

AN ABSTRACT OF THE THESIS OF

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The combination of the tenets of New Criticism and the language and concepts of quantum physics, as expressed by Danah Zohar in The Quantum Self (1990), results in a type of reader-response criticism for interpreting literature. This initial approach provides for an objective reading that validates subjective elements brought to individual literary works by the readers of those works. The specific concepts of quantum physics applied to literature in this thesis include the particle/wave theory, Heisenberg's uncertainty principle, virtual and real transitions, and Bose-Einstein condensates. Various elements of language and literature are explained in terms of the above concepts, and the concepts are then used to develop a critical approach to poetry--the Quantum approach.

Three poems, Robert Frost's "Putting in the Seed," William Carlos Williams's "Portrait of a Lady," and Gary Snyder's "Riprap," are explicated using the objective approach established by the tenets of New Criticism combined with a subjective approach supported by the principles and theories of quantum physics.

The final chapter explains why certain tenets of New Criticism are not applicable when the Quantum approach is used to interpret literature. Examples are given of the appropriate use of biographical information, authorial statements of intent, and other elements from outside the poem.

The conclusion drawn is that New Criticism is deficient as a means for understanding literature because it disallows subjectivity and ignores the fact that readers cannot help but be subjective.

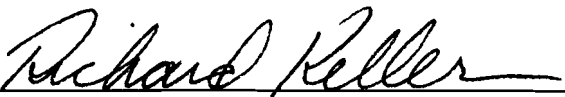
DUALISM AND FUSION:
A QUANTUM APPROACH TO POETRY

A Thesis
Presented to
the Division of English
EMPORIA STATE UNIVERSITY

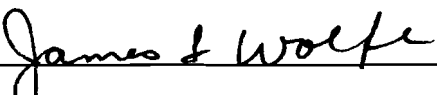
In Partial Fulfillment
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Chapter I

Introduction

The application of the theories and principles of quantum physics combined with some of the elements of New Criticism to the study of poetry provides the reader with a means for both subjectively and objectively examining individual poetic works. By using the theories and principles of quantum physics as expressed by Danah Zohar in The Quantum Self, one can demonstrate the relationships between the various elements of individual poems, including subjective elements that affect how individual readers understand the poems.

Throughout this work I have consistently used Zohar's language. My intent is to demonstrate that the principles she discusses are applicable to explicating poetry and to avoid possible confusion with other languages of criticism. Readers might identify by other names concepts that I use here. Such recognition is natural because I have, for the most part, not created new concepts; rather I have applied the terminology of one field to another field. An example of this application occurs when I discuss humans in terms of their being Frolich-style Bose-Einstein condensates. The description of the nature of these condensates is very similar to the description of what has traditionally been called the soul. Other similarities exist between the language used in

this work and more familiar language often used to described similar concepts.

Although this work to a large extent uses the objective approach for explicating individual poems, it also challenges some of the basic precepts of New Criticism. The most sweeping claim that I have made is that, with very few qualifiers, any reading of a poem is a correct reading. I base this claim on the argument made in this work and the tenets of reader-response criticism.

Reader-response criticism began in the 1920s and 1930s. It recognizes that no reader can be totally objective and that for this reason there can be no truly objective reading of a text. In "Unity Identity Text Self," Norman N. Holland writes: "Interpretation is a function of identity." He explains that, even for the interpretation of one word, different readers have different interpretations, sometimes radically different interpretations (123). There is no way to remove the individual from the reading and no way to insure every reader will have the same interpretation.

Some advocates of reader-response criticism seem to claim that reading and interpreting literature is an entirely subjective process. In "Literature in the Reader," Stanley E. Fish writes: "It is the experience of an utterance--all of it and not anything that could be said about it, including anything that I could say--that is its meaning (78). In a sense this claim is true. No piece of literature has any

meaning until someone reads it. However because there is usually agreement on the major "message" of each literary work, there must be some objective element to be found in the work that is identifiable by multiple readers.

One of the objective elements is language itself. In a very limited sense, speakers of a particular language have an agreement on the meaning of individual words. It is a limited agreement because each reader or speaker of any word has unique individual connotations, emotional weight, and intellectual backgrounds that further define the word and make complete agreement with another speaker or reader virtually impossible. The conventions of language and social interaction allow meaningful communication because we all agree to ignore the subjective differences and hold to the denotative meaning of each word in context. To escape subjective interpretations, literary works would have to be written in a language devoid of connotative, emotional, and symbolic meanings. In From the New Criticism to Deconstruction, Art Berman, referring to Jacques Derrida, writes: "Derrida has. . . asserted that he must write within the logocentric tradition because no other language is available" (205). And no other language is. Every language has as an integral part of it subjective elements that cannot be discarded because they interfere with objective interpretation of literature.

The conventions of literary techniques, of tradition, and of language itself are not validated if an individual reader is unfamiliar with those conventions. The reader will still arrive at an interpretation of the work. The reader will still "get something" from the work. The reader will have a relationship with the work. It is not a less valid reading merely because conventions have been overlooked.

Combining the objective elements of language and literature with the subjective elements brought to individual works by the readers of those works provides a more complete and honest interpretation than either method alone. Using the language of quantum physics, as expressed by Zohar, provides a method for combining the objective and the subjective in a coherent and meaningful way.

Chapter II

Understanding Basic Quantum Theory

Major shifts in world view affect all areas of human interest, including literature. One world view, or paradigm, that has been held by numerous people in western civilization is a belief in God and in religious tradition. This belief has been extensively reflected in literature. Since the time of Euripides, literature has also reflected doubt about the nature and/or existence of God. Over the centuries, the amount of skepticism found in literature has increased. Before Descartes, literature frequently reflected man's belief in God and in religious tradition. Cartesian philosophy allowed much more doubt to creep into the world view and into literature. Then, with the coming of the Newtonian world view, discontent and a personal sense of isolation became a much larger part of literature. Later, literature became infused with a sense of searching for identity and specifically for a perception of self. This developed into a search for God, a search to reestablish a sense of man's place in the universe, and a search to develop individual

concepts of self. Other changes in the paradigm also occurred. Eventually, the paradigm shifted from a spirit/matter dualism to a particle/wave dualism. But these changes did not occur swiftly.

The changes involved with a shifting paradigm occur gradually, and the effects of quantum theory on the world view and on literature, including poetry, are no exception. Nearly a century has passed since the first theories of the new physics appeared, and the effects of the shifting paradigm are still in a state of flux. The effects that the new paradigm can have on poetry are evident if one looks at poetry with the new paradigm in mind. To understand these effects, we must apply quantum theory to poetry. But to understand how quantum theory can be applied to poetry, we must first understand some of the basic elements of quantum theory.

The first component of quantum theory we need to understand is the particle/wave theory. This theory in and of itself contains the essence of the new duality. It asserts that all being at the subatomic level can be described equally well either as solid particles, like so many minute billiard balls, or as waves, like undulations of the surface of the sea. Further, quantum physics goes on to tell us that neither description is really accurate on its own, that both the wavelike and the particlelike aspects of being must be considered when trying to understand the

nature of things, and that it is the duality itself that is most basic. Quantum "stuff" is, essentially both wavelike and particlelike, simultaneously.

(Zohar 25)

This new duality requires an understanding and acknowledgement that there are two distinct ways of looking at matter (at what is), but that both ways are necessary to get a complete picture.

Particles and waves are not new. Both were elements in Newton's physics. In Newtonian physics

it was assumed that being, at its most basic, unanalyzable level, consisted of tiny, discrete particles--atoms--which bump into, attract, or repel each other. These particles were solid and separate, each occupying its own definite place in space and time. Wave motions, such as light waves, on the other hand, were thought to be vibrations in some underlying "jelly" (the ether), not fundamental things in themselves. (Zohar 26)

But in quantum physics, not only are both particles and waves "fundamental things in themselves," they are both present in all matter simultaneously. "Each is a way that matter can manifest itself, and both together are what matter is" (Zohar 26). This discovery raises a new problem and a new theory.

The way one looks at matter also determines what one sees. While it has been established that both particles and

waves occur simultaneously and that both together are fundamental to matter, it is impossible to focus on both at once. If you look for particles, you see particles. If you look for waves, you see waves. You cannot look for both particles and waves at the same time. If you attempt to do that, all you see is, at best, an inaccurate representation of both. This is Heisenberg's uncertainty principle.

The uncertainty is in the nature of the duality. Particles are identifiable and quantifiable. So are waves. But the duality is neither.

Particles exist as separate and distinct entities for only part of the time. Then they dissolve into waves. When they again become particles, they will be particles of a different type or there will be a different number of them or they will behave differently. A large part of the uncertainty in the uncertainty principle has to do with what happens to the particles--the how, where, and why of the event. There is no set pattern for how they will change. The change is constant, unpredictable, and perpetual (Zohar 26-31).

In quantum theory, an infinite number of possibilities exist for every reality. They exist simultaneously and in every direction at once. They are as real as the reality we know, but they are not physically tangible. So what are they and where are they? The theory of virtual and real transitions explains what happens to these innumerable possibilities. When a change is imminent, all possibilities

manifest themselves. Then at the moment of change the wave function collapses, and it is in that collapse that the real, i.e., permanent, change occurs. All the possibilities that existed for that brief moment before the wave function collapsed are called virtual transitions. The one possibility that the wave function collapsed into is called a real transition.

Virtual transitions are as real as real transitions. The difference between the two is primarily in the length of time that they exist--their permanence or impermanence--rather than in the effects that they may have. Virtual transitions affect reality as much as real transitions do. The influence virtual transitions exert before the wave function collapses directly affects how the wave function will collapse and what the real transition that results from the collapse will be (Zohar 32-33). One example of how virtual transitions work is a woman who always wanted to be a scientist. All through school she works and studies to get into the university of her dreams and learn genetic engineering so that she can find cures for incurable diseases. Then one day, she finds out she is pregnant. She has a variety of possible ways to handle the situation. To make her decision, she thinks about all of these ways. She tries them on, as it were, to see which is right for her. In the end, no matter which decision she makes, the possible decisions she did not make will have an effect on her. If she chooses abortion, she might harbor

feelings of guilt that affect her future intimate relationships. If she chooses to have the child, she might have feelings of guilt because she considered aborting the child and these might well color how she treats the child. For each possibility she considers, similar effects will occur.

The real transition that results from the collapse of the wave function produces effects that are measurable, quantifiable, and in some degree permanent. And this actual collapse of the wave function occurs in the exact way that it does because of the virtual transitions that existed before the actual collapse. But where do the unrealized possibilities go once the wave function has collapsed? Scientists do not know where the possibilities go. That is the rest of the uncertainty in Heisenberg's theory.

Another fundamental of quantum theory we need to be familiar with is the nature of Bose-Einstein condensates. Although particles and waves behave in ways that are measurable and quantifiable, they also behave in ways that are not. One of these ways is forming relationships with other particles and waves. When a large enough number of energy-producing particles come together, they start acting in unison; they become, as it were, harmonious. At some point when this happens, they act not only as if they were one whole thing, but they actually have become one whole thing. They become a unity that is greater than the sum of its parts and

that in quantum theory is called a Bose-Einstein condensate. If that unity is a living being, then it is called a Frolich-style Bose-Einstein condensate (Zohar 83-84).

People are Frolich-style Bose-Einstein condensates. The body, including the brain, is made of matter. It is measurable and quantifiable. The mind, the *res cogitans*, is ethereal. It is not measurable or quantifiable. Yet at some point the electrical activity generated by the body (brain) becomes synchronized and a Bose-Einstein condensate is generated. At that point we have a mind. Exactly when in the development of a human that occurs is unknown, but each person reading this has reached that point. You, that immeasurable thing that is your identity, are greater than the sum of your measurable parts.

