

*WHY DO WE ENJOY ART?**

Pinchas Noy, MD

Jerusalem

Jean Cocteau once said in a discussion about poetry: "Poetry is indispensable—if I only knew what for." This declaration could apply to any of the arts. Psychologists agree that art fulfills some of our most basic needs, is essential in maintaining our emotional equilibrium and provides a source of pleasure. But what are these needs, and why is their satisfaction experienced as a pleasure unlike any other that we know?

Modern psychoanalytic ego-psychology, by approaching perception as an active ego organizing process, can perhaps bring us closer to understanding our needs. In 1950, Kohut and Levarie (1) presented an interesting ego-psychological theory explaining the enjoyment of music, a theory which can be further expanded to explain the function and pleasure provided by any art. The pleasure we derive from listening to music is not passive, the result of our sense of hearing being caressed by some pleasing stimuli; rather, it is the pleasure of the ego succeeding to master a chaotic medley of auditory stimuli that challenge its abilities to organize, impose order on and invest meaning in the unorganized. The fact that the musical piece is based on easily recognizable themes, and constructed according to well-known organizational rules, assists the average listener to do the job of organizing, but as musicologist Leonard Meyer (2) has shown, any music, in order to

*This is a revised version of the paper "A Psychoanalytic View of Play and Trauma," presented in Jerusalem at the Third Conference of the Sigmund Freud Center on March 18, 1986.

provide pleasure and challenge to the ego, and to exercise its organizing power, must also include some "hard nuts" to crack, as well as several deviations from known rules and expectations.

This new approach nearly places art in the same group of ego-activities as play. Paul Valery (3) claimed: "The most evident characteristic of a work of art may be termed uselessness..." Indeed, from the viewpoint of reality, both art and play are useless activities, and as such, neither art nor play impose themselves on the ego and neither constitute a task that the ego must cope with in the realm of reality-oriented strivings. However, as Adrian Stokes (4) suggests, art and play do offer the ego an invitation to grant itself, for a while, some freedom from its reality-oriented tasks and instead to participate in a seemingly useless but pleasurable activity. In this respect, the artistic stimulus, like play, has a "take it or leave it" attitude. The ego is free to respond to or ignore the invitation, and if it does respond, it is free to participate in the experience offered precisely to the extent it wishes, depending on the availability of its resources, ability to renounce its reality-oriented functions, and willingness to exercise and train its organizing faculties.

The main thesis put forth in this paper is that when the ego does "decide" to respond to the challenge and participate in the experience that art offers, its participation cannot be effected by use of regular processing modes for perception and organization of routine daily stimuli. To experience the satisfaction, pleasure and delight that art can provide, the ego must shift its activity toward a different processing mode. Accordingly, questions that must be addressed to understand the effect of art are: What exactly is the nature of this different mode of processing and why is it experienced as more pleasurable than the regular mode?

To attempt to answer these questions, let us see what can be learned by applying to our quest recent knowledge in the fields of neurophysiology, psycholinguistics, and modern psychoanalytic theories of primary and secondary thought processes.

According to modern neurophysiology, almost all known mental functions can be performed in several alternative ways, each depending upon a different brain circuit. In the course of normal development, gradual differentiation of mental functions occurs, and one of the potential alternative circuits usually becomes dominant. Others remain dormant and are roused to activity only when the main circuit becomes blocked, or when an exceptional task calls for a variation in functioning. A typical situation wherein dormant alternative circuits activate is during diseased states, when one of the brain centers routed in the dominant circuit goes out of order.

Harvard neurologist Norman Geschwind (5) described an aphasic patient who, when asked to read aloud a text including the word "symphony," substituted the word "orchestra." Geschwind speculated that the patient, while trying unsuccessfully to pronounce "symphony," saw on his inner screen the image of an orchestra playing, an image which elicited easier access to verbal expression than the sight of the printed word. Geschwind is correct in assuming that this circuit for perceiving the written word is certainly not the normal way in which we usually read written texts, but it proves that such a roundabout circuit does exist and can be put into use when the shorter and more efficient circuit is out of order. In normal development, the cognitive function of reading becomes semi-automatized and dependent on highly differentiated brain centers located in the left (dominant) hemisphere. In cases of aphasia, however, because some centers are damaged, the reader must recall imagery by activating much longer circuits—many involving the opposite hemisphere—in order to perform the function.

