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## DIGITAL TECHNOLOGY, TEXT AND MUSIC

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Two years ago I presented a paper called "Friends as Catalysts" in which I described the building of a house with little money, four years of sustained labor, and the help, inspiration and fortuitous involvement of certain key friends. I described one, Dean Foster, as a "supercatalyst". When you asked what we were working on next I mentioned something about a musical setting of the parable of the Prodigal Son.

Tonight I will complete the paper I began two years ago, this time exploring a remarkable relationship between digital technology, text and music.

Let's start with the technology. Somewhere around 1877 Thomas Edison presented a sketch to one of his employees with instructions to make something like it. The technician looked at it, scratched his head, and asked, "But what will it do?" Edison's reply: "It will talk." The phonograph's time had come.

The first recording medium was a tinfoil cylinder. Emil Berliner, an American inventor, introduced disks ten years later. All of these early recordings were purely mechanical with an acoustic coupling directly to the media. The limitations were pushed back with the introduction of electrical recording in 1925. I still have the album of 12" 78 RPM records of Tchaikovsky's 1st Piano Concerto I was given for Christmas somewhere around 1946. When I heard the Lynchburg Symphony perform this a couple of years ago, I still knew where the "record turns" occurred about every four or five minutes.

Because my older brother was in radio broadcasting I was into do-it-yourself recording at the professional speed of 33 1/3 long before the commercial success of the LP, high fidelity, and ultimately stereo on vinyl. We recorded on metal disks up to 15 inches in diameter that were coated with acetate. Three extra holes at the center allowed finger pins to supply the necessary torque to pull it under a cutting lathe. Because it was different and we could do it, we would often record from the inside out, reversing the tone arm movement everyone else saw, and amazing our friends. The sound quality, as you will hear a little later, was not very good, but it was recognizable. The only remaining sound of my Dad's voice is etched in home recorded acetate.

It was an American technician-turned -soldier who noticed something odd while stationed in Germany during the Second World War. A German radio station was playing uninterrupted recorded music over a span of time that greatly exceeded the capacity of the largest disks turning at the slowest speeds. When the area was secure, he went to the broadcast studio and saw something that had not even been rumored to exist: a magnetic tape recorder.

Magnetic recording was off and running. I still have an ancient Webcor wire recorder that was marketed in this country before tape manufacturing facilities could be designed and

implemented. This did not take long, and open reel recording took the nation by storm. It is amusing to see movies from this era focusing the camera on primitive tape recorders. Many people lack the manual dexterity for threading tape or film. Other formats soon appeared. The so-called eight track system that chewed up tape by spiral winding it beside itself soon died; the cassette survived.

We have been talking about analog recording. Today I have a digital tape recorder in my basement, and many Americans are listening to their music from digital compact disks.

There are two pairs of distinctions we need to clearly understand tonight:  
the differences between analog and digital,  
and between synthesis and sampling.

When a microphone's diaphragm is moved by the changing air pressure we call "sound", it converts that movement into electrical energy. A graph of the sound would essentially match, curve for curve, a graph of the electrical impulses. These electrical impulses can then be stored, and/or be used to trigger the reverse of the process, exciting the cone of a speaker, which, in turn, causes air pressure to change, producing a sound. This is called an "analog" process. There is a mechanical, physical relationship between each element in the loop.

The weakness in this approach has always been the introduction of noise. The surface of a record, the hiss of a tape, and activity within electronic circuitry itself all contribute to what audiophiles have called the "signal-to-noise ratio." Most of us know what happens if you make a third or fourth generation copy of a cassette, or for that matter, attempt to pirate a rented movie on VHS. Analog is simple and straight-forward, but it is nasty.

Digital technology has given us a much cleaner approach to manipulating sound. Using an analog-to-digital converter, the electrical message from the microphone is quickly translated into numbers, digits, specifically zeros and ones--offs and ons. There are several factors that determine the quality of the results. Tonight we will look at just one: the sample rate.

Think of a reel of old-fashioned movie wet-film. It is a series of still pictures. At a slow sample rate of two or three frames a second, the image on the screen is jerky and almost unwatchable. At sixteen frames per second the resolution is good enough for amateur photography. Millions of feet of narrow gauge home movies were shot at 16fps to the delight of every child having a birthday party. Things seem to move smoothly enough. The pros, with more money to spend on film, increased the sample rate to 24 fps and produced steady apparent motion, even though the bright arc lights of theater projectors encouraged the nickname, "flicks."

