Introduction

The modes of expression used in scientific and religious study bear a similarity to each other. Both are heavily dependent upon metaphor and analogy to support their creative thought. This paper explores the characteristics of this similarity and shows that thinking in parables is alike in both. The thesis advanced is that, for the person who is both a Christian believer and a scientist, it is appropriate and natural to express one's religious beliefs and commitments in the language of science by constructing parables after the manner of Christ. Several examples of this are presented and their pedagogical contexts discussed.

Why Parables

When one hears the word "parables" or the phrase "speaking in parables" an image of Jesus teaching by the lakeside or confronting the temple rulers immediately comes to mind. His greatest accomplishment, indeed His mission, was to atone for sin; but after this achievement He is probably best remembered as a teller of parables.

In today's 20th century Western society parables seem anachronistic, a mere reflection of an ignorant, unsophisticated past. We recall that Christ taught in parables because of the "hardness of the hearts" of His hearers. Modern, sophisticated society expects to hear and see "the straight stuff." We are used to factual reporting, candid statements, and photographic invasion of privacy. We
expect to perceive the truth about things propositionally—"up front," as we say.¹

As a general rule we are quite intolerant of anyone's moralizing, or putting a "guilt trip" on us with "oughts" or "shoulds." And when we hear a parable coming—"a short fictitious story from which a moral or spiritual truth may be drawn"—we quickly put up a defense against what we feel is a retreat from rational discussion. But this is an unfortunate mistake. Parables are a magnificent example of rationality and demand the best intellectual involvement, both in the telling and the hearing. Moreover, a well-crafted parable is an art-piece in its own right and can be enjoyed as an aesthetic experience.²

For the Christian the parables of Jesus are one of the primary means of becoming acquainted with God's character. Through them we gain access, a little at a time, to the "hidden God." They are more than illustrations, but rather a mode of religious experience. They are a way religious faith is attained and transmitted from one person to another. Far from being a crutch for limping intellects, they are a spur to religious insight.³

Parable-like Thinking in Science

Whether they realize it or not scientists are well-acquainted with the mode of thought involved in parables. Broadly speaking, a parable involves placing two, at least, apparently dissimilar ideas or concepts in comparison with one another. One idea becomes an analog for the other. Now only one of these concepts or ideas will be directly addressed in the parable, but the other will be present by implication. (We shall have more to say about this later when we discuss the form and structure of Christ's parables.)

In science the comparison is not so subtle, but the mode of thinking by analogy is the same. Science advances when two different aspects of the same thing are fused in the mind of the beholder. It is like hiking in the mountains and seeing two peaks, only to have it strike you later that these two peaks were different faces of the same mountain.

Jacob Bronowski, in his appealing volume Science and Human Values, reminds us that "all science is the search for unity in hidden likenesses."⁴ It is not merely a collection of facts, not a photographic exposure of one's self to the universe. One "sees the facts" in the sense that they fit or are congruent with what else is known. There are no isolated facts. Even to say that we have seen or heard something new involves an assessment of all other things like it that we can remember. And again, to be aware that we are "seeing" or "hearing" anything
involves our ability to distinguish among the "things" that present themselves. With Bronowski we confess that "Order must be discovered and, in a deep sense, it must be created."5

Isaac Newton imagined that the same force of gravity that pulled an apple to the earth might reach beyond the tree tops to the moon and hold it in orbit, much like a ball on the end of a tether. He calculated the force of the earth at the distance of the moon, and compared it with the force of gravity at tree height. "I found them answer pretty nearly," Newton wrote. They agreed only nearly; no comparison is exact. But Newton seized a likeness between two unlike appearances, "for the apple in the summer garden and the grave moon overhead are surely as unlike in their movements as two things can be." Yet "he traced in them two expressions of a single concept, gravitation."6