We may assume that such reactivation of alternative longer circuits occurs not only due to pathology but also in the normal brain, when the highly differentiated function is no longer sufficient to accomplish the task. Normally, in the course of the developmental process that strives for efficiency and parsimony most of our daily, routine functions become semiautomatized and differentiated. Nevertheless, when more complicated tasks call for deviation from the routine, the brain must open additional circuits to participate in the activity. I believe psycholinguistics provide us with the best demonstration of this principle and exemplify what can bring us closer to understanding the specific function of art.

Verbal communication and language can be regarded as the most differentiated and efficient brain functions, enabling human beings to transmit nearly an unlimited amount of information in very short time frames. To attain and maintain efficiency, language always strives for: the highest levels of generalization (with each word designating a whole concept, not a particular object or action); the maximum degree of neutrality (divesting every word, as much as possible, from any personal, sensual, or emotional meaning); isolation between the sign and what it signifies; and a common collection of concepts shared by all individuals of the same language-group. However, every highly differentiated biological system, perfected by evolution to fulfill one specific function, is apt to be inefficient with regard to other related functions. In language, the four characteristics contributing to its perfection—generalization, neutrality, isolation, and dependency on a common and socially shared system of classification and categorization—are also the source of most of its deficiencies. The cost of

perfection is a considerable impediment in the communication of emotions, subjective experience, and anything that does not fit into the shared and agreed-upon cognitive frames of classification and categorization. I suspect that nearly everyone has experienced at some time an inadequacy in language. Although one may have no difficulty communicating, by means of language, even the most complicated objective knowledge, the moment the desire to express some intimate feeling or emotion arises, one may find oneself at a loss for words after one or two sentences.

What do we do when we reach that limit of language? Usually, we try to express subjective meanings, inexpressible in ordinary language, by using symbols, metaphors, and other picturesque expressions. Common to these expressive means are what Sussane Langer (6) termed "the power of logic analogy," the representation of an otherwise indescribable phenomenon or event by using a word, phrase, or sentence that presents an alternative phenomenon or event similar to the original one in form or content. Regarding the cognitive processes involved, use of "beyond ordinary words" techniques for expression necessitate relinquishing the natural strivings of language toward generalization, neutralization and isolation, and calling on the hitherto suppressed imagination, isolated affect and memories of subjective experience for assistance. Like Geschwind's patient (5), when the speaker finds himself lacking words to convey an idea or experience, he first attempts to represent it on his inner screen in some concrete form—visual, auditory, or tactile—and then looks for a commonly recognized experience similar to the original in content or form, one that can more easily be communicated by means of ordinary words. The listener or reader, in order to grasp the meaning of such an "out of logical context" message, must activate a similar cognitive process. For example, if someone describes a certain train of thought as "twisted," the listener, assuming that he has never before heard such an expression, will comprehend its meaning only if he elicits the assistance of imagination and tries to imagine the movement of, perhaps, a twisting snake. Only if he recognizes the similarity between such movement, and how it can be applied to the movement of a line of thought, will he grasp the meaning of the message.

With repeated usage in language, a metaphor can become as semi-automatized as an ordinary word, so that neither the speaker nor listener are required each time anew to activate their imagination in order to comprehend its meaning. In 1885, Wegener (7) described this as the "fading" of metaphors, the process whereby a fresh metaphor gradually becomes assimilated with ordinary words or language phrases. Each time the requirements of communication call for a novel metaphoric expression,

however, both the speaker creating it and the listener wanting to grasp its meaning, do so by activating anew their imagination to represent the metaphor on their inner screen in some concrete form—visual, auditory, or other. The development of technology, the enrichment of social life, and modern man's ever-growing awareness of emotions and experiences, always put a strain on language to express new meanings hitherto not expressible in ordinary words. To meet this need, language must continually enrich its repertoire of ordinary expressive means through the process of regularly creating new symbols and metaphors, which subsequently fade through repeated usage, and become incorporated into language as ordinary words. If we search for the source of new expressions, especially those used to describe emotions and subjective experience, we will find that most were invented by creative artists active in the media of language-based art—poetry, literature and drama. Such artists never neutralize and isolate their language from the springs of imagination, emotion, and subjective experience. Thus, when confronted with the shortcomings of written language and ordinary words, they are able to draw on both their imagination and experience to invent new means of expressing the otherwise inexpressible (8).