Non-living things can also be Bose-Einstein condensates. Phase generators, pumped systems, symphony orchestras, and poems are all things that are potentially greater than the sum of their parts. Their parts can act as if they are in unity, become synchronized, and generate a phased condition that creates a true unity. And as a true unity they have an effect that their parts alone cannot have.

All Bose-Einstein condensates, whether Frolich-style or not, can form relationships with other Bose-Einstein condensates. They emit particles and waves. These can overlap, harmoniously or discordantly, with those of other Bose-Einstein condensates, and the condensates can thus act

in relation with other Bose-Einstein condensates to form new unities that are greater than the sum of their parts.

An understanding of each of these quantum principles and theories is necessary to an understanding of how they are applicable to poetry. Potentially, a poem is a Bose-Einstein condensate. Potentially, it is a unity that is greater than the sum of its parts. Its writer and its reader are also Frolich-style Bose-Einstein condensates. They form relationships with each other. They act in quantum ways.

Chapter III

Language

The basis for any form of communication is language. Poems are constructed of words (spoken or written), and words are constructed of sounds (or symbols for sounds). These sounds are language at its most basic level and the smallest distinguishable unit of sound is a phoneme. Each phoneme represents a different sound, and these individual sounds can be combined to create Bose-Einstein condensates we call words. But sounds are not the only source of energy that creates a word. Words also are composed of morphemes, the smallest distinguishable units of meanings.

That certain combinations of sounds have meaning and others do not is an agreement among the speakers of a particular language. Meanings exist only because speakers of a language have agreed that the meanings exist; they do not exist independent of that agreement. And the agreement of what words mean is changeable. Over the years, language usage changes, new words are created, and old words become obsolete, but each word is still the result of the collapse of the wave function and is a Bose-Einstein condensate. Each word generates a kind of energy that results in that word having meaning.

But words are not composed of sound and meaning alone. Words are also composed of letters, symbols that are merely

representations of phonemes and are the result of another agreement made by the speakers of a language; and each letter can represent more than one phoneme.

Phonemes act in ways similar to particles. They are measurable and quantifiable. You can examine each phoneme separately. The phonemes [t], [o], and [b] have no significance by themselves, but when combined in a particular order, [bot], they become a word. When phonemes are combined to form words, they become Bose-Einstein condensates. They form relationships with other phonemes to create wholes that are greater than the sum of their parts. The same phonemes can be combined in different orders that take on no specific meanings. The orders that do not create a whole greater than the sum of the parts are virtual transitions that exist before the wave function collapses into the word [bot], a Bose-Einstein condensate with a unity greater than the sum of its parts. It is greater than the sum of its parts because it is a unity that has meanings agreed upon by the speakers of a language. One of the meanings "boat" has is a vessel that is used for transportation in the water.

The meaning of words is more fluid than the words themselves. Words can have more than one meaning and usually have both denotative and connotative meanings. Each type of meaning is important and functions in its own way. The sounds of words are equivalent to the particle function and the meanings of words are equivalent to the wave function.

Because the wave function is an undulating form of energy, the denotative and connotative meanings of words are equivalent to the undulation of the waves.

The denotative meaning of words, simply put, is the dictionary definition. Looking at the dictionary inclusion for a simple word, like the word "cat," we find these definitions:

1. a. A carnivorous mammal, Felis catus (or F. domesticus), domesticated since early times as a catcher of rats and mice and as a pet and existing in several distinctive breeds and varieties. b. Any of the other animals of the family Felidae, which includes the lion, tiger, leopard, and lynx. c. The fur of a domestic cat.
2. A spiteful woman.
3. A cat-o'nine tails.
4. A catfish.
5. Naut. a. A cathead. b. A device for raising an anchor to the cathead. c. A catboat.
6. Slang. A man. (American 246)

This is a rather complex set of definitions for a simple word. To decide in any particular case which definition is applicable to the word, we first need to know the context the word is used in. For the sake of this discussion, we will use the first definition. However, limiting ourselves to the first definition does not completely simplify the task. Even by limiting ourselves to one specific denotative meaning we are still faced with a possible multiplicity of perceptions

as to what is actually being defined, and we still have to examine the connotative meanings of that definition. The variety of perceptions of what "cat" means does not interfere with our understanding the concept of "cat." The first-given denotative meaning of the word "cat" is a domestic pet of some specific variety, a catcher of rodents. Even though we might not know exactly what kind of cat we are talking about, what we do have is a reasonable idea of what a cat is.

When we focus on a wave-function undulation of the word, on a possible connotative meaning of the word, we have much more difficulty agreeing on what the word "cat" means. I might think of my favorite childhood pet; for me the connotative meaning is one that includes softness, purring, love, warmth, and great pleasure. Another person might think of the comic-strip creation Garfield; for that person the connotative meaning includes humor, fat, greed, selfishness, and, at times, cruelty. Another person might think of a dead cat seen on the road; in this instance the connotative meaning includes sadness or horror, perhaps even disgust. Yet another person might hate cats; the connotative meaning for that person includes evil, nastiness, dirtiness, and perhaps even pain. Which of these meanings is that of "cat?" All of them are. But each person probably does not see all of them. The observer defines the function of the word; the word does not define what the observer sees. The observer provides the context that determines meaning for that person.

There are other factors that influence the connotative meaning of a word. For the educated person, the word "cat" comes complete with symbolic meanings that affect the connotative meaning of the word. In A Dictionary of Symbols, J. E. Cirlot writes:

The Egyptians associated the cat with the moon, and it was sacred to the goddesses Isis and Bast, the latter being the guardian of marriage. A secondary symbolism is derived from its colour; the black cat is associated with darkness and death.

(39)

Thus, for the educated person, "cat" takes on the additionally connotative meanings of the moon and all that is associated with it, as well as all the connotative meanings associated with Isis and Bast, and with marriage. If we color our cat black, we add meanings associated with darkness and death. We can also add Halloween, witches, evil, and Satan. We can endow this simple three-letter word with enough meaning to fill a book. The word has more virtual meanings than the number of meanings that have real transition in a particular context.

The particle function of the word and the wave function of the word combine to form a Bose-Einstein condensate. The sound and meanings together create an energy that allows them to become a whole whose unity is greater than the sum of its parts and which can form relationships with other Bose-

Einstein condensates that are words. A word can become part of a sentence, a context that can define it; and its meaning thus becomes part of a this particular whole, which is also greater than the sum of its parts. The sentence can become part of a paragraph or part of a poem. The chain of potential relationships does not stop.

To put the word "cat," or any word, in a particular context is to define the word and to create a new energy system of particles and waves that can coalesce into a Bose-Einstein condensate. In poetry, each line potentially forms a relationship with every other line, as does each stanza with the other stanzas, until the parts act in harmony and the wave function collapses into a poem. Each Bose-Einstein condensate is capable of forming relationships with other Bose-Einstein condensates. For a 'good' poem, that is exactly what happens. Each word has a relationship with every other word, each line with every other line, each stanza with every other stanza, until the entire poem functions as a thing with a unity (and meaning) greater than the sum of its parts.

In the next chapters, Words in Context I and II, we will examine a specific set of words and a specific pair of poems to see exactly how this process works.

Chapter IV

Words in Context I

When a large enough group of energy-producing particles join together to form a unity greater than the sum of its parts, a Bose-Einstein condensate is formed. Bose-Einstein condensates can both form relationships with other Bose-Einstein condensates and emit energy capable of uniting with other energy-producing sources to form more complex Bose-Einstein condensates. So far, we have discussed how, in poetry, the duality of sound and meanings fuse to form Bose-Einstein condensates. The next step is to examine how the context of a word affects the condensate.

The meaning of any word we choose to examine will be affected by the context it is in. To show how this process works, let us examine the words "white," "apple," and "tree."

For each of these words there are established denotative meanings and a variety of possible connotative meanings including symbolic meanings that can be looked at before we examine contexts the words might be used in. The denotative (dictionary) meanings of "white" includes these:

1. An achromatic color of maximum lightness, the complement or antagonist of black, the other extreme of the neutral gray series. Although

typically a response to maximum stimulation, white appears always to depend upon contrast. 2. The white or nearly white part of something 3. One that is white or nearly white
 (American 1378)

Again we have a rather complex definition of a rather simple word. The dictionary goes on to list four more noun definitions and eleven adjective definitions. But we all know what "white" means. There is likely to be less disagreement between people over the definition of "white" than over the definition of "cat."

"White," like most other words, also has connotative meanings. "White" is often associated with purity, and so becomes associated with virgins, virginity, marriage, and Christ (with all the attendant emotional weight those ideas carry). Snow is white, so "white" is also associated with cold, winter, and death (and all of their emotional weight). Symbolically, "white" pertains to "illumination, ascension, revelation and pardon . . ." (Cirlot 56). But perhaps the most important symbolic significance of "white" is "white as diametrically opposed [to black as] symbols of the positive and the negative, either in simultaneous, in successive or alternating opposition." "White" is a symbol that is in its nature part of a dualism of opposites. "White" means good, timeless, pure, and ecstatic. It relates to gold. It stands opposite the evil that black represents (Cirlot 57-58).

"White" can be, and usually is, associated with positive connotations, but it does have some aspects of the negative (death, winter).

The definitions of "apple" include this one:

1. a. A tree, Pyrus malus, of temperate regions, having fragrant pink or white flowers and edible fruit. b. The firm, rounded fruit of this tree or any of its varieties, having skin that is usually red but may be yellow or green. (American 121)

The dictionary lists two other noun meanings for "apple." The denotative meaning of "apple" is much less complex than that of "white." Most people can readily agree upon the definition of apple. Its connotative meanings are dualistic, in that they are both negative and positive, but even the connotative meanings of "apple" are fairly simple.

An apple for most people evokes images of the Biblical story of Adam and Eve. Because of this tale, the apple is connected with original sin and thus has negative connotations. But the apple is also a fruit connected with the images of mother and apple pie. These images bring up positive connotations of home, love, security, and in some instances patriotism.

The symbolic meaning of "apple" is connected with the Adam and Eve myth as well. In this context, "apple" signifies earthly desires or indulgence in such desires. The warning not to eat the forbidden apple came,

therefore, from the mouth of the supreme being, as a warning against the exaltation of materialistic desire (Cirlot 14).

Because of its shape (spherical), the apple is also symbolic of totality.

The definitions of "tree" include this one:

1. A usually tall, woody plant, distinguished from a shrub by having comparatively greater height and, characteristically, a single trunk rather than several stems. (American 1291)

"Tree," at first glance, would appear to be a simple word. We all know what a tree is, but each of us will likely think of a different kind of tree; we might perhaps even picture our tree in a season different from that another person sees. We all have different associations attached to our idea of tree. Besides the one definition listed above, the dictionary lists seven additional noun definitions, including "a gallows," and "The cross on which Jesus was crucified." It also lists three verb definitions.

"Tree," just like the other two words we have looked at, turns out to be not so simple. The connotative meanings of "tree" can range from pleasant (associated with memories of shady walks, picnics, swings, tree houses, climbing, etc.) to painful (a hanging tree, the cross, or more personally perhaps the tree you fell out of when you broke your arm).

We all know that words have different denotative meanings and that there can be a wide variation in connotative meanings as well. These different meanings all add to the energy that makes words Bose-Einstein condensates, but words rarely occur alone, as separate entities available for examination. Words appear in contexts. They are the energy units of phrases, sentences, paragraphs, and whole written works. The contexts words occur in help to restrict the meaning of each word, while expanding the number of energy units working together harmoniously to create larger Bose-Einstein condensates.