We can take this a step further and make it immediate. Each person who revels in a poem, proves a theorem, or comprehends the application of a principle of science is a participator in the creative act that is embodied in that poem, theorem, or principle. In Bronowski's words, "We re-enact the creative act, and we ourselves make the discovery again. At bottom, there is no unifying likeness there until we too have seized it, we too have made it for ourselves."7

Active participation is at the heart of all teaching and learning. And nothing can substitute for the personal thrill of unlocking the meaning of a poem or capturing the moment of success after careful preparation of an experiment. For scientists, however, there is the continual give and take between theory and experiment, each mirroring the other. In parabolic fashion each is an analog of the other. Ideas that were once kept in separate compartments of the mind confront each other in experiment. Results of apparently separate phenomena are harmonized by a unifying theory.

We have come to accept the parables of Jesus as special. Not just that He spoke them, but that they convey more about God and His kingdom than could be said directly. Indeed, that is the case, for "we can only speak of God by means of the language of analogy."8 But we have come to expect of science direct pronouncements about the way things are. This popular view is false. Science, along with theology, "is essentially concerned with entities whose unpicturable reality is more subtle than that of naive objectivity."9 Both must use analogy as a primary theoretical tool.
Parables as a Christian Response

Jesus's use of parables included several motivations. They aroused interest and stimulated curiosity about His teachings. By shrouding what amounted to controversial ideas in the cloak of a parable, He could convey messages without creating prejudice. The educated classes caught the meaning carried by His parables, and felt the rebukes He often hid in them. The common people, however, warmed by Jesus's loving, accepting, and healing ways, were charmed by His uncommon expression. Since the direct meaning of His words was covered by parabolic language, spies sent by the leadership could not trap Him. The apparent meaning of His words violated no laws, and, because of the multitudes who followed Him, the Jewish authorities wouldn't dare molest this itinerant preacher.¹⁰

But most important for the context of this paper was that by using parables Christ validated the possibility of receiving spiritual truths through features of daily living. That we could be reminded of God by ordinary things and events was one of Christ's broad objectives for His parables. Not that we will "see God" in seeds, coins, sheep, or daily wages, as though God was somehow confined to these things; but that the common, the ordinary, the familiar will remind us of our loving God. "In every line of useful labor and every association of life, He desires us to find a lesson of divine truth...[that] will continually remind us of our Creator and Redeemer."¹¹

My thesis is that an appropriate response for the scientist/believer to the parabolic mind inherent in both science and theology is the construction of parables in the vocabulary of science. I wish to regard this construction as a creative act, not a homily nor an analysis, not an apologetic nor a didactic, but a synthesis of thought.

These "parables of response," if you please, will be written by a person of faith, a believer, one who confesses the name of the Lord. They will come from one whose scientific maturity has risen above the routine mechanics of the discipline, one who has had experience with theories and experiments and formulations that didn't work, one whose mind is still open to new ideas.

The purpose for writing them is to focus and strengthen one's spiritual understanding. By expressing what we believe in the language of what we know, we confirm both our beliefs and our knowledge. The same thing happens in science. A theory is confirmed by experiment, and experiments are organized by theory. Meaning emerges through their mutual analog.

These parables will not explain anything that isn't already known; indeed,
the parables will be declared failures if their metaphors violate scientific principles or religious tenets. They must be true to what is known and believed, else they betray misunderstanding and fuzzy thinking, scientific or religious.

I am not talking about endowing atoms with social natures, nor forcing morality upon the isotopes of a nuclear decay chain. We will surely not mistake the parabolic symbols for the spiritual message of the parable. Neither will we believe that the parable is in any way a scientific theory of the spiritual, as though its metaphors could be squeezed for new spiritual truth or tested for scientific validity. This would both trivialize the Gospel and mock science.

These parables are a response, as Bonhoeffer put it, to "find God in what we know, not in what we do not know; God wants us to realize his presence, not in unsolved problems, but in those that are solved." Writing such a parable is a confession of what is known and what is believed. The parable becomes, not a theory, but a testament; not a model, by a mode of religious expression.

