



Homospatial  
Thinking  
as a  
Psychological  
Process

Albert Rothenberg, MD

# **HOMOSPATIAL THINKING AS A PSYCHOLOGICAL PROCESS**

**Albert Rothenberg, M.D.**

e-Book 2016 International Psychotherapy Institute

From *The Emerging Goddess* by Albert Rothenberg, M.D.

Copyright © 1979 by Albert Rothenberg, M.D.

All Rights Reserved

Created in the United States of America

## Table of Contents

### [HOMOSPATIAL THINKING AS A PSYCHOLOGICAL PROCESS](#)

[Homospacial Thinking, Psychopathology, and Fusion](#)

[Homospacial Thinking and Synaesthesia](#)

[Homospacial Thinking and Mental Imagery](#)

[The Creation of the Play "High Tor" by Maxwell Anderson](#)

## HOMOSPATIAL THINKING AS A PSYCHOLOGICAL PROCESS

Because homospatial thinking involves fusion, imagery, multiple sensory modalities, identity, and similarity, it can be confused with so-called primitive, pathological, and concrete modes of thought. Moreover, one of the characteristics of primary process thinking is the lack of ordinary spatial restrictions, so-called spacelessness. In dreams, this characteristic is manifested by the bringing together of concrete elements without regard to their ordinary locations, dimensions, conformations, or their integrity in space; there is defiance or exaggeration of the limitations and effects of gravity, size, and structure. Thus, flying, enormous feats of strength, or excessive exhaustion, as well as composite images of places, people, and things appear. Sometimes, as we well know, the composite images in dreams can be phantasmagoric. This primary process feature of spacelessness is mirrored in consciousness by homospatial thinking. Both operate to defy the ordinary restrictions of space but they function in a reverse cognitive and psychodynamic manner. The primary process characteristic functions to express wishes in concealed form, while homospatial thinking functions to unearth and reveal unconscious material as well as to integrate and unite concrete entities to produce both metaphors and abstractions. In homospatial thinking, discrete entities are usually superimposed and vague when occupying the same space, in dreams, entities tend to be brought together as vivid composites, that is, combination and compromise formation takes place.

Related to the mirror-image relationship between homospatial thinking and primary process spacelessness is the relationship of the former to the specific primary process mechanism of condensation. With condensation, multiple entities are brought together and compressed in order to discharge impulses in a concealed, distorted way. As this compression involves spatial representations, products of condensation bear some similarity to homospatial constructs. However, the product of condensation is always a composite; through compromise formation various aspects of multiple elements are combined. To elaborate on a distinction from the previous chapter, a character produced by condensation in a dream might have the red hair of the dreamer's mother, the voice of a childhood sweetheart, and appear in a circumstance connected to the dreamer's wife. The character produced by homospatial thinking might very well be a merger of these same three real persons but she (or he) would

be a new integration of the three with derivations of particular characteristics rather than the characteristics themselves. While the purpose of the image produced by condensation in the dream is to represent the dreamer's wish—for timeless female care, for instance—in concrete and disguised form, the purpose of the homospatial process with respect to characterization is to create a new and valuable entity, as well as to begin to reveal the nature of underlying wishes and feelings.

As described earlier, the homospatial process also bears a mirror-image relationship with the primary process mechanism of displacement. With regard to sound similarities in poetry, for example, the homospatial process produces a shifting of emotional charge onto progressively more important psychological material; that is, content associated with unconscious wishes and affects comes progressively toward awareness. Displacement, on the other hand, uses sound similarities to shift emotional charge onto progressively less important material, and content progressively conceals unconscious wishes and affects.

### **Homospatial Thinking, Psychopathology, and Fusion**

These distinctions made between homospatial thinking and primary process spacelessness, condensation, and displacement should also clarify the differentiation from psychopathological modes of thought, especially those in schizophrenia. Primary process mechanisms are usually considered to be operating prominently and significantly in schizophrenic symptomatology. Hallucinations, use of neologisms and word-salads, and various types of autistic communication and behavior appear to be identical with the products of condensation and displacement in dreams. As homospatial thinking is not a form of condensation or displacement, it—like janusian thinking—is not a form of schizophrenic cognition.