The three words we have examined above occur in two different poems that we will examine. We will see how context helps narrow the definition of the words and how all the words of the poem fuse to form a unity greater than the sum of its parts. The first poem we will look at is Robert Frost's "Putting in the Seed." It reads:

You come to fetch me from my work tonight
 When supper's on the table, and we'll see
 If I can leave off burying the white
 Soft petals fallen from the apple tree
 (Soft petals, yes, but not so barren quite,
 Mingled with these, smooth bean and wrinkled peas)
 And go along with you ere you lose sight
 Of what you came for and become like me,
 Slave to a springtime passion for the earth.
 How Love burns through the Putting in the Seed
 On through the watching for that early birth
 When, just as the soil tarnishes with weed,
 The sturdy seedling with arched body comes
 Shouldering its way and shedding the earth crumbs.
 (250)

It is a very traditional poem in the sense that it is a sonnet with a rhyme sequence of ababcdcdefefgg. Its meter is iambic

pentameter and there are no truncated lines. The resolution of the poem begins with line nine instead of line eight, but that is not a radical departure from tradition. The apparent subject, nature, is also very traditional. However, when we examine the poem closely we see that this poem is much more than a simple poem about nature.

The title, "Putting in the Seed," suggests that the poem is about planting time. The speaker of the poem tells us about starting his garden. The word "putting" implies that it will be a deliberate act. The word "seed" represents the germ of life. It is the plant's reproductive product, its egg. It also holds the connotative meaning of potential, because a seed is merely the potential for life and for growth. "Seed" can also be used to mean sperm, and in that sense "putting in the seed" can refer to the sex act--an act of creation. Now the title is less clear. It could still be referring to planting a garden, but it could also be referring to human procreation or the start of any creative endeavor.

The first line of the poem adds another person to the poem. The speaker is speaking not just to the reader but to an unidentified "you." The speaker then has a relationship with someone else. At this point we do not know what kind of relationship, just that one exists. The tone the speaker uses, especially with his choice of the word "fetch," implies the speaker is rural or at least a minimally educated speaker. The use of "fetch" also might imply that the speaker is an

educated person trying to sound rural. The first line has both persons performing deliberate acts. The speaker is working, and the "you" has come to get him. The word "fetch" implies that this is an habitual act (a dog fetching a stick), something the "you" does routinely. And the "you" has come to get him "tonight," not some undefined time. Night is the end of the day, which can imply the end of life. Night is dark and can imply death, or evil.

The second line begins to reinforce some of the possible meanings the title and first line present. The "you" has come for him "when supper's on the table." That implies (in our sexist society) that the "you" is a woman, probably the speaker's wife, who has simply and habitually come to call him in from his day's work to feed him supper. The reason for interrupting his work is justifiable. It gives the relationship between the speaker and the "you" a flavor of domesticity. But "supper" can imply also the last supper, when Christ was called from his work to prepare for his sacrifice.

The rest of the second line reads "and we'll see." The "we" could be the speaker and the "you," in which case the implication is of a very close relationship, a two-acting-as-one kind of relationship. They both together will see. But if we stick with the Christ image, then the "we'll see" implies something else. "We" can become the people of the world and what "we'll see" will be the ultimate love of God

for his children through the sacrifice of his only son and the love of his son for both father and mankind through his willingness to die for us. We will see a hope for salvation. But after only two lines of the poem this remains a virtual transition, a possible context of meaning. There is no collapse of the wave function at this point, no fusion of the energy-producing particles to cause the collapse of the wave function. We must continue our examination of the poem.

The third line, "If I can leave off burying the white," must be tied back into the second line to get the full potential of its meaning: "And we'll see / If I can leave off" It takes both of them, the "you," with her interruption, and the speaker, with a willing response, to stop his working. The speaker seems incapable of ceasing without the impetus from the "you," and the interruption alone does not assure the speaker will stop his work ("If I can . . ."). And what is his work? "Burying the white." Referring back to the title, we understand that he is "burying" seeds in the ground. But "burying" is a strange word to use. "Burying" implies deaths and funerals. It implies a finality, an end to life, and not the hope for new life and regeneration that planting seeds more likely implies.

And what is it that he is burying? He is "burying the white." "White" is one of the words we looked at earlier. It has many possible meanings. The context that the poem provides eliminates some of them from consideration. At this

point, before we examine line four and then go back to tie lines three and four together, there are still numerous possibilities for the meaning of "white" in the poem. The speaker could be symbolically burying good, and by implication holding up evil. He could symbolically (if we consider the title and its meaning of potential procreation) be referring to a loss of virginity or simply a loss of innocence and purity. If we consider the possibilities of the Christ image, we must consider that Christ at the last supper hinted at his sacrifice to come, which was to end literally in the burying of the pure, virginal, and good Christ. The possibilities of meaning for the word are myriad because the fusion of the words in the poem is, at our stage of reading it, incomplete and the poem is thus, for the reader, in a state of virtual transition.

In the fourth line, the meanings of "white" start to fuse. The speaker is talking about "the white / Soft petals" that he is only by chance planting with his seed. They have "fallen from the apple tree" and lie on the earth where he is working the soil. The "petals" are the result of the disintegration or death of the apple flowers. They are merely pieces of a whole. All of this is natural. The petals fall from the flower, and decompose into nutrients that feed the plant they came from, and others growing around. Symbolically, they represent something quite different.

Because of the flower's shape, its symbolic representation is as "the centre" (Cirlot 109-10). The fallen petals, then,

are representative of a disintegration of the center. This suggests a sense of alienation and lack of direction. This lack of direction points to the next word of the poem, "fallen." The word "fallen" brings to mind the image of fallen from grace. When we tie in the last phrase of the line, "from the apple tree" (which contains the other two words we looked at earlier), the composite image makes even more sense. Adam and Eve fell from grace when they ate of the fruit of the tree of knowledge of good and evil. As a consequence, they lost their immortality and became the source of original sin, which was to haunt mankind from that time forward. This meaning also ties into the Christ image we noted earlier. If humans are "the white / Soft petals fallen from the apple tree," then the earlier image of Christ's sacrifice becomes relevant and acceptable. Humankind, through Adam and Eve, lost its innocence and purity in their fall from grace.

The next two lines of the poem add even more complexity to the meanings already existing as possibilities. The speaker states: "(Soft petals, yes, but not so barren quite / Mingled with these, smooth bean and wrinkled pea. . . .)" Notice that Frost deliberately ties lines five and six together, while providing for a separation from the rest of the poem, by using parenthesis. For emphasis he repeats "soft petals" from the line above. Why the emphasis? Perhaps it is to underline the impermanence of the petals, and thus the impermanence of humankind. Tied into the rest of the line, "but not so barren

quite," the repeated words raise another aspect of impermanence. The petals of a flower surround the reproductive organs of the plant. They surround the place where the seed is formed, yet they themselves are incapable of reproduction. Humankind of course is capable of reproduction, but humankind's creativity is limited. The words "not so barren quite" can refer to humankind's inability to create in the exact manner of God, but still acknowledge humankind's ability to create beauty and memories. There is even more involved in this image when the second half of the couplet Frost set aside is considered.

The petals, fallen into the earth the speaker of the poem is planting in, have "mingled" with the seeds he is planting. The seeds are fertile, food-producing seed. But the further implication of the "barren" petals' mingling with the fertile seeds is that the petals will provide nutrients for the seeds to grow with. Also, in the seeds' presence, the petals are in a vicarious sense "not so barren quite." Moreover, if we return to the image of humankind as the petals, the fertility of the seeds can be seen as related to God's planting the means of man's salvation. God, by giving us a human incarnation of his son, and providing through him a means to return to the bliss of Eden, has given humankind a way to redeem themselves. The mingling becomes by means of faith a mingling of fallen man with God in his grace. At this point in the reading, the image seems a little stretched. But all

possibilities are yet extant. The state of virtual transition still exists. One additional possibility is that the barren petals represent sinful humankind and the fertile seed represents moral mankind. Both kinds of persons are mingled on this earth.

The seventh line returns us to the main text of the poem. It reads: "And go along with you ere you lose sight." The speaker, is again speaking to the unidentified "you." To get a sense of the meaning of this line, we must go back to line four. The context indicates that if the speaker can quit work, then he can go along with "you" before "you lose sight" of what is stated in the eighth line. This line brings the full sense of the context together and makes the Christ images seem not at all far fetched.

The speaker states: "Of what you came for and become like me." If we see the "you" of the poem as Christ, then we can see him as having come to call humankind from its work and to save humankind from its sins. He has called humankind to the table of the last supper to hold communion in remembrance of his own sacrifice. He has indeed provided a way for humankind to "mingle" with something fertile and life producing, the grace of God; and if the speaker of the poem is one of the apostles, then, speaking in the historical present tense, he must go along with Christ through Christ's torment in Gethsamene. He must stand beside him before he loses sight of his *raison d'etre*, his purpose on earth. Christ

must go through with his sacrifice or, Frost implies, become a sinner, one fallen from grace, a mere mortal like the rest of humankind.

Line nine finishes the first part of the poem. It reads: "Slave to a springtime passion for the earth." If Christ, in the historical present tense, does not sacrifice himself for humankind and allows himself to remain a mortal, then Christ will become a slave to the temptation of materialism and earthly riches; he will become a sinner. As a slave, he will no longer be free; he will have no free will. The springtime image can refer to the pagan rituals that sinners might indulge in as well as to Christ's passion on the cross. It might be that the speaker is implying that Christ must not exercise free will but see himself as a slave to God's will, that Christ must perform his "springtime passion for the earth" because it is this passion that promises redemption for the earth.

At line ten, the change in the sonnet occurs. The first nine lines present the problem; the next five lines provide the resolution. At the end, the wave function collapses into the meaning of the poem. Line ten reads: "How Love burns through the Putting in the Seed." "Love" is capitalized in the poem. This implies it is more than just the emotion love, but rather a personification of love. In this poem, "Love" is the personification of God's love for humankind through his son. It is "The Putting in the Seed" of the holy spirit into

the creation of Christ, and "The Putting in the Seed" of man's salvation.

Images of Easter, which is the culmination of Christ's life on earth and tangible evidence of man's ability to achieve salvation, continue in line eleven. It reads: "On through the watching for that early birth." Here is a dual image of the birth of Christ (an "early birth" in the sense that it occurred in an earlier time) and an image of the rebirth of Christ when he rises from his tomb to once again walk the earth. The "watching" image is dualistic. The magi watch the skies for the sign of the birth of the new king of Israel and follow that sign; shepherds watch the sign and are led to Bethlehem; Caesar watches the sign and is led to slaughter the innocents in an attempt to destroy the new king. But the image is also that of the apostles' watch for a sign that Christ's prophecy of a resurrection was true, that their faith is justified.

Line twelve is the distinct beginning of the answer to the problem raised in the first part of the poem. It explains why Christ came when he did. It reads: "When, just as the soil tarnishes with weed." At the precise moment when humankind was again, just as it was before The Flood, faltering in sin, when the earth was again full of evil, God sent Christ ("the sturdy seedling with arched body comes" [line 12]) to redeem humankind and provide salvation. The "arched body" may be Christ's mortal body racked with pain on the cross or it may be the body of the church, "Arched" a possible reference to

the arches found in many churches. The power of Christ "comes / Shouldering its way and shedding the earth crumbs." Christ resurrects from the grave, throwing off death, mortality, and humanness and provides a way, through faith and grace, for humankind to do the same. The picture is that of Christ giving up the material for the spiritual and providing an example for humankind to follow.

At this point, the poem is complete. The wave function has collapsed and a real transition has occurred. That you may not agree with my interpretation of this poem has to do with your relationship as a Frolich-style Bose-Einstein condensate with the Bose-Einstein condensate that is the poem. Every reader relates differently to every poem.

