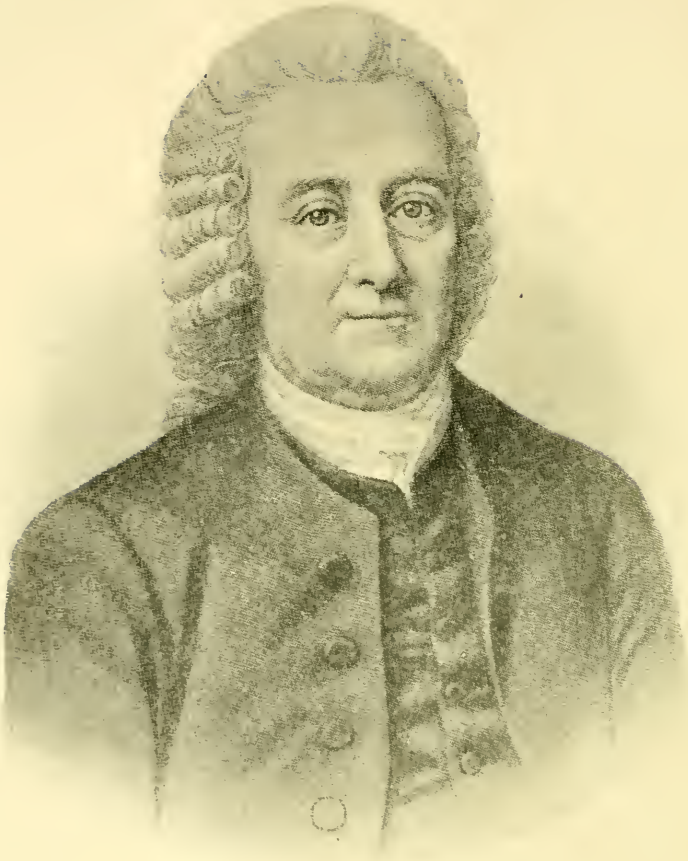
It tells who wrote the New Testament and when and where and how. This book presents in a vivid and popular manner the situations out of which the New Testament books arose, the actual conditions of early Christian life which caused the writing of each book, and the manner in which each writer met the problems before him.

The Religion of the Psalms. *By* J. M. POWIS SMITH. $1.75, *postpaid* $1.85.

The Religion of the Psalms gives an understanding of the purpose for which the Psalms were written and of their function in the Jewish community.

The University of Chicago Press

5750 Ellis Ave., Chicago



Em. Swedenborg.

Frontispiece to The Open Court.

THE OPEN COURT

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea.

VIL. XLI (No. 7) JULY, 1927 (No. 854)

LOGIC OF EMOTIONS

BY HENRY LANZ

SEPARATION of meaning from the psychological nature of ideas belongs to the most secure generalisations of modern philosophical science. It seems now quite natural that after the emancipation of logic from the control of psychology we should expect a similar reform for other branches of philosophy, especially for ethics and aesthetics. Modern philosophical literature moves unmistakably in the direction of the reform. And yet no definite results can be possibly obtained along those lines unless it is positively demonstrated—as it was demonstrated in logic—that our desires, impulses, and emotions also have an objective, "neutral" content which is in the same sense independent of our consciousness as the truth of a proposition is independent of its flash in the mind of one who discovers it. It is the purpose of this paper to advance some evidence of "neutrality" for the province of emotions, especially for certain groups of emotions which have definite artistic significance. By analysing the nature and origin of certain emotional concomitants in music and poetry along the lines suggested by Hanslick and Liddell, I believe it is possible to show that psychological bodies of emotions, such as, melodies, rhythms, and rimes, have certain a—psychological or *neutral nuclei*—an analogon of meaning—which remain constant and can be identically transmitted from one individual to another. Those nuclei are by no means simple, homogenous entities, but complex bodies showing intricate organization based on certain laws—such as the laws of harmony, for instance—which impart to them a character of specific necessity. Where "specific necessities" exist there must be a general body of principles which apply to all groups and all individual cases. And, although

the material to which this body of laws applies is—as we shall see—allogical and cannot be expressed in propositions; yet the laws themselves constitute a system which is theoretical in nature. This system then,—as applied to emotions,—may be properly called "logic of emotions". Certain fundamental propositions from it I hope to be able to establish here.

Psychologists define emotions as a feeling of bodily changes which follow the perception of some exciting fact.[1] Bodily changes which form the psychological basis for the rise of emotions are very varied, possibly innumerable. The change of heart beats and the tempo of breathing, visserial stirring and flushing of the face, certain contractions of muscles and, above all, certain chemical changes in various glands, produce internal sensations accompanied by various shades of pleasant or unpleasant feeling. Such mental complexes we call emotions.[2] Recent research into the matter has shown conclusively that our emotional life depends largely on the chemistry of the organism. If this is the case, the field of emotions must be considerably wider than it is popularly believed. For, what does not cause a chemical change in our organism? Every perception, every slightest sensation must be accompanied by processes of composition and decomposition of organic substances within certain cells. And indeed, it has been a long established fact in psychology that all our sensations, and possibly perceptions, are accompanied by a slight feeling of pleasantness or unpleasantness. It is what Germans call *Gefühlston*. Every sound, every hue, every shade of red or blue, has its specific emotional appeal which by no means consists of mere pleasantness or unpleasantness. For sensations may be pleasant or unpleasant in as many different ways as propositions may be true or false. In fact, the reference to pleasure does not adequately describe the innumerable differences in our emotional response. The monotonous sound of a cricket on a still night may be just as pleasant—or as annoying if you wish—as a prolonged practice of the same musical phrase on a piano. Yet both are so totally different from each other that the slight variation in the intensity of pleasure derived from them is insufficient to express the difference. Both situations, although equally pleasant, or equally annoying display different emotional contents.

Considering these differences we must say that the range of

[1] W. James, *Psychology*, Vol. 2, p. 449.
[2] E. B. Tichener, *An Outline of Psychology*, p. 229 ff.

emotions reaches considerably farther than our emotional vocabulary is able to follow. We have but few words referring to our emotional life. Love, hate, fear, alarm, hope, anxiety and a couple of dozen others make that portion of our emotional life which appears practically important and is discussed in the text books of psychology. The larger bulk of our emotions remain for ever nameless. And yet, it is precisely those nameless emotions which supply material for the domain of art. Of all these I shall here briefly consider (1) musical and (2) certain poetical emotions.

1. Melody is a form of emotional response. The tonal material that affects our ear is not melody. Hearing alone does not constitute what we call a musical ear. Beethoven was deaf, and nonetheless he remains the greatest master of music. But play one of his sonatas to a Bushman, who hears distinctly every single tone, and he will not be able to *hear* the melody. For strictly speaking, one does not *hear* a melody. One is able or unable to *follow* it, which means that one either has, or has not, the ability to organize the tones into a higher unity. This organization is accomplished emotionally. Emotion is the cement that binds various parts of the melody together.

A crucial test of the correctness of the assumption that melody is a form of emotional response consists in the psycho-physical analysis of its origin as it is given by Helmholtz. His theory briefly stated is this: Simple musical tones do not exist in nature; every tone is accompanied by a series of the so-called overtones. Therefore, listening to a musical sound we never perceive a single note, but a whole chord. If "do" is intoned by voice or any musical instrument we can clearly detect "sol" in its sound. "Mi" is heard less distinctly, although quite audibly, even without assistance of any tone-intensifying device. Thus, natural concomitants of "do" are "sol" and "mi" which together with the original "do" form the so-called major chord. In the infancy of music, therefore, a transition from one tone to another was most probably determined by the fact that the second tone was indistinctly heard together with the original. For this reason the most natural melodical transition is from "do" to "sol". This transition is indeed the foundation of all melodic motion, so to speak, the *model melody*. But as soon as the second note of the interval is actually taken, or even heard, a strong impulse is born in our mind to return to the original tone. *This impulse is the real origin of melody.* It may be immediately satisfied in the most

primitive way by a direct return to the tonic, or else the motion may be executed by means of another note that would lead the voice to the original tone. In the later case a feeling of suspense is produced that modifies the original craving for return. This craving can be intensified and varied in many different ways producing innumerable melodies from the sweetest Italian tunes to the most phantastic intuitions by Skriabin. Psychologically, therefore, melody is nothing else than a variety of desire, a longing or craving. It is not—I am aware—an expression of some heterogeneous desire, such as love, longing for God, or moonlight, or what not, which the composer is supposed to transmit to us. He does not transmit anything except his immediate and perfectly *unique desire to move from one tone to another,* which *is* melody.

There are till now, and—I am afraid—there always will be, many dilletantic enthusiasts of music who maintain that when they hear Beethoven's Moonlight Sonata they visualise a sort of lonely landscape flooded with moonlight. One would say that the landscape is lonely, the other would insist that you are supposed to see angels moving about, etc. It is popularly believed that it belongs to the intelligent listening of musical compositions to have stories connected with them. And thus forgetting music people fabricate their stories. Romantic aesthetics contributed much to this popular misunderstanding bestowing upon it the air of philosophical profundity. Even Hegel,—the sanest of all—, believes that music is a form of expressing truth, namely the inner truth of the subjective.[3] For Schopenhauer music becomes the language of the universe. And following Schopenhauer, Wagner,—this protagonist of philosophical music,—declares that music is of feminine character in that she conceives and bears a meaning that is given to her from the outside.[4] In all these theories there is very little new. They are all but variations of an idea handed over to us from grey antiquity which, with the words of Plotinus, says that "music dealing with rhythms and harmonies is but a copy of the real music, which in the realm of

[3]Hegel defines music as a "romantic art" characterized by a complete retirement into the subjective: *Die Hauptsache der Musik wird deshalb darin bestehen nicht die Gegenständlichkeit selbst, sondern im Gegentheil die Art und Weise wiederklingen zu lassen ,in welcher das innerste Selbst seiner Subjectivität und ideeller Seele nach bewegt.* (*Hegel, Vorlesungen über die Aesthetik*, p. 189.

[4]Wagner, *Das Wesen der Opera "Alles musikalische Organismus ist Natur nach weiblicher; er ist nur ein gebärender, nicht aber zeugender; die zeugende Kraft ausser ihm"* (p. 83). Wagner maintains that it lies in Drama.

mind, deals with the ideal rhythm."[5]

In contrast to this romantic interpretation Hanslick advances his formal and objective interpretation of melody. In his work "Vom Musikalische Schonen" he assumes that the principle of music must be "specifically musical" i. e., it lies exclusively in the relation and affinity of tones involved and not in any ideas or emotions that, being foreign to the tonal material, are somehow expressed in it. "If one asks what is expressed in the tonal material of a melody, the answer is: musical ideas. And a wholly actualized musical idea is an independent manifestation of beauty and end in itself, and not merely a means or material for expressing thoughts, or feelings". Under the stress of polemic Hanslick goes to the extreme saying that the content of it is purely "tonal". It is, however, emotional; not in the sense that it brings to expression some human emotions, such as love, joy, etc., which exists independently of music, but in the sense that it forms itself a group of specific emotions which do not, strictly speaking, find their expression in music, but *simply exist as music.*

Carefully perusing "Vom musikalisch Schönen" one comes to the conclusion that the author anticipates the realistic point of view in aesthetics. He objects to "feeling", not because he wishes to defend the sensualistic point of view reducing melody to the accoustic sensations, but rather because he finds in it something more definite and more permanent than both sensations, and feelings. He demands for beauty the same thing as Bolzano demanded for truth: an existence *"an sich"*, an objective validity that would be independent of our consciousness. Quite in accordance with the Husserlean phenomenology Hanslick says: *"Das Schöne, ist aud bleibt schön, auch wenn as keine Gefühle erzeugt, ja wenn es weder geschaut, noch betrachtet wird"*. And—going a bit farther—we may say that melody remains melody even if there is nobody to listen to it. As a neutral entity it retains its musical content. For, to be sure, it does not spring into existence every time it is performed, and does not vanish into nothingness every time a performer ends his programme. As a beautiful form it is valid all the time, or rather out of time,—eternally.

2. Another large class of emotions is produced by words. Words affect us emotionally in four different ways: by sound, by rhythm, by meaning, and by associations. The latter two, meaning and asso-

[5]Enn. 5; 9, 11.

ciations, are generally considered the most vitally important. Transmission of meaning is, of course, the chief function of words. Yet there are emotional concomitants connected even with the most abstract meaning. Every logical form throws its shadow into the land of emotions. It is those shadows that make our driest abstractions appear beautiful. Even geometrical theorems are not entirely deprived of this subtle beauty. For do not mathematicians often speak of the intrinsic ellegance of their proves and beauty of geometrical constructions? And, perhaps, it is the purest, barest form of beauty, that made a modern poet, in a humble resignation, exclaim:

Euclid alone has looked on Beauty bare. . .

Great mathematicians are great artists even in spite of themselves.

Yet meaning is the business of words. And it is the business of business to be unemotional. The largest part of emotions stimulated by words come not from meaning, but from associations. An idea may be expressed in a business like form in which only those words are used as are necessary to convey the meaning desired. Or the same idea may be expressed in what we call a poetic form which appeals—to use Liddells phrase—to our human interest. Thus, the content of every verbal expression is not merely logical, but logical plus emotional, or in Liddell's abbreviation:

$$X = HI$$

This however, is not sufficient to express the emotional content associated with a linguistic form. With every phrase there are connected not merely those emotions which are caused by associations and which are remembered from our previous experience, but also those subtle and transient emotional fragments which are connected with the sound, rhythm and physiognomy of words.

Reason has moons, but moons not hers
Lie mirrored on her sea,
Confounding her astronomers,
But, oh, delighting me!

Every poem, every phrase has such satellites of alogical formation that revolve around the meaning and the sound of words. Liddel calls it verse form, VF. In our every day conversation, where meaning stays in the foreground, those emotional satellites are ordinarily too small and are too far removed from the center of attention to be notices.

The words of most men kiss
With satiated familiarity

says the poet in Bodenheim's "Impulsive Dialogue". Yet there are means to make words emotionally more prominent. Those means consist largely of rhythm and rime.

(a) Rhythm in poetry does not exactly coincide with what is called metre. The latter is but a dead, academic form that is never followed in real poetry. From metrical point of view the first two verses in "Paradise Lost":

Of Man's first disobedience and the fruit
Of that forbidden tree, whose mortal taste. . . .

are iambic pentametre which counts five unaccented and five accented syllables. In actual reading, however, the accents of the second foot of the first line are reversed, for "first" is no doubt accented. The fourth foot has no accent at all, for nobody would read "and" with an accent. "That" of the second line is but slightly accented; in ordinary speech it would not be accented at all. Such interruptions of regular rhythm are by no means exceptional. They exist in all languages. Reading of poetry would be unbearably monotonous, if we strictly followed the metrical scheme. The reading quality of a verse depends largely on distribution of such interruptions. There are lines that move with solemn dignity; others that read with ease and playful ellegance; some that are sung, and others again that move heavily, with almost alarming gravity, as for instance, the first line of "Paradise Lost". A five-feet iambic verse with a trachee on the first foot such as:

Sing, Heavenly Muse, that on the secret top

is quite different in its rhythmic character, than the one that has a throchee on the second foot, such as the first line of the "Paradise Lost". A line that has no accent on the second foot reads differently from the one that has a similar interruption on the fourth. The difference in rhythm causes, and largely determines, the difference in our emotional response to a line as a whole. And this emotional response depends, not merely on the metre, nor even on the fact that there are interruptions, but largely on *where those interruptions take place.*

Following the methods used by a Russian scholar-poet, Andrei Belyi, for recording rhythms, I am giving here a table for a comparative study of English, Russian and German rhythms. I have selected thirty verse-lines in each language taken respectively from

Milton's "Paradise Lost", Goethe's "Faust", and Pushkin's "Boris Godunov", all of which are written in iambic pentametre. Each verse-line is represented by five cells corresponding to the number of feet contained in it. If a line follows correctly the metrical form retaining alternating accents on each foot, all five spaces are left blank. A foot that lacks accent is marked by a ·. A cross stands for a spondee, and trochees are represented by circles. An added syllable (anapestic foot) is marked by a triangle.