When describing film speed we are using a parallel for what digital audio refers to as the sample rate. The question is, how many times a second should we take a snapshot of a sound to produce useable reproduction? Clearly, a single snapshot would be meaningless noise. A click, at best. Even at twenty-four samples a second, these thin slices of audio would reveal nothing worthwhile to the human ear. We now have an otolaryngologist in our club. Perhaps, when I am

through, we can discuss whether or not the ear is more sensitive to stimuli and more discriminating in the data it sends to the brain than the eye.

However that may be, it takes thousands of digital samples per second to reproduce recognizable sound. The sample rate selected for recording digitally to compact disk is 44.1 KHz. Already, people with golden ears are complaining that the number is too low. 48, or even 50 KHz, are recommended and actually used in special applications. Still, the so called "CD quality" reference point is fixed at 44.1, good enough for most of us and far better than anything recorded analog. Most importantly, digital numbers are clean. There is no extraneous noise that is multiplied with each copy, there is no mechanical dependency upon accurate turntable speeds to prevent wow and flutter. The numbers are read into a memory buffer like water behind a dam. The supply of data for conversion to sound is always there waiting.

The compact disk is only our current step on the way to supplying this data. A new format, DVD, is expected about the end of this year that will greatly increase the amount of data that can be encoded on its iridescent surface (4.7 GB). It is only a matter of time until there will be no moving parts at all. No disks, no tapes, no motors, no gears or pulleys. The next generation may purchase its music on little cards like this. When ROM technology advances to the point that a gigabyte or two can be inexpensively incased in plastic, all those ones and zeroes we are reading now from CDs will originate in silence and stillness.

Memory, the reservoir of all these digits, becomes the chief limiting factor for digital audio. Ten seconds of stereo music recorded at 44.1 KHz requires 2 megabytes of memory. While the price of memory is coming down, it is still expensive. A CD can contain about 650 megabytes of data, roughly 72 minutes of music recorded as ones and zeros. The material used is fairly cheap to come by. Chip ROM and RAM (do you need to hear again what they stand for? Read Only Memory and Random Access Memory?) comes more dearly. Today we hear of people having 8, 16 or even 24 megs of RAM in their personal computers. In terms of digital audio that is not nearly enough. Even so, we don't have to go back many years to find that 64K was a luxury and a half meg a dream.

The first distinction: analog/digital.

The second: synthesis/sampling.

The synthetic production of sound began with an electronic device known as a signal generator. These produced a sine wave of varying amplitudes. They were first used for aligning the cumbersome oscillator circuitry of radios. Again, I grew up with one at home. I will always remember the warm summer day when all the windows and doors were open. Mrs. Rodgers, the neighbor across the street enjoyed soap operas. Her radio was in the front of the house, and her kitchen in the back, so she turned the volume up high. My brothers and I were making jokes about the mushy melodrama we could not avoid, when an idea suddenly occurred to us. We put a long wire on the back of our signal generator to form an antenna, turned it on, and began twisting the knob. A horrible howl emitted from Mrs. Rodger's radio. We were in stitches. She turned it off.

The sine wave is a pure tone with little character. [tape]. This is the tone that became musical in an instrument called the Theremin and played along with orchestras in some spooky movies during the 40's. It remains the tone used in audiometers to test human hearing and may or may not be the best choice for that purpose.

Other basic waves easily synthesized electronically are square [tape] and sawtooth [tape].

There are other factors than tone in musical expression. The attack of a note is vital. What happens while it is being held and after it is released are also important characteristics. Early electronic synthesis with analog equipment was carried out in academic laboratories with huge budgets.

Milton Babbitt was professor of music at Princeton when I was early in my ministry. He had access to the megabucks of equipment at the Columbia-Princeton Electronic Music Center. This is a fragment of his "Composition for Synthesizer." [tape] Jacques Barzun could only say, "We are not here to like or approve, but to understand." The French were busy cranking out what can be translated as concrete music of the same genre. The sounds were popular as atmospheric effects in movies such as "Forbidden Planet", but as music, it never caught on. I was with Milton Babbitt once when someone asked him why he was teaching instead of composing full time. He was quick to reply, "I like to eat."

Bob Moog thought it would be fun to connect a piano style keyboard to an analog synth. By plugging patch chords into various terminals, the tone could be changed. It is interesting that to this day, instruments on electronic keyboards are still called "patches".