As homospatial thinking is, in some ways perhaps, more difficult to grasp than janusian thinking, I shall make some more specific differentiations. Homospatial thinking is not a hallucinatory experience, either visual or auditory, or of any other sensory type. There is no involuntary eruption of homospatial conceptions into consciousness as with hallucinations; the former are products of an active intentional process. Unlike hallucinations, which are vivid and realistic, the homospatial conception is vague and diffuse with only certain elements somewhat more vivid than the rest. And there is no question whatever

about reality in the creator's mind. He is fully aware that he himself has produced, and is mentally manipulating, the images rather than their existing in a physical world before him.

Persons suffering from schizophrenia often appear to be communicating by means of metaphors, a matter that has received some attention in psychiatric literature.<sup>1</sup> By implication, the production of effective metaphors in this condition would suggest a capability for and a use of homospatial thinking. A subject for further elaboration and research, briefly the issue turns on whether the schizophrenic person is primarily aware of the figurative or of the literal meaning of a metaphorical expression. When saying, "spilled tea is anger," there is frequently a belief that a person's anger literally caused the tea to spill. This is not because schizophrenics cannot think abstractly. They most certainly can and do, and when they do they are, if predisposed, capable of homospatial thinking. But most often, they are focused on the concrete and literal meanings of their words and expressions. Here, the condensation mechanism predominantly holds sway.

With respect to other forms of psychopathology where there are intrusions as well as aberrant types of mental images, such as in hysteria, condensation rather than homospatial thinking is involved. And not only psychopathological forms of thought but psychopathological dynamisms are distinct from the psychological dynamisms of homospatial thinking. A particular case in point is the factor of fusion. In schizophrenia and other types of psychopathology, an excessively interdependent or interlocking relationship between parent (or parents) and child—symbiosis—is often implicated as a possible causative or attenuating factor. This interdependence is so extreme that young child and parent are psychologically virtually fused, a factor playing a role in the child's later difficulties in developing psychological boundaries between himself and all others, as well as his inability to distinguish categories. Other types of fusion that have been described are the narcissistic fusions associated with a wide diversity of psychopathological conditions.<sup>2</sup> Hellmuth Kaiser has described an underlying fantasy of fusion consisting of a wish to incorporate oneself or to be incorporated with another person, a fantasy that he believes to be the basis of all interpersonal and intrapsychic aberrations.<sup>3</sup> None of these types of fusions are involved in homospatial thinking. The homospatial process involves a fusion of the content of cognitive imagery, and sensory experiences. Elements in the content can be, and usually are, representative of unconscious wishes and impulses, and when these elements are cognitively fused there is a concomitant fusion on other psychic levels as well. Neutralized and adaptive energy becomes

available as a result. But the fusion of cognitive elements is not motivated by a "fusion fantasy," or a wish to reunite with a mothering figure or to regain a symbiotic relationship. Such fantasies and wishes *could be re-presented by the elements* in the homospatial conception but they are not the motivating force or the psychodynamic basis for the fusion of cognitive content. Elements are fused or otherwise brought together to occupy the same space because the creator intends them to be fused and to produce a creation.

### Homospatial Thinking and Synaesthesia

Synaesthesia, a phenomenon in which "a stimulus presented in one sensory mode seems to call up imagery of another mode as readily as that of its own,"<sup>4</sup> has at times been linked to metaphor creation. With synaesthesia, music is "seen" and colors or other visual images are "heard" or "felt" or "tasted." Certain persons are especially endowed with this mode of perceiving, and it has been reported that mescaline and d-lysergic acid diethylamide (LSD) produce such synaesthetic experiences regardless of any previous endowment.<sup>5</sup> So dramatic and so stimulating are these experiences for the drug ingestors that the drugs are frequently touted as instigators and facilitators of creativity.<sup>6</sup> However, despite the rather dramatic qualities of this type of imagery and of the synaesthetic experiences during drug ingestion, no definite connections to creativity have been established. Although some musicians and other artists have occasionally used terms suggesting synaesthetic experiences, there are no data to suggest that such experiences played any direct role in their creations.