Table 1 represents the first thirty verses from "Paradise Lost". It contains a very large number of trocheeic feet (reversed accent) which for the most part fall on the first foot. Of the thirty lines twelve have trochees and six spondees.

Table 2 represents thirty lines from Goethe's "Faust".

Ich grüsse dich, du einzige Phiole!
Die ich mit Andacht nun herunterhole,
In dir verehr' ich Menschenwitz und Kunst.
Du Inbegriff der holden Schlummersäfte,
. . . . . .

The number of trochees is considerably smaller. The number of syllables which have but a very slight accent is considerably increased. Those interruptions fall largely on the second and third feet *which makes a line symmetrical, and gives it a swing.* Such lines as:

Und froh ist wenn er Regenwürmer findet

which is superbly Gothean, affording greatest rhythmical satisfaction on account, no doubt, of the symmetrical distribution of accents.

Table 3 represents a part of the fountain scene from "Boris Godunov" which in English transliteration, reads:

Ten Groznovo menya usynovila,
Dimitri' em iz groba narekla,
Vokroog menya narody vozmutila
I w zhertvu mne Borisa otdala.

The trochees are entirely absent. There are neither spondees nor dactyls. The rhythm is perfectly clear and transparent. It consists exclusively of interruptions which are quite distinct and well pronounced.

Comparing these three tables one can clearly see the difference in the rhythmic structure of different languages. English rhythms are exceptionally rich, and offer to a poet a wider range of possibilities. German and Russian rhythms are less complex, but more

Paradise Lost,
1-32.

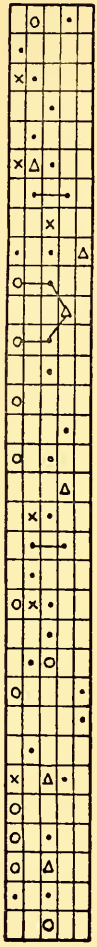


Table 1

Faust
690-721

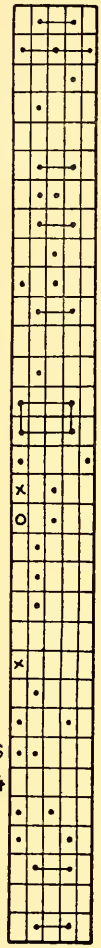


Table 2

Boris Godunov,
1-32

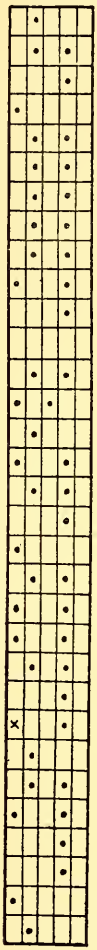


Table 3

°—trochee,
.—accent missing,
×—spondee,
△—dactylic foot.

symmetric and musical. Each horizontal line in our diagram indicates a rhythmic figure which tends to produce a special emotional response. In many cases two or three lines are symmetrically arranged so that they form larger rhythmical units. Thus, for instance., the 10th, 11th, and 12th lines of the first diagram form a "figure". The 14th, 15th, and 16th lines form another symmetrical figure. This symmetry unconsciously felt, gives in reading a great deal of satisfaction, such as:

Thát with no middle flight inténds to sóar
Above th' Aónian móunt, while it pursúes
Thíngs unattémpted yet in próse and ríme

Good German poetry is full of such symmetrical figures. It is sufficient to compare graphically, Goethe with some minor German poets in order to see how much Goethe's verse gains by constant recurrence of symmetrical figures. In reading, our emotional response to each different figure is different. Those differences cannot be expressed in propositions. Their meaning and emotional significance can be grasped only by listening to the words as actually pronounced. Each five-space line of the diagram represents a specific rhythmical figure with a *specific emotional content attached to it.* But it has no *logical* value, for it abides with the sound and not with the meaning of words.

(b) Another groop of emotional contents associated with words are introduced by rime.

It is well known that human vowels are tone-clusters in which each component sound has a specific intensity. Among the variously intoned over-tones, however, there is for each vowel one characteristic frequency constant to which falls the larger part of the energy of the sound. It is the tone which is intensified by the sympathetic vibration of the mouth cavity. It has been proven by experiments that this tone remains constant for every pitch of voice. Thus, in a very precise, and not at all metaphorical sense our vowels produce music. When we speak, the vowel-tones produce a gentle accompaniment to our speech which only lacks certain unity, or organization to become a melody. It is a continuous flow of subdued musical sound, a sort of "infinite melody" in Wagnerian sense, that is gently whispered into our ear by the vanishing vowels. If we agree to neglect the disturbing influence of consonants, we may represent the musical content of a phrase in common musical signs. The analysis of the following lines from Wordsworth may serve as

an illustration:

Hail, Zaragoza! If with unwet eyes
We can approach, thy sorrow to behold,
Yet is the heart not pitiless nor cold;
Such spectacle demands not tear or sigh.

The vowels of this fragment, when pronounced, contain the following melody:

Such, or approximately such, melody is actually contained in the above lines. If by some appropriate physical device we were in position to intensify the characteristic over-tones of every vowel, we might be able to hear the melody directly at its source. By playing it on the piano, or some other musical instrument, one may obtain but a very imperfect reproduction of it.

If, as we have seen, an harmonic deviation, from a well perceived musical tone is bound to produce in our mind a feeling of alienation and a desire to go back to the original tone, there are reasons to believe that an indistinct musical tone, such as perceived, for instance, in a vowel, will produce the same effect, only in a smaller degree. The phenomenon of assonance or inner rime, corroborates this view. There is a great deal of satisfaction connected with the return to the same vowel. As I have shown elsewhere,[6] the tendency to repeat the same vowel at the end of the next line (or alternatively) i. e., the desire for rime, is from the musical point of view nothing else than a tendency to close a verse in the same key in which it was begun. This tendency finds its expression psychologically in a slight emotional excitement which becomes decidedly "pleasing' and "satisfying", if the phrase ends in rime. Thus, rime may be properly defined as the *unity of key in a melody of vowels.*

It is quite obvious that rime is not concerned with the meaning of words, but with its form, which is emotional. It lies within the plane of a-logical cross-section of the verse. Just for this reason it often appears "mysterious",—a "work of genius", which is too dazzling

[6]Henry Lanz; "The Physical Basis of Rime. (Publ. of Language Association of America, 1926).

for our intellect to follow. The fact is, however, that being itself not intellectual it is not at all unreasonable. It belongs to the form, the external appearance,—poets call it "dress"—of a poem, which is in the same time the innerest substance of poetry. Deprived of this charming dress a poem often becomes ugly and ridiculous,—a direct contrast to what one would call poetical. At any event, if not completely distorted, the general tone of a poem deprived of rime becomes quite different from the original. Here is what O. W. Holmes says on poetry:

And most of all, the pure ethereal fire,
Which seems to radiate from the poets lyre
Is to the world a mystery and a charm,
And Aegis wielded on a mortal's arm,
While reason turns her dazzled eyes away;
And bows her sceptre to her subjects sway;
And thus the poet clothed with godlike state,
Usurped his Maker's title—to create;
He, whose thoughts, differing not in shape, but dress,
What others feel more fitly can express. . . . .

Now take the "riming dress" from this charming fragment! I shall ask my condescending reader to have patience to read the same lines once more without rime:

And most of all the pure ethereal flame
Which seems to radiate from the poet's lyre
Is to the world a mystery and a lure,
And Aegis wielded on a mortal's arm,
While reason turns away her dazzled eyes
And bows her sceptre to her subjects sway;
He, whose thought differing not in shape, but dress
What others feel more fitly can pronounce.

I have changed only three words in the above fragment selecting those which are equally, or even more poetical. (substituting "flame" for "fire", and "lure" for "charm".) And yet it sounds almost as a caricature on Holmes poetic eulogy.

Thus, the emotional effect produced by the melody of vowels is far from negligible. Homeopathic doses are sometimes the most effective ones. Think how many private lives were ruined by inner rime quite accidentally contained in the harmless formula: "seven—eleven". It is sufficient to remind one on such expressions as: "freedom and liberty" or "cash and carry", so show that rhythms

and rimes quite powerfully interfere with the affairs of our political and practical life. They are fit to electrify masses.

* * *

We have considered three groups of emotional contents: melody, rhythm and rime. They the particularly fit to serve our purposes of proving that emotions—like ideas—also have neutral content; for they not merely have a content, but allow their content to be symbolically represented in signs. One reason why the content of "ideas" was so early crystallised into "concepts" was that the meaning of ideas was attached to words. The symbolic value of words makes the neutral nuclei of ideas stand forth more prominently. Emotions on the whole lack this advantage. The path that leads our mind from "Satz to sich" to "Warheit an sich" was not available for those who ventured into the field of emotions. That is the reason why their neutrality remains largely obscured even now. And for the same reason those groups of emotions which allow sematological treatment are very important.

It may be objected, however, that strictly speaking it is not the emotional content that can be expressed in signs, but only a certain arrangement and sequence of sense-qualities. In writing down a melody, for instance, musicians merely indicate the sequence of tones in time; emotional content remains beyond their reach, and does not even belong to their intention.

And yet we nevertheless assume that in musical books, not merely the sequence of tones, but *melodies* are written. And melody, no doubt, is something more than a mere sequence of tones. It has a content that goes beyond our acoustic sensations. Buying, for instance, a piano transcription of "Boris Gudonov," I do it for the sake of harmonies and melodies it contains, and not for the acoustic material; for opera as performed on the stage has the same melodies, but certainly different acoustic material as orchestra and singing is quite different from what I am able to produce on my piano. If it were the correct reproduction of tonal material, nobody would ever buy piano transcriptions. It is evident that melody as a whole including its specific emotional tension finds its expression in musical signs. The content of musical emotions are there. They are as Germans would say *"mitbezeichnet"*. The same holds true with regard to our symbolic representation of rhythms and rimes.

There is, I think, as much reason to believe that content of emotions remains constant as there is reason to believe that logical

meanings never change. For even if it were true that our response to the sound of a melody is different every time, yet to know and feel the difference we have got to have a standard of identity. Otherwise the difference could not be seen or comprehended. This identity does not imply, however, that the content of each emotion is altogether "immutable". For we can not say that of our ideas either. It is, for instance, quite impossible to live through emotional content of given rime without in the same time considering rhythm and meaning. The melody contained in a verse is never given in an isolated form. And the impression produced by a given rime depends largely on the general impression derived from the whole poem, on the expressiveness of reading, musical quality of the voice, as well as the temporary mood of the reader or listener himself. It seems that at every particular moment we can have only one emotion in which various emotional contents fuse together. And yet that is no argument for refusing to admit the existence of fixed and constant emotional contents. Rime may be differently perceived at different times, for each time it is forced to co-öperate with a different emotional state of mind,—it is differently prepared, we may say. Yet—if it is active at all—it affects any state of mind in a definite way that never changes. It is not exactly a special mood or an isolated emotion that is forever connected with the given rime, but a certain mode of emotional coöperation, *certain fixed and definite way of modifying other emotion.*

What has been shown with regard to music and poetry can be easily applied to other emotions. Every emotion must have a content. This may be regarded as the fundamental axiom of the logic of emotions. Further on, the evidence that was obtained for the emotional contents which appear in music and poetry can be easily generalised. It can be shown in a general way that (1) the content of emotions is independent of our consciousness, and (2) it is of an a-logical character.

Proposition 1. *(Declaration of Independence). Although the content of emotions is given to us through mental processes, it is not dependent on those processes for its being, or nature.*

This proposition may be supported by the following argument: It is axiomatically, and without reservations, admitted by psychologists that "fear", "love", etc., are mental processes, or manifestations of consciousness. And yet what is consciousness? Psychologists till now can not agree as to the meaning of the term.

Every psychological school—and they are very numerous—has its own conception of what mental process or consciousness should be. Behaviorists refuse to admit that consciousness exists at all. An average man knows nothnig of mental processes. And yet, every one knows what fear it, and knows it very definitely without the inherent vagueness of the psychological theories. We have the testimony of an ancient fairy tale that a man who knows not what fear is, is but a fool. Nobody in the days of fairy tales would regard a man particularly foolish for not knowing what "mental process" means.

Psychologists claim that our mental processes are "immediately given" to us. There is revealed in this assertion a remarkable inability of philosophical minds to draw a line between facts and theories,—remarkable especially in view of their incessant argument about this very distinction. There is nothing surprising that men of science grow suspicious whenever a philosopher begins to speak of "facts". It is quite possible that men of science often commit the same fallacy; yet there is nothing surprising in it as it is not their business to know the distinction. A philosopher ought to be more cautious. Speaking of mental processes he ought to remember that they appeared comparatively late in the history of human knowledge, that ancient Greeks knew nearly nothing about those "facts", and that there was a great deal of thinking necessary to grasp the distinction between the inner and outer world. Till now the distinction is very far from being clear, and every philosophical school, nearly every individual psychologist, have different conceptions of what inner life, consciousness, or mental processes should be. That shows that "consciousness" is, not a given fact, but a doctrine, a theory obtainable only through learning, and a great deal of learning. It is not a "sensation" that is immediately given to us, but red and blue rough and smooth, loud or soft. "Sensation" is a psychological theory (and not a very clear one) that is superimposed upon those immediate facts. Consciousness is a giver that in itself is never given.

For similar reasons the content of an emotion must be different from its psychological nature,—different precisely in the same sense in which red is different from sensation. It is not the emotion that is given to us, but "fear" or "love", "courage" or "hate", "hope" or "despair". What psychologists call emotion is not at all a mere generalization obtained by abstraction from those underlying facts.

For there is not much to generalize from hope and despair. It is not a generalization, but a hypothesis. And living through a fear we certainly do not live through a hypothesis.

It may be objected, however, that "fear" is an emotion. Of course, we shall reply. But it is also true that space is a perception. And yet this proposition, though true, does not prove a single item in the system of geometry. For mathematicians in dealing with space "take consciousness into parenthesis" and forget all about their perceptions, which never appear in either their arguments or proves. Similarly a man who is in love can hardly derive anything from his knowledge of psychology that would have any bearing upon his happiness. Yet he can derive a great deal of practical and useful knowledge from literature, which deals largely with the content and genuine structure of love, and not at all with its "psychology".

Proposition 2. The content of emotions, although a legitimate subject for theoretical analysis, can not be intellectually comprehended. It can be logically discussed, but cannot be grasped by logic or expressed by a theory.