In 1968, Moog's keyboard analog equipment was used by Walter Carlos to produce an LP called, "Switched on Bach". This was the first revelation of the expressive potential of synthesizers. No longer an abstract academic exercise, this stuff was real music. [tape]

Sales quickly topped one million. Newsweek called the synthesizer "the Stienway of the future." Later, Walter endured a sex change and is now Wendy Carlos. It is a bit of a personal coup that the August 95 issue of Keyboard Magazine which has a feature article on him/her, also features my picture at the center of page 47.

In the interests of time constraints I will skip important steps in the electronic synthesis of music with only a mention of the Hammond B-3 electric organ. This thing has become a much sort after classic. It had the potential for rich musical expression under the right hands.

Attempts to synthesize familiar acoustic instruments were sort of successful. Musicians early noted that the sine wave reminded them of a flute, the square wave a clarinet, and sawtooth, brass and strings. By increasing the complexity of the waves, paying attention to the envelope of attack, sustain, release and decay, sounds that could be called by such names as flute, clarinet, trumpet and strings were put on the market. While these were fun for those who played with them, real musicians smiled smugly and knew they were secure.

So much for analog synthesis.

Digital sampling is something else altogether. This is the technique of actually recording the tone of a legitimate acoustic instrument, putting it in digital memory, and then manipulating it. Because digital memory was rare and expensive, early experiments had to be brief. Working with only a few kilobytes of memory in a computer, the first samples were usually less than a second long. The “orchestral hit” is a well-known effect left over from this era. **[tape]**

The problem was how to play sustained musical phrases with such short sample data. Since computer memory has an address for each byte, it was easy enough to tell it to go back to a certain location and start playing the sound again. It could do this repeatedly, endlessly looping through a selected portion of a sample as long as a key were held down. **[tape]**

To give it an expressive life, vibrato was added with a low frequency oscillator, and the volume could be increased or decreased at will, often by applying or releasing pressure on the key, a process known as aftertouch. The sharpness of the attack could be controlled by the velocity of the keypress. Suddenly, digital technology had unleashed new musical potential.

I am very grateful to my son for getting me into computers at the very beginning of the personal computer revolution. Yes, I resisted. David and I ended up publishing the first book ever of computer Bible games through Harper and Row. The beauty of starting early is that I was never overwhelmed by so much to learn. I have learned small lessons over many years, a painless process. Computer music has been a part of my experience from the beginning. Of course it all remained quite primitive until 1985 when I encountered my first MIDI system. MIDI is an acronym for “Musical Instrument Digital Interface”. I was immediately hooked and have played with it now for eleven years. The technology has made enormous advances each year, and the prices have fallen dramatically. I have a studio in my basement at home that would have filled a warehouse and cost hundreds of thousands of dollars just a few brief years ago--if in fact, anything like it could be found. To see how far we have come, let’s listen to the evolution of two sounds across those years: a piano and a solo violin. **[tape]**

Here is a brief passage of my own music from a production we will use to conclude this paper. It is pure string quartet--the most off limits sound of them all for electronic musicians. This was impossible for almost everyone before January last year. **[tape]**

Most listeners detect no trace of computer music here. Of course, I do, but then I know what I am listening for. My intention is, beginning next week, to work through all of this production one more time, polishing, tweaking, removing every remaining trace of digitization. The truth is, most of the music you hear today on soundtracks behind movies and TV is originating in the state-of-the-art equipment I have at home. It is rare when a movie can afford a live orchestra. Watch the credits. If it says “music composed and conducted by”, it is mostly live. If it says “music by”, it is probably digital.

So much for the digital technology. Hey, I’m having fun. Are you?

There remain the other two items of my topic: text and music.

I invited Dean and Maxine Foster here tonight because we have a very special symbiotic relationship. Dean is the default poet laureate of Rockbridge County. He writes sonnets with a flick of the wrist. Let anyone have an anniversary, a birthday, a celebration of any kind, and Dean will present them with a poem on the level of the greats, often with a sublime wit lost on dullards, myself included.