Art's function to widen the scope of language and mold its means so that they may be utilized to express all human experience, which ordinary language cannot convey is best demonstrated in poetry. Dylan Thomas said: "I use everything and anything to make my poems work and move in the direction I want them to: old tricks, new tricks, puns, portmanteau-words, paradox, allusion, paranomasia, paragram, catachresis, slang, assonantal rhymes, vowel rhymes, sprung rhythm. Every device there is in language is there to be used if you will" (9).

If the listener or reader of poetry wishes to embrace the whole range of meanings and let their emotions reverberate with those of the poet, they too must transcend the limits of habitual language perception and open all possible mental receptors to participate in the process of perception. Only if they succeed in activating their imagination and arousing their emotions will they be able to delve the depths of the meanings conveyed.

Let us now try to integrate the two points of view presented, both of neurophysiology and psycholinguistics—by translating the above into the language of neurophysiology. In the course of phylo-and onto-genetic development, language competence and practice—one of the highest differentiated mental functions—became localized in highly specialized centers in the left (dominant) hemisphere of the brain. Smooth and efficient operation of these centers in ordinary language communication is dependent, apart from all other conditions, on excluding most other brain centers from

participation in the activity (neutralization, isolation). In any case where the power of ordinary language is no longer sufficient to transmit more complicated or novel meanings, hitherto dormant brain centers and circuits must be reopened and reactivated to participate in the more complicated process of communication. When such reactivation also involves arousing the imagination, it must include, as modern research has proven, activation of centers in the opposite hemisphere.

By its very nature, art transcends the limits of ordinary semi-automatized verbal and nonverbal systems of communication, and its function is to entice the brain to open as many circuits as possible in addition to those habitually used—to enable the perception and inner processing of the message. In practice, all known arts are able to combine with any medium of human communication, i.e., music with the auditory medium, painting with the visual, or in combination (theatre with opera). Moreover, the medium used by any art always goes beyond the edge of its potential, so that the message can be perceived and its meaning assimilated only if the brain is ready to open additional circuits and shift to widespread activity.

As mentioned earlier, art—like play never imposes itself on the observer/listener/reader, the recipients are free to respond to the challenge to the degree that they wish. Great creations in any dimension of art are always constructed in a multiple manner, each deeper level conveying an additional sphere of meaning. The consumer is free to attend to as many levels of meaning as he is ready for, and accordingly to open, at every deeper level, additional (and hitherto unused) circuits in the brain. If he does succeed to respond to the challenge and open himself to the experience, he may find that proportional to his ability to attend to more levels of meaning his pleasure will also grow.

The forth movement of Mozart's Jupiter symphony, a monumental musical architectonic construction built on five different themes, is one example for us to study. You can enjoy listening to it, even if you follow nothing more than the simple melodic line and its rhythmical beats. Such listening does not require activation of additional circuits of music perception—no more than those used while listening to *Rescheth Gimel* (an Israel radio station). But you may receive an even greater pleasure by following various ingenious combinations of the two, three, or four themes, and their inversions, from beginning to end. Doing so you will have activated many hitherto inactive brain circuits, including spatial-perceiving centers in the right (opposite) hemisphere. And you will achieve the greatest pleasure of all if you succeed to follow all five melodic lines of the symphony to their climax at the coda, where they converge into a magnificent five-part

counterpointal structure. Then, in order to attend to the whole orchestra, your entire brain, on all available circuits, will have to orchestrate in concordance with the music perceived.

The theory that I suggest, explaining art as a form of communication whose function is to entice the brain, the cognitive apparatus, or the ego—depending on one's point of view—into a more widespread organizational activity, raises the question: what for? For what and why is a widespread activity better than a focused and confined one, and why is the kind of widespread activity elicited by art felt as more pleasurable than the regular confined one? To answer these questions, a third source of knowledge, in addition to neurophysiology and psycholinguistics, must be presented: the psychoanalytic theory of the primary and secondary processes.