One who says "fear" attaches certain meaning to the word. Referring to this meaning, i. e., discussing fear one is not supposed at the moment of discussion to live through an actual experience of fear. One may fairly intelligently discuss fear without being actually afraid of anthing or anybody. This is a purely theoretical situation in which nothing but meanings are involved. From this situation actual experience of fear is entirely different, and whoever lives through this experience knows that he, not merely means, but feels fear. There is something present in his experience that goes far beyond logic, something that cannot be logically accounted for. One who loves and enjoys music knows that no logical terms, no theory whatsoever can "explain" a melody. One must actually or mentally *feel* the melody in order to grasp it. No logical terms can possibly give it to us. One who says "Sigfried melody" attaches definite meaning to his words. Those are not merely words, but words with a definite *logical* meaning. And in the realms of logical concepts *there is* a concept that corresponds to these words. *Yet that concept itself is merely a symbol.* To indicate the Sigfried melody itself, words and concepts are not sufficient. We need musical signs. And one who reads those signs reads directly the melody itself.

Now in conclusion, let us briefly discuss the application of the above proposition to the general problems of aesthetics. The value

of the first proposition consists in establishing independence for a large realm of phenomena which otherwise appear in constant danger of psychological attacks. Psychological treatment substituting theories for facts shifts all problems to a different level, and often makes us forget the original issue; instead of analysing the structure of what is actually given to us in our artistic experience, or otherwise, we, under the effect of psychological fallacy, begin to analyze the process of experience itself. To avoid this error, in aesthetic especially, it is well to have the truth of the first proposition constantly in view.

The second proposition guarantees a correct method for dealing with many objects of art. There are three ways of enjoying an artistic work. The first is when we simply and naively enjoy a work of art without trying to "understand" anything beyond what is immediately given to us in form of enjoyment. This is, perhaps, the most adequate, and I should say, the most sympathetic way of approaching art. For that is precisely what the artist expects us to do. There is another, professional way of approaching an artistic work, which is based on training, and study of technique and history. This professional way, by no means, interferes with the naive enjoyment. It merely opens for enjoyment new points which otherwise may escape our attention, and makes our appreciation of the work more thorough and profitable. There is, however, a middle way betwen these two, which is neither naive, nor professional and consequently not at all belonging to the proper territory of art. It consists of "understanding" reached through "philosophy" and based on "profound interpretations". People who are dull and unartistic and unable to feel the content immediately given to them in music, or poetry, often wish to prove their "intelligent" reaction by what they claim to be mystical revelations. They substitute their cheap symbols and commonplace images for the genuine content of great works. And thus, the tragic harmonies of Sonato op. 27, are brought down to the level of a pictorial moonlight-melodrama that might be successfully used for advertising Ivory Soap, or Packard cars. To avoid such illegitimate substitutions it is highly important to realise that emotions can not be properly "understood", but merely *emoved*, or lived through in a manner accessible only for emotions.

"THE MEANING OF MEANING"—WORDS AND IDEAS

BY VICTOR S. YARROS

"WORDS, words, words", said Hamlet, and on similar occasions we make the same contemptuous remarks about orators, rhetoricians and politicians, or even about solemn theologians and moralists, who use words, labels, cliches, tags, overworked phrases, without attaching any real, sincere and definite meaning to them.

Many a fallacy or pompous, high-sounding assertion may be punctured by simply asking the speaker: "Pray, just what do you mean? Please define your terms with some approach to precision."

To give one example. The late Luther Burbank, the eminent horticulturist and experimenter, observed that most of those who say that "God is a spirit" have not the faintest idea of what "a spirit" is, and actually imagine God as an elderly gentleman with a white beard and austere mien. The same may be affirmed of those who, less naive, tell us that God is conceived by them not as a person resembling man, but as "a super-person." Of course, they cannot possibly tell you what they mean by a "super personality". The compound term has *no definite meaning.* It is a conscious or unconscious substitute for other terms, which *had* a meaning, but a meaning outgrown and rejected as no longer entertainable. Burbank was right, though he was abused for his blunt remark.

Again, there are words which, though possessing or carrying no *definite* meaning, are charged with emotional significance and conjure up, in any connection or context, a rich variety of images. Words, as the poet said, not realizing the full deep meaning of his words, "are deeds", alluding no doubt to words of this character. To this category belong such words as *love, beauty, virtue, truth, justice, mercy.* To say "beauty", for example, is to call on a hundred different memories, images, perceptions and emotions. One

may think of beautiful women, beautiful sunsets, beautiful landscapes, beautiful gardens, beautiful birds, beautiful poems.

In general, however, the meaning of meaning is a problem the solution of which bristles with difficulties. And never has the importance of a correct and satisfactory solution of that problem been appreciated as keenly as it is to-day, by reason of the new theories now current among psychologists, philologists, anthropologists and philosophers concerning the origin and function of language, its relation to thought and its role in promoting civilization and progress.

Generally speaking, there are two views of the genesis and early development of language. According to one school, there is a significant and vital correspondence between words and natural objects, sensations, sounds and simple feelings. This school has even sought to explain *things, phenomena,* by studying the *words* which represent them. The other school treats language as, in the main, *conventional* and *artificial.* It does not deny that *some words* were suggested by sounds or appearances, but it finds little significance in such correspondence. Words like gurgle, tinkle, rattle, clatter, chatter, hum, etc., clearly enough indicate their source and origin, but it is absurd to suggest that analysis and contemplation of them will aid us in fully *understanding the things they represent.*

It is the second school which is rapidly gaining ascendency. And of the remarkable and illuminating books produced by it, "The Meaning of Meaning", written by Prof. C. K. Ogden and I. A. Richards of England, is unquestionably the most profound and philosophical. Its central propositions, moreover, are supported or confirmed by Prof. B. Malinovski, an anthropologist and ethnologist of note, who writes of language and of meaning in the light not of library research alone, but also of direct and practical contact, under varying conditions, with surviving tribes in primitive stages of culture. (Prof. Dewey, by the way, quotes Prof. Malinovski with warm approval in his work on "Nature and Experience", which the present writer has reviewed in this magazine.)

The book has attracted much attention and high praise, though it is confessedly introductory and tentative. Its central thesis is, perhaps, best summarized in the following brief statements of Prof. Malinowski:

"Language and all linguistic processes derive their power only from real processes taking place in man's relation to his surround-

ings."

"Language serves for definite purposes; it functions as an instrument used for and adapted to a definite aim."

"Language in its primitive function and original form has an essentially pragmatic character; it is a mode of behavior, and indispensable element of concerted human action."

"Neither a word nor its meaning has an independent and self-sufficient existence. . . . Words must be treated as symbols, and a psychology of symbolic reference must serve as a basis for all science of language."

"The meaning of a word must always be gathered, not from a passive contemplation of it, but from an analysis of its functions, with reference to a given culture."

The authors of the volume under discussion, Messrs. Ogden and Richards, show by illustrations drawn from philosophic, metaphysical and aesthetic literature that even the term "meaning" is not properly understood today, and that it is used actually in no fewer than *sixteen* distinct senses. They argue that to *understand* any word, it is necessary to regard it as a *symbol* and to know what particular thing it refers to, while definition of a term is merely the substitution of a better understood and better known term or symbol. They stress the importance of distinguishing between the symbolic and the emotive uses of language, and show that much confusion in discussion and even in science is due to different uses of the same terms by the disputants. They show that language often influences and distorts thought by its vagueness and ambiguity.

Indeed, the influence of language upon thought is but little understood by the average thinker. To quote the authors:

"There are three factors involved when any statement is made or interpreted.

"(1) Mental processes. (2) The symbol. (3) A referent—something that is thought of.

"The theoretical problem of symbolism is, How are these three related.

"The practical problem, since we must use words in discussion and argument is, How far is our discussion itself distorted by habitual attitudes toward words and lingering assumptions due to theories no longer openly held but still allowed to guide our practice."

Phantoms and superstitions associated with words that are inherited from the past, from cultural stages long since outgrown,

prevent clear thinking and mutual comprehension. Savages attributed magic to words; they were not altogether wrong. There *is* magic in words, and it plays havoc with much that passes for exact, scientific writing.

Hence, the greatest of all reforms now needed in philosophy and the socalled social inexact sciences is reform in the use of words—the deliberate and careful attaching of clear meanings to all words employed for other than emotional purposes.

In the light of such observations and conclusions as these regarding the relation between words and the things expressed by them, it is not difficult to point out the fallacies of writers on religious, ethical and metaphysical subjects who mistake words for ideas or realities. Take a few examples.

We still often meet with the assertion that science and religion are totally distinct provinces, with a high, insurmountable wall between them, and that the methods and procedure of science are utterly alien to religion. "Faith", or "belief", is all that religion needs and demands, we are told, and without the emotional reactions which beget faith and belief religion is impossible. Men of science, therefore, are admonished to leave all their notions of evidence, proof, probability, and the like behind them when they close the door of the laboratory or the research library, and become simple and child-like again, or heed the very different *logic of the heart,* before venturing to deal with religion.

Those who use such phrases have simply failed to define the significant words in them or to ask themselves whence those words came and how they acquired any meaning, *if they possess one.*

There is no such thing as faith or belief without apparent evidence or reasonable ground. Not every pretender, impostor or self-deluded faker inspires faith in us. Christians do not take the claims of Mohammed very seriously, and the followers of the Arabian prophet, in turn, do not accept the claims put forward by the worshippers of Jesus of Nazareth. Jews read the New Testament and the Koran with a critical mind, and the emotional reaction produced in them is *esthetic,* not religious. They may admire the style here, the form there, the substance or ethical message elsewhere. But their "heart" jumps to no conclusion of the sort said to be "spontaneously" drawn by the orthodox believers.

Again, the orthodox and naive Monotheist is overpowered and awed by such a phrase in the Old Testament as "Thus saith the

Lord". Those who think of the Lord as a jealous ruler, a stern law-giver, an occupant of a celestial throne surrounded by angels and archangels, attach a concrete, definite meaning to that phrase which the Agnostic and the atheist deem childish, and the latter, therefore, are neither overpowered nor impressed. On the other hand, Agnostics and Atheists *are* confessedly impressed by the mystery of nature, the glories of the universe, the phenomena of space and time, the miracle of life. They do not, however, solve riddles by changing their names, or by inferring other and greater riddles behind those sought to be explained.

Let us imagine a dialogue between one who uses words carefully, with appreciation of their value, and one who uses them without reflection or understanding, the subject being the supposed essentials of Christianity as a religion.

Believer: I respect and value science within its proper sphere, but it has no jurisdiction over religion. It can neither prove nor disprove my profoundest beliefs. Faith has its own logic.

Skeptic and Agnostic: And what, pray, *are* your profoundest beliefs with which, you admit, science has nothing to do?

Believer: The existence of a personal God, the Supreme ruler of all things, the creator of all things, and the divine origin and mission of His only begotten Son, Jesus, the Christ, the redeemer of man.

Skeptic: And how did you reach and form those essential beliefs?

Believer: They are spontaneous—in the nature of revelations. They satisfy my soul and heart; they give life meaning; they solve the riddle of existence; they are supremely rational.

Skeptic: Are you certain of the *spontaneity,* or the *revelation?* Would you possess the same beliefs if your education had been different, if your parents, teachers and other early guides had professed Buddhist or Mohammedan doctrines, or Agnosticism? Do persons born and reared in a wilderness, or among savage tribes, and not taught Christianity, *acquire that faith spontaneously?* As to the *rationality* of your beliefs and their interpretaion of life, perhaps you are too easily satisfied, and mistake words for ideas. What seems to you irrefutable seems to me and to many others very shallow, empty and not worth refuting. God, you say, created all things, gave men free will, suffered him to fall, and then sent Jesus, His Son in human form, to redeem man. You have no real con-

ception of God, in the first place, and you have no notion as to his purpose, if any, in creating man, or in letting him fall, or in saving him, if he *is* saved, or if the word "saved" has any definite meaning, which is debatable, to say the least. Begin, if you please, by attempting a definition of God.

Believer: Ah, to define God is to limit Him, and He is infinite. The best we can do is to think of Him as *pure spirit.*

Skeptic: And what *is* pure spirit? Where do you find it and how do you know it exists?

Believer: Why, even science tells us that matter is ultimately resolvable into—into force, and that there is no such thing as matter. No matter, then there can be no materialist philosophy. We revert, then, to force, spirit, as the stuff of the universe, and the creator of all this stuff, of course, is pure spirit.

Skeptic: Yes, there is no such thing as *matter* in the old crude sense of the term, but we do not know what matter resolves itself into. Call the ultimate constituents of atom spirit, if you like, but that is only a word; it has no definite meaning. What the stuff of the universe is, no one knows, and if that be true, as it is, to call the supposed creator of the ultimate stuff 'Pure Spirit' is not to throw any light either on the stuff or on its supposed creator. "Materialism" is nonsense as a philosophy, of course, but so is spiritualism or vitalism. *These terms simply have no meaning.* Science knows nothing and says nothing about *cause* or *ultimates.* Religion knows nothing, either, about these things, but says much, and *what it says seems intelligible only because believers do not ask for definitions and explanations of terms.* Religion is just as ignorant as science, and might better admit the fact, and belief in Jesus or in his mission is justified only if it *can be supported by evidence and probability.* The belief in the parthogenetic origin of Jesus is merely childish and superstitious. Like beliefs, equally childish, are to be formed in other and cruder religions. Talk of "saving" man is absurd. Man has risen very slowly, and is still rising. He has sinned and still sins against *his own better self,* but no one can *save* him from the consequences of his folly, malice and hate. He must learn to control his anti-social desires and impulses; he must learn to behave like a truly civilized being. He cannot be "saved" at a given arbitrary period and licensed to start all over again.

To purify itself and appeal once more to rational persons, religion must begin by learning the meaning of meaning and avoiding

the use of terms that conceal lack of thought and of ideas.

But some metaphysicians are as guilty as theologians of using terms without meaning and erecting philosophies on fog, mist and illusion. Take the naive old-fashioned idealist who asserts that nothing really exists save our own dream or idea. When he asks how we *know* that alleged realities are real, and not fancies of our own mind, he merely demonstrates the fact that he does not know the meaning of the words used by all intelligent persons, nor the origin and significance of words generally.

When I say, "I see a tree", it is idle for any metaphysician to tell me that I am deceiving myself, and that I have nothing but a notion or idea of a tree. I say *the tree is there*, because these words have to me a perfectly definite meaning. I can also think of trees in Paris, or in Peking. I can thing of trees painted by artists. I can think of trees I saw and climbed when a boy. Finally, I *dream* of trees and know that I have such dreams.

Common sense easily perceives the *difference* between all these images and ideas. Philosophy cannot afford to disregard and outrage common sense. Even if the naive idealists were right in some sense, their conceptions would be irrelevant to the problems of life and language. Perhaps there are no trees anywhere, and we only think and say "they exist"? But our words have grown out of our experiences, needs, feelings, contacts. We distinguish between trees seen, trees remembered, trees dreamt of, *because these distinctions are to us very real and very significant.*

In truth, most of the empty controversies between naive idealists and naive realists are attributable to carelessness, confusion and unconscious muddling and shuffling in the use of words. To start out with precise definitions and common meanings is to obviate nine tenths of the futile and pointless discussions in which we indulge.