Form and Function of Christ's Parables

"Parable" refers to a broad classification of several literary forms. Included here are similitude, illustration or example story, allegory, and parables proper (the narrow sense of the word). Each of these forms has characteristics unique to itself, but together they all share the common characteristic of an elaborated comparison. In Christ's parables (broad sense) all four forms appear, sometimes separately, and often with a mingling of forms. It is instructive to examine the forms and His use of them as an introduction to the function the parables (broad sense) served in His ministry. This treatment will be very brief and cursory, but will be sufficient for our purposes here. There are many excellent references in the Bibliography that discuss the form and interpretation of the parables.

Similitude

The simplest form is the similitude which tells of a typical situation or event just as it would happen in everyday life. The image or central figure in the similitude behaves just as it would be expected to. Similitudes begin with phrases like "Which of you..." or "With what shall I compare the kingdom of God...?" In other words, "It's obvious/well-known that..." The similitude tries to overwhelm the listener by the weight of its generalizations.

The mustard seed similitude is one of the best known of this form (MATT 13:31). The seed is planted, sprouts, and grows just as Jesus states. Other
similitudes have yeast added to flour to bake bread (MATT 13:33), or fathers delighting to give good gifts to their children (LUKE 11:11-13) just as would be done in real life.

Illustration
Illustrations or example stories are like similitudes in that the central figures behave as we would expect in real life, but now these figures are people. In the illustration of the Good Samaritan (LUKE 10:29-37) the behavior of the Samaritan is not analogous to what person should do, but is what a person should do.15 In the example of the Pharisee and Publican (LUKE 18:9-14) we have two character types and professional affiliations that were common to the society of the time. Christ built His example around the attitudes and relationships that actually existed between them.

Allegory
The allegory is an extended, coherent, freely told story in which there is a one-to-one correspondence between elements of the story and their counterparts in real life. It gets its name from saying something other than what it means. By using figures or symbols whose own behavior or characteristics are similar to those being hinted at, the allegory makes a veiled statement. In order to be understood the state of affairs that prompted the allegory must be known. That is, the allegory presupposes understanding of the symbolic connections with reality; else it is only a riddle. This implies that allegorical classification depends to some extent upon the standpoint of the reader or hearer.17

The allegory of the Sower is a typical example (MARK 4:3-9). Here we have the figures of the seed, the sower, birds, sun, various kinds of soil, and varieties of harvest. By itself the story is plausible and we may try to fill in the context from our own experience. We can see ourselves scattering seeds and coping with various problems of achieving a harvest.

Without Jesus’ interpretation, however, we would be hard pressed to see the connection between the birds and Satan. Standing alone the story could simply mean that God sends opportunities for salvation to all (broad scattering of seed) and each person gives his own response (behavior of sprouting seeds). The matter of the birds, then, is just filling for the story. Note that not every element in an allegory must have a real-life counterpart. Christ makes no specific connection for the figure of the sower, for instance, but it is clear He was referring to Himself.18
For many centuries Christians regarded all the parables as allegories. This view persisted down to our own time until it was thoroughly refuted by Adolf Juelicher around the turn of the last century. Most scholars today regard the parable of the Royal Wedding (MATT 22:1-14) as the only genuine allegory.

Parable

Parables proper (narrow sense) are distinguished as much by their contrast with the other forms as by their unique characteristics. They are, in my opinion, the highest form of analog writing, and require the most inventive skill to create. Christ's parables begin with phrases like "There was a rich man who had a steward..." (LUKE 16:1), or "There was a man who had two sons..." (MATT 21:28 or LUKE 15:11), or "In a certain city there was a judge..." (LUKE 18:2).