Primarily based on associational cognitive processes, synaesthesia is clearly distinct from homospatial thinking, an active process leading to integration. Also, synaesthesia involves only qualities of entities rather than entire entities or images of entire entities. It involves interchangeability of sensory modes rather than fusion or superimposition. Because synaesthesia derives from associations between experiences in different sensory modalities, such as a particular sound calling up a particular color sensation, it differs from homospatial thinking in involving sequential images. The color green, for instance, follows the appearance of the sound stimulus; the color and the sound do not occupy the same space.

Although some seemingly effective metaphors, such as "a yellow voice," appear on the surface to be direct products of synaesthesia, that may be primarily a serendipitous type of event. Such concatenations



may result directly from synaesthetic experiences but, in relation to a context, the homospatial process may be required to render them into effective creations.

### **Homospatial Thinking and Mental Imagery**

Imagination and creativity are so closely interrelated that often the terms are used as equivalent with one another. And the word "imagination" is based directly on the forming of mental images. That the homospatial process, as a major form of creative cognition, uses and depends on mental imagery to a very large degree should therefore be readily appreciated. However, it is important to clarify the nature of the relationship.

Because visual imagery is the sharpest and clearest, most readily arousable, and most widely experienced type of mental imagery, we tend to stress it. We tend to consider the characteristics of visual imagery as representing the characteristics of all types, and we use them for general laws. We study visual images, turn to them as examples, and check on them for verification. Moreover, visual imagery is the most specific and consequently the most readily communicated and validated type. In short, mental imagery as a category is often treated as though equivalent to visual imagery.

In the homospatial process, however, it must be emphasized that various types of imagery can be involved. As we have noted, auditory and kinesthetic imagery play an important role in homospatial thinking in music (and presumably dance) and poetry, and tactile imagery is involved in the process pertaining to materials in the visual arts. A capacity for thinking in visual imagery may not therefore be correlated with a capacity for homospatial thinking unless there exists some (so far unproved) general correlation between capacity in visual imagery and in other types. Indeed, a characteristic use of visual imagery could possibly function to reduce capacity to use other types of imagery and thereby to reduce homospatial cognition involving other sensory modalities. Homospatial processes depend for their function on the capacity to construct and to use some type of imagery.

Special types of facilities with visual imagery are not necessary factors for homospatial thinking. Special capacities to have vivid visual images, special eidetic faculties or special facility in remembering visual details are not intrinsic to the process. The images in a homospatial conception depend on the

quality of the entities chosen by the creator, their fuseability and their relationship to the context in which the creator works. Homospacial conceptions are usually vague and diffuse, and an initial vividness of the images would not necessarily facilitate the production of an effective metaphor or other creation. Capacity to remember scenes or visual impressions may be of some general use in the visual arts, but it is not the same as the particular ability to use and fuse visual images. Eidetic images, which are reproductions of actual physical scenes, are not at all required for the homospacial process.

Special capacity with auditory and other nonvisual forms of imagery are, however, probably quite important in homospacial processes involving these other forms. Composers, for instance, surely have greater capacity to generate auditory images than the rest of us. The major issue is characteristic function and use. Special capacity with visual imagery is not ordinarily necessary because a tendency to think in visual images is already fairly highly developed in the general population. This is probably the result of a number of factors: developmental, evolutionary, and social. The intense contemporary bombardment of visual images from motion pictures and television surely plays a role. Only a reduced tendency to use visual imagery in comparison to the average, therefore, would be of pragmatic importance. Those who seldom think in visual terms would very likely seldom engage in the homospacial process. Those who frequently think in visual terms do not necessarily engage in homospacial thinking except perhaps by chance or because they apply their visual imagery creatively.