In Freud's studies from the beginning of the century he developed the theory of primary processes, especially in "The Interpretation of Dreams" (10); following his paper from 1911, however, he never returned to systematically deal with them (11), nor did he integrate the theory of primary processes into his new "ego-psychology" (12). In several of my studies during the last 18 years (13-21), I have tried to revise the theory of primary and secondary processes and to adapt these concepts to up-to-date knowledge of psychoanalysis and cognitive psychology. Because this new theory seems relevant to me for answering our present question of why we enjoy art, I will briefly present the main ideas.

Mental activity can be divided into two main sections, each related to one of the two main tasks of the mental apparatus: one is confrontation of reality; the second is preservation of the self. The first includes all mental activity aimed at enabling us to orient to reality, to solve the problems reality confronts us with, and to communicate with others; i.e., perception of reality, logical thinking, reality-oriented behavior and the use of language. The second includes all activity aimed at integrating the self as a coherent mental organization, enabling its continued growth and development, and maintaining self-identity, self-confidence and a basic sense of well-being.

According to the theory I have suggested, the first task, reality orientation, is the function of the secondary process; the second task, preservation of the self, is the function of the primary process. Therefore, I shall define secondary processes as "reality-oriented" and primary processes as "self-centered." According to this theory, no difference exists between secondary and primary processes in regard to their level of development and maturation, efficiency, and organizational capacities. Neither of the two processes can be regarded as more primitive, infantile, chaotic, loose, unorganized, or unrefined (or any other descriptive that classical psychoanalysis may use to ascribe the primary

process as inferior to the secondary process. All differences in structure, form, and mode of operation between the two processes represent and have developed out of the two distinct functional requirements. Each process becomes differentiated through the course of phylo-and ontogenetic evolution, and optimally adapted to its particular function—secondary processes to the function of reality orientation, and primary processes to the function of self preservation and development. For example, the fact that secondary processes organize information according to dimensions of space and time, and primary processes do not, does not indicate that secondary processes are more highly developed in their organizational capabilities, in comparison to primary processes; rather, it indicates that reality-oriented tasks require space-time organizational skills, while self-centered tasks do not. Conversely, the skills considered advantageous for reality-oriented tasks (secondary processes) may, for self-preservation and development, be disadvantageous. The self-centered task of assimilating new experience into organization of the self and accommodating the self to that new experience, can only be efficiently performed if the primary process succeeds in its operation to transcend the limitation imposed by the dimensions of space and time.

Of all characteristics distinguishing primary and secondary processes, the most relevant for this discourse is their degree of neurological differentiation. Secondary processes are dependent on highly differentiated brain circuits located in the left hemisphere, while primary processes involve widespread activity in both hemispheres of the brain. The functional reason for this difference is that reality-oriented mental activities require a sharply focused deployment of attention, a linear organization of mental contents, an abstract mode of thinking, and the representation of ideas and other contents in verbal form. In contrast, self-centered mental activities require a widespread deployment of attention, multi-level organization of mental contents, a concrete mode of thinking, and representation of the contents as nonverbal visual, auditory or tactile images. The two main activities best representing the main features of each of the two processes are: language, for reality-oriented secondary processes, and dreaming, for self-centered primary processes. Language is dependent on the operation of highly developed and well differentiated centers in the left hemisphere, while dreaming is a widespread activity involving both hemispheres. It is interesting to note that when neurophysiologists and cognitive psychologists discovered dominance of the left hemisphere for logical, verbal and secondary thinking, they immediately looked for dream centers in the opposite hemisphere. Surely such centers were never found, and even their

assumption (22)—that if secondary processes are connected to the left hemisphere, primary processes must be connected to the right—has never been proven; by some it has even been refuted (23). The very assumption and ensuing search for dream centers in the brain was based on a total misunderstanding of the nature of primary processes and a disregard of psychoanalytic knowledge; for years, psychoanalysts already knew that the feature distinguishing primary from secondary processes, and dreaming from language, is that secondary processes are confined to highly differentiated centers, while primary processes are widespread and not confined to any center.

To integrate this knowledge with what was presented before, one could say that what was described from the neurophysiological point of view as the brain-circuit-opening function of art and play, is—from the ego-psychological point of view—an enrichment of regular secondary process dominated mental activity by elements of primary-process activity.