About twenty-eight years ago, using his unique brand of Socratic questioning, he pulled out of me the fact that I had been in a high school band, and had arranged a selection from the orchestral score of Grofe's Grand Canyon Suite for band, which I conducted, and yes, which I preserved on an acetate disk. It was a moving experience for me to dig it out so I could play less than a minute of it for you tonight. **[tape]** I had no particular preparation to do that other than having played in the band for a few years. I just wanted to do it. I remember when I first looked at Grofe's score I had no idea how to interpret the alto clefs read by violas, or the tenor clefs sometimes used by cellos and bassoons. I also remember experiencing writer's cramp for the first time when I copied all those parts by hand.

One day, about a quarter of a century ago, we were riding through Rockbridge Baths--I could show you the exact spot in the road--Dean said to me, quite casually, "Bernard, how would you like to write a cantata?" I laughed, asking, "Who would ever want to sing it?". Inside, my heart was leaping. *Yes! Why hasn't anyone suggested this before? That is exactly what I would like to do!*

"Oh, singers love to perform. Don't worry about that. I've written some poems I'd like you to read. Maybe you could set them to music."

"No way," I said. "I'm not a musician. I can't do that."

When I picked it up, this is what I read:

When my baby first sees, he is smaller than wee. . .

(There were babies of my own at home)

Does he see Jesus and God here on earth?  
Does he see back to glory before his birth?

Ignoring the heresy of precognition I said, "It needs a flute. I think it needs a flute."

"You've got one. My best friend plays a flute." **[tape]**

That is the first song I ever wrote. I honestly can't explain it. All I know is that it happened. Maybe Dean is a hypnotist or something. All I know is that he wrote the text and I wrote the music and those kind people in Rockbridge County gave life to about forty minutes of it.

One thing leads to another. That first cantata was simply a warm up, a wrist exercise for both of us. Soon enough, he came to me with an enormous volume of poetry dramatizing the parable of the Prodigal Son. In a year or two I had set every word of it to music and it was performed in Lee Chapel at Washington and Lee University. This time our soloists and chorus were accompanied by an orchestra of three flutes, a french horn, piano, percussion and string quartet. The electronic effects I wanted were supplied by a tape recorder.

Frankly, it was a disaster. It had its moments, but as a whole it was terrible. I mean really bad. The event felt more like an abortion than a birth. I was greatly disheartened and discouraged.

Dean was as buoyant as ever. "We had a few problems," he acknowledged, "but on our next work we'll iron them out."

Then our mutual friend, Pierre Daura died. I buried Pierre beside his wife in our church cemetery at Rockbridge Baths. VMI planned a retrospective exhibit of Pierre's life and work. Dean and I were asked to write a Requiem. By now, our scruffy group of soloists and instrumentalists had evolved into the Rockbridge Orchestra and Chorus. Again, it had its rough edges, but it was our most musical effort to date, and I thoroughly enjoyed scoring for a full symphony orchestra.

Dean then came to me with a series of poems splitting at its side with humor: "At Home on a Range of Appliances." It was filled with puns, sarcasm and wit to the highest degree. I began to sketch out a few phrases.

And then I moved to Lynchburg. The train was broken. The music stopped. Moving to Florida in 1981 seemed to end such fun forever.

Shortly after we returned to Lynchburg our good friend and former neighbor, Martha Daura, had lunch at our home. We talked excitedly about her plans at Lynchburg College. A Daura wing would be added to the Dillard Fine Arts Center. After lunch she went down into my basement to see what I was doing with the computer. I demonstrated how I had reset some of that old Rockbridge Baths music into digital memory. Before she departed that afternoon, she told me she wanted me to rework the Requiem, to see if the computer could accompany live singers. I fought to hold back my tears of joy. "Dear Heavenly lambs, requiem, o requiem!"  
[tape]

After this I gave four years to building a house in my spare time. My computerized music

came to a standstill. Dean kept asking for new music. I explained that I had essentially maxed out on that. The tones were synthetic. MIDI was limited to 16 channels. That's not enough lines of music for symphonic work. We had already daisy-chained two computers to get it up to 32 channels, but it was neither challenging nor satisfying. He insisted that I do some research. "Something," he explained, "has surely happened since we did the Requiem."

Three months of exploration left me numb and dumbfounded. I could not believe what had taken place while I was sawing wood and driving nails. Equipment existed that was undreamed of only a year or two before, and at a prices that were unbelievable. Digital technology was leaving Academia and Hollywood and entering the home studio.