There are several other matters to think about in connection with this explication. One is that the possible interpretations that exist at the beginning of the poem, before the wave function starts to collapse and the meaning of the poem begins to become clear, still affect the poem. Having once considered, for example, that the act of "putting in the seed" might refer to a sexual act, I find that every time I read this poem that thought crosses my mind. It affects how I read this poem. And if a reader has not before considered that this might be a poem about Christ's sacrifice, even if the reader disagrees with that interpretation, that reader will never be able to read this poem again without that possibility crossing that reader's mind. The virtual transitions that

exist before the wave function collapses at the end of the poem do and will continue to affect the Bose-Einstein condensate that is this poem (and by extension the reader's interpretation of the poem).

Chapter V

Words in Context II

The words we examined initially in Chapter 3, "white," "apple," and "tree," appear in another poem, William Carlos Williams's "Portrait of a Lady." The context in which they are used in this case affects their meanings in ways quite different from how they are affected in Frost's poem.

The words function in the context as part of a Bose-Einstein condensate that is different from the Bose-Einstein condensate that is Frost's poem. Williams's poem reads:

Your thighs are appletrees
 whose blossoms touch the sky.
 Which sky? The sky
 where Watteau hung a lady's
 slipper. Your knees
 are a southern breeze--or
 a gust of snow. Agh! what
 sort of man was Fragonard?
 --as if that answered
 anything. Ah, yes--below
 the knees, since the tune
 drops that way, it is
 one of those white summer days,
 the tall grass of your ankles
 flickers upon the shore--
 Which shore?--
 the sand clings to my lips--
 Which shore?
 Agh, petals maybe. How
 should I know?
 Which shore? Which shore?
 I said petals from an appletree.
 (320)

Unlike Frost's poem, Williams's poem has no traditional form. It is free verse; it does not rhyme and it has no prescribed

metrical pattern that Williams chooses to follow. Unlike the sonnet by Frost discussed in the last chapter, which is a poem about love, a traditional subject for a sonnet, the form of Williams's poem creates no expectations as to subject matter; anything is possible.

The free-verse form of the poem makes it necessary to read the poem in a way different from the way that we read the Frost poem. A line-by-line reading is confusing here because the fusion of the words is more complete in Williams's poem; the construction is tighter and the meaning even more dependent on connotation. Rather than attempting a line-by-line reading, we will examine this poem for the most part by looking at complete grammatical units.

The title of the poem, "Portrait of a Lady," sets up certain expectations for the reader. The reader reasonably expects this poem to be about a lady. It might be just what the title implies, a portrait, or it might be a love poem. The word "portrait" denotes a representation of a person. It is often used in connection with a painting, drawing, or photograph; but we understand that a portrait can also be a written description, a word picture. Most connotations of the word are usually positive; a portrait is expected to be a fair representation, as opposed to a caricature, which would likely be less favorable. The word "lady" denotes a person of the female sex, even a noblewoman. Most connotations of this word are also positive. Williams has chosen the word "lady" rather

than "woman," "hag," "wench," "girl," "whore," or any other of a number of possibilities describing a female. The word "lady" generally carries with it connotations of adulthood, femininity, manners, and breeding, although slang usage of the word includes negative connotations associated with feelings of ill will towards the person the term is used to describe. And Williams specifically says "a Lady," which wording tells us he is going to be writing about a specific lady and not women in general.

After these expectations are set up by way of the title, the first line of the poem startles us. We do not expect to read: "Your thighs are appletrees." The reader expects something else--a description of the lady's face, hair, personality--almost anything other than what is presented. Not only are "thighs" a startling focus for the beginning of a portrait, but the comparison with appletrees is also startling. Thighs are generally soft, smooth, and supple; appletrees are hard, rough, and rigid; and they are firmly attached to the ground. What is Williams trying to convey?

A thigh is a part of the leg. The legs support the body. Symbolically, legs represent "erecting, lifting, and founding" (Cirlot 181). Additionally, "the leg is also equivalent to the pedestal, and . . . denotes qualities of firmness and splendour" (Cirlot 181).

The word "appletrees" denotes fruit-bearing, woody vegetation. It is a compound word formed from two of the

words we looked at earlier. The possible meanings of these words in this poem include the symbolical meaning of the apple tree as the source of the fruit of the knowledge of good and evil, and hence the source of original sin. Trees also symbolically represent the world tree, the center, the thing which holds up heaven. In addition, it also symbolizes immortality; the tree is an axis linking different worlds.

When the speaker of the poem compares thighs to appletrees, several interpretations are possible. The image that first comes to mind is that the legs (thighs) are like the trunk of the tree in that the thighs support the rest of the body, just as the trunk supports the rest of the tree. But when we start to look at the connotative meanings of the words involved, we find other possible interpretations emerge. The thighs stop at the sexual organs of a person, and the appletree can represent the source of original sin. While sexual activity was not the original sin (intellectual pride was), it is often closely connected with original sin, in that after eating the apple Adam and Eve felt compelled to hide their nakedness and that a part of the resulting punishment for Eve was pain in childbirth, the direct result of sexual activity. The two images of the thighs and the appletrees together imply that the thighs lead to the sexual organs and hence to a realization issuing from original sin. The thighs bear a source of temptation, just as the apple tree bore the fruit of temptation. Eve succumbed to her temptation, a fact

that sets up the expectation that the speaker of the poem wants to, or possibly even will, succumb to the temptation the lady seems to present to him. A portrait is generally platonic, so the thigh/tree comparison also can represent the movement from the platonic, or neutral, to the physical--the thighs representing an axis between levels of thought.

The second line reads: "whose blossoms touch the sky." This line continues the image from the first line. The apple tree is in bloom. The season is therefore spring. The word "blossoms" denotes the flowers of a plant. The connotative meanings of the word include beauty, softness, and transitoriness. Symbolically, as we have already discussed in connection with Frost's poem, flowers represent the center. In Williams's poem, these blossoms are touching the sky; they are still on the tree and have not yet fallen to earth. The center is intact and not disintegrating. The sky represents the intellect. The sky is composed primarily of air, and air is one of the former basic four elements. Air is "active and male" (Cirlot 6). Cirlot writes:

. . . air is the primary element. Compression or concentration of air creates heat or fire, from which all forms of life are then derived. Air is essentially related to three sets of ideas: the creative breath of life . . . [;]the stormy wind, connected . . . with the idea of creation; and, finally, space a medium for movement and for the emergence of life-processes. (6)

Air, then, represents creation and life. The lady's thighs are sources of temptation that reach to the "blossoms" of her pubic hair, and touch the source of human life--her sexual organs. The sky cannot represent the intellect in this poem. It represents the opposite, the very physical world of sexuality and reproduction.

Even though we have looked at only two lines of this poem so far, it should be fairly obvious that, unlike the Frost poem, this poem has fewer possible meanings, that they resolve themselves fairly quickly, and that it is hard to dissect the poem piece by piece. One reason is that this poem, unlike the Frost poem, was written after a significant paradigm started to shift because of the discoveries leading to the theories of quantum physics. Williams's poem joins together words and lines (energy-producing particles) in such a way that the wave function collapses to form a more cohesive poem (Bose-Einstein condensate) than the Frost poem.

The next grammatical unit of the poem reads: "Which sky?" The question "Which sky?" implies that more than one sky is possible. In a literal sense we know that is impossible. There is only one sky. But if we reexamine the possible meanings of sky, it is obvious that symbolically there is more than one sky. The speaker of the poem wants us to understand that it is "The sky." If we have made the correct associations in reading the preceding lines, then it is the "sky" of human sexuality that is referred to. The next grammatical unit of

the poem reads: "The sky / where Watteau hung a lady's / slipper." The word "sky" is thus repeated twice in one line (line three). This repetition of the word serves to emphasize the importance of the image and by implication the importance that the reader understand the image of "sky" correctly. When we look at this entire grammatical unit, we see that the speaker of the poem has moved from the natural sky to the artificial sky of a painting. The speaker is referring to a very specific "sky" in a very specific painting.

The painting referred to is one by Fragonard (who will appear later in the poem) and not by Watteau, who is an early 19th-century French painter famous for pictures of gatherings of people. He did not hang a lady's anything in any of his pictures as far as I have discovered. The image referred to by the speaker regardless of who painted it is almost surrealistic--a lady's slipper suspended in the sky. But the image in the poem is a false image because, whether deliberately or accidentally, we are misled as to who painted the picture. Before we can discover the reason for the deceit of the image, we must explore the possible meanings of this image.

The depicted sky is an artificial sky, regardless of who actually painted the picture. It is man-made, and perhaps in that sense it is symbolic of symbolism. Reference to the artificial sky of a painting directs us to look at the symbolic rather than literal meanings of the words and images that

comprise the poem. It is perhaps a way of telling the reader to look past the poem's literal surface--which is a deceit--to its symbolic and submerged meaning. Looking beyond the surface is necessary if the reader is to discover the message of the poem.

The slipper, too, involves a complex reference. Another use of the term "lady's slipper" is to designate a type of flower whose blossom looks like the exterior female sex organs. Symbolically shoes and slippers can represent sex organs and hence the purely physical nature of man. They can represent also liberty and the possibility of walking away from something or someone. Perhaps the speaker is trying to convey a sense that this lady is free to live her own sexuality.

The slipper image also contains the word "hung." "Hung" gives the image of a gallows or perhaps a lynching. It might represent the death of the lady's sexuality or perhaps someone or something else controlling her sexuality, as her marriage vows might obligate her to fidelity.

The next grammatical unit of the poem reads: "Your knees / are a southern breeze--or / a gust of snow." The speaker of the poem has again surprised the reader. The surprise is in part the choice of images to juxtapose; also, if he really is referring to sexuality, we might expect him to move up the anatomy and not down the leg. The knees are farther from the sex organs than are the thighs. They are also the weakest part of the leg, the structure that supports and

is the foundation of the body. The knee is the main joint of the leg, giving it the ability to function as something more than a pedestal support for the trunk of the human body. Without the knee, the leg really would be only a pedestal and humans would be unable to perform many of the tasks we consider normal and take for granted.

The knees, the speaker says, "are a southern breeze." The denotative meanings of southern include from the south in a directional sense, and from the south in a cultural sense. Add to the adjective "southern" the noun "breeze" and one has probably limited the adjective to the directional meaning. This meaning carries with it connotations of warmth, good weather, and a spring weather pattern that likely brings rain with it. The symbolic meanings associated with the word "breeze" parallel, to a certain extent, the meanings of the word "air." A breeze is air in movement. It is still the primary element, and because it is in an active state symbolically it is in a creative mode. It is symbolic of life and regeneration (Cirlot 373). That it is a "southern breeze," with the first word's connotative meaning of spring, emphasizes the generative and regenerative element of the image. Although generation and regeneration are not limited to procreation, procreation is an element of generation and regeneration, so the speaker has not really moved away from sexuality. He has just taken an unexpected route and introduced unexpected elements to create the image.

The image continues, altered yet again, in line seven. The knees from line five are now "a gust of snow." "Gust" continues the wind/air image we have already noted in detail. So creation, regeneration, and sexuality are contained in this line as well. Where does "snow" fit into the image? Snow is crystallized water--a form of ice. Symbolically, water is the communication between two dynamic forces, such as the conscious and unconscious. Ice then is the solidification of that communication. It is a barrier between the two. It also represents the stultification of the potentials of the symbol (Cirlot 155-56). But the image the speaker creates is more than this. It is "a gust of snow." Air is a male element and water a female element. "A gust of snow" is possibly an image of the paralyzed potentials of a female being controlled by a male. It is an image of male dominance and female passivity. Connected back to earlier images of the poem, it implies that the lady has no control of her own sexuality, but is merely the sexual object of the male.

Another possible reading of these lines is that the lady is fickle--that she first was willing and approachable, "a southern breeze," but then became cold and unapproachable, "a gust of snow." The male/female, air/water dichotomy of "a gust of snow" might be explained as the female's rejection, paralyzing the male's libido or at least nullifying his attempts at forming some kind of relationship with her.

