LOS ANGELES PSYCHOANALYTIC SOCIETY
BUSINESS MEETING

Time: Thursday, March 18, 1965, 7:30 p.m.

Place: 344 North Bedford Drive, Beverly Hills

Agenda

1. Minutes of the meeting of February 26, 1965

2. Membership Committee - Dr. Leavitt:

   Application for Active Membership - Dr. Nemeth

3. Progress Report of the Committee on Social Problems - Dr. Dorn

4. Announcements:

   a. Letter from Mrs. Frances Gitelson - Dr. Rangell

5. New Business

SCIENTIFIC MEETING

Time: Thursday, March 18, 1965, 8 p.m.

Place: 344 North Bedford Drive, Beverly Hills

Speaker: David Brunswick, Ph. D.

Subject: "The Drives and The Affects (from a physiological point of view)"

This paper is an extension of Brunswick's interest in that biological frontier between psyche and soma, the area of the neuro-physiological basis for drives and affects. It is his thesis that the psychic mechanisms of defense are based upon the prototype of biologically determined, physiological, prepsychic modes of defense common to all living protoplasm in the struggle for survival. He therefore links defense with the aggressive drive (offense-defense) and divides instinctual drives into the vital-libidinal and defensive-aggressive drives. He views the affects "both physiologically and psychologically (as) integral parts of the mechanism of the drives" and indicates that affects are both a response and a stimulus to the drives.

Copies of this paper are available at the Society office (for a charge of $1).

Charles Sarlin, M. D.
Chairman, Program Committee

Discussants: Gerald Aronson, M. D.

Arnold Scheibel, M. D.
Departments of Psychiatry and Anatomy, UCLA

Maurice N. Walsh, M. D.
Secretary

MNW:jk

MARCH 18, 1965.

THE DRIVES AND THE AFFECTS

(from a physiological point of view)

by

David Brunswick, Ph.D.

I. INTRODUCTION.

This essay represents the second chapter of my hoped-for monograph (that is, hoped for by me), "An Introduction to a Physiological Psychoanalytic Psychology", of which the first chapter is the paper I presented a few years ago on "Pleasure, Pain, and the Affects". I think the present paper on "The Drives and the Affects" is of importance in contributing to a unitary theory of anxiety (Rangell 19) and a unitary theory of affect in general (Rapaport 1953). The ideas and views expressed in this paper were mostly formulated in my short paper on "A Revision of the Classification of Instincts or Drives" published in 1954 (Int. Journal of Psa., Vol. XXXV), although the definite nature of the relation of affects to drives was not explicitly stated there.

My views may appear overly simple; I think because they concern basic theory, and basic theory must always be simple, however complicated the fully developed phenomena may be. It remains my conviction that the basic theory of psychoanalysis can be made clearer and more unified by relating it to the underlying physiology;

I Introduction

II Definition & Exposition of ~~Instinctual~~ Drive

III Classification of the Instinctual Drives

IV The Aspects & their Relation to the Drives

V Interrelation Between Drives

and then I believe that thereby psychoanalytic theories on the more complicated levels can be corrected and clarified. This is what I am thinking about and trying to learn more about, although very slowly.

And so, without further introduction, I will turn to the discussion of the instinctual drives, the affects or emotions, and the relationship between drives and affects.

II. DEFINITION AND EXPOSITION OF INSTINCTUAL DRIVE.

First, shall we call our subject matter instinct or drive? I believe we do justice to the subject if we use an apparent compromise term, instinctual drive. We call it drive because it designates the fundamental motive forces producing behavior, and instinctual in recognition of the fact that its basic chemical and neural mechanisms are congenital or inborn, or the result of physical maturation, even though the actual expression of the drives in behavior is modifiable to a certain extent by experience and learning.

Freud approached this subject in "Instincts and Their Vicissitudes" also from the physiological side, starting with the concept of the physiological reflex and the reflex arc. He confined himself, however, to what we must consider reflexes solely to painful stimuli, which result in removal from the stimulus -- for example, the flexion reflex, with no heed to the existence of its opposite, the extensor thrust, which reacts in a manner to increase the stimulus. Thus Freud seemed to consider stimulation and its increase always as painful, and pleasure-pain as a simple unitary quantitative series

along a straight line; whereas the physiological evidence indicates that there are also pleasurable or non-pain stimuli and separate systems for pain and pleasure within the central nervous system as well as the autonomic nervous system with its two main divisions, sympathetic and parasympathetic. Freud also recognized that his hypothesis of increase in stimulus or tension as regularly painful, gets into great difficulty when we consider the increase of sexual stimulation, which is regularly pleasurable.