Take, again, the dogmatic statement of some "mechanists" that man is "only a machine". If they were careful in the use of terms, they would realize that this proposition is pointless and empty. Physiologically man is a machine, of course, and no one disputes it. But do all machines act as man does, and does the application to him of the name machine take away his peculiarities, his distinctive traits, his unique endowment? Do machines write poetry, compose symphonies, construct philosophic systems, build cathedrals, evolve religions? Are machines conscious of themselves, capable of re-

flection, self-restraint and choice? Do machines reason, draw inferences, interpret facts? Do machines accumulate experience and profit thereby?

Since man does things which no machine fashioned by him can do, it is absurd to call him a *mere* machine. It is precisely his differences that call for explanation, and no verbal explanation which ignores those differences can possess the slightest value.

Illustrations of the essential theme of this paper, indeed, might be multiplied indefinitely, as they are not confined to the fields of philosophy, metaphysics and theology. We can find them in abundance in economic literature, in political discussion, in sociological treatises, in art criticism. Let one "burning" instance suffice—the different senses in which the word "radical" has been used of late and is still loosely used. What is a radical? One who goes to the root of things, traces causal connections, makes scientific diagnoses of social problems and prescribes adequate and genuine remedies, says the thoughtful radical himself. A radical is he who teaches destructive doctrines and would overthrow society by violence and civil war, says the conservative. A radical is he who denies everything, recognizes no principle, and demands license in the name of freedom to experiment, says the ultra-conservative. In France there is a radical party that is mildly liberal and a radical-socialist party which is neither radical nor socialistic. Yet how much energy, space and time have been wasted on attacks upon or defenses of "radicalism!"

Decidedly, the beginning of wisdom and of understanding is a correct and intelligent use of words and a firm grasp of their *intended* meanings. No meaning, no word. No idea to express, again, no word. New ideas require new terms, or frank and clear redefinitions of old terms retained for convenience. If we are determined to fight, let us fight not over misunderstood words, but over definite ideas and conceptions, over actual differences— of which, fortunately or unfortunately, there is no dearth.

SWEDEN'S CONTRIBUTION TO PHILOSOPHY*

BY AXEL LUNDEBERG

IF it be true that the literature of a people indicates its genius and character, this is especially so in regard to its philosophy. Poetry and fiction give expression to feelings and emotions while philosophy gives form to thoughts shaping them into concepts and arranging them into systems, which represent the highest achievements of the human mind. The Greeks with their overpowering sense of harmony and beauty were the first to produce systematic philosophical thinking in Europe. The Romans, absorbed as they were in pursuits of conquest and world-dominion, could do nothing better than imitate the Greeks. The middle ages lived to a great extent of Greek remains mixed with scholastic speculations. The new time has got hold of the lost chord and built on Greek foundations, until recent thinking has dared to move on independently with Germany and England as standardbearers of new world conceptions.

But even if the main currents of modern philosophy are to be found among the Teutonic and Anglo-Saxon subraces still even the smaller nations have had their say and made their contribution to the common fund of human speculation. This is especially the case with Sweden, a country located dangerously near the Northpole, almost half a year veiled in semi-darkness, and inhabited by an industrious and sturdy race of people hard working during the short summer, studying, meditating and speculating to while away the

*Swedish philosophy is almost as unknown outside of the mother country as was Hindu speculation some fifty years ago. The following discourse is intended to serve as an introduction to the study of that philosophy by introducing to the reader three representative Swedish thinkers, Swedenborg, Bostrom and Bjorklund, the main features of whose systems are here given in outline, and may be likened to three brilliant beads on the same string, for, aside of some minor differences, they are closely connected by one idea, common to them all, though seen from three different view points. Of the value of the idea, as an element of modern culture, this brief outline might enable the reader to form an independent judgment.

loneliness of the long winter nights. No wonder then if these exceptional climatic conditions should have fostered thinkers of an independent trend of mind deeply tinged with impressions from the rugged nature of the homeland.

Sweden's geographical location as isolated from the rest of the world by large sheets of water has created a spirit of independence and self reliance, which has found expression in characteristic adages such as "help yourself and God will help you", "a brave man helps himself" etc. It has also contributed to the rise of an independent philosophical thinking, the main characteristics of which are derived from the physical condition of the country. Located at a safe distance from the equator, far too "safe" some might think, Sweden does not know of any destructive cyclones. awe-inspiring quakes of the earth or vastating floods. Nature might in some respects have dealt in a stepmotherly way with the Swedes, but in return she has been a good stepmother, for she is calm, orderly and well tempered, and if she sometimes rules with the mailed fist of iron still every Swede feels that this hand is governed by justice and order. Would it then surprise us that a people fostered and nurtured in such an environment should create a philosophy, whose main feature is order, system and organization? In fact we shall find this to be the case. Of all the Swedish thinkers, in whom this common trait is conspicuous, we shall confine ourselves to the three, whose accomplished systems entitle them to occupy the first rank among many. They are in order of time Emanuel Swedenborg, Christopher Jacob Bostrom and Gustaf Bjorklund.

Swedenborg's Kosmosophy

Emanuel Swedenborg was born 1688 and died 1772, and consequently was a contemporary of Leibnitz, Locke and Christian Wolf, whose system is a further development of Leibnitzian metaphysics, and whose writings were the main source, through which Swedenborg got acquainted with Leibnitz, as appears from his extended notes on the psychology of Wolf, published under the title of *Psychologica; Being Notes and Observations on Christian Wolf's Psychologia Empirica.* He was the last of the great thinkers of the "Illumination" so called, which preceded the French Revolution.

But while our Swedish philosopher undoubtedly has been in-

fluenced not only by Leibnitz, but also though in lesser degree both by Locke and Spinoza, still his thinking is independent enough to warrant the statement that he has neither taken his starting point from, nor built on any of his predecessors.

According to Swedenborg there are three means whereby knowledge is acquired, namely experience, mathematics, and rational thinking, or in other words the subject matter is supplied by experience and further elaborated by rational thinking according to mathematical laws. It is only through this process that we can acquire knowledge about God and the world and their relation to one another. Swedenborg conceives of the whole universe as a living organism, whose center is God, who is likened to a central sun, from which life emanates and fills the material world. God consequently is the creator and sustainer of everything. Originally nothing but God existed, and when he produced the world he created it out of himself, as there was nothing else to create it from, and out of nothing, nothing can come forth. How could God, who is infinite, out of himself produce the world, which is finite and limited? Swedenborg devotes considerable attention to the answer to this question in his Cosmology in one of his greatest works: *Principia or The First Principles of Natural Things,* Vols. 1 & 2. First, he says, there arose within the Infinite innumerable whirling points, which formed around the central sun of the universe two luminous belts, the one outside the other, consisting of "bubbles", which according to their distance from the center became more and more dense or concentrated, so to say more "material", until at last they were condensed into an aura or finer atmosphere, which he also calls the spiritual or human aura, because in it the human soul originated. The elements of this first aura, as also of the two luminous belts, Swedenborg calls "the first and second finite" in contradistinction to the Infinite, which is God. (See also the author's work on *The Infinite and the First Cause of Creation*). Said elements are invisible to the human eye. Still farther from the central sun is found the second, magnetic or animal aura, composed of the so-called "third and fourth finite elements", which also enter into the composition of the natural sun, and consequently fall within the visible world. This aura is closely surrounded by the ether or the electric aura, whose elements likewise are said to consist of "the fourth finite". This aura serves as the conductor of light. Next comes "the fifth finite" consisting of the aerial atmosphere, the

medium of the phenomena of sound, and last and outermost is found "the materially finite" or limited, which is perceived as water, steam, vapour and finally courser material forms such as wood, stones, minerals, the bodies of plants and animals. All these atmospheres or "auras" are composed of small particles, by Swedenborg called "bullae" or "bubbles" so formed that their interior or kernel consists of the inner or finer aura, while their exterior or shell is composed of the courser particles of the nearest lower aura —resembling an egg with its yolk and surrounding white substance. Do not these elementary "bubbles" remind of Leibnitz's "monads" as also of the "cells" whereof all organic beings are built? And yet the attentive reader will agree that they are not identically the same, as their origin and structure differs. All this vast universe with its solar and planetary systems, yea, all their supersensual equivalents or correspondences, emanating from a central sun, forms one single living organism, sustained by a continual influx of life from God; and so strongly does Swedenborg emphasize the organic structure of the universe and all its constituent parts as to ascribe to it "Human Form"—form not meaning "shape" but a structural unit performing functions and "uses" in and for a common whole. This far-reaching idea is further developed by Bostrom, and still more in detail elaborated by Bjorklund, as will appear from what follows.

The statement of Swedenborg that the world is created out of and from the very substance of God, and is an emanation from him, could easily lead to the conclusion that it too were God, as in fact Spinoza taught. This difficulty, which Swedenborg anticipated is met by him by the doctrine of "discreet degrees" original with him. According to this doctrine the divine life emanating from God does not flow into the world in an uninterrupted or continuous stream or current, but is going on stepwise or by degrees so sharply defined and distinguished from one another, that one degree cannot merge into or as it were mix with another degree as for instance is the case with degrees of cold and heat, or light and darkness, and so forth. However, for the maintenance of the unity and continuity of life there must be an interaction between them, and this mutual co-operation is effected by means of the bond of causality, so that a higher degree of life produces effects in a lower degree, which there manifest themselves as "correspondences" to similar phenomena in a higher degree. Through this ingenious

reasoning Swedenborg saves his philosophical system from being entangled into the labyrinth of pantheism as was the case with Spinoza and most Hindu philosophers. But in so doing he at the same time emphasizes the fact that the life of the universe is maintained only through the divine "influx" and that the whole creation would immediately become annihilated if this divine inflow should cease.

What so far has been said refers not only to the corner of the world we know but also to the whole universe with its innumerable worlds, many of which Swedenborg thinks are inhabited by rational beings. His world-conception embraces the whole existence, both the spiritual and material and comprises not only all the solar systems of the universe but also all the realms of nature: the mineral, the vegetable, the animal, and the human, which all are subject to uniform laws, obey one will, and constitute one harmonious and orderly kingdom. Its originator aimed at the merging of all sciences and all human knowledge into one grand harmonious system, a science of sciences, which when completed should solve the riddle of the universe. He therefore extended his researches to all branches of human knowledge and thus became one of the most many-sided scientists of his time well worthy of the title of the Aristotle of the North.

So far we have tried to briefly indicate the main features of Swedenborg's Cosmology. We cannot here enter into an exposition of his Psychology as this would require more space and time than now at our disposal, and besides, at least partly lies outside of the purpose of this brief sketch, which is to give an outline of his philosophy in its most general features. From what has been said it is plain that Swedenborg belongs to the idealistic current of thought which can be traced from Plato, Pythagoras, Plotinus, Cartesius, Spinoza and Leibnitz up to our time. But he also belongs to the era of "illumination" and shares with other thinkers of that period in an insatiable thirst for knowledge, and an incessant effort to usefully employ that knowledge in all departments of human activity not excluding new mechanical inventions. But as he flourished towards the close of that period there may also be noticed in his philosophy currents of thought, which already during his life time were about to develop into, and later found expression in German idealism, for the philosophy of the eighteenth century had, with Locke and his followers evolved into a materialistic world-con-

ception which gradually culminated in the optimistic political economy of Adam Smith, whose entire sphere of thought was limited to the industrial world and its interests.

And while Swedenborg's Cosmology like that of his contemporary Isaac Newton was "mechanical", the universe being conceived of as a machine operating according to mechanical laws, he nevertheless was in advance of other thinkers of his time through the decided emphasis he put upon the reality of a spiritual and supersensual existence, in accordance wherewith he, when referring to experience as the source of knowledge, understood not only sensual but also spiritual experience, which latter to him was just as real as the former, and also most decidedly vindicates God's position not only as the creator but also as the ruling sustainer of and the moving force in the world-mechanism.

Swedenborg has given no name to his philosophy. When designating it as "Kosmosophy" we intend thereby to indicate its far-reaching scope and universal character as well as its claim to represent the universe as a harmonious and well-ordered Kosmos subject to immutable laws and governed from a common center.

Bostrom's Rational Idealism

Hegelian Pantheism was about to conquer Sweden and had already invaded the southern regions of the country when in the North it struck an impenetrable wall in the form of an independent native philosophy. The originator of this new philosophy was Christopher Jacob Bostrom, who, while influenced by his contemporaries, Fichte and Schelling, nevertheless went his own way, not so independently as Swedenborg but still without adhering to any of the then existing philosophical schools. Bostrom was born 1792 and died as professor at the University of Upsala in 1866. Like Hegel he elaborated a complete and finished system of thought, which no doubt to a certain degree contributed to the popularity, not to say sovereignty, which he enjoyed among the intellectual and educated classes of his native land.

The Bostromian philosophy claims to be the logical development of idealistic speculation as represented by eminent thinkers from Plato to Leibnitz by putting the capstone of completeness and perfection on all previous philosophical efforts along idealistic lines. Bostrom claims to have reached this goal by eliminating from his conception of philosophy all materialistic and empirical elements and retain only what he considered as purely idealistic, why he also

designated his system as "rational idealism". Philosophy is, according to him, the highest and most perfect of all sciences or, as he says God's own thinking, and is consequently perfect truth. But as such it cannot be conceived by man, whose philosophy on that account is marred by many imperfections and limitations, for man, although rational, is a finite being—"sensually rational" as Bostrom expresses it—and therefore cannot think the thoughts of God, which are perfect and free from sense limitations. Philosophy is either theoretical or practical and treats of God man and human society. God is said to be "infinite reason"; man is defined as a "sensually rational being", whereby is indicated that his reason or rationality is limited and conditioned by his "sensuality" i. e. his position in the world of senses or materiality; society is defined as a system of rational beings, and humanity, as composed of all human societies, is the highest and most complete of all social systems, why it also is called "the system of systems". It should be noted that Bostrom by system means a harmonious entity or an organism, and here we may observe his close relationship to Swedenborg.

Bostrom further teaches—as also does Swedenborg—that originally nothing existed but God, and that everything else is nothing but God's conceptions or ideas. As such, that is in and before God, they must be perfect, because God can think no imperfect thoughts, and consequently the whole creation, including man, as conceived by God, must be perfect. To themselves, however, and as their own conceptions, they appear with all the limitations conditioned by their "sensuality" or existence in the world of senses, and consequently imperfect. As conceived by God then the whole sensual or natural world, thus also man, must appear as perfect, that is without sensual limitations, because such limitations cannot be thought by God, for if he should in his thinking give place to the sensually limited, he himself would, of course, become "sensual" and consequently finite, which is contrary to the idea of God and makes God a part of his own creation, (in contradistinction to Hegelian Pantheism).

All God's thoughts or ideas, which constitute the whole conceivable world, form a system, that is to say, they are in an organic union with one another. This organism is called the spiritual world or "the kingdom of God", in conformity with the teachings of Swedenborg. All the members of this organism are mutually connected with each other as the links of a chain, but in such a way

that some are on a higher, others on a lower stage in the realm of existence. This relationship might be illustrated by the series of numbers, where every single number in itself contains all the other numbers either as a whole or as a fraction, i. e., either in a positive or in a negative sense. This might also be exemplified through man's relation to his environment. He is first a member of his family, then of the nation, and lastly of humanity, which is the highest of all societies. This doctrine, too, strongly reminds of Swedenborg.