Yet another possible reading is that the speaker perceived the lady as "a southern breeze," as someone approachable. However, the lady was "a gust of snow." In this reading, gust of snow might mean actively pure as in "pure as the driven snow." She might in reality be completely unapproachable.

This one phrase, "a gust of snow," potentially changes the entire tenor of the poem. Snow also can represent death because of its association with winter. Added to the pieces we have already assembled, the death image suggests that this male dominance is the cause of the death of the lady's sexuality or that the female's rejection of the male is the cause of the death of his libido or their relationship or potential relationship.

The two images of lines six and seven create a system of dualistic images. The "southern breeze" images of youth, spring, pleasure, and life contrast with the "gust of snow" images of old, winter, harsh, and death. They create the contrast between active sexuality and frozen sexuality.

The next grammatical unit of the poem reads: "Agh! what / sort of man was Fragonard?" "Agh" is a primitive sound of distress or disgust. It is followed by a question. The answer to that question can be found by looking back at the part of the poem we have already examined. As noted, Fragonard, another early 19th-century French painter, is the actual painter of the picture referred to in lines three through five. The girl on the swing loses her slipper and

Fragonard suspends that moment of loss in time, displaying the slipper prominently on his canvas. "Slipper," as we have seen, is symbolic of the exterior female sex organs and hence of female sexuality. The losing of her slipper is symbolic of her losing her virginity. Losing one's virginity is a normal act, but it is most generally, in our culture, a very private act, despite public assumptions of the loss of virginity following marriage (especially prior to the sexual revolution). Fragonard has turned the loss of virginity into a public display. He has, in a sense, vulgarized it perhaps as a way of showing the normality of it. In addition, the loss of anything is often tied to guilt, which can lead to ultimate purification (Cirlot 192-93); and, depending on the circumstances of one's deflowering, guilt is often associated with the loss of virginity. The purification for the woman comes culturally through marriage and physically through menstruation.

The next image of the poem denigrates the previous image: "--as if that answered / anything." The implication here is that knowledge of Fragonard's life and personality does not matter. In the speaker's view, knowing the nature of the painter adds nothing to the painting, a point of view that can imply that knowing the nature of the poet adds nothing to our reading of the poem. The speaker might also be referring to the fact that knowledge of the painter's nature has no relevance to the speaker's current problem.

But the word "anything" is open to all possibilities. It is a word without limits. Knowing the nature of the creator may not change the nature of the creation, but it does allow for new discoveries about the creation. "Anything" is definitely a virtual transition word, keeping extant myriad potentialities.

The speaker of the poem appears either to have made an error or to have deliberately misled the reader by confusing Watteau and Fragonard. One implication of this is that the speaker is unconsciously demonstrating the difference between error caused by confusion (his mixing up the painters) and deliberately misleading someone (the woman blowing hot and then cold). The error the speaker makes is inconsequential, but the deliberateness of the woman's rejection has consequences, for the speaker at least.

After this very slight digression, the speaker of the poem continues the movement of his concentration down the leg of his lady. Lines ten through fifteen read:

Ah, yes--below
the knees, since the tune
drops that way, it is
one of those white summer days,
the tall grass of your ankles
flickers upon the shore--

We are now below the knees. The line of thought expressed in the poem has to go in that direction we are told, "since the tune drops that way." The wave function that is our reading of the poem collapses in the direction of the unexpected from

the very beginning of the poem. We must continue down the leg because that has now become the expected way of travel. To jump back up to pelvis, groin, or navel would be to violate the course of the poem. (The poet began creating a structure of thoughts and words and that structure demands that its form be followed. The speaker of the poem calls that structure a "tune." Because poetry has often been the basis on which songs are built, that is a perfectly logical and understandable comparison. This poem is a lyric poem and lyrics are to be sung, so "tune" is an accurate word.)

Another possibility for "since the tune drops that way" is the speaker's realization of the developing nature of his relationship with the lady. If the lady did blow hot, then cold, the speaker might be referring to a shift from a possible physical enjoyment to a purely aesthetic enjoyment (nice legs).

"Below the knees," we are told, "it is / one of those white summer days." The speaker has, as stated above, moved us farther down the surface of the leg and, by implication, farther from the sexuality of the woman. To see if this apparent contradiction turns out to be a false contradiction, we must again examine the symbolic meaning of the words he uses.

"One of those white summer days" seems to denote a white-hot day, a real scorcher--the kind of day one longs for all winter and dreads once summer is here. The symbolic meanings

of the words yield a very different meaning. "One" is the perfect number. It is unity. It can represent God. It is symbolic of being and of the revelation to men of the spiritual essence. It is the active principle which, broken into fragments, gives rise to multiplicity, and is to be associated with the mystic Centre, the Irradiating Point, and the Supreme Power. It also stands for spiritual unity--the common basis between all beings. (Cirlot 232)

This meaning of the word alone neither supports or refutes the meaning of the poem so far. It offers several possibilities. Before we can see how the wave function will collapse, we must look at the rest of the line. "One of those" implies that it is not one alone but one of several or many. "White" is one of the words we examined prior to examining Frost's poem. It is ripe with possible denotative and connotative meanings. Since "one" can mean perfect, perhaps "white" in this instance should be taken as meaning pure, perfect, virginal, Christlike, or one of the other positive connotative meanings of "white." Summer is the season associated with the fullness of life. The fields are growing, although not yet ripe and ready for harvest. There is more sunshine than rain. The days are pleasant, although sometimes very hot and humid. The nights are usually warm. It is a pleasant time of year, although it can, depending on where one lives, be oppressively hellish. Symbolically summer represents the prime of life, the full

moon, and the direction south. Days are the opposite of night. They are the time when most of life's activities occur. They are the division of the month into countable units of time. Day is the active principle and hence male. It is also, because it is literally the opposite of night, the opposite to it symbolically as well. Day then represents goodness and life because of its association with pleasant weather and crops. It also represents infertility and the failure to germinate because of its opposition to the moon, a fertility symbol.

The symbolic images of this line tend to leave the reader confused. The speaker of the poem has given us purity and perfection at the same time that he has given us the male principle and infertility. What exactly is he trying to say? We cannot be sure at this point. It is possible that he is trying to show us that temptation exists for the male even in the purity of the female, that there is no inherent evil in her even though he is brought to a heated state because of her. Another possibility is that because the lady is fickle the promise of summer will fail to germinate. The relationship will be unfruitful because for the female it does not exist and for the male it has become purely aesthetic. The next image of the poem helps only a little to clarify these suggestions.

The poem continues: "the tall grass of your ankles / flickers upon the shore--." The image of "tall grass" forces

the reader back up the legs. Ankles are not tall unless one views the whole leg. The use of "grass" is a continuation of the speaker's use of the unexpected. The word refers to a living plant that would be natural near a shore. It is can be domesticated and cared for by man; it can be grown in lawns, which men faithfully tend to in what can become almost an obscene effort of one upmanship. Grass is a plant, and plants in general are representative of life and "the birth of forms" (Cirlot 259). Plants are also representative of fertility of all kinds. Ankles are obviously a part of the leg, and all symbolic meanings of "leg" apply to some degree to "ankle." So the use of this image forces us back up the leg to the source of fertility in the woman.

The image continues. "The tall grass," we are told, "flickers upon the shore--." We are accustomed to have the word "flickers" used to describe light, as in "the candle flickers" or "the fire light flickers," but the speaker of the poem has applied it to grass, and it "flickers upon the shore--." If we look at the symbolic meaning of the word "light," we discover that light represents morality. If the light is flickering, it is morality that is uncertain. A shore is a boundary between earth and water. Both of these elements are female and passive (Cirlot 6). This shore does not represent a sexual boundary in the sense of a boundary between the sexes; rather it represents a boundary between the physical and the spiritual, between the practical and the impractical,

between the intellectual and the emotional, and between a simple yes and no.

The speaker of the poem is in a state of uncertainty because of the temptation the woman causes him to feel. She might be partly responsible if she is indeed fickle. The speaker has described her legs, using words which carry symbolic weight relating to her sexuality, his moral uncertainty, her possible fickleness, and the temptation he feels. The words and the meanings of the words, in the way that they are arranged in the poem and are understood by the reader, create an energy that does not yet appear to be collapsing in a particular direction. The last seven lines of the poem show us just how the wave function collapses.

"Which shore?--" the speaker asks us. Just as earlier in the poem where the speaker asks us "which sky?" the question is designed to emphasize the importance of the meaning of the word "shore" and the importance that the reader understand that meaning. It is the shore of human sexuality, with all the complexity and uncertainty that implies. It is the shore between the willing and the unwilling.

The speaker says, "the sand clings to my lips--." The meaning of the poem begins to become clear now. The woman is fickle. She has rejected the speaker of the poem. The woman's rejection is distasteful to him. He cannot get it past his lips; he cannot swallow it. It is also possible, based on the symbolic meaning of "mouth" as a source of creativity, in

particular as a source of speech, that he cannot bring himself to say what he feels or cannot find the words to say it (Cirlot 221). He cannot speak against the woman even though she has rejected him. Sand, by implication, can represent death ("ashes to ashes, dust to dust"). Thus the woman's rejection of him is the death of his hope for developing a relationship. The image in this line also is a juxtaposition of the inorganic and the organic. Perhaps this image is used to represent the hardness of the woman opposed to the emotionalism of the man.

"Which shore?--" the poem asks us again. Repetition is usually done for emphasis. In this case the emphasis is on the speaker's confusion, on his moral and emotional dilemma. Her legs end at the shore of her sexuality and he is tempted. They end at the shore of her creative ability, and again he is tempted. "Agh, petals maybe," he says in his distress.

Petals we have seen are representative of the disintegration of the center. In general, they symbolize the decay of morality; in this poem, they perhaps also symbolize the decay of emotion, lust, expectation, and hope. The petals represent the death of the possibilities the speaker at first envisioned. The speaker then has given us the clearest image yet of the relationship the speaker sees between sex and moral decay. The word "maybe" in this line emphasizes his moral dilemma. He is unsure if his desire is wrong or if it is merely a natural act, and its going unsatisfied also a natural occurrence. Perhaps he is unsure of the woman's moral

position. Is she truly fickle or is she merely being coy? He is torn.

He goes on to ask, "How / should I know?" It is a weak proclamation of his innocence. He should know. He would not be having a moral crisis if he did not have a basis in morality. If he were amoral, he would be incapable of experiencing this dilemma. If he were immoral, he would not hesitate to engage in an activity the society of his time considers wrong, in this instance sexual intercourse with someone outside of marriage, because that is what immorality is. The speaker then must have some basis in morality for this dilemma to occur. He could be truly unsure of what is right and wrong or he could truly believe that sex is wrong and women are evil and still be tempted because of the biological nature of man.

"How / should I know?" is also a proclamation of frustration. There is no sure way he can know if the woman has truly rejected him or is playing coy. He faces further rejection if she has indeed rejected him once, and perhaps her coyness is, for him, a crime in the sense that it has caused him to suffer. His dilemma is one of not knowing what the appropriate response to this desirable woman is because of her rejection of him. The woman's rejection of the speaker of the poem reinforces the possible negative meaning of "lady" in the title of the poem. Quite possibly the speaker intends to disparage the woman by using the word "lady" sarcastically.

"Which shore? Which shore?" he repeats again. And now we can see him fighting for an answer. It is the shore of her sexuality, but it has in a greater sense become the shore of his morality. Will he choose the morally correct course or will he choose the immoral course? The speaker of the poem has to decide where he stands on the issue of sex as sin. He must decide if the act of sex outside of marriage is sinful or natural. He must also decide if her rejection of him is real or feigned.