With respect to Coleridge's previously mentioned distinction between fancy and constructive imagination, mental images derived from ordinary everyday thinking, daydreams and fantasies, or directly from nocturnal dreams are the components of fancy. When used to anticipate or to apprehend an event or circumstance, or a series of events and circumstances, these images are components of imagination. Constructive imagination, the type we consider intrinsic to creativity, involves mental images subjected to the homospacial process. This process is an essential ingredient, or perhaps *the* ingredient, in constructive or creative imagination.

So-called concrete modes of thinking are usually considered more primitive or in some way inferior to the abstract, conceptual realm. Because the homospacial process depends on mental imagery and concrete elements in space, it might possibly be considered simplistic or even a low level of mental functioning playing a minor role in creation, especially intellectual creation. Because metaphors have a

prominent concrete aspect and this process directly produces metaphors, it could be designated as merely a concrete or concretizing mode of thought. In order to demonstrate the high-level cognitive functioning of the homospatial process and also to provide further evidence for its salient role in literary creation, I shall report in an abbreviated way on an empirical study of mine (not yet published) pertaining to the function of homospatial thinking in the creation of literary character. Characterization is a major aspect of literary creation in plays, novels, short stories, and poetry as well. As the construction of a character is a complex matter occurring throughout the time of creation of a literary work, both the complete and the more abstract modes in which homospatial thinking operates can be appreciated.

### **The Creation of the Play "High Tor" by Maxwell Anderson**

Maxwell Anderson's play *High Tor*, written and produced in 1936, was awarded the New York Drama Critics Circle Award for that year. Generally considered one of Anderson's best works, it is a humorous and somewhat whimsical drama concerning a young man's fight to preserve a Hudson River palisade called High Tor (Old English: tor, "hill" or "mound") from the encroachments of a local trap rock mining company. Highly lively and eventful, the critics' accolades described it as a "romp." Included in the play are ghosts of the palisade from an old Dutch ship who are modeled after the legendary Catskill mountain ghosts from Henrik Hudson's boat; bank robbers hiding out on the mountain; a pair of fatuous representatives of the local trap rock company, one a judge, a last surviving Indian of an extinct tribe, the young, long-patient girlfriend of the young male hero.

Maxwell Anderson was a distinguished and creative American dramatist who won many awards, including the Pulitzer Prize. Most notably, he was one of the few American playwrights to attempt high poetic drama. It has not been generally realized that the verse drama *High Tor* is an attempt at a modern restatement of Shakespeare's *Tempest*. Just as *The Tempest*, in one respect, concerned the confrontation of the old world with the new world of the Americas and with the future, *High Tor* concerns a similar but reversed confrontation. In the Anderson play, new world values emphasizing industrialization and materialism are confronted both by a young man wanting to preserve the natural life and ways of the past, and by ghosts from the old world. There are, moreover, many particular similarities in structure and content between the two plays, including an almost identical humorous sequence involving the seeing of a monster in the doubled set of protruding limbs and heads of two people sleeping under a common

blanket. Because the play was clearly a literary creation and because original manuscripts were available, I undertook an empirical study of the creation of this work.<sup>7</sup>