When thus, according to Bostrom, everything existing is nothing but conceptions, either God's ideas, which are perfect, or man's ideas, which are imperfect—it follows as a logical conclusion that nothing that we are able to conceive can be the real thing, but is only a phenomenon or an appearance, as also Kant taught. Thus, for instance, we can never form an adequate idea of God in his perfection, neither can we perceive the smaller societies—the nations and the states—nor the totality of them all, which is humanity, as rational and personal beings, which in reality they are. (Swedenborg with his characteristic preference for concrete representation of the abstract expresses the same thought so, that they have or "are in the human form",—form not meaning shape, but referring to organic function and uses). For 'to be" is, according to Bostrom, the same as "to be perceived", and "to be perceived" is "to be", in consequence whereof perfect "being" is the same as the perfectly "perceived", why it cannot be pronounced of human beings, except from the viewpoint of God.

In Bostrom's philosophy also enters a system of rational theology, which is in harmony with the rest of his world-conception. His rational religion coincides in the main with the religious liberalism of our time, and consequently it made him a *"persona non grata"* in the eyes of the Swedish clergy. More fortunate he was in his application of his "doctrine of the state" to conditions then existing in Sweden, thereby following in the steps of Swedenborg and Hegel. He considers monarchy the only rational form of government, and the division of the legislative body in four estates as the most perfect form of popular representation, which of course made him very acceptable to the ruling class, and to some extent made the authorities overlook his religious and philosophical radicalism.

The Bostromian system has exerted a wide-spread and deep influence on philosophical research in Sweden for various reasons.

Bostrom's world-conception is characterized by an honesty, straightforwardness, boldness and intrepedity, which always has strongly appealed to the national humour of the Swedish people. Furthermore Bostrom had a highly winsome and attractive personality, which made him very popular with the young generation at the university of Upsala, where he was active as a teacher and lecturer for nearly forty years. But the main reason for the general acceptance and popularity of his philosophy is perhaps to be founr in the very nature of his system, its universality and completeness, which makes the impression of something compact, finished and harmonious, for Bostrom has developed idealism—in contradistinction to empirism, naturalism and materialism—to a maturity, unknown before him, and endeavored to give logical and decisive, not to say ultimate, answers to many problems which were either left unanswered or only imperfectly solved by previous philosophical research. He has reached this goal by eliminating all ametrialistic or "sensual" elements from his idealistic speculations, whereby his thinking has become, as he claims, purely rational or, if you prefer, reasonable. (There is not the slightest doubt that Bostrom would have branded all philosophies but his own as "irrational"). However that may be, it cannot be denied that his system occupies a high rank in the history of philosophy. But whether he has succeeded in placing it on a vantage ground unassailable for all time to come is another question which in his case, as in all others, can be satisfactorily answered only by the following development of philosophical research.

We have tried to point out the most conspicuous similarities and also the differences between Sweden's culturally most prominent thinkers, Swedenborg and Bostrom. The causes of the former are not difficult to discover. Both of these thinkers have sprung from the deepest soil of native Swedish culture, and why then should they not move within related spheres of thought? Both follow the path of idealistic thinking in the realm of philosophy, and how then could they be total strangers to each other, even if not contemporaries as to time? Add to this the fact that a comprehensive and very sympahetic work on Swedenborg was published in Upsala during Bostrom's professorship at the same university and under the authorship of one of his most celebrated fellow-academicians (Atterbom); how could he have avoided to undertake the study of so prominent a precursor? His works cer-

tainly bear the stamp of an intimate acquaintance with him. Again as far as the differences are concerned they are easily explainable from the different theories regarding the sources of knowledge held by the two thinkers, Swedenborg drawing from the rich resources of experience, whether spiritual or natural, while Bostrom confines himself to rational thinking alone. But nevertheless both of them have—let alone their similarities or differences—through the solid and magnificent dimensions of the structure of their speculative systems made highly valuable contributions to the treasure house of philosophical research.

Gustav Bjorklund's Organic Idealism

Gustaf Johan Bjorklund was born 1846 and died 1903, barely 57 years old. His was a sad fate. It was not given him to lay before the world a finished and complete expression of the philosophical ideas, for the elaboration of which he had broken tender family ties and forsaken the glories of an illustrious and influential career, to which his eminent mental and intellectual capacities not less than his commanding personality and striking physical appearance entitled him and upon which he no doubt would have successfully entered had he chosen to do so. But instead of all that he voluntarily chose poverty and seclusion to get an opportunity to devote himself exclusively to the fulfillment of what he considered to be his sacred mission in the world.

Bjorklund is a disciple of Bostrom. But he could not, as so many others *"jurare ad verba magistri"*. He moved independently within the sphere of thought delineated by his teacher, and he made practical applications of Bostrom's "rational idealism" which might have startled its originator.

We are already familiar with Bostrom's conception of humanity as an organism or, as he preferred to express this pet idea of his, a personality, a sort of living entity composed of ideas systematically arranged in such a way that the lower always entered into the higher either positively or negatively, either inclusively or exclusively. We have further seen that Bostrom was wont to illustrate this relationship of the ideas by the series of numbers. Bjorklund, however, chose another illustration, which led to far more important practical results than Bostrom ever dreamed of.

From the very beginning of his philosophical speculations Bjorklund aimed at a practical result. Like Swedenborg he cared very

little for theories unless they could be made useful. Taking for his starting point the Bostromian "rationally idealistic" conception of human societies as "persons", i. e. organisms, and humanity as the highest of all organisms known to "sensually rational" beings, Bjorklund drew the logical conclusion that all human societies, the smaller not less than the greater, are involved in a processs of evolution, the aim and purpose of which is their final coalescence into one single organism-humanity, and he undertook to show how this process is effected and at the same time indicate and define the laws that govern the same. Thus the abstract theory of the organic nature of society would be supported and corroborated by empirical proofs of its correctness whereby it would plainly appear that its logical consequences must of necessity lead to a brotherhood of nations and a peaceful co-operation free from international complications, so that wars would be impossible and a state of eternal peace realized.

Bjorklund's intention originally was to show, by a historical survey, how the primitive smaller societies gradually had combined, thus forming greater and greater communities until this growth at last resulted in the now existing nations, which again in their turn are destined to combine into one single society-humanity. But during his preparatory studies for this work Bjorklund changed his original plan into another which, though novel, semed to him more productive of conclusive evidence. There were, so he reasoned, other organisms than the human societies. Man himself was an integral part of a social organism and at the same time a nature-organism subject to the same evolutionary laws that govern all organic beings. Would it not then be possible, yea, even probable that an analogy existed between the growth of human societies and the development of the nature-organism? It was for the purpose of analysing this presupposed connection that Bjorklund turned from history and instead engaged in such anatomical and biological researches which he thought would further his aim. During the pursuance of these studies he became more and more convinced that not only did a similarity or analogy exist between the evolution of the human societies and the growth of the nature-organisms, but rather a complete identity. For the constant evolution from lower to higher forms of existence, in which both are involved, is realized and made actual through the mutual coalescence of the former and there merging as organs into the higher entity which is formed

through this process of coalescence. This thesis is proved by reference to animal forms which originated in the coalescence of segments, which originally lived a more or less independent life, and were only loosely connected with one another. These nature-segments consequently are not constant but rather transient forms, destined to, by emerging out of their independent individual existence, connected form a higher organism, which they serve as organs. In the evolution of human society these nature-segments correspond to the separate nations, which likewise are destined to grow out of their individual independence—their segmental state—and combine or coalesce into one single higher organism-humanity —and to serve it as organs or in other words to perform functions useful to the whole. In the first of his published works entitled, *The Coalescence of the Nations,* of which unfortunately only part I treating of "Material Coalescence" was finished by the author, Bjorklund delineates into the minutest details the comparison between the social organisms, formed by men, and the animal organisms, and shows that their development is governed by identical laws and consequently must lead to the same results. Just as the nature-organisms are composed of cells, through whose co-operation they subsist, so also human societies consist of co-operating cells, which are the human individuals that form society. Just as sure as the human cell is an organism, just as sure is human society an organism (Bostrom: a "person"; Swedenborg "in the human form"). The difficulty of so conceiving human society is caused precisely by the same obstacles which so long delayed the discovery of the cells of the nature-organisms, namely the lack of organs, or rather means, to see them. In the case of the nature-cells the discovery of the microscope removed this hindrance, revealing the diminutive cells which were invisible to the naked eye. In regard to the human societies the case is the reverse, because here the cells, being the human individuals, are visible, but not so the organism or social structure which they form, as no human being is able to see society as a whole, just as little as a cell in the human body can see that same body.

Bjorklund also has applied the cellular theory to psychology and made an attempt thereby to prove the immortality of the human soul. Life, according to him, is not a dead force of nature but a special "life-force" distinct from the former, and immortal. This life-force constitutes the very essence and life of the cells, why they

too must be immortal, and consequently also the organism they form, namely the spiritual body which is destined to be the abode of the human soul in the future life. These thoughts which are further elucidated in a work entitled "Death and Resurrection from the Point of View of the Cell-theory" are mainly to be considered as a remarkable and noble effort to strengthen the position of Idealism in its battle against the forces of materialism. Its greatest merit lies undoubtedly not so much in what it accomplishes as in the new and original method its author has adopted in availing himself of the latest discoveries in natural science, especially anatomy and biology, as a support for his idealistic world-conception. So far as the writer knows he has had only one precursor of note in that same line of thought namely his illustrious countryman Emanuel Swedenborg for instance in his work on "The Mechanism of the Intercourse Between The Soul and The Body".

Bjorklund was engaged in the elaboration of a greater and more extensive philosophical work, intended to represent the fundamental principles of a complete world-conception, when his life suddenly came to an end through an unexpected death. As he left only a fragment of this work we are unable to get an idea of its intended contents.

We hope, through this brief survey, to have succeeded in giving our readers some idea of the trend and character of philosophical research in Sweden, of its worth and value as an independent current of thought, and also of its relation to philosophical speculation in general. As will appear from the above, Swedish philosophy is built on idealistic foundations. One of its most conspicuous characteristics is also the conception of the ideal—as well as the material-world as a living organism. This idea runs like an Ariadne-thread through all the three philosophical systems, whose main principles we have tried to lay before our readers. Swedenborg, with the preference for concrete images, that pervades his whole authorship, expresses the same idea by the concept *"Maximus Homo"*, "human form". Bostrom, who was very fond of abstractions, calls the same concept "personality". Bjorkland, on the contrary, with his strong leaning towards natural science and his practical bent of mind, confined himself to the designation of the same idea as an "organism".

It remains to say a few words about the sources, from which the

above is drawn. Swedenborg, though a voluminous writer, never made a continuous exposition of his system. His philosophical ideas, therefore, must be gathered from some 150 books and manuscripts, where they lie scattered broadcast among scientific, theosophical and theological discourses, from which they have to be carefully sifted. In the case of Bostrom, again, only certain parts of his system were finished by the originator, while most of it was orally committed to his audiences, on whose notes we have to rely. Bjorklund, finally, did not live long enough to fully elaborate his world-conception, and only fragments thereof are extant. But the material at hand is rich and complete enough to enable the interested student to get the gist of their teachings, and form a clear and distinct idea of the same. This is what we have undertaken to do in the foregoing pages, constantly aiming at faithfulness to our purpose and correctness of our statements, in the modest hope of having, at least in some measure, succeeded in contributing to the filling of a deplorable "lacuna" in American philosophical literature.

A LETTER TO A FRIEND*

Dear George:

Here is the "letter" I promised you,—autobiography. No fiction, even in names. Stark realism abhors such feeble disguises. If this is published I may, however, preserve a decent semblance of anonymity. I have never before told anyone the complete story. I felt incapable of putting parts of it into words. So, until now, I always shrank from the effort of writing down matters that almost defy expression. Direct address will make the attempt easier, applying also to others who sat with me twenty years ago, when, in a single instant, Coincidence turned my world upside down. The events are as vivid in my memory as if they took place only yesterday. But if I am in error about any personal reference, I trust that you, or anyone else concerned to whom I may submit a copy of this document, will correct me on that point, both in fairness to himself and in the interest of accuracy.

I believe that my story belongs with the authentic varieties of religious experience. Externals, however trivial, are significant as the objective switches or guide-rails of a train of inner phenomena. The difficulty lies in distinguishing between illusion and reality, between mystical experience and abnormal psychology. The line of demarcation is not definite, as the doctors will testify. Science itself must keep an open mind or be untrue to its professed methods. . . . Well, here goes.—

You remember we began our Junior year at College in 1906. My religious faith, at that time, was superficially orthodox, deepening under the intellectual and spiritual stimulus of Princeton: *"Dei sub numine viget."*

As you may recall, the challenge to unthinking faith had come,

*George Looms ,author and publicist, to whom the following was addressed, died December 24, 1926, in Denver, Colorado.

not as an attack on our catechetical teachings and church doctrines, but as the statement of a problem by John Grier Hibben, then Professor of Logic and Philosophy. That was in our Sophomore year. What follows may seem merely academic, but is important for background.

Dr. Hibben briefly outlined the main types of philosophic thought, touching upon Idealism, Materialism, Monism, Dualism, and finally the Evolutionary doctrine. Explaining Evolution, Hibben said that Man was supposed to derive from a parent animal stock. The anthropoid apes descended on one side and Man ascended on the other. Hibben touched upon Darwin's theories of natural and sexual selection, and then mentioned Hugo DeVries' new discovery of *Mutations,* based upon experiments with the evening primrose. This theory, the lecturer said, suggested the appearance of new species as sudden mutations or "sports". When the creative process had reached the "point of saturation" it might thrust forth a new species, not merely a variety of the old slightly modified by gradual processes of natural selection. Dr. Hibben's position is well known. The difference between Man and animals, he contends, is a difference in *kind* rather than *degree.* To us he suggested that the divine spark of intelligence or reason may have appeared in the animal stock somewhere along the anthropoid line, thus making for the infinite potentiality of man as contrasted with the brute creation.

He reached the conclusion, however, that Religion and Evolution were not yet reconciled, and, as you may remember, left us with the problem that has focussed in the conflict between Fundamentalists and Modernists.

. . . . . .

That summer I forgot philosophy in favor of philogyny. In this case, one girl. I first met her when we went to High School. She entered Cornell in 1906. There was an "understanding" between us but no formal engagement.

I was bitten by the "cave-man" theory of "the masterful male" and Roosevelt's *Strenuous Life.* This combination seemed to work, but was always something of a strain. I wrote a thing for the "Nassua Lit." One stanza ran:

> "So if you're true to Fortune when she seems least true to you
> The goddess will not pass you when she picks the loyal few,
> But to be among the favored you must bend her to your will,
> For the goddess is of women, and they love a master still."

The verse form may be unfashionable, the sentiment passé, but the Nietzschean idea behind it represented then an intense conviction—The Will to Success. (I was very inexperienced.) Don't skip this with a smile. It's illuminating.

As the books have it, I was in love—physically, emotionally, and spiritually. Romance! Your novels show that you realize the stimulating influence of sex upon religious emotionalism—the susceptibility of adolescence to mystic beauty, the eternal Song of Solomon. This was true in my case—the usual romantic idealization—a mental condition often bordering on the ecstatic—a plunge into work with intense energy. "Do it *Now*—100% Efficiency".