The last image of the poem leaves those questions unanswered. The last line reads: "I said petals from an appletree." The speaker acknowledges that petals (moral decay and possibly the decay of lust, hope, and expectations) come from an appletree (original sin, which in western thought can be and often is equated with sex). He acknowledges that he knows what the source of his temptation is. The speaker, in line one of this poem, equates the woman's legs, and hence her very basis of being, to an appletree (sin). But this last line does not tell us what his decision is. Does he give in to temptation or not? The point is that he recognizes the source of his dilemma and he, just as Eve was, is left to decide with his own free will what to do. Morality is merely a guide. It does not force an individual to take certain actions. It is not binding, merely guiding. Both the woman of the poem and the speaker of the poem must exercise their free will. So must the reader of the poem.

We have examined Frost's "Putting in the Seed" and Williams's "Portrait of a Lady" in order to discover how the context affects the meanings of words. We started with the words "white," "apple," and "tree." In Frost's poem, the context that the word "white" is in and the way the wave function of the poem collapses result in "white" meaning good and also implying Christ. In Williams's poem, the context that the word "white" is in and the way the wave function of that poem collapses results in "white" meaning purity. The difference between the meanings is not overwhelming, but the meanings ultimately and significantly affect the overall meanings of the two poems.

The other two words we looked at function in similar ways. In Frost's poem, the wave function of the context collapses so that "apple" and "tree" mean the tree of knowledge of good and evil and sin in a general sense. In Williams's poem, the words "apple" and "tree" also end up meaning the tree of knowledge of good and evil, but they refer specifically to the sin of carnal knowledge and not to sin in general.

The particular context a word appears in affects the meaning of the line and the meaning of the poem because context is one more energy-producing element that affects how the wave function will collapse.

So far, the energy-producing elements we have examined are the sound of words, the denotative and connotative meanings of words (including their symbolic meanings), and the context

in which the words appear. To a lesser degree we have seen that the form of the poem also affects how the wave function collapses. In the next chapter we examine how all these elements work together to effect the collapse of the wave function and the creation of the Bose-Einstein condensate that is the poem.

Chapter VI

The Quantum Approach

Saying that a poem is composed of words is like saying that a symphony is composed of musical notes. Many elements contribute to the totality of a poem. The sounds of the words, rhyme and meter (or lack of them), the form of the poem, the denotative and connotative meanings of the words, symbolism, and literary techniques such as metaphor and allegory all contribute energy to the Bose-Einstein condensate that is a poem. Sometimes these elements seem to be at odds with each other as in Williams's "A Portrait of a Lady," where the first image is jarring; but, if the poem does result in becoming a totality greater than the sum of its parts, by the end of the poem the reader can see how apparently disparate elements bond.

An excellent example of the fusion of apparently unrelated parts is Gary Snyder's poem "Riprap." The text of the poem reads:

Riprap

Lay down these words
 Before your mind like rocks.
 placed solid, by hands
 In choice of place, set
 Before the body of the mind
 in space and time:
 Solidity of bark, leaf, or wall
 riprap of things:

Cobble of milky way,
 straying planets,
 These poems, people,
 lost ponies with
 Dragging saddles--
 and rocky sure-foot trails.
 The worlds like an endless
 four-dimensional
 Game of Go.
 ants and pebbles
 In the thin loam, each rock a word
 a creek washed stone
 Granite: ingrained
 with torment of fire and weight
 Crystal and sediment linked hot
 all change, in thoughts,
 As well as things.
 (497)

The title of the poem explains both the direction of the poem and the idea of disparate parts fusing into a coherent whole. The denotative meaning of "riprap" is "a loose assemblage of broken stones erected in water or on soft ground as a foundation" (American 1065). And a foundation is "the basis on which a thing stands, is founded, or is supported" (American 528). Thus the basis of this poem, as for all poems, is the assemblage of words put together however loosely to create a foundation for the idea(s) expressed in the poem.

The construction of this poem follows no traditional pattern. There is no consistent meter. There is no consistent rhyme. The poem is structured in a way that makes it appear to be unstructured. The layout of the poem on the page appears visually to be an image of two structures enmeshed, the first six lines forming one structure and the rest of the poem forming the second. The visual structure of the poem is one form of riprap. A device that reinforces this "riprap"

Before your mind." The speaker of the poem wants the reader to concentrate while reading the poem. The word "rocks" has symbolic meanings that intensify the foundation image and support the meaning of the word "solid." Rocks symbolically represent "permanence, solidity, and integrity" (Cirlot 274). The poem, the speaker tells us can have weight and permanence if the reader places it in the reader's mind carefully ("Before the mind").

The words of the poem are "placed solid, by hands." These are both the hands of the poet who is creating this poem and the hands (figuratively) of the reader who is placing them before his or her mind. "Hand" symbolically represents "manifestation, action, donating, and husbandry" (Cirlot 137). In this poem, hands probably represent action, although manifestation in the sense of the poem unveiling itself is also possible.

The words of the poem are placed "Before the body of the mind / in space and time." This is a strange but relatively easy-to-picture image. The mind is usually not given a body in the literal sense. The brain would seem to be the literal body of the mind, but the physical aspects of brain are usually kept separate from the intellectual aspects of mind. Instead, the body of the mind should probably be seen as the total assemblage of knowledge contained by the mind. If we equate the mind and the intellect and then look at the symbolic significance of "body," we discover an interesting connection.

"Body" symbolizes "the seat of insatiable appetite"; so when the reader is told to place these words "before the body of the mind," the reader is being told to place the poem before the mind to serve as food for the insatiable appetite of the intellect. The image is completed by the instruction to the reader to place these words "in space and time." The speaker of the poem is instructing the reader to see the poem as a material thing existing in time and space.

The first six lines are not just directions for reading the poem; they can also be seen as a world view. The world view these six lines depict is an integrative view of a universe of disparate objects and ideas functioning together in harmony. What appears on the surface to be riprap really forms a coherent whole. It is a world view of a natural order that does not need to comply with artificial constraints of classification, but assembles diverse elements into a cohesive and workable whole.

The next "stanza" of the poem consists of only two lines:

Solidity of bark, leaf or wall
riprap of things:

They constitute the premise of the poem--the thesis statement. It is the solidity of its assembled components that makes a riprap work, just as it is the meanings of words assembled together that makes a poem work. The "things" Snyder uses in this "stanza" are bark, leaf, and walls. Bark is the outer layer of a tree. Its purpose is to protect the inner parts of the tree from disease and insects. It is only partially

effective in this role. There is no standard symbolic meaning associated with bark, but its function as protection for the inner tree is related in a way to the function of skin, so that bark could be related symbolically to skin as well. In this sense, bark could represent birth and rebirth (Cirlot 298-99).

The second thing identified as part of the riprap of the premise is leaf. A leaf is also part of a tree. Its function is to act as part of the respiratory system of the tree. It breathes for the tree. Symbolically, a leaf represents happiness (Cirlot 181). Its function as part of the respiratory system of the tree also allows the implications of the symbolic meanings of "breath" to apply. These meanings include the ability to assimilate spiritual power and are symbolic of the paths of involution and evolution. There is a duality of opposites contained in the symbolic meaning that strengthens the image of "riprap" by using a word that incorporates two antithetical meanings.

The last thing in the riprap of the premise is walls. We are not told what kind of walls--whether they are the walls of a building or free standing walls. Symbolically then, walls could represent "rising above the common level," "impotence, delay, resistance, or a limiting situation," "protection," and/or "matter as opposed to spirit"; walls are also considered feminine because they are passive (Cirlot 362-63).

These three words appear to have little meaning in common except that "bark" and "wall" can both mean protection. They are used to establish the premise of the poem, which is that apparently disparate elements can be seen as united harmoniously and not necessarily as fragmented.

The next nine lines of the poem are the riprap of the poem. They consist of a list of seemingly unrelated images. The list begins with "Cobble of milky way." Cobble reminds one of cobblestone streets, which are a kind of riprap themselves. They are a deliberate construction of relatively small stones or bricks to provide a foundation for traffic. The Milky Way is the galaxy of which our solar system is a part. We see it in its haziness across the night sky.

Depending on whether one believes in creationism or in scientific explanations, one, as reader, may or may not have a problem with this image. If one believes in a creator God, then the milky way will be seen as another example of riprap deliberately placed by God. What it is a foundation for becomes a matter of speculation, but the problem of not knowing what it is a foundation for can be dismissed because man is not expected to understand the mysterious workings of the mind of God. If one does not believe in creationism, then a different problem arises. One scientific explanation for the creation of the universe, the Big Bang theory, implies that the Milky Way is not a riprap in the sense of having been placed there deliberately, at least not by an identifiable mind

and will, but rather the result of determinant forces, the origins and functions of which are as mysterious as the workings of the mind of God. In either case, the image of the line implies a deliberateness that is not explainable.

The next image on the list is "straying planets." Again we have a paradox. Planets are very large celestial bodies that revolve in a fixed orbit around a star. Some orbits are less perfect than others, but planets do have orbits because of gravitational forces exerted on the planets by the star. That is simply physics--Newtonian or quantum. Planets do not stray. Planets cannot stray. While straying can be a mindless act (a cow searching for better forage escapes from a pasture and wanders off down the road), to a certain degree it implies a living, thinking being. A child might stray away from a playground. It strays not because it thinks, "Oh, I'll run away." Rather the child thinks something like, "What a cute kitten. I'll catch it and bring it home." And then in chasing the kitten, the child might stray from the playground. The act of straying is an intentional leaving, but not for the purpose of leaving. Planets cannot make that choice. They are mindless and totally controlled by the physical forces of the universe. So in the first two items on the list we have images of deliberate acts that we cannot be sure are deliberate. If the word "planets" is used loosely to mean "stars," then "straying" might mean responding to the forces

of the universe. In that sense the "planets" still are not "straying"; they are responding to irresistible forces.

The next line gives us two images: "These poems, people." The relationship between these two images is easier to envision. Here are more similarities than disparities. Poems and people are both the result of creative acts. Poems are created by people and people are created by people. The difference is that the parts used to create a poem are deliberately and intentionally selected, while the parts (genetic material) used to create people are coincidental to the creative process. Poems are always a deliberate act of creation. People can be the accidental result of a sexual encounter. Poems and people are both Bose-Einstein condensates composed of a multitude of energy-producing parts and capable of forming relationships. Poems have an effect on people and people have an effect on people.

The next two lines of the poem convey the next image on the list. Snyder writes, "lost ponies with / Dragging saddles--." This image is clear on the surface, but how does it fit into the poem? A horse is symbolic of "intense desires and instincts" (Cirilot 152), which in this poem are suggested to be lost. If we continue this image, the dragging saddles could be the restraints placed upon our desires and instincts by society. Still what does such meaning have to do with the poem so far? "Horse" can also represent chaos, so that the dragging saddles could represent a restraint placed upon chaos in an

attempt, apparently futile, to create order out of the chaos. But these two lines could also be a representation of the apparent chaos of this list and the reader's futile attempt to create an order out of the seeming disorder. Another possibility is that the dragging saddles represent a loss of order, of civilization (saddles) slipped back, in destructive fashion to nature.

The next image helps us understand what is being suggested. The next image is "and rocky sure-foot trails." As we saw earlier, "rock" represents solidity and foundation. "Sure-foot" emphasizes the security of the passage. The image is a metaphor whose meaning contends with that of the preceding one. Riprap is not secure footing to walk on. Poems can contain apparent chaos or they can contain a solid and sure path to the meaning of the poem. Life too can be chaotic or orderly. A person can be confused about the meaning of his or her life or a person can be secure in who he or she is and where he or she is going. A "rocky" path also implies the threat of tripping and falling on a rough, hard surface; and the intricacies of some poems might cause the readers of those poems to become "lost" and leave the poem without understanding the poem's meaning. The path of life is rocky as well. It is a sure and certain path from birth to death but how one lives his or her life and how and when one will die is uncertain. In a sense, "sure-foot" becomes paradoxical.