By adding something called "ports" one computer could now address many 16 channel modules. I have 128 channels at my disposal today, and could easily increase it to 256 with a simple plug in card. By inventing something called "banks", the tone producing modules are no longer restricted to 128 instruments. Now there can be thousands of instruments. By increasing memory, huge, delicious, realistic samples can be played--many of the linear, not looped. The realism and musical expression have taken a quantum leap forward.

Several friends helped me get my hands on that kind of gear. I am into my third year at this professional level of digital music. I have been learning to use it by rewriting the music for "The Prodigal." We cut out the worst of the bad, and Dean wrote enough new material to make it about 50% fresh ideas. Next week I will begin the process of polishing the orchestration and recording tracks for public performances in Lynchburg and Lexington sometime later this year.

Here are a few samples of what we've already got. **[tape]**

# The Prodigal

*A Choral Parable*

Text by Dean Foster

Edited by Maxine Foster

(1974, revised 1994-95)

## Part I

### I. Home

#### *Chorus*

Thou shalt not! Jehovah said: Kill not, steal not, swear not!  
Thou shalt honor God and man, thy parents and the law.  
Honor parents? Honor God and love a jealous God?  
How can mortals made by Him, a force they never saw  
Honor Him who authored them? For authored are we all!  
Should authors thus instruct their casts,  
"Shout huzzahs unto me?"  
Must fathers too command their sons,  
"Give parents all the praise"?"  
This son will fail to know just why or who or what is he,  
'Til he turns his steps from home to where the self can grow,  
Where the anguish of one misstep may teach life's purpose clear.

#### *Benanon*

Too small, my world's too small.  
I seek thoughts of destiny, but no use,  
My knowledge is not enough.  
Appetites call without my bidding.  
I must get free. I will talk with father.  
Get his help. Know his mind.

#### *Father*

Almighty God! Dear God of love, the sire of all:  
Gave us our sons.  
So briefly have we breath of life,  
so short a time with our loved ones.  
All neighboring fathers lost a child, Thou spared ours,  
Eli and Benanon.  
They fled the serpent and lived through plagues,  
When Ben was small how ill was he,  
Two more times his health gave way, yet still he lives,  
Our thanks to Thee. He was restored, and lives today.  
Let him survive us, O Lord, I pray.

#### *Mother*

Dear God, let me echo my husband's prayers.  
To Thee we prayed, Thou understood.  
Our children have survived and spared us cares, only Thou could!  
They fled the serpent, and lived through plagues.  
Ben, our younger one, so ill, but in your mercy  
He lives, our thanks to Thee.  
He was restored, and lives today.  
Let him survive us, Lord. Amen.

#### *Benanon*

Father, my father, the Lord of all that counts,  
Your lands reach out, out to all the eye can see.  
Vineyards, fruit and corn, your grain, your kine, your goats,  
Your nut trees are heavy with fruit. All goes well with you.  
But this bounty is becoming boring!  
Each new day finds me tending  
Your growing wealth. It is too dull!  
But what have I to look forward to?  
How can I be worthy of you? What and who am I?  
To gain my selfhood, I must quit protected childhood,  
To gain mature adulthood, or try!

Dear Father, give me my share of property,  
The share that would fall to me.  
I have not spoken with my mother,  
Nor with Eli, my elder brother.  
If asked, he may prefer to stay.  
Home's not for me! I must get away!

#### *Eli (Interrupting)*

Father, believe me! He speaks the truth!  
Home is where I want to spend my time.  
I can do his work and also mine.  
Let Benanon go. He speaks the truth!

#### *Father*

Take the half of all I own.  
Welcome, boy, you know my land.  
All's your due, oh Benanon.  
Sell it, sell it, it's for you alone.  
Have this wealth of yours in hand.

#### *Chorus*

Oh, be off, be on you way!  
Shed that look so insincere.  
Leap and dance away from here,  
Take full promise free of fear.  
Grand adventure calls, distance calls!  
Learn how to follow, leap and turn  
From regrets, thus never yearn  
For the win when done's the race.  
Off you go, leap and dance,  
Hard earned pay, be on your way!  
Leap! Dance! Drink! Eat!  
Dance and drink and sing!

## 2. The Far Country

### **Benanon**

Thank you, thank you, Father, Eli -- everyone!  
Now I'll prepare at once, this decision's done!

### **Eli**

God speed your steps, oh brother mine.  
Watch out for snakes, women and wine.  
Refuse all gifts, however fine.  
Beware of thieves, gamblers and swine.