The H. P. E. curriculum was so coordinated that I seemed to be growing in power every day. Subconsciously I felt that all my activities, physical, mental and spiritual, were bearing me toward some portentous result, hidden in the future. So acute was this feeling that it was like a premonition of splendid achievement, not disaster.

Obviously that condition was evidence of over-fatigue. Working at top speed, my brain tissues were storing up the poisons of auto-intoxication. I had no feeling of exhaustion. Instead, driving along by sheer will power, I generated the exhilaration of accomplishment.

In short, I was approaching a crisis like Robert Louis Stevenson's classic breakdown (*Memories and Portraits*).

I ran cross-country, as you know, and drained my nervous vitality training for the Varsity team. For I did more work than the coach prescribed. I was preparing syllabi in three different lecture courses, contributing to the "Tiger" and "Lit" and running for class office. My letters to Ithaca might be abridged to: "I must see you soon. You must come down for the Yale game."

My roommate—(You knew Alex)—will be a pivotal figure in this narrative. Alex had told me that when Woodrow Wilson was chosen President of Princeton, Henry van Dyke was passed by because he was considered unsound in Christian doctrine. This story may have been "Seminole" gossip, because Dr. van Dyke later assured me that he had never been a candidate—that he was a writer, not an executive, and intimated that he would not accept a college presidency "on a gold plate". The rumor, however, left an impression that had no little influence on my subsequent actions.

A point where my memory differs from Alec's version relates to

the evening of November 1. Alex afterward believed that I was up most of the night brooding over the Bible. He was doubtless sincerely convinced that this was so. As a matter of fact, I seldom read the Bible, and never opened it that night. In the character of Tiger lampoonist, inspired by the tirades of our track coach who filled me with excitable detestation of W. R. Hearst and Tammany Hall, I was composing some lines of satirical verse on the political situation in New York State. The satire I thought good enough to mail to several New York papers, but I don't believe it was published. It may have been libellous, but I have since seen worse things in print about William Randolph Hearst. I may have gone to bed about two o'clock. I slept profoundly, mentally exhausted, not overstrained to the point of insomnia.

That brings us to the morning of Friday, November 2nd., when you and I met at 8 A. M. with the Class in European History for Professor Coney's lecture in Dickinson 2. . . . Old Dickinson Hall has since burned down, and Coney is dead. But whatever became of "Joe Gish"?

Like the black poodle in Goethe's *Faust* that dog introduced elements so unreal—so fantastic—into my experience that my own account would scarcely be credited without corroboration.

Every Princeton man of that period remembers Joe Gish. Wasn't he a brindle bull terrier?—Ugly as Sin, crazy but perfectly harmless. Named after the fictitious freshman who "won" the cannon-rush for his class every year.

You may agree that Joe Gish, the dog, wasn't mad in the usual sense. Call it pyromania. He was literally a fire-eater. In scriptural days his obsession would have been termed "demoniac possession," subject to exorcization. In the 16th Century his owner might have been hanged as witch or wizard. You know how the "simple students" burned newspapers on the campus or dropped "fresh fire" from the windows, and poor old Joe went perfectly insane. He had none of the usual animal dread of fire, but gallantly charged the blazing enemy, pawing and chewing the flames until his mouth and tongue were scorched raw. Then you saw him wander around the campus, licking the cold metal of the fences and fire plugs to cool his blistered tongue and chops—slavering all over the ground. A tortured hell-hound; to paraphrase Jonathan Edwards, a sinner in the hands of his thoughtless gods.

Joe frequented our classes, usually well behaved. But did you

notice that, during the last week in October, he was unusually keyed up—on edge? I recalled his strange actions afterwards. Several times during those previous lectures he ran under my seat, brushing against my legs with his hair bristling on his back, as he growled or rumbled in guttural tones. The boys were usually pretty noisy, applauding and stamping their feet whenever the lecturer became emphatic or flowery. I was too busy taking notes to pay much attention to Joe. If I thought about his nervousness at all I put it down to one of his fire-fed aberrations, not to any possible affinity between my own mental condition and his increasing excitement.

On that Friday morning I was seated next to you, among the Ls, somewhere in the middle of the class. There may have been a hundred of us,—I don't remember the number, but of six or seven long lines we sat in the middle row. My seat was next to an aisle on the right hand side of the room looking toward the front. The aisle was at my left and you were on my right. The inner vestibule door had been left open by late arrivals, but the outer door was closed.

I was writing as usual—in a mixture of shorthand and long-hand—following the professor through the triple mazes of King, Nobles, Church, Papacy, Feudal Lords, Crown. The lecturer seemed to be going around in a circle, striving desperately to give meaning to the chaos of mediaeval Europe. At his more emphatic tones or gestures the class broke into loud applause. Meanwhile I took notes mechanically, while my mind functioned casually on irrelevant matters—cross-country, the Yale game, the girl, then religion.

Some reference to the Mediaeval Church suggested Hibben's conclusions the year before: "Science and Religion have not been reconciled." My mind, over-stimulated, acted directly, ignoring possible difficulties. "Why," I thought, "doesn't somebody do it, then? These scholars—all these preachers and people who have studied philosophy and science and theology—why don't they get somewhere?" My impatience was fervent as a prayer. . . .

My mind reached back to what afterwards became the crux of the Tennessee Evolution case—the origin of Man. Dr. Hibben's outline emerged—"The animal—the parent stock of man—intelligence introduced—the divine spark—by mutation—infinite potentiality—the human intellect reaches a point of saturation—what next? (Someone has said that we haven't developed our intellectual capacity over that of the Greeks of the Age of Pericles.)"

Then, like an answer to my "prayer", my own mind took the inevitable step—"Out of Man, another Great Mutation—Christ— the Incarnation of Divine Love—perhaps the Virgin Birth". At that time I had never heard the term "Superman". Hibben hadn't mentioned Nietzsche.

At any rate I wasn't thinking in terms of the Nietzschean Superman, but of his antithesis. Of course I didn't know that Gilbert Chesterton and others had suggested the same idea. I didn't know that Tennyson had anticipated the idea, mystically, in the 103rd. Canto—the key-canto—of *In Memoriam*. I was ignorant of the bio-genetic theory, which, by analogy at least, would have backed up my line of reasoning. It was before the time of Bergson's *Creative Evolution*. And I hadn't heard of Bernard Shaw's *Man and Superman*.

To me the Superman was an original idea, reconciling my orthodoxy with a smattering of science and philosophy. I had asked for "reconciliation". And I got it, with the force of inspiration.

I stopped my mechanical note-taking. The idea had come in a flash. But it ought to be discussed with someone. Hibben could probably help me. Then, as Alex had said, Henry van Dyke had wrestled with the problem of the divinity of Christ. These two men, both Christian ministers, one a philosopher, the other an eminent writer, ought to be able to set me straight. Help Princeton reconcile Science and Religion. *That* ought to be done, Hibben had implied. Why not? I ought to see Hibben—perhaps in a few days—when he is not too busy and I can find him at home. And Henry van Dyke too—just casually. But I *will* see Hibben....

At that precise moment, Joe Gish, who was lurking quietly in the aisle right beside me—had been there unnoticed, I think during most of the short period of time that had elapsed,—just at the instant when I came to a willed decision, Joe broke into a terrific barking. The tones were horrible,—sepulchral. To me the noise was devilish and unholy. The room resounded with the racket. You all heard it and surely remember how that dog dashed down the aisle toward the door, still barking and yelping horribly. Poised in reflection, pen in hand, I was completely unsettled by that hellish noise. The coincidence appalled me. The tension immediately became electric. The atmosphere was stifling, unbearable. I couldn't sit through the hour—couldn't follow the lecture—might as well see Hibben right away. I closed my notebook, stuck it in my right hand pocket, my

fountain pen in my breast pocket.

Then, as I started to rise, a peculiar sensation—possibly a nervous spasm like epilepsy—ran through me. Just as if some tremendous spirit, expanding within my breast, were bursting out of me, half lifting me from my seat, surging up from inside my body to my mouth, and wrenching me toward the right instead of the aisle on the left. I felt my mouth twisted by this internal force as it seemed to leap forth and leave me. Did you notice the distortion of my features, or not? Joe had stopped barking and yelping and was now alternately whining abjectly in terror and plunging at the outer door with terrific force, using his head as a battering ram as if there were SOMETHING in the room that had driven him into panic terror.

My own convulsion lasted but an instant. The next moment, in action, I was a center of calm like the core of a spiritual cyclone. I turned to the left to follow the dog to the door. As my glance fell on the two-thirds of the class seated beyond the aisle, I noted a phenomenon—or was it an illusion? The front rows sat applauding the lecturer, moved by a common impulse. I could see their hands meeting sharply, their grinning faces upturned toward the rostrum where the professor, nervously strident, gyrated dizzily in an effort to hold their attention above the disturbance. The noise of clapping and stamping was loud and spontaneous.

But the line along which I gazed, and the two or three rows behind, sat braced back, silent and rigid, their immobile hands whitely gripping the desk-arm chairs, faces staring straight ahead with tense, strained chalkiness, like corpses in a mist. No sound but the dog's fearful whining and plunging came from my left. As I saw and heard it the class was parted in the middle, as hair is parted by opposing movements of the comb. Each group was moved to an antithetical homogeneous mental or emotional state at the same instant, and apparently by the same cause. There may, of course, be some natural explanation of the cleavage. A remark by the professor was often the signal for universal and thunderous applause. The dog's outburst and my sudden salience, almost coincidental, might account for the death-like amazement of those in the rear. But the line of demarcation went exactly through the point whence Joe had first leaped barking and yelping from the aisle beside my seat. I was astounded. I had never known of anything like it, coming on top of my train of ideas and the dog's instant terror.

Something else to tell Hibben and van Dyke! What could it *mean?* But for me the cause was less vital than the consequences.

I turned sharply, and strode down the aisle with a peculiar sense of amazement combined with exhilaration.

The dog was now silently lunging at the door. Like Chaucer's Miller, he used his head as a battering ram, regardless of hurt. No sound but those crashing impacts. With each plunge, the door-knob rattled and the panels creaked, and Joe's claws scratched the floor as he bounced back and dropped down to gather himself for the next frenzied leap.

As I reached the vestibule a loud deep voice, that did not seem to be my own, burst out of me: *"Down!* Get *down* you . . . . " The dog crouched back and groveled on the floor at my feet. I turned the knob and pulled the door open toward me. Joe crawled out silently on his belly and wormed his way down the hollowed slate steps like a chastened puppy. To me he moved like some grotesque mottled reptile. There was a subtle suggestion of frustrated diabolism about him—like a whiff of brimstone to the nostrils of my imagination.

I closed the door behind me on a roar of applause. The whole class was back of that—probably giving me a hand for putting out the dog. The scene within must have jerked back to normal. Well, I didn't care. . . . I had other things on my mind.

Professor Coney died several years later. I never learned how the scene looked to him, or how it appeared to the eyes and ears of anyone else. Perhaps you will check up on my observations. Alex told me that you immediately began taking notes for the syllabus.

My bewildered mind was nevertheless functioning like lightning. Unabashed, though the heavens fall, the human intellect will always seek causes—always probe the cryptic meaning of life—ever seek to rationalize the apparently irrational. Psychologists know that the deepest mental characteristics may be revealed by abnormality. And even the sensitive normal mind, under great stress and strain, may be stimulated to an intensity of thought that produces new ideas, or discoveries.

Thinking intensely, my mind at white heat, I postponed my intention to see Jack Hibben. First I had to think this out. The strange phenomenon that had manifested itself to my eyes and ears, coincidental with my train of thought, suggested some kind of *revelation.*

I had no delusions, no hallucinations—unless what I had seen and heard in Dickinson 2, could not be substantiated by the testimony of perhaps a hundred men. I heard no Voices,—with the force of a mandate. God did not talk to me familiarly, as He does to the ordinary fanatic.

I was simply a much perplexed and upset youth seeking enlightenment. Like a flash, by verbal association, the idea of revelation that leapel into my mind suggested the *Book of Revelation*. I had a "hunch" that I might find an answer there. The idea was what our college slang called a "hunch", what Science calls the "method of trial and error". I took my gray cap out of my pocket, pulled it on, and turned down the path to Brown Hall. Reaching my room I found my little pocket Testament.

Some very devout people might be more impressed if I stated that Heaven-guided fingers opened the volume to certain texts of the*Apocalypse* and I got an answer immediately. Such was not the case. The method of accident is used to prove almost anything from texts selected by random opening of the Bible. Romantic fiction employs the same device.

I knew about the *Apocalypse,* but I had never read a single chapter consecutively. The idea of "revelation" seemed to apply equally to the intellectual enlightenment of my evolutionary thinking and to the peculiar sense-perceptions of my experience in the lecture room. Therefor I turned deliberately to the *Book of Revelation* to solve a problem in eschatology as I might have turned to an authority on Biology or Mathematics to throw light on some problem in those subjects.

I leafed rapidly through the first chapter. The oriental imagery was tremendously impressive, read for the first time. It was clear that the Spirit of Christ was speaking in a vision to St. John.

At that time, I knew nothing about scholarly research into the influence of the Hebrew apocalypses—*The Apocalypses of Ezra* and the *Secrets of Enoch;* nothing of Bishop Lowth's book on the *Sacred Poetry of the Hebrews;* or the tendency of recent Higher Critics like Wenley and Jastrow to rationalize everything in the Bible.

What I could understand of the first chapter had no message for me. But in Chapter III my straining attention was fixed on verses such as:

"Angel of the Church in Philadelphia" . . . "Behold I have

set before you an open door and no one can close it". . . . (I lived in Philadelphia!)

"He that hath eyes to see and ears to hear—let him hear what the Spirit saith to the Churches."

These texts were profoundly impressive—arresting. Then I came to ii. 17, *"To him that overcometh I shall give a white stone and in the stone a new name written which no man knoweth saving he that receiveth it."*

Now consider the name of the girl uppermost in my thoughts—the "White" of her disyllabic surname—her middle name (also a family name), "CHRISTINE." The names leaped into the text like electric sparks from a surcharged battery. Given the events and ideas charging the battery, the text and my mind were like positive and negative poles. It was inevitable that the spark should flash across—the contact split the darkness like lightning. "CHRISTINE—a feminine savior—the second coming of the Spirit of Christ in Woman"—(The suffix after "White" in her last name, I thought, must mean "stone".)

Of course I knew little then about the origin of names,—nothing about St. Christina, the Christian martyr of the Third century A. D., the Roman patrician, patron saint of Venice and the Adriatic states, pierced by arrows when she rose to the surface of Lake Bolsena with a millstone around her neck. Her fame shone dimly in the Church beside the glory of the Virgin.

It may be easy to scoff at the preposterous, not so easy to draw the line between what is impossible and what is merely rare or improbable, between material miracles of thaumaturgy and spiritual miracles of regeneration, inspiration, revelation.

Perhaps only those who have idealized one woman with an unalterable transcendent devotion will understand this apotheosis of womanhood: the loved one as a symbol of divinity.