However this relation of pain and pleasure may be, Freud defined an instinct (or drive -- 'Trieb') as an internal stimulus of a bodily need (examples: hunger and thirst), and emphasized that an instinctual stimulus acts always as a constant or continuing force, whereas an external stimulus may have just a single impact. The example he gives of this is an external (pain) stimulation, with immediate withdrawal or flight from it. However, he points out, the internal instinctual stimulus of a bodily need requires more complicated activity to remove it and thus to satisfy the need.

Everyone remembers that Freud discussed four elements of an instinct or drive: (1) its impetus or pressure, (2) its aim, which is always satisfaction -- the removal of the stimulus, (3) its object, by means of which satisfaction is attained, (4) its somatic source of stimulation. But Freud at that time was admittedly studying only the sexual instincts and not discussing the ego-instincts or self-preservative instincts, which then constituted his second group of instincts. And when his second group became death instinct

or aggression, he did not go into the question of its somatic source to any degree.

Now, I would follow Freud in adding to the sexual or vital-libidinal drives the group of aggressive drives. As you may know, from my 1954 paper, I wish to class with them the defensive instincts. So I want to examine here also the somatic source of the defensive-aggressive drives, and I believe I can locate this source in pain stimulation, both external and internal. When someone or something hurts us, the normal reaction is to flee or to fight back or both. Therefore I would not cling to Freud's definition of an instinctual stimulus as always an internal need stimulus, but would include pain stimuli as instinctual source stimulation for defense and aggression.

Also, in "Instincts and Their Vicissitudes" Freud seems to define instinct or drive as the stimulus itself which acts from the body on the mind. I would prefer to consider the instinctual drive as the entire drive mechanism: the source of stimulation, the neuro-physiological mechanisms and the behavioral modes of responding.

So much for the question of definition of instinct or drive.

III. CLASSIFICATION OF THE INSTINCTUAL DRIVES.

Once again I will refer back to my earlier paper on "A Revision of the Classification of Instincts or Drives", in which I traced the history of the development of Freud's classification of instincts and tried to explain how it had happened that the defensive components of the early so-called ego instincts were dropped out of the account and classification of instinctual drives; so that the entire comple-

Freud < sexual
< aggressive - destructive

Brunswik < vital - libidinal
< defense - aggressive < anger, fear } affects

ment of drives was divided between (I) sexual or libidinal and (II) aggressive-destructive ones, and no place was left among the drives for the functions of fear and defense. I wished definitely to restore defense among the fundamental instinctual drives and to classify it with the aggressive drive, for physiological and functional reasons; so that the classification would become (I) vital and libidinal drives and (II) defensive and aggressive drives.

In my present discussion I want to approach the addition of defensive drives in a somewhat different way, first, because I prefer not to repeat myself, and secondly because I wish to emphasize the physiological viewpoint. One of the early classics on the physiology of emotions was Walter B. Cannon's book "Bodily Changes in Pain, Hunger, Fear and Rage", first published in 1915, in which he collected and summarized the results of experimental work he and his co-workers had been accomplishing in this field in the previous years of this century, and related it to earlier work of others. The order of the bodily and emotional states in his title was partly determined by euphony; the first three quarters of the book is devoted to discussion of physiological functions in pain, fear and rage, all mediated through the sympathetic division of the autonomic nervous system. We recognize rage and its milder form, anger, as the affects involved in the aggressive-destructive drive, and fear and the closely related anxiety as affects involved in defensive actions and attitudes. I want to emphasize again, as I tried to a dozen years ago, that I see no adequate reason in any psychological theory,

including psychoanalysis, to deny the designation of instinctual drive to defense and its related affects of fear and anxiety.

In my earlier paper (1954) on the classification of drives, I pointed to both introspective observation and objective observation of other humans and animals as the first and most direct evidence for the phenomenological similarity or parallelism between the affect-emotion-activity complex of rage-anger-aggression on the one hand and the affect-emotion-activity complex of anxiety-fear-defense on the other. Both groups are clearly instinctual drive.