In the earlier study of the creation of a play based on analysis of manuscript drafts, the study of O'Neill's *The Iceman Cometh*, I developed a methodology focused on textual errors and revisions by the author.<sup>8</sup> First draft revisions provide a written documentation of the dynamic, changing aspect of a work in progress. Study of revisions, therefore, is a reliable means for retrospective analysis of the process of literary creation. Furthermore, by extending the principle of unconscious and preconscious conflict as the basis for errors and slips of the tongue—one of Freud's most scientifically valid and widely accepted discoveries—to literary revisions as a related category, revisions become the means for understanding preconscious and unconscious influences operating during the creation of a particular work. Although Freud himself never extended his discoveries about slips and errors to the realm of literary revision, the basis for such an extension is the following: just as ordinary slips and errors represent a discrepancy between intent and execution—the person making the error wants to say or write the correct thing but doesn't—literary revisions also represent a similar discrepancy. An author has a particular aesthetic goal in mind and frequently he does not achieve it on the first try; hence, when he later recognizes a discrepancy between his intent and the execution, really an aesthetic mistake, he makes a revision or a change. Or, using a broader approach, constant change and revision focused on particular types of content or structure indicate an author's anxiety and conflict about those types of content or structure, regardless of whether a change is merely grammatical and lexical, or is more ambitious and aesthetic in nature.<sup>9</sup> Statistical analysis of revisions connected to written references to the central symbol of "the iceman" in O'Neill's play showed a significantly higher rate of revising in sentences containing direct references to "the iceman" than in all others, and content analysis of revisions indicated the nature of O'Neill's preconscious preoccupation and conflict. Content of revisions indicated O'Neill's preoccupation with the idea of a real rather than a symbolic iceman. Because, as indicated in other material from the play itself and from other documented sources, a real iceman was the same as an adulterer, the finding pointed to O'Neill's preoccupation with sexual matters and with a friend's suicide apparently precipitated by a wife's adultery.

In an attempt to develop a widely applicable approach to revision analysis, the manuscript of Anderson's *High Tor* was even more systematically investigated. All 2,439 sentences in the play were

numbered sequentially, and presence or absence of revision (ranging from correction of pen slips and spelling errors to more extensive additions and deletions) was charted. On the basis of careful independent inspection of the sentences containing revisions, and on logical grounds, 61 separate categories or variables were developed for sentence classification. These variables were the following: length of sentence (three variables: short, medium, and long); character in the play speaking (15 characters or variables); character present on the stage (15 variables); early or late portion of the play (six variables: six scenes); linguistic factors (nine variables: presence of any of six specific personal pronouns; presence of a verb of giving or receiving, presence of a poetic metaphor); specific types of sentence content (13 variables: references to money, male-female relations, legal matters, death, religion or magic, darkness or light, age, food, occupation and work, play, violence or aggression, identity of persons or things, false or illicit matters). Every sentence in the play, revised or not, was scored on the basis of all 61 categories or variables. Scoring of sentences with regard to categories of sentence content and to the category of poetic metaphor was carried out by two raters working independently. The resulting data was assessed statistically to determine what categories were significantly associated with revision.

A major initial finding was that the dialogue of certain characters in the play or the mere presence of these characters on the stage was positively correlated with revision. Sentences spoken by these particular characters or in their presence tended to contain one or more revisions each, while other sentences did not. The association of revised sentences with these characters was statistically significant (chi-square = 9.706,  $df = 1$ ,  $p < .01$ ). The particular characters were the ghosts or dead persons in the drama. Further statistical calculations of chi-square associations were then made, grouping the individual characters into two larger categories of living and dead characters. On the basis of this second calculation, findings were that the following categories or variables were all significantly associated with revision: dead characters speaking or on the stage, longer (both medium and long) sentences, presence of poetic metaphors, verbs of giving and receiving, references to darkness or light, and references to death. Sentences having any or all of these characteristics tended to be highly revised in the first-draft manuscript of the play.

The findings of associations between revision and longer sentences, presence of poetic metaphors, verbs of giving and receiving, and references to darkness and light are all of interest but I shall focus here

only on the statistical associations having the most definite content implications, the association between revision and the dead character categories and the association between revision and references to death. The associations with the categories of reference to darkness or light and of verbs of giving and receiving do, in fact, also have a connection to the meaning of these findings but the connection is too involved and is unnecessary for this summary.