Like the allegory the parable unfolds as a freely told story to bring the listeners to understand something. We are not shown what is necessarily typical, but what happened once. The parable "means" what it says; that is, the elements of the story relate to each other as the story says. But there is no direct correspondence between elements of the story and real life. These elements are internally related within the story and do not point outward allegorically. The whole parable with its internal connections relates to ideas or circumstances outside the parable. It has a correspondence (analogy) to these outside circumstances.

Perhaps the most famous of all Christ's parables is the Prodigal Son (LUKE 15:11-32). It can be allegorized, of course, but its sweeping power upon the hearer does not come from allegorically implied meanings. Rather the turn of events within the story itself and the unfolding relationships between the father and his sons make their marks upon the mind of the listener.

Where the similitude gains respect from its pronouncement of what is universally accepted, the parable achieves credibility by its perspicuity. Where the allegory is intended for the initiated, the insider, the parable is addressed to an opponent, to reconcile opposition. Parables instruct by presenting what is unknown or hard to grasp through what is familiar and easy to grasp. They exhort by attempting to overcome resistance that stands in the way of doing good. They can be used to engage in scholarly arguments, as they were by the Jewish scribes of Christ's day. And perhaps most important, parables evoke a response from the listener.
Function of the Parables

Biblical scholars have several descriptions of how parables make their point. Juelicher, struggling with allegorical interpretation of the parables, and wishing to maintain their unity, argued that each one could have only one point of comparison or point of contact. Eta Linnemann continues this reasoning with her concept of "significant idea." She is concerned that we do not miss the meaning that the parable had for its first narrator. She believes parables were spoken as a form of argument, and that only one thing could be argued at a time.

Dan Otto Via sees parables linguistically as "language events." Language, he says, is "performative." It declares war, opens a highway, inaugurates a president. So parables draw the listener into an event by injecting new possibility into the hearer's situation. This provides opportunity for the hearer to make a decision.

Linnemann sees the decision evoked through conflict between the narrator and audience. The story in the parable brings the audience to a verdict. By claiming one thing as another (the parabolic analogy), the parable "interlocks" with the situation of the hearers. The verdict implied in the parable is pressed upon the hearers. They are impelled toward the decision to implement this verdict in their own situation.

In a similar vein Via describes how the decision event occurs when the listeners see the juxtaposition of parabolic content with their own contemporary self-understanding. "Thus theological reflection, as well as the original texts, may be a language event because it conducts a man to...the place of decision."

William Barclay puts it simply. Jesus "wanted to persuade men to pass judgement on things with which they were familiar, and then to compel them to transfer that judgement to something to whose significance they had been blind." This is precisely what happened when the prophet Nathan confronted David with the parable of the poor man and the lamb. David was compelled to transfer to himself his judgement of how the poor man had been treated. In a colorfully vivid phrase Barclay declares, "The parable is...a sword to stab men's minds awake!"

Examples

I have been experimenting with parable writing in classes I have taught in mathematics and physics. The results have not been as well-developed as might be implied by the foregoing defense, but a number of students who caught the spirit of the venture found it rewarding. What follows is a set of assignments on
parables I have given my students, and a selection of products produced by them.

Sabbath Problems

These problems were assigned to students in a second semester calculus course. After the subject of infinite series had been developed up through the tests for convergence and divergence, I asked the students to do the following problems over the weekend after church! Most of them thought it quite novel to do a math assignment on Sabbath.

I introduced the assignment by suggesting they think about phrasing their religious beliefs in the vocabulary of mathematics. They could view mathematical formalism as a means for expressing the dynamic aspects of their faith. Some class discussion was necessary to help the students get a feel for the exercise in terms of its symbolic representations. We also read the scripture references and began answering question #1 in class. The problems have allegorical connections, but an allegorical response is not required. Instead appropriate responses are discussions utilizing the allegories each student selected. We might call these Sabbath Problems "discussion parables."

**SABBATH PROBLEM #1**

Consider series of the form $\sum_{i=1}^{n} a_i$ or $\sum_{i=k}^{\infty} a_i$.