The second line of evidence is that of general function and physiology. (a) Defense and aggression have the same general function or aim, which is to protect the body itself and to maintain the possibility (present or future) of the satisfaction of the vital and the erotic-libidinal drives; and (b) they are closely related physiologically, both being mediated in functional and emotional aspects by the sympathetic division of the autonomic nervous system, in contradistinction to the libidinal instincts, which are mediated in their expression by the parasympathetic division. Both are instinctual drive, and they should be classed together as a second group of drives, the defensive and aggressive drives, the first group being the vital-libidinal drives.

The third line of evidence is in psychoanalytic theory itself. Just as there is signal anxiety used by the ego to initiate defensive activities, from repression at one (unconscious) end of the continuum to actual flight at the other end, there is as well signal

anger which the ego employs to initiate and to further aggressive activities, from simple reinforcement of blocked actions to contending or actual fighting of one kind or another. In fact we can recognize that the ego uses aggressive instinctual energies in varying quantities in furthering, enhancing and reinforcing the satisfaction of various instinctual needs and desires; and similarly the ego employs defensive instinctual energies to oppose, inhibit, suppress or repress various instinctual demands and actions.

Now why is it that defensive instinctual drives have not been explicitly recognized as such in psychoanalytic theory? I will take the liberty here of quoting directly from my 1954 paper on "A Revision of the Classification of Instinct or Drives" (p.). "The idea of defensive instincts was implicit in Freud's early writings on hysteria and especially in his 1894 paper on 'The Defence Neuro-Psychoses ( ). When he first definitely formulated his views on instincts in the paper, 'Instincts and their Vicissitudes'( ), published in 1915, he explicitly distinguished (on p.67) two groups of primal instincts: 'the self-preservative or ego-instincts and the sexual instincts'. However, his discovery of the libidinal components of the self-preservative instincts, described a year previously in the paper 'On Narcissism' ( ), had(apparently) shaken his confidence in this particular dual classification and thus brought about the neglect of the concept of defensive instinct components. And then the emergence of the studies on structure of the personality ( )( ), the division into id, ego, and superego, further undermined the conception of defence as instinctual" drive.

"For the psycho-analytic method, which led to this conception of personality structure, studies the struggles of the ego (conscious and unconscious) against the unconscious id, the repressed instinctual components and their representatives. In these struggles the ego battles defensively against various instinctual forces, most notably libidinal and hostile-aggressive ones. In its necessary preoccupation with this defensive activity of the ego, psychoanalysis has come to consider all defence as a property of the ego and to overlook its source in defensive instinctual energies of the id -- and this in spite of our recognition that the ego often defends itself also against defensive instinctual manifestations, against fearfulness, cowardice, and impulses of flight."

And so I repeat here my conclusion, from the various lines of evidence, that defense must be considered as instinctual drive, and the classification of the drives should be (I) the vital and libidinal drives or instincts: feeding, excretion, respiration and the psycho-physiological sexual instincts -- i.e., the oral, the anal-urethral, and the genital instinct components; and (II) the defensive and aggressive drives.

IV. THE AFFECTS AND THEIR RELATION TO THE DRIVES.

How are we to define affects? I would find it extremely difficult to give a definition which would not for me be a question-begging one -- that is, based on my own physiological theory of affects. Therefore I have to fall back on our common experience and agreement that the affects are the feelings and emotions as intro-

Sources - Primary - Vital - hedonic — Defensive - Aggressive
Nerve centers — nerve centers
(affect as implicit)

Secondary - Autonomic (pleasant affect) — Autonomic (anxiety & rage affect)

spectively and objectively observed, the chief basic ones being fear and anxiety, anger and rage, and the pleasurable feelings and emotions connected with the arousal and satisfaction of the vital-libidinal drives. I see that already I cannot avoid mention of the drives, and must note that there is no affect without relation to arousal or expression of instinctual drive. Indeed the physiological theory of affects must be what Rapaport ( ) termed Freud's earliest affect theory, that is a drive-theory of affects.