Objectively, of course, even the symbolism lacked all sense of proportion, as applied to a particular spiritual text. The chances were a billion to one against it. But then the odds were still greater than that against the infinite God of an illimitable universe taking any special interest in this atom of star-dust that we call the World, or in human beings as individuals. Yet the almost universal experience of mankind—our whole habit of religious thought—the idea of intimate communion of Man with God—refuses to accept this as a stupendous improbability. If we have any normal

religious faith, it must lack a logical sense of proportion. So the objective absurdity recedes into a vague doubt beside the transcendental evidence of the Inner Light. To me the poetic quality of this inner certitude was absolutely convincing, largely because of my heightened perceptions.

William James has written:

> "As a matter of psychological fact, mystical states of a well-pronounced and emphatic sort *are* usually authoritative over those who have them. They have been "there" and know. It is vain for rationalism to grumble about this. If the mystical truth that comes to a man proves to be a force that he can live by, what mandate have we of the majority to order him to live in another way? We can throw him into a prison or a madhouse, but we cannot change his mind.
>
> We commonly attach it only the more stubbornly to its beliefs. It mocks our utmost efforts as a matter of fact, and in point of logic it absolutely escapes our jurisdiction. Our own more 'rational' beliefs are based on evidence exactly similar in nature to that which mystics quote for theirs. Our senses, namely, have assured us of fact; but mystical experiences are as direct perceptions of fact for those who have them as any sensations ever were for us. The records show that even though the five senses be in abeyance in them, . . . they are face to face presentations of what seems immediately to exist.
>
> The mystic is, in short, *invulnerable*, and must be left, whether we relish it or not, in undisturbed enjoyment of his creed." (*Varieties of Religious Experience,* chapter on "Mysticism".)

But even to me the idea was not entirely subjective. There were objective and logical elements. There was the simple complementary logic of the sexual opposite. Assuming the validity of prophecy and granting the premises of Revelation, if the name of Christ (the Speaker) was masculine, the new name, symbolizing the new manifestation of that Spirit, I thought, must be feminine. This was the inevitable corollary. There could be no other mystical reason for a "new name".

I found a picture of "Christine"—a little kodak blue print—inserted it in the Testament to mark the place, and put the book in my pocket. I kept it with me day and night. At times it was my only hold on reality.

PART II.

The Search for the Other Wise Man

Before visiting van Dyke and Hibben, I wrote a brief note addressed carefully and in full to the original of the picture, at Sage College, Ithaca. The note contained one sentence: "Read Revelation ii. 17 and *keep your nerve.*" (Subconsciously, my own need!) It never occurred to me that what was perfectly clear to my preternatural intensity of thought, would be a dense and insoluble mystery to a college freshman, interested in biology, sororities, fraternity dances, and football. I had blundered in thinking that such a message could do anything but mystify a normal, healthy American girl. She was denied the approach that had prepared me for the idea.

I left my room and mailed the note (special delivery, I think) at the Post-office on Nassau Street.

But a more dangerous idea crept in, as the next step in my thinking. "What if she *knew?*—knew Herself—and the Name?" Then the letter was superfluous, or at best only a message that I had penetrated the heart of her mystery. She began to loom in proportions magnified by absence and by her connection with that scriptural text. The name (as a given name or surname not at all peculiar to any single individual) nevertheless, in my narrow emotional intensity, made her colossal, sublimely divine. The idea was tremendously *personal.* But it did not go so far as to vest her with powers of telepathy or divination; otherwise my next move would have been inconsistent. Goddess or woman, she was a problem to be mastered. I had intended having her down for the Yale game. But this was more important. She must come immediately . . . She should explain . . . help me.

My mind was now moving too fast for letters. The Western Union was next to the Post-Office. So the telegram that I sent was phrased as either or both of two things—a command to the girl and an appeal to the "divinity" for aid and enlightenment. It read simply, "Come at once".

When I had signed my name and paid the charge I started for Bayard Lane. First I tried Henry van Dyke, at Avalon, probably because I knew exactly where he lived. Dr. van Dyke was not at home. I left a message that I would call later. I found that Dr. Hibben lived just across the street. But I decided to wait until lunch time, realizing that they both were busy that morning.

I walked out past the Cleveland home along the wagon road that continued Bayard Lane into the country. It was a dull November day at the end of Indian summer. A haze was on the hills and gossamer threads floated in the cool air. There may have been blasting up somewhere near the Washington house at Rocky Hill. I heard constant reverberations like thunder from the horizon. I can understand the superstition of ancient Rome about "thunder on the left". For to me ther umbling was a portent of the gods, All the landscape, barren and sere and hazy to the distant hills, seemed nevertheless sentient and bursting with import—as if the end of Time had come and a new heaven and earth were to be born. I was "wandering between two worlds", the dead world of actuality and the unseen spiritual world, quickened with the promise of imminent rebirth. Masefield has expressed this mystic feeling so well in the *Everlasting Mercy* and Browning at the end of *Saul* that I hesitate to put it into words—simply refer you to the ecstacy of Saul Kane and David, that Masefield and Browning themselves must have felt in some spiritual crisis. I was buoyed up by a magnificent pensive elation—full of love for all things.

"In the gathered intensity brought to the gray of the hills,
In the shuddering forests' held breath, in the sudden wind-thrills."

When I had tramped a mile or two a little fox terrier rushed out from a farmhouse, barking and snarling at me most pertinaciously from the path ahead. He was an ordinary dog and his discourtesy to tramps was probably quite normal although not discriminating. To my state of mind he was a bundle of nervous antipathy. But I loved him, too, spiteful as he was. I thought, strangely sorrowful, "Why do I, so full of love, attract this antagonistic Spirit that seems to possess these dogs". Like Baalam's ass, I took his defiance for a sign. It shocked me out of aimless wandering. So, while not afraid of him, I turned back immediately. I mention this episode to show how, at the time, trifles affected me like omens. Yet I was never by nature superstitious.

It may have been noon when I returned to Avalon. Time did not exist. I was admitted to the reception room. Beyond this in an alcove or hallway the figure of Tertius van Dyke sat on a lounge, facing a flight of stairs. Usually friendly and democratic, he seemed too preoccupied to greet me as a class-mate. His uneasy silence brought suspicion to my mind. This suspicion was projected in a

flash of illusion. Without actually *seeing,* I *recognized* the pursuing genie. But I couldn't confuse It with *Tertius himself.* So I asked briefly, "Tertius, is your father home?"

Without a word Tertius and the co-incident Suspect rose abruptly and vanished up the stairway. But there was no diabolism about the appearance of his father.

Dr. van Dyke descended, calm and dignified. If he thought I was mad, he at least treated me with every courtesy. I believe that I introduced myself, apologized for the intrusion, said I wanted his advice, and then tried to tell him about my morning's experience. I got everything hopelessly mixed, because I didn't give it in narrative sequence. Ideas crowded each other. Evolution, Mutations, Joe Gish, the scene in the class, Revelations, the New Name, and the girl. It must have been a hopeless jumble. In my suppressed excitement it was impossible to tell the story consecutively and coherently.

He listened patiently—the literary artist who sensed a background of reality, even if he thought the interpretation pathological. But when, remembering the reference to Dr. van Dyke's supposed "heresy", I tried to explain the Virgin Birth as a possible Mutation, I must have imagined a shade of disagreement on his sympathetic and finely chiseled features—probably a troubled awareness of the confusion of my ideas. He failed to see the connection with my story and I was inexpressibly disappointed.

"Oh, Dr. van Dyke!" I exclaimed, "And you could write *The Story of the Other Wise Man.*" His attitude was incredible, when everything seemed so clear to me. "Well," I added, distinguishing between faith and works, "*You*'ve just been doing good all your life—like your 'Other Wise Man' "—a little bitterly, or sorrowfully perhaps, because I thought he had not acknowledged the validity of ideas that were so authoritative in my own experience.

He thought it best not to argue with me, and asked me to accompany him across the street to see Dr. Hibben.

In the hall he allowed me to help him with his overcoat, showing some courage if he thought I might be suffering from homicidal mania and attack him from behind in defense of theological dogma. I remember pulling down his coat-tails in the approved style. This thoughtfulness may have reassured him. Then we crossed the street together.

Mrs. Hibben met us first, and Dr. van Dyke exchanged a few

words with her in low tones. Then Jack Hibben appeared and I tried to tell my story over again. There must have been a thread of sense in what I said. At least I made it plain to them that I was expecting my friend of the "new name" from Ithaca. I told them I had wired her, and I insisted that she would come. She knew that I needed her help. She'd probably make it all clear to them. (Fond and dangerous delusion!)

They were all very patient—made no attempt to cross me. Someone suggested that I go to my room and wait. Then they evidently got in touch with my roommate.

On my way back to Brown Hall I saw two dogs fighting in the middle of Nassau Street. Dogs were coming a bit thick. These two were close-locked in battle, snarling, snapping, and rolling over and over in that strident vortex of ferocity that resembles no other possible combination of sound and action but dog-fight. Dogs were certainly getting on my nerves. I can't say that I loved this pair. I bellowed in a deep voice that didn't seem to be my own. "Cut 'at out." . . . They separated immediately and slunk away in different directions. I strode on, with a new sense of power. This sort of thing was tremendous.

Joe Green passed me on the other side of the street. He called across, "Didn't know that was your dog", (doubtless referring to Joe Gish). I waved a greeting but don't remember whether I replied.

I didn't want to answer any questions. I wouldn't go to the Club for lunch. I couldn't bear the atmosphere of flippant indifference to serious ideas that is the pose of all good Princeton men, until like Woodrow Wilson, they close their teeth uncompromisingly on an ideal. This was too serious. I wanted to think.

So for a long time I waited in my room. I had told Hibben, "She will come. She *must* come." I was sure of it. I took out my Gillette and began to shave. Again that sense of the stoppage of Time.

While I was shaving George Sargent appeared. Excitement showed in his voice. Whatever he said, I remember only that he shrilled my name as he passed me in the bedroom doorway. He annoyed me but was gone almost immediately.

Then Andy Andrews and Billy Bain dropped in. They sat with me a while. Tacitly we all realized that they were trying to be helpful. Conversation lagged. I may have told them that I was

expecting a friend. That was all. They sat like silent priests with a condemned prisoner. I was glad of their company but relieved when they left me to my own thoughts.

Finally there came a knock at the door. Could it be ——? But impossible. Too soon. I opened the door. A uniformed messenger boy stood there. He pulled a yellow envelope from inside his cap. I signed for the telegram, slitted the envelope and read the message typed in capitals on the Western Union blank.

"Cannot come today. Will meet you at your home."

It was signed with her given name. I had no doubt that it was genuine. Of course that was good sense. I had made no allowance for train schedules or a chaperone. The trains from Ithaca, and the proprieties, made Philadelphia much more feasible as a meeting place. But the telegram was finally and irrevocably convincing. SHE KNEW and had accepted my discovery. So the message did two things: confirmed my delusion—the superwoman idea—and set the stage for a terrible disappointment later that threw my mind into a tumult of doubt and suspicion.

This, perhaps, is no place to enter into a discussion about the wisdom of deceiving invalids, or those suffering from mental aberrations. An immediate strategic advantage may accrue to those who have to deal with the sufferer, or he may be temporarily spared bodily harm or mental anguish. But ultimately the effect of deception may be inculcably harmful. I am blaming no one—merely showing the unforseen relations between cause and effect.

My roommate later assumed full responsibility for faking the telegram. Had it been followed in a few days by an explanation in person or even by letter, my mind might have been comforted and brought back to realities. But this possibility was prevented by my family.

The efficacy of the deception was indicated by my next move. I had told Hibben particularly that the lady would come. It was only right that he should be informed of the change in her destination. The telegram would be self-explanatory. So I decided to relay the message by mail. He would get it the next day. But I was tempted to add a flourish: On the telegraph blank, under the message I wrote my name and the name of the girl in full. Over the names, the words—

"Great Mutation—Philadelphia"

Beneath her name, the symbolism:

"Noble Christess White Stone"

Beneath my names the almost literal meaning, with a romantic stop-gap for the surname:

"King Rock Poet".

I joined the names with a large X indicating cross-reference and added "See Rev. ii. 17". I enclosed the telegram in a large envelope, and as an afterthought slipped in a copy of Wieland's *Oberon* which we had been reading in German. Its general symbolism seemed obvious to me, but would no doubt be cryptic to the uninitiated. *Oberon,* you may remember, is the romantic story of Hüon of Bordeaux and his fair lady,—two faithful human lovers by whose loyalty to one another through trials, afflictions and long separation, the rulers of fairy heaven were reconciled. In narrative details there was no actual parallel, but regarded symbolically, the human elements of the story were to prove strangely prophetic.

I do not remember when I mailed the envelope. But it was sent.

I had seen little of my roommate during the day. Finally Alex appeared and I told him I was going home. He, of course, was prepared for that move.

I admitted that I didn't feel very well. I expected to take a few days' rest and stay over for the gubernational election on the 6th of November. (I was then voting "on age" from a Philadelphia precinct). I said nothing about the telegram. It was one thing to tell my roommate that a girl was coming to Princeton; quite a different matter to explain why she was going to meet me at my home.

To my relief I found that Alex was going home too. If I didn't mind he'd go with me. I was glad of his company. He began packing his suitcase with the big DAMN printed in large capitals on one end. (Since Alex was to study for the ministry, Sargent and I, with a perverted sense of humor, had added a D and an N in indelible ink to his initials,) I packed my own grip and late in the afternoon we left Princeton.

The railroad schedule made it necessary to take the trolley to Trenton. As I remember, before we started, we got sandwiches and coffee at the terminal restaurant. I think Alex paid the bill. He was taking care of me and did it efficiently.

Of that trip, passed in mutual silence, I remember only a few details that nevertheless seemed to be of vast importance. They were "tremendous trifles" (to borrow from Chesterton) with cosmic significance. My mind was as susceptible to trivial impressions

as that of the restored Lazarus, described by Browning in the "Epistle of Karshish":

"Speak of some trifling fact, he will gaze rapt
With stupor at its very littleness
(Far as I see), as if in that indeed
He caught prodigious import, whole results."

My whole sense of values was altered.

For instance, crossing the Canal, after changing cars in Trenton, a canal boat loomed up behind the bridge railing. The name "Gray Dawn" was painted on the bow. To me the words were bursting with prophetic import—symbolic of a new era. They brought back the mood of the morning walk—the strange sense of "wandering between two worlds", one dead, the other in the twilight sleep of labor.

Again, the flaring streamer headlines of a New York paper, probably the "Evening Telegram", caught my eyes from across the car. The big black letters read: *"We love him for the enemies he has made"*. The drop-line clearly indicated that Elihu Root was being quoted in a speech referring to Roosevelt. But the scarehead made a deep impression—not taken as a personal reference, but suggesting dangers.

For the first time the possibility of the peril of my own ideas—was suggested to my mind, hitherto exalted in fearless conviction.

A reaction was setting in. At the P. R. R. station in Trenton Alex bought the tickets. I was tired—almost in a daze. Lacking all initiative, I was satisfied to let him run the trip.

At the station in Philadelphia he left me for a few minutes. He was telephoning the family. We boarded a trolley together. I made no objection,—I wanted his company home.

My mother met us at the door. She was all in a flutter from Alec's phone message. But, when I took off my hat, under the bright hall light, her first words were, "Oh, isn't he *pretty.*"

I had never thought of my average-looking self in such feminine terms, but a warm glow seemed to be suffusing my face. I was in an ecstacy of relief at getting home after the soul-shattering exhaustion of the day. And that feeling of boundless love for everyone had returned. I kissed my mother and went upstairs to bed.