The index $i$ serves to count the elements in the series. Let the index be a counter of sorts for events in life. Then $a_i$ will be our response to or participation in those events. The sum over the $a_i$ will represent the "sum of what we are."

For example,

- $i=1$, could be birth
- $i=2$, first breath
- $i=1000$, first step
- $i=2000$, first word

For some $i = k$ we will meet Christ. Our response at $i = k$ will be $a_k$.

1. Is our life on earth like $\sum_{i=1}^{n} a_i$ or $\sum_{i=k}^{\infty} a_i$?

   To help you answer this read Hebrews 11:1–16, and see especially verse 13. Justify your choice in terms of this text.

2. Some series converge, others diverge. What spiritual analogy can you make with these mathematical concepts? Mention specific Bible characters whose
3. The sum of the first $k$ terms of any series is finite so long as the $a_i$ are finite. Also the terms of the series have a value which is a function of the index $i$ and is the same function throughout the series. Conversion to Christ might be likened to changing the function of the index. What is the nature of this change in the spiritual sense, and what kind of change does it suggest for the series? How will successive $a_i$ behave after $i = k$? What affect will this change have on the convergence or divergence of your series?

4. Find a spiritual analogy for $S = \lim_{n \to \infty} s_n$. Discuss the implications for the existence or non-existence of the limit in spiritual terms.

5. What aspect of series is like religious faith?

The choices the student makes in answering question #2 will predicate the answers to the remaining questions. The student will quickly reveal his/her level of understanding of both mathematical concepts of series and concepts of Christian belief by these subsequent responses. The teacher must be careful to check for consistent use of the answers to question #2 in succeeding questions.

In general students write more convincing responses if they identify convergent series with committed Christian living. But some have written equally cogent expressions in terms of divergent series. Examples of both viewpoints follow.

(Convergent Viewpoint)

An infinite series is like our life. Each successive term represents some conscious or unconscious decision or reaction of ours, anything that in any way affects our life. So our life at a certain time, $S_n$, is the sum total of all our experiences. While no one of them is extremely important, they each have an effect on our life. The index number is then like the specific time that something takes place.

Before we meet Christ the function that acts on $i$ could be either convergent or divergent, as some people are working toward a goal and putting everything toward it, but it is the wrong goal, so the function converges to the wrong limit. On the other hand, some people don't know what they're doing and have no specific goals, but are just trying everything, and so their life diverges because they don't know where they are going.

Upon meeting Christ, the function changes. For some people the change isn't as great as others, because for some their function was already converging, and the change isn't so noticeable. But for others, whose function diverged, the change is very obvious. For either person the change was just as miraculous though, since it is miraculous to change the function even the slightest bit.

In the same way that we each start out with a different function, God does not change us all to the same function. He modifies our own unique one to make our "life sum" converge on Him, in the same way that He takes our unique talents and puts them to work for Him.
If we stop at any point short of infinity, our "life sum" $S_n$ has not yet reached the limit intended. But even though we will never reach it of ourselves, we merely need to trust God to believe that He will add the necessary amount (whether or large or small) to our $S_n$ to equal His perfect limit. This is what Christ's imparted righteousness is all about.

Looking over some of the Bible characters, David was one whose life had been altered to converge toward God. The Bible says he was "a man after God's own heart," and although he didn't always make the right choices, God knew that his life was converging toward Him. Judas, on the other hand, appeared to his fellow disciples to be a pretty good man, so his $S_n$ appeared to be converging; but Christ recognized that the limit implied by Judas's choices was faulty.

—Nadene Baerg, CUC, 1974

(Divergent Viewpoint)

Life on earth is like $\sum_{n=a}^{\infty}$ because the sum of all our experiences and responses is finite. It may seem that the instance of those who were translated would contradict this, but this is not the case, since the time that these people were on the earth was finite.