Normal mental activity is always compounded of a constantly changing admixture of secondary and primary process operations wherein the relative proportion of each process is dependent on the functional requirements of the immediate task that the mental apparatus must perform. The more a task is reality-oriented, the more the center of dominance shifts toward secondary processes; conversely, the more a task is self-centered, the more the center of dominance shifts toward primary processes. Accordingly, the function of art is to pull the center of dominance closer to the primary process pole, a qualitative change expressed: 1) in the gradual enrichment of word-represented, abstract, logical thought—with visual, auditory, and other concrete representations; 2) in loosening the tight, linear, one-track associational trains of thought to enable more widespread multi-associational ones; and 3) in the infusion of practical, task-oriented thought—with more and more emotionally charged personal images and fantasies.

To understand the process of change, one must remember that the cognitive apparatus does not tend to easily renounce its focused secondary process dominated activities, and may employ various defenses to prevent an uncontrolled shift toward widespread activity. One of the main reasons for such resistance is a fear that widespread activity may evoke inner chaos; controlling and organizing a focused activity confined to well-differentiated brain circuits is always easier than organizing widespread activity. Among all other stimuli and messages that may also entice widespread, primary-process dominated activity, the artistic product is unique in that it is constructed in a way that enables the cognitive apparatus to organize and master the percept

without presenting too many difficulties (3). As a result of prior learning, the perceptual apparatus is acquainted with basic organizational laws of the percept it is confronted with, and therefore dares to open additional circuits to those that are habitual and routine. Thus, it shifts toward the widespread organizational activity necessary to assimilate the gamut of meaning represented by a product of art.

Almost all modern psychoanalytically-oriented studies of art and creativity (24,25) describe art as a message structured in great part, or even exclusively, by the laws of primary processes. What is often overlooked, however, is that art differs from all other primary-process dominated human mental products, such as dreams and fantasies, in that it is always well-organized. Patterns of organization employed by art are, admittedly, qualitatively different from those governing ordinary word-represented logic. They are based on the organizational laws of primary processes, or on specific amalgams between the organizational laws of secondary and primary processes what Arieti (26) called the "tertiary process." A comprehensive description of these patterns of organization is beyond the scope of this study, but what is significant is that they are always patterns of widespread organization, and attempt to embrace a wide range of percepts, an array of stimuli, or several levels of communication.

To illustrate differences between ordinary, secondary-process dominated patterns of organization, governing ordinary speech and logic, and primary-process dominated patterns, governing art, let us imagine what might happen if you were to organize a meeting of 100 men and women gathered in an assembly hall. They have arrived from all parts of the country, and each is eager to go on stage to express themselves in some way. Obviously, if you let everyone climb on stage and speak, sing, play, dance, or act as they would like to, the result will be nothing but chaos. So what will you do? Certainly you might shout: "Quiet, please! take your seats and everybody in his turn—when I call him—will come to the stage and say or do what he wants." I would call this kind of order "the convention model of organization": everyone expresses themselves in turn, while the others remain silent. But you can also solve the problem of order in a different way, by inviting all 100 participants to come to the stage and allowing everyone to express themselves—in unison, group by group, or alone. Some may sing, play, dance, or speak. This is the kind of order I call "the opera model of organization": Everybody is active and expressing themselves and all are happy.

The first pattern of organization, similar to patterns characterizing secondary processes, is rather easy to employ. You need only a good

chairman tough enough to keep 100 men and women silent while one speaks. Precisely when every one will come to the stage and what they will each say or do or for how long, is not important so long as the order of "one at a time" is kept.

The second pattern of organization, involving primary process patterns, is much more complex to employ. First, it is nearly impossible to plan such activity impromptu, and you need a previously prepared program i.e. a score, a libretto, to depend on. Furthermore, even if you have such a program at hand, you need a great deal of experience and excellent organizational capabilities to execute the multi-participant stage performance. The first, that of writing the program, is the task of a talented composer or writer, and the second, performing the creation on stage, is the job of a talented conductor or director. So, if you still insist on attempting the second pattern of organization, you must take into consideration that you will not be able to accomplish the task alone. You will need to review art archives for a suitable organizing program, and employ the assistance of an experienced artist for its execution on stage.

This imagined assembly illustrates the main differences between the two patterns of organization. Regular confined patterns of organization are relatively easy to employ, while those that are widespread require a high degree of planning, as well as consummate skill for their implementation.