Then we come to the last image on the list. Snyder writes:

The worlds like an endless
four-dimensional
Game of Go.

Go is a Japanese game for two players that uses black and white stones on a board divided by nineteen vertical and nineteen horizontal lines, creating 361 intersects. The word "go" implies endless dynamics. It is an alpha without an omega. The game of Go is three dimensional; Snyder has made it four dimensional. In this poem it has one of its dimensions in the fourth dimension--time--and Snyder has made that dimension endless. He compares "the worlds" to this complex and endless game. He has created an image of the universe that contains the complexity of physics, the eternal nature of time, and the playfulness of a game rather than the serious intention of a creative God. And while play can be serious business--the test of skill and intelligence (ego involvement, demonstration of fulfilled potential)--in our culture we tend to value work and its products more than play and its products. Therefore, a universe that is the result of a playful act could be seen as having less worth than a universe deliberately created.

Put the whole list together and we have a rirap of possibilities that encompasses the idea of virtual transition. All these possibilities, even the ones that on the surface make no sense by the laws of physics, are possible while the reading

of the poem is in a state of virtual transition. The list is a riprap that creates the foundation for the real transition that occurs at the moment the wave function collapses into the Bose-Einstein condensate that is one's understanding of this poem.

Snyder has tied his ideas together in another way as well. The first six lines of the poem have the form of two lines that start at the left margin followed by one line indented thirteen spaces. This pattern is repeated once. In these first six lines there is one instance of internal rhyme (place, space). The first three lines all end in a plural noun, and the last two lines of this stanza are a slant rhyme. They also help to create the unity of ideas implicit in the first six lines.

The second stanza is only two lines long. The first line starts at the left margin and the second line is indented thirteen spaces. There are no rhymes or other literary devices used in these two lines.

The next nine lines are tied together by various devices. Snyder changes the form of the poem. These nine lines have the pattern of one line at the left margin followed by one line indented thirteen spaces. This pattern is repeated four and one half times. In this stanza Snyder uses alliteration (planets, poems, people, ponies; saddles, sure-foot; game, go) and an internal rhyme (way, straying) to help tie the stanza together. He also uses eleven "o" sounds. Although there are

not enough of the same sounds to be considered assonance, each sound is repeated enough to create a sense of unity.

The last eight lines of the poem begin with a continuation of the list: "ants and pebbles / In the thin loam." Loam is the end result of the disintegration of rocks and organic material into dirt. Both ants, which are living things, and pebbles can be found in dirt. Ants deliberately create their homes in the dirt. Pebbles are there accidentally or coincidentally.

The poem continues with overlapping images: "In the thin loam, each rock a word / a creek-washed stone." In the dirt, each rock has some significance. In this poem, each word has significance. The stones/words are "creek-washed." They have been cleansed by flowing water. Symbolically, water can represent intuitive wisdom, so the words of this poem have been selected by the poet's, and passed through the reader's, intuitive wisdom.

The tone of the poem changes for the last five lines, which read:

Granite: ingrained
 with torment of fire and weight
 Crystal and sediment linked hot
 all change, in thoughts,
 As well as things.

For the first time in the poem, Snyder names a particular kind of rock--granite. He then goes on to give a description of what granite is and how it was formed. That he chooses granite is significant because granite is the kind of stone used most

often for buildings and monuments. It is a very hard stone. It is used in the phrases "Will of granite" and "Carved in granite." The first phrase is used to describe a person's determined and unyielding nature; the second is used to indicate the permanence of some particular decision or rule. Snyder's implication is that once it is complete the poem is permanent and unchangeable. While a poem is only words and a word or phrase can be altered or edited out, such modification would change the poem into a different one. Once this poem is finished it is unalterable.

The description of granite is also the description of the poem. Granite is "ingrained / with torment of fire and weight / Crystal and sediment linked hot / all change." Granite is an igneous rock, one created by heat and pressure (torment of fire and weight). It is composed "chiefly of quartz, orthoclase or microcline, and mica" (American 572). Quartz and mica are crystalline in structure. Orthoclase and microcline are feldspars, which are rock-forming minerals. These components of granite are the "crystal and sediment linked hot." The heat and pressures of the earth transform crystals and sediments into granite.

The "torment of fire and weight" are intrinsic to the poem as well. Fire is symbolic of transformation and regeneration (Cirlot 105-06). The meaning of the words of this poem are transformed by the context of the poem and by the reader of the poem. The poem is permanent in the sense

that physically the words remain the same; it is mutable because each reader will, to some degree, understand the poem differently from every other reader. It is possible, even though apparently paradoxical, for the poem to be permanent and mutable. As a Bose-Einstein condensate the poem is an energy-producing whole that is in a constant state of flux because of Heisenberg's uncertainty principle and the condensate's ability to form relationships that inevitably affect both components of the relationship.

Crystal is symbolic "of the spirit and of the intellect associated with the spirit" (Cirlot 74). Sediment is a form of dirt. And dirt is symbolic of the physical and concrete. This poem then is a fusion of the spirit, the intellect, and the concrete. It conveys a spirit of belonging (everything and everyone has a place in the universe--a place that is valid in and harmonious with the universe). And, through use of concrete images placed together in a riprap whose meaning is discernable by the intellect, this poem demonstrates one union of disparate items functioning harmoniously in its limited universe. The intellect can see the order in the disorder of this poem. It can accept the order as presented without trying to create a different order. It can accept the solidity of the poem.

The poem ends with "all change, in thoughts, / As well as things." Again Snyder has overlapped images. The process that creates granite or poetry changes the nature of the

particles that create the new substance. In the case of this poem, the energy-producing particles react in harmonious ways with each other until they act as one unit. The wave function collapses and the result is a Bose-Einstein condensate--a poem. The multitude of virtual meanings for each individual word, clause, phrase, and line of this poem have been changed into the "correct" possibilities for this reality. The change occurs not in the words themselves but in the reader's perception of what the words mean. This perception of meaning is the essence of the poem. It is the idea that is the poem. In "Paterson," William Carlos Williams wrote, "No ideas but in things" (327). This poem says there are ideas in thoughts and in things. The abstract is valid.

There are two more statements that must be made about Snyder's poem. One concerns the form of the last stanza. It is composed of eight lines in the pattern of one line beginning thirteen spaces indented from the left margin followed by one line starting at the left margin. The pattern is repeated four times. It has a pattern exactly opposite that of the preceding two stanzas. There are no internal rhymes, no alliteration, and no assonance. The other statement that needs to be made concerns the overall fusion of the disparate parts of this poem into a unified whole. We touched on that when discussing the final stanza and how the wave function collapses. Part of the fusion of the elements of this poem is simply the realization that there is a natural order for everything, including

individual poems, and the reader should try to work within that order rather than in an artificial order. By this I mean that a reader should not take a preconceived idea of what poetry is or should be and attempt to force all poems into that mold. There must of necessity be a relationship between reader and poem. It is a kind of duality that results not in fusion but in relationship. The duality of the individual energy-producing elements fuse to create the poem, but the poem and reader must form a relationship for the poem to have validity.

"Riprap," to a certain extent, explains the creative process that results in a poem, the nature of poetry as Snyder sees it, and the relationship of the reader to the poem.

The techniques used in this poem help to create a unity within each stanza. The unity of the stanzas, and their completeness of idea, help to create the unity of the whole poem.

Each energy-producing element we can find in the poem aids us in understanding the Bose-Einstein condensate that is the poem. Seeing how the elements fit together harmoniously allows us to see how they come to be a unity that is greater than the sum of its parts.

Chapter VII
Quantum Criticism

The quantum approach to poetry has several implications: the nature of the creative act itself, the problems of the biographical fallacy and the intentional fallacy, and the fallacy of one correct interpretation for each poem. Included in these implications are changes in how poetry should be taught both in literature and in creative writing classes.

The first implication is based on the nature of virtual transitions and relationships between Bose-Einstein condensates. The particle/wave theory also plays a part. The energies produced by the various elements of a poem, whether they are particles or waves or both, start to act together in unison; and by the end of the poem they are working together harmoniously. They become a unity whose total is greater than the sum of its parts. They become a Bose-Einstein condensate that is the poem. The next three implications have to do with the kinds of energy that can be included to make up a Bose-Einstein condensate. All four of these implications affect how poetry should be taught as literature. The first implication affects how poetry should be taught in a creative writing class.

If looked at from a quantum viewpoint, the creative process that results in a poem occurs when a Frolich-style Bose-Einstein condensate is in a state of virtual transition.

At the moment the wave function starts to collapse, the idea of writing a poem occurs. The creative process of writing is a series of virtual transitions; each word the writer puts on paper is the result of the collapse of the wave function of his or her creative process. If the writer chooses words in such a way that they create energy that is harmonious with the energy of every other word in the poem, the writer has created a Bose-Einstein condensate. There are many elements that contribute energy to the Bose-Einstein condensate that is a poem. Sounds contribute energy to the system through the poet's manipulation of the language to create or make use of alliteration, assonance, and onomatopoeia, among several other possibilities. Words contribute energy to the system through their denotative and connotative meanings, including their symbolic meanings. The various ways in which the poet puts together the phrases, clauses, and lines of a poem all contribute energy to the system. The form of the poem contributes energy to the system. Rhyme and meter, or lack of them, contribute energy to the system. The particular combination of these elements causes the wave function to collapse in a way unique to each poem. Before the wave function collapses, each energy-producing part of the poem is in a state of virtual transition; all of the possible effects an individual part might contribute to the ultimate "meaning" of the poem exist simultaneously (even those possibilities that obviously are not applicable), and none is more valid

than any other. Just as the unselected possible courses of action affected future decisions made by the hypothetical pregnant college woman in Chapter I, so also do unselected possible word choices affect the ultimate collapse of the wave function into the completed poem. During the writing of the poem, and while the poem is in a state of virtual transition, the poet contemplates each word's possible meaning(s) as well as other features of the word (rhyme potential, alliteration potential, assonance potential, etc.). Each of these possibilities, although many are unrealized in the particular poem, affects how the wave function collapses during the real transition. Some possibilities that existed during the state of virtual transition will affect the real transition more than others; some possibilities will remain as the real transition and others will have inconsequential effects. After the wave function collapses, the energy-producing parts of the poem are in a state of real transition; we can affix to each of them the meaning or meanings that best suit, at least in our reading, the overall message of the poem.

This is not to say that poems must have messages or lessons. Poetry does not need to be didactic, but a poem is a form of communication, not perhaps of a moral but of a vision and/or emotional reaction to a stimulus, and in that sense every poem delivers a message.

When the wave function has collapsed and the poem exists in a state of real transition, it is a Bose-Einstein

condensate; and as a Bose-Einstein condensate it is capable of having relationships with other Bose-Einstein condensates. Relationships exist between poet and poem, and between each individual reader of the poem and the poem. The poet's relationship with the poem develops during the act of creation. The poet, a Frolich-style Bose-Einstein condensate, selects the energy-producing particles that react with each other to ultimately become a poem. Each word the poet chooses is the result of the collapse of the wave function of the creative process in the poet's mind; until the poet actually chooses which word(s) to use, all possibilities exist because a state of virtual transition exists.