Let me say then that both physiologically and psychologically the affects are integral parts of the mechanism of the drives. In my paper on "Revision of the Classification of Instincts or Drives" I tried to show that there are two types of somatic stimulation sources for the drives, primary and secondary instinctual sources. In the case of the vital-libidinal group of instincts, in respiration, in the feeding instinct and in the sexual drive, the main primary instinctual sources of stimulation are in the blood chemistry acting on the respective sub-cortical nerve centres for these instinctual activities. It appears that the stimulation at the primary source of every instinctual drive is a painful or unpleasure sensation or tension, which the organism strives to get rid of: hunger tension and hunger pangs, thirst, sex tensions; the pains, injuries and frustrations that bring about reactions of defense or aggression. * The secondary sources of stimulation for the vital-libidinal drives are pleasurable sensations and tensions which drive to the continuation of certain activities and to the increase of this secondary

stimulation: sexual feeling in the sexual organs, the pleasurable taste and smell of food and the activity of salivation, etc. -- these are pleasurable affects. The secondary sources of stimulation for the defensive and aggressive drives are in the largely autonomic bodily changes of the affects of anxiety and anger, respectively, or in central nervous stimulations which may represent these peripheral affective stimulations. These secondary stimulus sources for the defensive-aggressive drives are painful affects, more painful in anxiety and fear, somewhat less unpleasurable in anger and rage, but at any rate affective feelings of which the individual wants to rid himself, as contrasted with the pleasurable affects of the vital-libidinal instinctual drives.

It is clear from the foregoing exposition that the affects must be regarded both physiologically and psychologically as secondary sources of stimulation for the drives; they are an integral part of the mechanism of the drives. Sexual feelings or affects, the relish of food in eating, the stimulations and feelings of anxiety or anger are of great importance in keeping the instinctual drive mechanisms going to consummation and satisfaction. Psychophysiologically it would thus appear that affects have a function of afferent drive at least as important as is their efferent discharge function in much of psychoanalytic theory. I think, too, that this afferent drive function is quite apparent to our introspection; and I do not believe that introspection should be disregarded in considering these problems of psychoanalytic psychological theory.

What can I say here about the efferent discharge function of the affects? The first observation to be made is that the efferent discharges are physiologically of the utmost importance adaptively. (Parenthetically I must say that a safety-valve function of affect discharge as mentioned by Rapaport does not seem to me to be valid.) In the case of the vital-libidinal drives of feeding and sexuality the pleasurable peripheral changes brought about through the affective autonomic efferent discharges are physically and physiologically necessary for carrying out the drive activities. And for the defensive-aggressive drives the work of Cannon and of others has shown that the peripheral effects of the autonomic efferent discharges in fear and rage are of great importance physiologically in the activities of fighting or fleeing.

But beyond the physiologically adaptive function of the efferent affect discharges, there is the psycho-physiological secondary drive-source function of the affective, emotional bodily changes as felt by the individual. It is of course a moot question whether the efferent discharges of the affects must always necessarily occur, if only in limited amount, for emotion to be experienced and have its drive function, even in its lesser signal intensity. There is always the possibility that the entire function can be taken over by central neural mechanisms; indeed this is a probability with the increasing complexity of the organism. I am certainly tempted to believe that such central mechanisms must bear a considerable resemblance to the primitive centro-peripheral ones, as in the comparison of thought and action. (I hope that my language is clear here.)

The final observation or consideration concerning the affects which I wish to advance here is that it is almost entirely through the affects that we are introspectively aware of the drives. Our sensing of the primary source stimulation is only in the form of rather vague tension in the case of the vital-libidinal drives, and in the stimulation of the defensive-aggressive drives we sense only pain or frustration-tension as primary source stimulation. It is only when the affect develops that we recognize drive and can know what the drive is from the secondary source stimulation. I think this is what is reflected in psychoanalytic affect theory as summarized by Rapaport when he writes of affects as indicators of drive tension and speaks of the formation of the drive-representation termed affect charge.

V. THE RELATION OF PAIN AND PLEASURE TO THE INSTINCTUAL DRIVES.

One might consider pain and pleasure to be the basic instinctual drives. For do we not basically and generally seek pleasure and avoid pain? Or as Kenneth Colby puts it in his book, "Energy and Structure in Psychoanalysis" (p. 52): "One acts to repeat the experience of gratification and to avoid the experience of discomfort-"; and John Lilly speaks of the "start" and the "stop" patterns of behavior. However, I believe that pain and pleasure are too general and all pervading to be considered as drives. It made sense when Freud spoke of a pleasure-pain principle, and I would like to regard pain and pleasure as part of the mechanism of the various instinctual drives, as follows.