So, to return to the central question of this paper, why do we enjoy art? Or, why is the widespread primary-process dominated, self-centered, mental activity experienced as more pleasurable than the confined secondary-process dominated, reality-oriented one?

The study of the experience of pleasure is perhaps the most problematic in psychology, and related to what Freud (27) called "... the most obscure and inaccessible region of the mind... ." George Klein (28) criticized the prevailing psychoanalytic theory which "... has no language for conceiving other than sensual pleasures, or the varieties of pleasure in other than the terms of sexual theory." When presenting his economic theory of pleasure in 1920, Freud, too, was reluctant to present it as a general theory and wrote: "We would readily express our gratitude to any philosophical or psychological theory which was able to inform us of the meaning of the feelings of pleasure and unpleasure which act so imperatively upon us. But on this point we are, alas, offered nothing for our purpose" (27). Perhaps the theory presented here may provide some clues for that purpose, explaining at least one form of pleasure other than the sensual one—pleasure related to the enjoyment of art.

It is feasible to assume that the amount of pleasure obtained from

involvement in any artistic activity, whether as producer or consumer, is proportional to the sum of mental functions and operations released for participating in the process. In the language of neurophysiology, one could say that the amount of pleasure obtained is proportional to the number of brain circuits opened for participating in the process of perception.

Ernst Kris laid the foundations for an ego-psychological theory of art and wrote that: "... the pleasure is a double one, in both discharge and control" (24). By reformulating his statement we could say: the pleasure is a double one, in both release and control—release, by enabling as many mental functions and operations to take part in the process of perception as possible, and control, by being able to organize and master a wide field of diverse and multi-level percepts and meanings. Due to its inherent order and organization, the product of art allows perceptual apparatus to enjoy a shift toward widespread organizational activity without threatening its loss of control.

Nonetheless, in describing conditions of pleasure, the question "why" has not yet been answered. To any "why" question (i.e., in psychology or biology) we can only respond in the realm of evolution; like it or not, the darwinistic functional theory is still our only epistemological basis for speculation on reasons in nature. According to this approach, we are left with few alternatives other than supposing that if in the course of evolution a certain activity became a source of pleasure for the human being, it must have considerable survival value for the individual or the entire species.

Applying this point of view to our present discussion, we must suppose that widespread, primary-process dominated organizational activity has considerable survival value, and serves self-needs for assimilation, accommodation, and integration. These functions are as essential for preserving a healthy equilibrium of the mind as secondary processes are for serving the demands of reality orientation. Normally, there is a constant diurnal rhythm according to which, by day, our mental organizational activity is dominated by secondary processes enabling us to successfully fulfill all our reality-oriented daily tasks; at night, when retreating from reality, mental activity becomes dominated by primary processes, whose function is to assimilate into the self any new experience accommodating the self to new conditions created by that new experience, in order to resolve incompatibilities created and left over from the previous day's activities. Furthermore, these processes prepare the self to confront the demands that reality is expected to impose on it in the following day. The problem is that for most people the time spent in vital self-centered mental activity during night's sleep is not sufficient for completing the needed self-assimilation,

accommodation and integration, and subsequently they must also devote considerable time during daily waking mental activity to pursue self-centered aims. We observe such activity particularly in growing children and adolescents who, when confronted with an excess of new experiences, and having to accommodate too quickly to changing conditions, periodically and frequently retreat from reality-oriented activity and escape into fantasy and play. The same is also true in adults, particularly those confronted with excessive reality demands on their self-integration, or those suffering from some defect in their self-structure, who may periodically withdraw from reality to invest mental effort primarily in self-centered activities. I would recommend such periodic retreats for everyone as release from the strenuous daily reality-oriented activities they must participate in. For children, fantasies elicited by fairy-tales or individual and group play are usually sufficient for fulfilling the organizational needs of the self. For adults, however, who have more complex organizational needs and developed logic, more elaborate means of fulfillment are required—provided only by the arts.