According to the psychological rationale for the study of revision patterns described above, the association with dead characters and with references to death in sentence contents indicated that the playwright was preoccupied with death during the writing of the play. Alternatively, of course, one could say that the dead characters were merely hard to create, their lines difficult to formulate, and that constructing sentences referring to death in a play is always difficult. But, keeping to the idea that the reason for Anderson's consistent revising here was a conflict and preoccupation about death, I reasoned that someone very close to him had probably died at or around the time the drama was created. This I made as a prediction of what

I might further find out about Anderson despite the fact that it was primarily a comical rather than a tragic play. And after some extensive detective work—nothing but a very brief biography exists and Anderson gave out very little personal information during his lifetime—I discovered that his father died three months before he began writing *High Tor*.

After establishing this connection, a connection supporting the hypothesis that revision patterns indicate an author's personal preoccupations (there was a similar construction in the O'Neill study), I looked again at the content of the play. The young hero of the play, Van Van Dorn, is at the beginning briefly described as having inherited the High Tor palisade from his father. Later it is clear from the dialogue that Van Dorn's father has died shortly before the action of the play begins. Thus it appeared that the hero of the play was definitely based, in one aspect at least, on Anderson himself.

Although direct connections such as this between authors and their heroes are usually assumed to be universally present in literature, such is definitely not the case. There would be no reason to assume a priori that this particular feature was derived from the author's life. Moreover, the connection to the author definitely does not itself account for the creation of the Van Dorn character. For one thing, Van

Dorn is a hunter who lives alone on High Tor and spends his time living as he pleases. One of the reasons he will neither sell the palisade to the trap rock company nor marry his extremely patient girlfriend is that he wants to continue living in the woods just as he has done up to that point. But Anderson himself did not at all live that way, nor was he reputed to be as aggressive as the Van Dorn character; also, Anderson was married at the time he wrote the play. There was, I discovered, a living person named Van Orden who lived on the real mountain in New York State named High Tor and it can surely be assumed that Van Dorn was partly derived from him. Young Van Orden inherited and held on to the mountain for a time.

In order to gather further information about Maxwell Anderson, particularly any information pertinent to the writing of the play, I made contact with Quentin Anderson, the playwright's oldest son. Enormously helpful to me from the first, when Mr. Anderson learned that I was interested in *High Tor*, he directed me to a 1952 novel entitled *Morning, Winter and Night*.<sup>10</sup> This novel, it is not generally known, was written by his father under the pseudonym of Michaelson. The pseudonym, it seems, was motivated both by the highly autobiographical material in the novel and by the need or desire to include explicit sexual scenes and sexual slang that might in 1952 have affected or hurt his literary reputation. Quentin Anderson believed that the novel was based on actual experiences in his father's life. Through this book and the findings of the revision study, the creation of the Van Dorn character, among other things, could be explicated and clarified.

The story concerns a year spent by Maxwell Anderson, then twelve years of age, on his grandmother's farm. This grandmother was, according to Quentin Anderson, a very important person in his father's life, often being described by the father as the person who virtually brought him up. Focused a good deal on the young Maxwell Anderson's relationship to his grandmother, the novel also vividly recounts his painful awareness as a boy of the onset of puberty and his first sexual experience during that particular year. But a major event in the story is the death of an old man living in the grandmother's house. This man, referred to as the "old coot," appears throughout the story only to be somewhat of a handyman, living in the house on the grandmother's good graces as he does precious little work. A climactic revelation, then, is that this same man actually had once been the grandmother's lover and with her he had fathered her beloved child who died in infancy. Much of the final portion of the novel is devoted to the details of this man's death and burial. In a final scene, the old man lies dead in his coffin

while, due to circumstances, the young Anderson and his girlfriend engage in a strange attempt to have intercourse in the same room. The attempt fails.