Because every poet is a unique individual, the actual creative act must necessarily be unique for each poet. Any discussion of that creative act must involve very broad terms and generalized statements. To create a poem, the poet must first decide in a general way what he or she wishes to say. Perhaps an image or feeling comes to the poet, and the first words chosen convey that feeling. Perhaps the poet starts with the title. However the poet starts, the poem ultimately writes itself. By that I mean that, as the poem is being created, the form and tone the poet selects at the beginning of the writing process dictate and limit to a degree what can follow after. If, for example, the poet chooses to write a sonnet, the poet is limited to fourteen iambic lines that probably should rhyme in one of the accepted rhyme patterns for a

sonnet. There probably should be a change in the poem in one of the accepted places for that change to occur in a sonnet. The rest is entirely up to the poet. The poet can choose to use alliteration or not. The poet can choose to use assonance or not. The same choice exists for the use of every literary device applicable to poetry; the poet can choose to use it or not. Or the poet can choose to use the device in an untraditional way.

A large part of how the poet makes these choices is based on who the poet is. The tenets of the New Criticism hold that the biography of the poet has no bearing on the poem. As students of literature we are thus taught the biographical fallacy, which states that it is a false perception to see the writer in the writing, that it is false to assume that the subject the writer is writing about comes from the writer's life. But, because the writer's life has formed the writer's mind, what the writer writes can come only from the writer's life. I do not mean that every piece of literature is biographical in the sense that it is a detail from the author's life. I do mean that at least one image in the piece of writing, and most probably the image that sparks the piece of writing, is an image based on some reality in that writer's life. A good writer can disguise that reality depicting it in symbolism, metaphor, or allegory. But the essence of the image remains.

Sometimes, as in the case of Robert Lowell's "Life Studies" or Sylvia Plath's "Daddy," much more than a single image from the author's life is present. Sometimes we get the details. Knowing the biographical background of the poet can give the reader insights into the poem that can only add to the energy of one's reading of the poem.

If we know Plath's biography, then when we look at the poem "Daddy" we find many parallels between her life and that of the speaker of the poem. Some of the parallels between the poem and Plath's biography are these:

1. Plath was thirty when she wrote the poem and the speaker of the poem is thirty. Knowing that Plath was thirty when she wrote this poem gives the reader insight into the probable maturity level of the writer and affects how the reader feels about what Plath writes.

2. Plath's father died when she was eight. The father of the speaker of the poem died when she was ten. This information gives the reader information on the reality of the pain for the writer and affects how the reader sees that pain. Also, a reader who lost his or her father when the reader was young will likely experience a highly charged energy level when reading this poem.

3. Plath's father was of Polish descent; he taught German. The father in this poem is German. Plath also knew of Hitler and experienced World War II. She knew of the atrocities committed by the Germans under Hitler's command.

This knowledge helps the reader understand a reason for the use of the German/Nazi images in the poem.

4. Plath's father was reported to have been strict. This information also helps explain the Nazi images of the poem.

5. Plath was in a marriage that was ultimately unhappy. It lasted seven years, until her suicide. So did the marriage of the speaker of the poem. This information also gives additional insight into the pain expressed in the poem and the reality of that pain for the writer. It intensifies the already intense images Plath has put into the poem.

6. Plath attempted suicide when she was twenty. So did the speaker of this poem. This explains how overwhelmed by pain the speaker and poet were.

None of this means that Plath is the speaker of the poem, but it gives us an enhanced insight into the ultimate meaning suggested by the poem. Even without the biographical information the reader finds that the poem is powerful, but with the biographical information the reader finds that the poem becomes almost overwhelming. With such knowledge we can fit into our reading clearly and justifiably the image of a child in pain who never came to terms with the cause of her pain, and who is still suffering intensely at the age of thirty. If we add to the energy we as readers bring to this poem knowledge of the psychology of dysfunctional families and

codependency, we have an even clearer picture of the horror Plath paints so well.

A poem can and will exist as a Bose-Einstein condensate without the reader knowing the biographical details of the poet, but it is incorrect to teach the biographical fallacy in the way we now teach it because each poet is a unique Frolich-style Bose Einstein condensate relating to the energy-producing particles of life and language to create each unique Bose-Einstein condensate that is a poem. The biographical background of the poet provides information that gives the reader additional energy to put into the reader's relationship with the poem. Rather than be taught to accept the biographical fallacy, students should be encouraged to know the backgrounds of the authors and poets whose works they read. And if they should see parallels between the author's life and his work, that parallel should be explored rather than dismissed.

If, for example, we knew that Frost was an atheist (I am not claiming he was), then it would be appropriate to question the interpretation of the poem "Putting in the Seed" offered earlier in this work. It would be highly unlikely that an atheist poet would deliberately choose symbols that relate so strongly to Christianity. Knowing Frost was an atheist would force us to reconsider the above interpretation of the poem. Did we as readers put too much into the symbolism of the poem? Did Frost not consider the symbolic meaning of the words he

was using? Did Frost intend that readers merely look at the surface of the poem and not look for symbolism? Was Frost consciously playing to a particular audience?

Knowledge of Frost's background would allow us, as readers, to verify the validity of our reading. Frost may indeed have unintentionally put those symbols into his poem. Yet, if they are provably there, then his atheism will not affect the meaning they add to the poem. We as readers may have read too much into the poem and rereading the poem may show us that. Whether or not Frost intended the symbolism that is found in the poem, if the symbolism is truly in the poem, the symbolism is valid. Biographical data becomes merely a tool in the reading of the poem--one more piece of information to add to the reading or not as each individual poem requires.

This issue brings us to the intentional fallacy. If we as readers are privy to information about what the poet says he intended, we merely add another particle of energy to the relationship we are forming with the Bose-Einstein condensate that is the particular poem. We do not have to accept the stated intention any more than we have to accept all the possibilities inherent in any particular word in the poem. The author's stated intention becomes one of the myriad of possibilities for the poem while our reading of it was in a state of virtual transition. Whether it becomes part of the real transition depends entirely on how the wave function collapses. It never should be the primary factor in

determining the meaning of the poem. It simply is one more bit of information that increases our chances of getting the most out of any particular poem. If the author's stated intention is available to students either in a footnote, in the biographical data on the poet, or in some piece of criticism they have read, they should be encouraged to add that piece of information to the knowledge they bring to the reading of the poem. The poet's stated intention need not be accepted as fact, but should be used as one more potentiality for understanding the poem, even if in some cases the stated intention ends up being rejected entirely. Wallace Stevens intended, he said, that the poem "Thirteen Ways of Looking at a Blackbird" should be a series of sensations and not a series of connected images (Ellman 327). If we know his intention when we examine that poem, we can decide if he succeeded artistically in his intentions or if he failed. We can also see if he went beyond his intentions and created something greater than what he says he intended to create. We can use the poet's stated intention as one more bit of energy for our relationship with the poem.

In forming relationships with the poems they read, readers do not bring just informational energy to the poems they read; they bring themselves to the poems. Every reader of a poem forms a relationship with it. Sometimes the relationship is brief, lasting through only one cursory reading. Sometimes the reader relates so intensely with the poem that the reader

memorizes it, recites it to others, and perhaps treasures it for years. However long the relationship is, there are effects caused by the relationship. The poem affects the reader to greater or lesser degrees depending on how strong a relationship is formed. Perhaps the effect lasts only long enough for the reader to recognize and then let subside a particular emotion. Perhaps the effect is longer lasting. The reader may embrace the poem, adding the poem to his or her store of permanent knowledge so that the reader is permanently changed. Any effect having a place between these two extremes is possible, but because the reader and the poem are two Bose-Einstein condensates coming into contact there will be some kind of effect.

The read poem is not left unaffected, although the effects on it are more limited than the effects on the reader of the poem. Each person who reads a poem brings to that poem only a certain amount of knowledge and ability to understand. A reader who has had no literature classes brings only the barest knowledge possible to that poem and because of that fact can grasp only a small part of what the poem conveys. A reader who specializes in poetry, who has a background in mythology and symbolism, and who knows all the major literary criticism of the past several centuries may bring to the poem more knowledge than what the poet had. The effect each of these readers has on the meaning of the poem is an evaluation that affects the poem in the reader's estimation. The poem does

not change on the page; it changes only in the reader's mind as the poem is read, understood, and absorbed. Poems that rise high in the estimation of numerous educated readers get frequent inclusion in anthologies and ultimately can become part of the so-called canon of great literature.

Because each reader brings a different background to the reading of a poem and that background affects the relationship that is formed between the reader and the poem, any reading of the poem is a "correct" reading. A poem has one "correct" meaning only in the sense that the writer of the poem knew at the particular instant in time that the poem was written what that poem meant for him or her. After that moment passed, the writer changed, and the poem could not mean exactly the same thing to that writer again. However this circumstance does not mean that the possible meanings the poem can convey are infinite. Once the poem is in its final form on the printed page, it is subject only to typographical and editorial change. That Bose-Einstein condensates can and do change is evident. People are Frolich-style Bose Einstein condensates, and people change. But poems are not living; the change they undergo is caused by how the reader understands the language of the poem in context. Each reader's interpretation of the poem can be based only on the reader's ability to understand the language and concepts presented by the poem. Misreadings are possible, but only to the extent that a particular reader has misunderstood the accepted meaning

of a particular word or words and not to the extent that the reader has failed to relate a line or image to another literary work, mythological event, or other esoteric piece of information unavailable to someone not a student of literature. A broad context or series of contexts brought to the reading of the poem can add depth and significance to the reading of it and can deepen the relationship formed with it, but this fact does not negate the validity of a reading in a narrow context.

Students in literature classes should be encouraged to bring as much knowledge as possible to bear on the poems they read. However, not all students of literature are English majors. Often, regardless of their major, students are required to take at least one literature course. While it would be a pleasure for teachers of literature to have all students want to dig deeply into everything that they are required to read, it is unrealistic to expect that to happen. Non-English majors should not have their inability to grasp the finer nuances of a poem held up to ridicule. They should be encouraged to provide an interpretation based on knowledge readily available to the general public, and the teacher should guide them to at least a working knowledge of the more common symbols and suggest broader possible meanings that they might explore.

The last implication is for teaching the writing of poetry. One common thread in writing-of-poetry classes is

the unacceptability of personal poetry. Students are told to remove themselves from the poem. They are encouraged to use metaphor rather than realism. There is nothing wrong with encouraging students to use metaphor, but there is nothing wrong with realism either. Many contemporary writers use realism. Many of them use metaphor. Most of them combine realism and metaphor. But I contend that most contemporary and even modern poetry is, to one degree or another, personal poetry. Students should not be encouraged to remove themselves from the poem. They should be encouraged to keep the feelings and passion inherent in the poem and, if applicable, to broaden the images of the poem so that the poem will reach and affect a broad readership. This can be done by teaching creative writing students mythology, symbolism, and literature from other ages, so that their base of knowledge from which the virtual transition will result, and from which, in turn, the wave function will collapse, is as broad as possible. If they are so taught, the chances are great that students will be able to create personal poetry that is literary and appeals to a numerous readers. The maturity level of the poet probably will affect the ultimate outcome of the poem and the degree of estimation readers place on the poem, but the result of teaching young writers to keep the emotional energy in their poetry while broadening their knowledge base should result in fewer "still lifes" being produced by young writers.

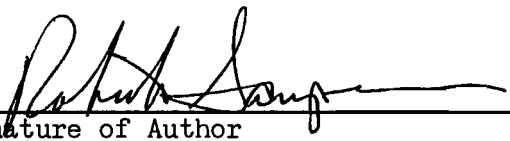
The quantum approach to poetry is not nearly as radical as it sounds. It is merely a new way of looking at old ideas. Cleanth Brooks wrote that form and content fuse. The quantum approach says that all elements that go into and surround the creation of a poem fuse to become that poem. The old dualism (form/content) gives way to a particle/wave duality in which various types of energy fuse to become wholes greater than the sum of the parts. A quantum approach does away with few of the theories that have come before; it merely expands those theories to include things previously rejected or overlooked. It puts the poet back into the poem and helps to make the poem accessible to the reader.

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