If both kinds of mental activity—self centered and reality-oriented—are equally vital for survival of the individual and the species, why is it that self-centered, primary-process dominated mental activities, i.e., play and art, are the dominant sources of pleasure? There is no definitive answer to this question, but we are able to speculate. I would suggest that nature (i, e., natural selection), while endowing us with the ability to experience pleasure when engaged in some vital physical or mental act, was principally interested in motivating us to spend our time and effort in vital activities that might otherwise have been neglected. Nature does not need to care for reality-oriented activities, because they are already assured by instinctual drives and physical needs. This is also true for dreaming, which spontaneously occurs during REM sleep, and requires no specific motivation for its activation. In play and art, however, the individual engages himself at the expense of all other reality-oriented activity. Owing to the ever-pressing and ever-present demands of reality, it is unlikely that such an expenditure will occur. Therefore, if nature really desires and wants to ensure that these two vital activities will not be neglected and allocated to "I will do it later, when I have time," it must attach a considerable premium of pleasure to the activities. Otherwise, why would a child invest energy in playing, or an adult waste time in such useless activities as reading poetry, and dancing or listening to music, were it not for the pleasure that these activities provide us?

References

1. Kohut H, Levarie S. On the enjoyment of listening to music. *Psychoanal* 1950;19:64-87.
2. Meyer LB. Some remarks on value and greatness in music. *J Aesth Art Critic* 1959;17:486-500.
3. Valery P. The idea of art. In: Osborne H, ed. *Aesthetics*. Oxford: Oxford University Press, 1972.
4. Stokes A. *The Invitation in Art*. New York: Chilmark Press, 1965.
5. Geschwind N. The organization of the living brain. In: Miller J, ed. *States of Mind*. New York: Pantheon Books, 1983.
6. Langer S. *Philosophy in a New Key*. Cambridge, MA: Harvard University Press, 1942.
7. Wegener P. Untersuchungen ueber die Grundfragen des Sprachlebens. Halle: Max Niemayer, 1885.
8. Noy P. About art and artistic talent. *Inter J Psycho-Anal* 1972;53:243-249.
9. Thomas D. Poetic manifesto. *Texas Q* 1961;4:44-53.
10. Freud S. *The Interpretation of Dreams*. 1900. London: Hogarth Press, 1953.
11. Freud S. *Formulations on the Two Principles of Mental Functioning*. 1911. London: Hogarth Press, 1958.
12. Freud S. *The Ego and the Id*. 1923. London: Hogarth Press, 1961.
13. Noy P. A revision of the psychoanalytic theory of the primary process. *Inter J Psycho-Anal* 1969;50:155-178.
14. Noy P. Symbolism and mental representation. *Ann Psychoanal* 1973;1:125-158.
15. Noy P. Insight and creativity. *J Am Psychoanal Assoc* 1978;26:717-748.
16. Noy P. Form creation in art: an ego-psychological approach to creativity. *Psychoanal Qtrly* 1979;48:229-256.
17. Noy P. The psychoanalytic theory of cognitive development. *Psychoanal Study Child* 1979;34:169-216.
18. Noy P. A revision of the psychoanalytic theory of affect. *Ann Psychoanal* 1982;10:139-185.
19. Noy P. The three components of empathy: normal and pathological development. In: Lichtenberg J, Bornstein M, Silver D, eds. *Empathy*, Vol. I. Hillsdale, NJ: The Analytic Press, 1984.
20. Noy P. Originality and creativity. *Ann Psychoanal* 1984/85;12/13:421-448.
21. Noy P. Von der Phantasie zur Realitat: Von Selbsbezogenheit zur Realitatsorientierung. *Jahrbuch Psychoanal* 1986;19:109-141.
22. Galin D. Implication for psychiatry of left and right cerebral specialization: a neurological context for unconscious processes. *Arch Gen Psychiat* 1974;31:572-583.
23. Hoppe K. Split brains and psychoanalysis. *Psychoanal* 1977;46:220-244.
24. Kris E. *Psychoanalytic explorations in art*. New York: International University Press, 1952.
25. Ehrenzweig A. *The Hidden Order of Art*. Berkley, CA: University of California Press, 1967.
26. Arieti S. Creativity and its cultivation: Relations to psychopathology and mental health. In: Arieti S, ed. *American Handbook of Psychiatry*. Vol. III. New York: Basic Books, 1966.
27. Freud S. *Beyond the Pleasure Principle*. 1920. London: Hogarth Press, 1963.
28. Klein G. *Psychoanalytic Theory: An exploration of Essentials*. New York: International University Press, 1976.