I shall allow myself to repeat something I have already mentioned earlier, because now it is in a different context.

It appears that the stimulation at the primary source of every instinctual drive is a painful or unpleasure sensation or tension, which the organism strives to get rid of: hunger tension and hunger pangs, thirst, sex tension; the pains, injuries, threats and frustrations that bring about reactions of defense or aggression. The secondary sources of stimulation for the vital-libidinal drives are pleasurable sensations and tensions which drive to the continuation of certain activities and the increase of this secondary stimulation: sexual feeling in the sexual organs (the result of tumescence), the pleasurable taste and smell of food and the activity of salivation, etc. -- these are pleasurable affects and sensations. The secondary sources of stimulation for the defensive and aggressive drives are in the largely autonomic bodily changes of the affects of anxiety and anger, respectively, or in central nervous stimulations which may represent these peripheral changes and stimulations. These secondary stimulus sources for the defensive-aggressive drives are painful affects, more painful in anxiety, somewhat less unpleasurable in anger and rage, but at any rate affective feelings of which the individual wants to rid himself, as contrasted with the pleasurable affects of the vital-libidinal instinctual drives.

VI. INTERRELATIONS BETWEEN DRIVES.

I do not intend in this paper to go into the subject of the interrelationships between the drives at any length or in any detail,

but just to mention them. We know that the activity of vital-libidinal drives (feeding or sexual activity) can be inhibited by pain, fear, anxiety or anger, that is by the activation of the defensive or the aggressive drive. This comes under the general heading of what Sherrington called the prepotency of the pain reactions in the nervous system and is also to be accounted for by the antagonistic action of the two divisions of the autonomic nervous system, parasympathetic for vital-libidinal and sympathetic for defensive-aggressive drives.

But some aspects or degrees of aggressive drive can also work with or reinforce the vital-libidinal drives, as in the hunting and feeding activities of the wild animals, in aggressive sexual activity or rape, and in many human activities. Under this classification would come also the fusion of libido and aggression which has importance in psychoanalytic theory. The physiology of these matters seems beyond my present knowledge.

I must mention also libidinization as defense against anxiety, which is observed in psychoanalytic work, as a further example of interrelation between drives; and then of course I am sure I have not exhausted the possibilities of such interrelationships in the complex layerings of the human psyche and the complication of human activity and experience. These matters would be taken up, if I am fortunate, in future chapters of my attempt to connect psychoanalytic theory with the physiological substrate.

One further consideration I should like to include now at the

conclusion of this paper, a certain general comparison or rather contrast between the two main groups of instinctual drives. The vital-libidinal drives are autoplastic in their aim; their purpose or function is an alteration of the state of the organism itself. The defensive-aggressive drives are originally and primitively alloplastic in aim, to alter something in the environment which would interfere with the satisfaction of vital-libidinal drives.

This distinction is not to be contradicted by the fact that vital-libidinal drives need to make use of the environment (e.g., food, love objects), nor by the fact that with increasing complexity due to growth, development and experience the defensive-aggressive drives come to be directed also intrapsychically within the organism, so that one part of the personality defends itself against or is destructive toward another part, or one partial drive versus another, as is so regularly observed in psychoanalytic work. In this the alloplasticity is seen to be between instances within the personality. -- I have to confess that the possible neurophysiology of all this is out of range; perhaps I might reach to it in a future chapter, or in a future incarnation, if you will take that with a wink.

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S U M M A R Y

In this paper about the drives and the affects, from a physiological viewpoint, I first attempted definition and exposition of instinctual drive, following Freud's own approach, which was also

physiological. Next I took up the classification of the instinctual drives and repeated an earlier attempt of mine to justify including defense among the instinctual drives, and I repeated my earlier explanation of why this was not done previously in psychoanalytic theory. Then the discussion turned to the affects and their relation to the drives, the view being advanced that the affects are secondary sources of stimulation for the drives -- not secondary in importance but secondary in the chain of events. The involvement of pleasure and pain in the mechanism of the instinctual drives was next taken up; and finally came a brief discussion of interrelations between the various drives, with at the end one general comparison or contrast between the two main groups of drives, vital-libidinal and defensive-aggressive.

May 29