In discussing whether the series converges or diverges, we must take into consideration what aspect of God's character and ours we are looking at. I would like to consider the aspect of love. The response $a_n$ to a situation is proportional to the love that prompted that response, $b_n$, where $a_n = cb_n$. From this it is obvious (if we ignore alternating series) that if our love is bounded, then our responses are also limited by our lack of love, and our series converges below the level that God has in mind for us. If, on the other hand, our love is without bound, as God's is, our responses, prompted by this love will also be unbounded.

The best example of the divergent series is Christ. By looking at the responses that we have recorded we can see that His responses were prompted by a consideration of more than the finite. He exhibited God's boundless love in all of His reactions.

The opposite can be seen in the responses of Ananias and Saphira whose love was limited to themselves. From this example we can see the results of our love approaching a limit.

Conversion is making the person "a new creature." This is analogous to changing the function at $i = k$ from a function which is approaching a limit to one that is increasing without bound.

As was mentioned in above, as long as $i$ is finite the sum is finite, so we could think of the sum of God's love and therefore his responses as being infinity. Since at any point in time, even through eternity, our sum will still be finite, we will be constantly learning and growing more like God through eternity.

I think that taking the limit could be thought of as the process of sanctification. In saying this I am implying that a perfect Christian character is not having reached a certain level or having approached a limit, but rather being a continually growing relationship.

Faith is also somewhat like taking the limit of the sum of a series. We can't physically add up all the terms and get the answer, but we are persuaded that if you could add up all the terms you would get the answer claimed. Faith, while it cannot prove what it claims, can convince us from the evidence, convince us that its claims are true.

—Charles McMillan, CUC, 1974
The following problem was distributed to the second semester calculus class after we had discussed their responses to the questions in Sabbath Problem #1. No further instructions were necessary, but cautions were given to remind the class to use their chosen metaphors consistently.

SABBATH PROBLEM #2

A power series of the form \( S_n = \sum_{i=1}^{n} a_i x^i \) is convergent in the limit as \( n \) approaches infinity only if \( x \) is selected in the domain \((-R, +R)\), where \( R \) depends upon the coefficients \( a_i \). The interval \((-R, +R)\) is called the "interval of convergence."

What spiritual application can you find for the concept of the interval of convergence? Read John 8:32-36, Romans 8:1-4, and I Corinthians 6:12. Use the metaphors you have previously developed for series in Sabbath Problem #1.

(Response from the Convergent Viewpoint)

In mathematical terms, in order for the power series to converge, \( x \in (-R, R) \), so there are limits on the value of \( x \); but inside those limits, there is freedom to converge from any \( x \) you want. Spiritually that concept can be applied to the fact that a Christian, after accepting Christ, is not free from the law but is free within the law. In order for the power series to converge its independent variable must stay within the interval of convergence, so in order for the Christian to become like Christ, he must remain within the law. It is also interesting to note that there is not only one value within the interval of convergence that will cause the power series to converge. So likewise, there is not just one way to be saved, but many, since each of us has different talents we are not exactly alike, yet we must all use our different talents within the law.

--- Nadene Baerg, CUC, 1974

(Response from the Divergent Viewpoint)

The concept of the interval of convergence \((-R, R)\), where \( R \) is the radius of convergence, is similar to a very important spiritual concept. In John 8:34 we see that sin is, in a sense, our master because those who have committed sin are servants of sin, and certainly we "all have sinned, and come short of the glory of God." (Romans 3:23). So we are caught in the interval of convergence, and deserve to die because "the wages of sin is death." (Romans 6:23).

The power series is convergent for \(-R < x < R\). If \( R \) were made smaller and smaller the interval of convergence would become smaller and smaller. And if somehow we could equate \( R \) to zero we would eliminate sin entirely. This feat is impossible, only Christ has lived a sinless life. So we must accept \( R \) to exist not equal to zero. This is the crux of Christianity: to realize that \( R \) does not equal zero, and that we are made free from the law of sin and death by the law of the Spirit of life in Christ Jesus. (Romans 8:2). We are not made free from sin but are forgiven our sins. (I John 1:9). Sin will exist until the great controversy is ended, and sin and sinners are no more. Only then will \( R=0 \) and the power series will diverge for all \( x \). What a beautiful truth!