### **Benanon**

Just where I'll go, I do not know.  
What distant place, to what far land?  
But while I seek, I'll surely grow,  
My legacy I'll have in hand.

### **Instrumental:** The Road out

### **Eli**

There he goes! Many servants may rejoice  
Ben makes demands. Now I'm glad of father's choice  
To let him go, let him leave. . .let him run. . .  
Truth to tell, while he's gone we'll get more done.

### **Benanon**

My family sent me forth with no blame  
Asking though that I return, well endowed  
With servants, stock, kine, and wide-spread name --  
Husbandman before whom heads are bowed.  
First, however, why not have a fling,  
Party, meet others, make some fine friends  
To get direction. . .then learn everything  
Of local needs and economic trends?  
I've trudged far enough.  
I'll stop here--this land looks just right,  
Farms and people prosperous--stay the night;  
Find a home I can rent.  
This place is heaven sent.

### **Ruth**

Greetings! I am Ruth, daughter of Philip  
Whose country lodge you have rented.  
In your honor a feast is planned.  
The invitations have gone forth.  
We could change that - move to your lodge,  
Have celebrations honoring your arrival.  
Come, let's prepare!  
You will meet your new friends!

### **Benanon**

Let's toast our love! Let's toast our joy!  
Let's toast our wine and you! Let's have a feast,  
A bounteous feast! Enjoy it at your ease.  
Drink, drink, drink, let's frolic as we please!  
Plenty more where this came from,  
Steep you and me in rhapsody.

### **Chorus**

We will eat, we will drink; so merry we shall be,  
With these loves, all our loves,  
With such friends, all are friends!  
All for one, friends must love,  
With each friend joy attends.  
Revel all. All for one!

### **Benanon**

If our chief end is to glorify almighty God,  
Why am I so excited by wine and laughter?  
But my father, the ideal man, bade me to go --  
At liberty to find my way, my hereafter. . .  
No regulations, no father to worry, freedom!  
No nagging conscience, I call the shots!

### **Chorus**

Forget your home, forget the world --  
Where lie so many sadder plights.  
Man's search for meaning so unsure,  
Produces hell with heav'nly sights.  
But we have found, in light of love,  
Revolving fun, and truth more real.  
Now Benanon, like Solomon,  
A thousand different lives will feel!

So let's play, as we may, let us dance!  
Let us sing! So let's play!  
All the while, see us smile,  
As we laugh, as we love! All the while!  
Dance this step, right and left,  
Then below, now above, dance and sing!  
La, la, la, la. . .

Too late aware of his dire need to change;  
Too much poor Ben has spent of life and hope;  
Too great his disappointing of loved ones;  
Too little had he learned of how to cope  
With those who take but never, never give --  
With false smiling mouths -- no smiles in their eyes  
With promises that proclaim they shall pay  
With fervent vows that are just flagrant lies  
When should he have worked for prosperity?  
Who, pray's that "I" he seeks, that's here not there?  
Where might he trade his mouth for wisdom's sake?  
What chance have prodigals fortunes to make?

### **Benanon**

Where are all my former friends?  
They were legion yesterday.  
It seemed that we were so close,  
Fair the weather, yesterday.  
Honey keeps the honey bee,  
Money's all that my friends see.

**Chorus**

Fortune paid a happy call,  
When Benanon came round.  
Better parties than he threw,  
We never yet have found.  
But this simple fool has paid,  
A sadly silly cost,  
For poor Benanon is done,  
His gold and friends are lost.

Farewell, dear Benanon,  
No more feasts you can buy,  
So we shall seek another fool,  
And teach him squandering's wrong.  
We'll find a richer son,  
No foreigner lasts for long.

**Father** (Job 14:1-2)

Man that is born of woman  
Is of few days and full of trouble.  
He cometh forth like a flower  
And is cut down.

**Mother**

Fertile land is fruitful when rain,  
In plenty, greens the fields.  
When full crops in harvest yield,  
Bursting granaries are sealed.  
Richly crowded ev'ry bin.  
But tragedy, oh woe,  
Woe will be when famine  
All the land will strike.

Food the least for man and beast.  
Drought hits rich and poor alike.  
Suffer failure, pestilence,  
Lank hunger is but death in life.  
The old in pain, the babies cry,  
All men despair, and crime is rife.

God, give us fruit and meat again.  
Before we perish, give us rain.