The specific connection to the characterization in the play *High Tor* is that the "old coot" was, like Van Dorn, a hunter. Throughout the novel, in fact, this man is pointedly described as going and coming as he pleases and living a good part of the time alone in the woods, just as Van Dorn does. Most important, it is strongly and quite dramatically emphasized that the "old coot" stubbornly held on to his way of life, never marrying the grandmother and never giving up his long trips to go hunting. These characteristics are point for point the same as those of Anderson's character in *High Tot*. Not only is Van Dorn devoted to hunting and living as he pleases, but he significantly temporizes about marriage. And the main dramatic focus of the play is Van Dorn's stubborn refusal to give up his land and way of life. That the "old coot" was himself important in Anderson's life is unmistakable from the descriptions and climactic events in the autobiographical novel.

The revision patterns indicating Anderson's preoccupation with death during the writing of the play point both to his father's death and the (psychologically connected)<sup>11</sup> death of the "old coot." The life history information and circumstances indicate that at least three distinct persons came together in the character of Van Van Dorn: Anderson himself, the real owner of the mountain High Tor named Van Orden, and the hunter-lover of Anderson's grandmother. Anderson's conscious and intentional bringing together of the three persons is indicated by the following considerations: (1) Van Dorn is exactly in Anderson's own circumstance at the start of the play: he has just lost his father; (2) Van Dorn has the "old coot's" occupation as well as his personality characteristics described explicitly sixteen years later in the novel of 1952; (3) not only is Van Dorn's name almost the same as Van Orden, but among Anderson's literary effects<sup>12</sup> there is a newspaper clipping concerning the man who owned and lived on the real mountain, High Tor; (4) Anderson himself had earlier been, according to his son, actively involved in a dispute with a power company about his own land. This dispute was analogous in many ways with Van Dorn's dispute with the trap rock company.

That the bringing together of the three persons was a continual process of fusing or superimposing them throughout the writing of the play rather than a mere labeling and combining of certain specific traits is demonstrated by a detailed consideration of the manuscript. Throughout the play, Van Dorn



behaves as though he were all three persons together. Stubbornly holding on to the land just as the "old coot" hunter would, his relationship to the female ghost, the captain's wife, is also very much like the basic relationship of the young Anderson to his grandmother. His abiding love of the land and of his Dutch ancestry, however, is also totally unlike the "old coot" and is more related to qualities of the real owner of High Tor, who held onto the mountain and whom Anderson knew. Or, as far as loving the land is concerned, this was also a feature of Anderson himself.

The phenomenon of fusion of three discrete persons, sometimes producing abstract conceptions of the character's moral stance and nature and sometimes producing new and concrete qualities and behaviors, is demonstrated in the ongoing and unfolding events of the play. At one point in the original manuscript there is an indication of a dramatic shift: in writing the end of the second of three acts, Anderson tried three quite different versions, the only place throughout the writing he vacillated so extensively. The three different versions reflected his indecision about whether to have Van Dorn give in and sell the palisade to the trap rock company, a crucial issue in the story. Clearly, the "old coot" never would have. Also, there is some concern about how the girl would have viewed his action, a factor probably more of concern to Anderson himself. In the final version used, Van Dorn tells his young girlfriend he will sell the Tor if she stays with him. This, a new and more softened position, leads to a selling of the land in the last act with a climactic philosophical pronouncement about the future activity of the trap rock company: "Nothing is made by men but makes, in the end, good ruins." The creative solution, in other words, developed during the writing of the play. Anderson had not decided beforehand when or how the Tor would be sold or, perhaps whether it would be sold at all. Van did not follow the "old coot's" way, but out of a fusion of three discrete persons, Anderson was enabled to produce a vibrant, new and integrated character.

To recapitulate the probable sequence: as Anderson was preoccupied with his father's death before and during the writing of *High Tor*, an early idea for the play very likely consisted of the ghosts of the Hudson palisades. Now, while ghosts are assuredly dead, it is of interest that there is much discussion in the early portion of the play (and in the first formulations on the manuscript) of their wish to be alive or to go back to a previous state. Although this is not in itself remarkably new, it does suggest, along with the overall structure of the drama—a romp involving both the dead and living—that the idea of portraying life and death simultaneously was an early conception in Anderson's mind. Ghosts could be considered

"living dead." This, of course, would be a janusian conception. With respect to the Van Dorn character, therefore, the initial conception would also have been janusian: the dead hunter together with the living playwright as well as the living owner of High Tor in one character simultaneously. In conjunction with this janusian conception, the homospatial process then operated throughout the writing of the play, fusing and superimposing images, sequences, and actions. In this way, the homospatial process played a significant role in the creation of a dramatic character.