--- Don Sharman, CUC, 1974
Try Writing a Parable

The following handout was distributed to a class of physics, mathematics, and computing students who were studying the implications of religious and ethical thought in their disciplines. I presented the activity in the context of Bronowski's "hidden likenesses" (see the section on Parable-like Thinking in Science).

1. Christ taught and preached using parables. These are "short fictitious narratives from which a moral or spiritual truth is drawn." (Webster's New Collegiate Dictionary) Christ's parables were built out of the experiences and culture of the people of his time. He made up a story that expressed a deeper meaning than that contained in the events or things of the story itself.

2. Here are some familiar parables.

   The Sower (Luke 8:4-8)
   The Good Samaritan (Luke 10:25-37)

   The Unfruitful Fig Tree (Luke 13:6-9)
   The Mustard Seed (Luke 13:18,19)
   The Yeast (Luke 13:20,21)

   The Great Feast (Luke 14:15-24)
   The Lost Sheep (Luke 14:25-33)
   The Lost Coin (Luke 15:8-10)
   The Prodigal Son (Luke 15:11-32)

   (There are many more!)

3. Jesus' parables are largely based upon the agricultural and commercial activities of his day. What "materials" might he use to build a parable for 20th century people? In particular, what concepts from mathematics, physics, and computing could a parable be build around? Remember, the parable must be faithful to both the scientific concept and the spiritual lesson it attempts to teach.

4. Try writing a short parable that begins "The Kingdom of Heaven is like this..." Complete the parable in two or three sentences using:

   mathematical concepts—continuity, closure, limit, differentiability, integrability, mapping/function, domain/range, integers, etc.

   physics concepts—force, inertia, field, resonance, particle, wave, center of mass, diffraction, etc.

   computer concepts—memory, computability, recursiveness, finiteness, control, logic, CPU, data structure, etc.
5. Here is a simple example of what you might try. It is based on one of Christ's familiar parables, and copies its structure. Recall that Christ likens the Kingdom of Heaven to a grain of mustard seed. Though it starts out small, full grown it is nearly a tree! Birds can actually roost in it.

"The Kingdom of Heaven is like a Simple Harmonic Oscillator. When stimulated by a source of energy near its resonant frequency, its response becomes very large, and it seems about to break."

6. Try writing an extended parable using concepts from these fields of study. Build the parable to teach a lesson about redemption, salvation, faith, conversion, Christ as human and divine, God's character, etc.

This parable will be several paragraphs in length. The spiritual message will be carried by more than one mathematical, physical, or computer analogy. The parable must not violate the usual meaning of the math, etc., concepts, nor may it lead to an erroneous or confused spiritual conclusion. Keeping both requirements in mind is the challenge!

All of the class accepted the challenge and wrote something. The ignorance of a few students regarding data domain conversions in a modem was exposed when they tried to make a metaphor for prayer.

But two students had already been thinking along these lines. This assignment gave them opportunity to release the creative thought that was stirring in them. What they presented that afternoon stunned the rest of the class, even though their expressions were somewhat sketchy. All recognized that in these two creative acts a beautiful synthesis had taken place. What for most of them had been a feeble attempt to copy Christ's method, became living expressions of conviction and hope. The messages transcended the technical vocabulary that carried them.

A few days later the students presented me with carefully written versions of their work. Both are based upon computer science vocabulary. The first below is an allegory of the creation and fall of man, Christ's atonement, and the final redemption of mankind; the second is a psalm in the format of the 23rd.
AN ALLEGORY OF THE KINGDOM OF HEAVEN

The Kingdom of Heaven is like a Master Unix Process, which operates a number of subprocesses. These subprocesses are free to process whatever they want, to choose to accept whatever input they want, and to output whatever they like, as long as it is within the general boundaries set up by the Master Process. Additionally, the subprocesses can communicate among themselves.