They had prepared the second-story middle bedroom for me. (You may remember the general arrangement of the house.) The gas-light between the two east windows was burning dimly.

As I removed my spectacles to place them on the bureau-top, I caught a glimpse of my face in the big plate-glass mirror. I could recognize myself only by the inevitable logic of my position before the glass. I thought of my mother's peculiar remark, moved closer and looked carefully at the reflection.

I should have seen the image of features thin and haggard from overstrain, cheeks hollow from hard training. But the face I saw was softened, rounded—actually beautified with an unearthly radiance. To my eyes, there was a faint refulgent aura enveloping my head—a delicate luminosity suffusing my face. My ordinarily dark hair glowed like white wool and my sunburned face gleamed white—not with the ghastly pallor of illness—but with a soft transfiguring beauty like phosphorescence in the gloom.

To my eyes it was a transfiguration so softly marvelous that the phenomenon awed rather than startled me. The wonders of the day had prepared me for almost anything. My image was *behind* the reflection, yet it was clearly not my own. Its beauty was non-sexual, or rather feminine, as if a glowing portrait overlay my own image in so skilful a composite that the lines blended imperceptibly. That was the vision my eyes beheld in the dim light of the bedroom.

What was behind my eyes—working this wonder in the mysterious subliminal optical centers of the brain—is a mystery, and like the secret of consciousness perhaps must always remain a mystery to Science or so-called "rational" thought. But I have often wondered whether visions, or voices, like those of Joan of Arc, ridiculed by rationalism as hallucinations or illusions objectively non-existent, may not be exactly like the projection of pictures on the cinema screen, or the broadcasting of voices from the radio. In the *machine itself* we must search for the cause—the reality—whether the "hallucination" is that of a disordered mentality, of delirium, or a spiritual reality beyond the scope of abnormal psychology. The "machine" in this case is the human mind, both projecting and receiving through the senses, a message from the subconscious to the conscious. But what Power is behind the mind?

There was, in this case, some objective basis for my mother's strange remark. There could be no question about my abnormally ecstatic frame of mind—the exhilaration that came from a boundless sense of spiritual power and love—with a physical manifestation that had actually relaxed and softened the features. We speak

naturally of human faces transfigured with kindness, sympathy, love. . . . But this was an awful transfiguration, such as I had only seen pictured in art as the face of a saint or an angel.

"Clearly I am *not* myself." That was my thought as I climbed into bed, and the thought had a dangerous double meaning. I did not dare look into the mirror again and said nothing to the others.

Psychoanalysts of the Freudian type might attempt to explain my experience on the basis of sexual repression. Undoubtedly there was an element of sex-inhibition present—as there must be in all cases where sex-functions have been stimulated by love or passion and then repressed either through the dictates of morality or loyalty to one person of the other sex. . . . The refuge of rationalism, of course, lies in that all-inclusive label, "insanity".

But never in the nervous breakdown that ensued did I lose my grip on my identity—the continuity of consciousness—or while awake fail in the knowledge or memory of what was going on around me. For a brief period I lost physical self-control, possibly through the curbing of muscular and nervous energy intensified by athletic training. And my hearing seemed attuned to the sounds of an invisible world.

For instance, I dozed off, sleeping fitfully. Every time I awoke, at intervals, during the night, I heard the galloping of a horse's hoofs apparently outside on the hard-paved streets. This was no slow milk-wagon trot, of early morning insomnia, but a wild, rapid midnight gallop—around and around the house—down one street and up another—a constant clatter, furious and unwearying, ever-present in my waking moments. Again and again I heard it.

I had always been fascinated by Gustav Dore's imaginative Bible prints. "Death on the Pale Horse" flashed into my mind. Why was that ghastly horseman of the Apocalypse circling our house in this wild nocturnal ride? . . . Yet I was not afraid. And it was no dream, because at the same time there was also the reality of the locomotive whistles from the P. R. R. freight yards, mournful as fog-horns, and occasionally the arrogant screaming note of a Main Line express. I thought of Pullmans hurtling through the night over the Lehigh Valley, bringing the protecting divinity from Ithaca. Comforted, I fell asleep.

In the morning, after I was given some breakfast, my father entered the bed-room. I wanted to ask him about a lost or runaway horse, but with the warm sunlight flooding the room, the question

seemed either absurd or cheaply rational. He was very serious—spoke kindly but in firm, authorative tones. He was the first to oppose me in any way.

He told me that She was not coming. I could scarcely comprehend, yet I had to believe him. He gave me no reasons. That made it worse. My hope was blasted. I was cast adrift on a wild sea of doubt and conjecture, with nothing to cling to but the Testament and the little blue picture under my pillow. I protested, "She *must* come. I must *see* her." But by the sheer power of will, he forced me to accept what I wanted to deny. And his statement was confirmed. She did not come.

Later I learned that they had warned her (by wire or letter) to disregard my messages. I have always believed that she alone could have saved me from what followed.

I was absolutely alone—isolated the moment I stepped across the border of reality into the world of illusion. And so I was delivered body and soul to the Powers of Doubt and Darkness—the gods of the Dark Forest, that lurk in the hidden recesses of the mind and prowl forth when the ruling god has abdicated. To use another figure, the steering wheel of my consciousness being no longer under control, the machine might swerve to destruction from the slightest impulse—internal volition or external accident. Acting on pure instinct, I was subject to the least caprice of the sub-conscious. Heretofore my mood had been seraphic. But you remember what William James writes in the book I have already quoted:

> " . . . We may have a *diabolical* mysticism a sort of religious mysticism turned upside down. The same sense of ineffable importance in the smallest events, the same texts and words coming with new meanings, the same voices and visions and leadings and missions, the same controlling by extraneous powers; only this time the emotion is pessimistic; instead of consolations we have desolations; the meanings are dreadful and the powers are enemies to life.
>
> It is evident that from the point of view of their psychological mechanism, the classic mysticism and these lower mysticisms spring from the same mental level, from that great subliminal or transmarginal region of which science is beginning to admit the existence, but of which so little is really known. That region contains every kind of matter: 'seraph and snake' abide there side by side. To come from thence is no infallible credential. What comes must be sifted and tested, and run the gauntlet of confrontation with the total

> context of experience, just like what comes from the outer world of sense. Its value must be ascertained by empirical methods, so long as we are not mystics ourselves." (*Varieties of Religious Experience,* Chapter on "Mysticism".)

I was ready for whatever whim might rule me, to rend or destroy. "Diabolical possession" was the unscientific way the ancients put it.

For a while I was quiescent, almost stunned. The transition in mood was not immediate. I thought and thought, with the increasing doubt, suspicion, futile raging from which devils are fashioned. Finally I lost consciousness, in a sort of baffled stupor. My mind was blank. I slept. . . .

I was awakened by a terrific crash. There followed the jingling rattle of broken glass. I suddenly discovered my head and one arm out of a top pane of the bed-room window, my body held by the frame that crossed in the middle. Someone grabbed my legs and called for help. As I struggled in a panic to scramble out through the broken pane, I heard my name and a voice, "Come back. Oh, come back". I managed to turn my head. It was a girl's face, her eyes blue as the sky. The eyes held me. I stopped struggling. (I had been gathering my strength for a desperate push, head first through the jagged glass.) Other hands seized me. Unresisting I let them carry me back to the bed bleeding from cuts in my head, arms, and legs. The room seemed suddenly to fill with men in overalls, carrying ropes. They were painters who had been working on an adjoining building when I had dived from the bed across a five foot space straight at the window.

They said I first yelled "Fire!", but I have no recollection of anything until I found myself partly through the window. I am sure that the plunge was a reflex from my high-diving stunts of the previous summer. The window panes doubtless suggested a pool of water and my sub-conscious complex—the athletic habit of overruling the instinct of self-preservation—demanded the dive. I had done it somnambulistically—utterly oblivious to reality. I have since heard of similar cases—sleeping dives by over-strained athletes.

Later, now fully conscious, I asked, "What color are Hannah's eyes?" (Hannah was the young girl, acting nurse, who had held me back at the window.)

"Brown", my mother said. "Almost black".

"They were *blue*—there at the window," I remarked, and thought to myself, "That's curious. *Her* eyes are blue."

My mother looked at my father. "You must remember," he said, "Everything looks different to his eyes. The human mind is a very delicate and complex machine. . . . " (That was as deep as he could go.)

The sudden stoppage of intense activity brought inevitable reactions. Exercise, which was scarcely feasible, might have been an outlet for dammed up physical energy. I wanted to run. I insisted that I must keep on training. But even while resisting force, I never offered to harm anyone. My violent impulses were all self-destructive. My voice at times was tremendous. I felt that I must denounce these diabolical forces that were conspiring to confuse and destroy me.

So once, when Alex returned and I heard low voices in the front room, I became suspicious. I leaned from the bed and peered through the doorway. He stood there, slim and slightly stooping—Alec's body and clothing. . . . But Someone Else, as before with Tertius. His expression and attitude—Mephistopheles (I knew him from "Faust")! A smooth, prowling devil—Clearly Alex wasn't *himself*, although *he was there too.* I couldn't address him as Mephisto. That would be absurd. So, with all my force I defied the Devil in a loud "Damn you, Alexander." He bowed slightly as if to acknowledge the impeachment, and in his acquiescence I read confirmation of my suspicions.

He was at the bottom of this complot, but he didn't understand. . . . (I speculated vaguely). Back of this—involved in it all—some kind of wager—between God and Devil—a Book—The Ring and the Book—Ring for marriage, of course—God to dictate a Book no one could understand—forestall events until too late—after prophecies fulfilled . . . now the wager being won . . . Devil naturally sore . . . perhaps not too late . . . Get me yet . . . (My Job, Goethe and Browning were rather mixed but perhaps you know Poe's rationale of prophecy in his review of Stephens' "Arabia Petraea.")

Next day they called some doctors together in hurried consultation and I was committed to a hospital, "for my own good". I went unresisting, recalling certain pacific scriptural texts. But I shall never forget that first night. I became noisy. The attendants

laughed, dragged me out of bed to a remote cell and threw me on a straw mattress like a piece of human junk. Left alone and unguarded in the strange darkness, I was seized by violent half-controlled impulses of despair and defiance. I cracked the high wire-glass window with my fist. I hammered at the door. I reeled drunkenly back to the window and marvelled at the moon, shattered into a thousand fragments. Was this the end of the world? Then a mental whisper dared me, "You're afraid to dive". And so again and again I swayed, head on, against the walls, with cautious but painful bravado. They had given me a strong cathartic that made me horribly sick and weak.

At various times, while my mind was hovering between reason and blank madness, voices from an unseen world came to my consciousness. Once two hag-voices (I heard them distinctly) shrilled from a distance in wild Walpurgis-night bickering. The sounds, at first rhythmically unintelligible, swelled on the air to a crescendo of frenzied but perfect articulation. "He *has* it!" . . . He *hasn't!*" . . . "He *has* it!" . . . "He *hasn't!*" . . . "He *has* it!" . . . "He *hasn't!*" . . . The witch voices seemed to be riding the night wind, high in the air, and gradually faded away in the distance, ever affirming—ever contradicting. So acutely was my hearing attuned that the slightest difference in articulation between affirmative and negative was distinctly audible—always alternating. Again, as I lay weak and battered, more dead than alive, I heard a great chorus, singing with supernal beauty. The voices seemed to come from far away. And although hymns were sometimes sung in another part of the building, the air was no hymn. It was the music of the old half-forgotten "Annie Lisle". But why was my own name enunciated so distinctly in the refrain? Why did the song end in that triumphant burst, "Hail to thee, Christine"? Undoubtedly my imagination had altered the usual words. But without any conscious effort on my part. To me it was an angel chorus, paraphrasing the familiar Cornell "Alma Mater". Quieted and comforted, I fell into a deep sleep. . . .

After the horrors of that first night I had the best of care. My recovery was gradual. I had to think myself back to a normal frame of mind, but in the reaction I lost idealism, self-confidence—all but a stubborn tenacity. My religion was almost gone, my college career ended. The "understanding" was broken off by mutual agreement.

For I was *afraid*—afraid of the mystery of the New Name. . . .
But more of this later.

Yours,

———————————*

*A Postscript, in which the author describes his gradual return to health and happiness, will appear in the August number.

Publishers: WILLIAMS & NORGATE, London—G. E. STECHERT CO., New York—FELIX ALCAN, Paris—Akad, Verlagsgesellschaft, Leipzig—NICOLA ZANICHELLI, Bologna—RUIZ HERMANOS, Madrid—RENASCENCA PORTUGUESA, Porto—THE MARUZEN COMPANY, Tokyo.

"SCIENTIA"

INTERNATIONAL REVIEW OF SCIENTIFIC SYNTHESIS

Published every month (each number containing 100 to 120 pages)

Editor: EUGENIO RIGNANO

IS THE ONLY REVIEW the contributors to which are really international.

IS THE ONLY REVIEW that has a really world-wide circulation.

IS THE ONLY REVIEW of scientific synthesis and unification that deals with the fundamental questions of all sciences: the history of the sciences, mathematics, astronomy, geology, physics, chemistry, biology, psychology and sociology.

IS THE ONLY REVIEW that by means of enquiries among the most eminent scientists and authors of all countries (*On the philosophical principles of the various sciences; On the most fundamental astronomical and physical questions of current interest, and in particular on relativity; On the contribution that the different countries have given to the development of various branches of knowledge; On the more important biological questions, and in particular on vitalism; On the social question; On the great international questions raised by the World War*), studies all the main problems discussed in intellectual circles all over the world, and represents at the same time the first attempt at an international organization of philosophical and scientific progress.

IS THE ONLY REVIEW that among its contributors can boast of the most illustrious men of science in the whole world. A list of more than 350 of these is given in each number.

The articles are published in the language of their authors, and every number has *a supplement containing the French translation of all the articles that are not French.* The review is thus completely accessible to those who know only French. (*Write for a free copy* to the General Secretary of "Scientia," Milan, sending 12 cents in stamps of your country, merely to cover packing and postage.)

SUBSCRIPTION: $10.00, Post free **Office: Via A. De Togni 12, Milan 116**

General Secretary: DR. PAOLO BONETTI.

SCIENCE PROGRESS

A QUARTERLY REVIEW OF SCIENTIFIC THOUGHT, WORK, AND AFFAIRS

Edited by Lieut.-Col. Sir RONALD ROSS

K.C.B., K.C.M.G., F.R.S., N.L., D.Sc., LL.D., M.D., F.R.C.S.

Published at the beginning of JANUARY, APRIL, JULY, OCTOBER

Each number consists of about 192 pages, contributed by authorities in their respective subjects. Illustrated. 6s net. Annual Subscription, including postage, 25s, 6d.

SCIENCE PROGRESS owes its origin to an endeavor to found a scientific journal containing original papers and summaries of the present state of knowledge in all branches of science. The necessity for such a journal is to be found in the fact that with the specialization which necessarily accompanies the modern development of scientific thought and work, it is increasingly difficult for even the professional man of science to keep in touch with the trend of thought and the progress achieved in subjects other than those in which his immediate interests lie. This difficulty is felt by teachers and students in colleges and schools, and by the general educated public interested in scientific questions. SCIENCE PROGRESS claims to have filled this want.

JOHN MURRAY

Albemarle Street **London, W-1**