Because of the nature of the real persons fused and superimposed—the writer himself, the living owner of the property, and the old man whose characteristics are explicitly described, and because of the handling of the characterization in the play—the character's finding a new solution, the process of fusing or of homospatial thinking seems to have been an ongoing, conscious intentional one, operating together with high-level logical and critical mental faculties in creating the High Tor drama.

#### Notes

- <sup>1</sup> E. Caruth and R. Ekstein, "Interpretation within the Metaphor: Further Considerations," *Journal of Child Psychiatry* 5 (1966) :35–45; R. Ekstein and J. Wallerstein, "Choice of Interpretation in the Treatment of Borderline and Psychotic Children," *Bulletin of the Menninger Clinic* 2 (1957): 199-207. The schizophrenic use and production of metaphor is a complicated matter, and is a topic in my "Creativity: Pure and Applied," in progress.
- <sup>2</sup> G. J. Rose, "Fusion States," in *Tactics and Techniques in Psychoanalytic Therapy*, ed. P. L. Giovacchini (New York: Science House, 1972).
- <sup>3</sup> See L. B. Fierman, ed., *Effective Psychotherapy: The Contribution of Hellmuth Kaiser* (New York: Free Press, 1965), esp. pp. 117-41, 208-10.
- <sup>4</sup> Definition by M. D. Vernon in *Visual Perception* (London: Cambridge University Press, 1937), p. 205. The discussion following here is not meant to pertain to the use of the term synaesthesia in the literary movement associated with Baudelaire, Rimbaud, and Huysmans, as I am concerned with the psychological process rather than with any particular aesthetic approach or the advocacy of a particular aesthetic idea.
- <sup>5</sup> See P. McKellar, *Imagination and Thinking* (New York: Basic Books, 1957), pp. 60-64, 192-93.
- <sup>6</sup> R. E. L. Masters and J. Houston, *The Varieties of Psychedelic Experience* (New York: Holt, Rinehart & Winston, 1966).
- <sup>7</sup> Original manuscript written by Anderson is at the Beinecke Rare Book Library, Yale University. It consists of a legal-size ledger book in which the play is written on the recto sheets with some revisions on the verso sides. I acknowledge my gratitude to Donald C. Gallup, curator of the Yale American Literature Collection, for making the material extensively available to me. Some later revisions by Anderson are also deposited at the University of Texas Library at Austin. Help with method and statistics on this study was provided by George F. Mahl and with statistics by Barry Cook.
- <sup>8</sup> Rothenberg, "The Iceman Changeth." The methodology was in part devised as a means of empirical study of literary creation in which an interviewer or observer could not exert any inadvertent influence.

9 In an experimental study by Bruce Nagle and myself using latency of reaction time on a word association test as an anxiety measure, subjects showed significantly higher levels of anxiety when presented with words connected to their own revisions than to other words from their own and others' writings ( $p < .05$ ; A. Rothenberg and B. Nagle, "The Process of Literary Revision," in prep.; see also B. Nagle, "The Process of Literary Revision: A Study of Its Psychological Meaning in the Writing of Normal, Emotionally- Disturbed and Creative Individuals," M. D. Thesis, Yale University School of Medicine, 1969).

10 J. N. Michaelson, *Morning, Winter and Night* (New York: William Sloane Associates, 1952).

11 The novel clearly indicates oedipal overtones between young Anderson and his grandmother. The "old coot" was therefore also a displaced type of father figure.

12 These effects are at the University of Texas Library at Austin.