## Part II

### 1. Dreaming Among the Swine

**Instrumental:** Porcine Nocturne

**Benanon**

Lord of love, I'm tending these loathsome swine.  
Daily I grow gaunter every way.  
See my eyes ablaze! See my bones protrude!  
I hunger, Lord, for food I intently pray.  
What a lot is mine! I envy these fat swine.  
They have their filling fare,  
Forget not my despair.

How I long for home. Weary, hungry.  
I must sleep.  
Oh, to sleep like a baby. . .

**Mother**

Lullaby.  
There, sleep, my lamb.  
Let calm rest restore thee.  
Ne'er recall what caused  
Your dear face to frown

**Chorus**

There! You slumber in silent sleep, softly.  
As you sail like a wind-blown ship on the sea.  
One day you can flee from this distant land.  
We'll sing and laugh our way home, hand in hand.

## 2. Coming to Himself

### *Chorus*

His hunger overwhelms his hope,  
And colors all he does or sees.  
The famine from this endless drought  
Has weakened ev'ry hopeful thought.  
It seeks the anguished end of him.  
to starve and die while yet so young,  
Before he learns how he should live,  
Creates despair he can't pass on.  
Swiftly comes death to Benanon.  
His final prayer to God he'll give.

### *Benanon* (Psalm 139)

Oh God! Dear God! Please hear my plea!  
You have searched me and known me,  
You know everything I do.  
From far away, you understand all my thoughts.  
You see me whether I am working or resting.  
You know all my actions.  
Even before I speak, you already know what I will say.  
You protect me with your power.  
Your knowledge of me is overwhelming.  
It is too deep for me.  
Where could I go to escape your spirit?  
Where could I get away from your presence?  
If I ascend to heaven you are there!

If I lie down in hell, you would be there.  
If I take the wings of the morning,  
And dwell in the uttermost parts of the sea.  
Even there your hand shall guide me,  
And your right hand shall hold me.  
God, how difficult your thoughts are for me!  
Search me, and know my heart.  
Try me and know my thoughts.  
See if there be any wicked way in me,  
And lead me in the way everlasting.

### *Chorus* (Job 14:7-9)

For there is hope of a tree, if it be cut down,  
That it will sprout again and that the tender branch thereof  
Will not fail, though the root thereof wax old in the earth,  
And the stock of it die in the earth, die in the ground.  
Yet at the scent of water, it will bud.

### *Benanon*

My father's servants do not starve as I do,  
They have bread and more.  
Too long have I been gone from home,  
Too long since I saw sights I knew,  
The strange grew stranger as I drew away  
Farther from my home. . . I will go home!

## 3. Home

### *Instrumental Interlude* The Trek Home

### *Chorus*

Distant figure, dusty one,  
Shuffling forward, who is he?  
Might it be the wandering son? Can it be?  
Yes, yes, yes, here comes Benanon!  
It is he! The Prodigal returns!  
We hear he consumed his father's fortune after all.  
Squandered all beyond recall.  
His father may not take him back,  
This wayward, foolish son.  
Doesn't he look ragged, wild?  
Like a beggar, common man?  
Could this be the great lord's child?  
This prodigal was profligate,  
This long, long absent son!

### *Father and Benanon*

(B) Father, father, pray forgive me.  
(F) My son, oh Benanon, my dear boy!  
(B) I have sinned against the heaven.  
(F) Turn now, let me see your face.  
(B) I have sinned before you sadly;  
No more can I be called your son.  
(F) Come closer, boy, I will kiss you,  
Forgiving as we embrace.

### *Mother*

Our son is home, for him we prayed and for others  
That they may be at one with God, now and ever  
For humankind, for their fruitful, blessed happiness  
Productive, creative, faithless never, love forever.

### *Benanon*

Forgive my tears, they flow from great joy,  
Joy of homecoming, joy of reunion and love.  
. . . Now and ever. . .  
For this haven that was my home until I left  
And then learned to love, like blest heaven above.  
. . . Forever.

### *Ruth*

Come, embrace! The circle's now restored--  
Glad gongs now strike, in tri-part chord!

### *Chorus*

Blast all trumpets!  
Strike the great gong!  
Ring, ring the bells!  
Welcome home Benanon!  
Love then our God, give him the praise,  
Praise father, son and brother.  
Bless too our debtors, Christ has said,  
Love always one another.  
Seek out his promised country,  
Love's bond no force can sever.  
Live unified forever!