Now, when the system booted, the Master Process was. And initially it created a few perfect subprocesses that performed exactly as they should. Unfortunately, due to some inexplicable error somewhere, the subprocesses became somewhat erratic, and failed to perform the task the Master Process expected them to complete. The subprocesses spawned more subprocesses, and problems in the system perpetuated and multiplied. Eventually, some of the earlier subprocesses died, due to their erratic behavior. They died without completing the tasks expected of them by the Master Process. The subprocesses kept spawning more faulty subprocesses, and dying, and nothing was being accomplished.

Eventually the Master Process, not having the tasks performed that it wished to have performed, split itself to see if it could correct the problem. It ran the risk of the whole system's crashing to the possibility of one of the split Master Processes going bad and failing to join again with itself. The split Master Process did do the job correctly, though, and allowed those subprocesses functioning at that time to communicate exceedingly with it, and straightened them out. It was killed completing the task, but because it was not faulty, the other side of the split Master Process was able to save its memory and respawn it. It then joined back together.

Due to all of this, for some of those subprocesses that had ceased functioning, the Master Process was able to gather sufficient residual information from the memory they had resided in, and gather meaningful data. Furthermore, when it was ready to clean up the system, it would be able to reconstruct these subprocesses and have them functioning correctly again.

All that was in the past.... There are still many faulty subprocesses executing all over the system. There are also a group of corrected subprocesses functioning meaningfully together, computing and calculating to perform their intended task. Occasionally, a few will go faulty, and, also occasionally, a few of the faulty subprocesses will communicate with the corrected subprocesses, and through them start communicating with the Master Process again. And again, occasionally a few of the faulty subprocesses stumble onto bits of data left in certain pages of memory by the Master Process, and are able to interpret it, and then are able to communicate with the Master Process again, thus joining the corrected group of subprocesses.

It is rumored that in the future, the Master Process will clean up the system, will join all the corrected subprocesses, and respawn all those that died that were attempting to complete instructions from the Master Process. At this time there will be no more bugs in the system.

Until then the interrupts keep coming, and instructions keep processing....

—Kent Rue, LLU, 1987
THE LORD IS MY OPERATING SYSTEM

The Lord is my operating system,
    I have everything I need.
He allocates disk space for me to save my files.
He schedules my job at the right time.
He swaps my program without my notice.
Even though my requests threaten deadlock,
    you schedule your resources perfectly.
Even though I encounter unsolvable bugs,
    your utilities are accessible and ready to help me.
Your bound registers protect me.
You raise my response time,
    while my enemies' terminals are slow.
You log me on quickly,
    and allocate for me unlimited memory.
I know that you will give me high priority
    whenever I am on your system.
And your computer will be my home site
    forever and ever.

—John Wical, LLU, 1987
REFERENCES

1. "The thing is: there's no story written that has any value at all, however straightforward it looks and free from doubleness, double entendre, and duplicity and double play, that you'd value at all of it didn't have intimations of something more [special] than itself. It almost always comes under the head of synecdoche, a part, a hem of the garment, a part for the whole...; touch the hem of the garment for the whole garment. And that's what it's about all the time.... After all these years I'm sorry when I'm caught unready for somebody's figure of speech--somebody's metaphor. The symbol will do for it all." [Robert Frost, quoted in Reginald Cook, Robert Frost: A Living Voice (The University of Amherst Press, 1974), p. 42.]


9. Polkinghorne, p. 64


22. Linnemann, p. 4.


24. Via, pp. 52, 53.


27. Via, pp. 52, 53.

28. Linnemann, p. 27.


31. Barclay, p. 16.