

# Always Look on the Bright Side of Life

*Am D G Em*  
Some things in life are bad they can really make you mad

*Am D G*  
Other things just make you swear and curse

*Am D G Em*  
When you've chewing an life's gristle, Don't grumble give a whistle

*Am D7*  
And this'll help things turn out for the best

*G Em Am D7 G Em Am D7*  
And always look on the bright side of life

*G Em Am D7 G Em Am D7*  
Always look on the light side of life

If life seems jolly rotten there's something you've forgotten  
and that's to laugh and smile and dance and sing.

When you've feeling in the dumps don't be silly chumps  
Just purse your lips and whistle - that's the thing

And always look on the bright side of life  
Come on always look on the bright side of life

For life is quite absurd and death's the final word  
you must always face the curtain with a bow  
Forget about your sin - give the audience a grin  
Enjoy it - it's your last chance anyhow.

So always look on the bright side of death  
just before you draw your terminal breath

Life's a piece of spit when you look at it  
Life's a laugh and death's a joke it's true  
You'll see it's all a show - keep'em laughing as you go  
just remember that the last laugh is on you

And always look on the bright side of life  
Always look on the right side of life  
*A F# Bm E7 A F# Bm E7*  
And always look on the bright side of life  
Always look on the right side of life (retardando)



This was a triumph  
I'm making a note here: "HUGE SUCCESS"  
It's hard to overstate my satisfaction  
Aperture Science  
We do what we must because we can  
For the good of all of us, except the ones who are dead

But there's no sense crying over every mistake  
You just keep on trying 'til you run out of cake  
And the Science gets done  
And you make a neat gun  
For the people who are still alive

I'm not even angry  
I'm being so sincere right now  
Even though you broke my heart  
And killed me and tore me to pieces  
And threw every piece into a fire  
As they burned it hurt because I was so happy for you

Now these points of data make a beautiful line  
And we're out of beta, we're releasing on time  
So I'm GLaD I got burned  
Think of all the things we learned  
For the people who are still alive

Go ahead and leave me  
I think I prefer to stay inside  
Maybe you'll find someone else to help you  
Maybe Black Mesa  
That was a joke, haha, fat chance  
Anyway, this cake is great, it's so delicious and moist

Look at me still talking when there's Science to do  
When I look out there, it makes me GLaD I'm not you  
I've experiments to run  
There is research to be done  
On the people who are still alive

And believe me I am still alive  
I'm doing science and I'm still alive  
I feel fantastic and I'm still alive  
While you're dying I'll be still alive  
And when you're dead I will be still alive  
Still alive, still alive

# We Are Gathered 2022

by Daniel Speyer

Welcome to the 2022 Secular Solstice.

After two disrupted years, we are back. Battered but unbroken. Gathered again, and most importantly NOT DEAD YET.

We are gathered here as a community to mark the longest night of the year with a ritual that upholds our values.

Since it is the longest night of the year (well, close enough), there's going to be a lot of darkness. Sure, we start silly. But I'll warn you now, it isn't staying that way.

And while I can pretty much promise the days will start getting longer again soon, because we have astronomy now and that's awesome, I can't promise the same about the more metaphorical darknesses encircling our civilization.

And tonight is not about blind hope.

But it is, in its way, about hope.

Which is why tonight's ceremonies will be scattered with little vignettes about high-leverage historical actions that are, in their respective ways, encouraging. Or at least I find them so.

Tonight is also, in a way, about community.

Some of you are very linked in. Your partners, your friends, your roommates, your favorite writers – all are here in this room or in rooms like this one in other cities. And some of you aren't. For some of you, maybe this is your first meatspace rationalist event. For some of you, this might be your first contact with some of the ideas we're touching on tonight. (If so, this isn't going to be a very good introduction, being optimized for emotion rather than clarity. But you'll have plenty of opportunity to research later, and I have confidence in you.)

I only want to gently nudge you towards thinking of yourself as one of us. Such things shouldn't be rushed. Eventually you will know whether you are or not.

But I do want you to feel welcome. Even if you're confused. We're all confused, one way or another.

And I do want you to be a part of things tonight. Tonight isn't about those of us on stage doing things to you or for you. It's about everyone in this room doing things together.

So I ask you to take the rest of the evening seriously. When it's silly, take the silliness seriously. If you disagree, disagree seriously.

And I ask you to sing along. At whatever volume you're comfortable with – even if that's a whisper.

And I ask you not to applaud. Applause is a custom from performances, not rituals. Also, you're active participants, so you'd be applauding yourself. And that's just gauche. There'll be a chance to applaud individuals at the end when I thank people by name.

That's enough introduction for now. On with the ritual. Stepping up the seriousness one small notch.

# When I Die Chord Chart

|   |    |   | [partial measure] |              |                   |                   | [partial measure] |
|---|----|---|-------------------|--------------|-------------------|-------------------|-------------------|
| D | A  | D | They may          | bury my      | body when I       | die (when I       | die)              |
| D |    | A | They may          | bury my      | body when I       | die (when I       | die)              |
| D | D7 | G | Em                | Near some    | grave site I'd be | found, simply     | rotting in the    |
| D | A  | D | If they           | bury my      | body when I       | die               | ground            |
| D | A  | D | They may          | burn my      | body when I       | die (when I       | die)              |
| D |    | A | They may          | burn my      | body when I       | die (when I       | die)              |
| D | D7 | G | Em                | When the     | fiery furnace     | flashes, I'll be  | nothing left but  |
| D | A  | D | If they           | burn my      | body when I       | die               | ashes             |
| D | A  | D | They may          | use my       | body when I       | die (when I       | die)              |
| D |    | A | They may          | use my       | body when I       | die (when I       | die)              |
| D | D7 | G | Em                | As the       | doctors ply their | arts, I'll be     | in a hundred      |
| D | A  | D | If they           | use my       | body when I       | die               | parts             |
| D | A  | D | They may          | freeze my    | body when I       | die (when I       | die)              |
| D |    | A | They may          | freeze my    | body when I       | die (when I       | die)              |
| D | D7 | G | Em                | Though I     | may well be mis-  | taken I would     | hope to re-a      |
| D | A  | D | If they           | freeze my    | body when I       | die               | waken             |
| D | A  | D | They may          | eat my       | body when I       | die (when I       | die)              |
| D |    | A | They may          | eat my       | body when I       | die (when I       | die)              |
| D | D7 | G | Em                | If a         | zombie horde re-  | mains, they'll be | hankering for     |
| D | A  | D | If they           | eat my       | body when I       | die               | _____             |
| D | A  | D | There's a         | chance: I'll | never die at      | all               | ...               |
| D |    | A | There's a         | chance: I'll | never die at      | all               | ...               |
| D | D7 | G | Em                | Cheating     | death is such a   | rarity, it would  | take a singu-     |
| D | A  | D | To per-           | mit, I       | never die at      | all               | larity            |
| D | A  | D | They may          | bury my      | body when I       | die (when I       | die)              |
| D |    | A | They may          | bury my      | body when I       | die (when I       | die)              |
| D | D7 | G | Em                | Near some    | grave site I'd be | found, simply     | rotting in the    |
| D | A  | D | If they           | bury my      | body when I       | die               | ground            |

color

(color)

# Die Gedanken Sind Frei

## A Traditional Song of Freedom

Hoffmann von Fallersleben et. al.

Translated by Daniel Speyer

Oh my think-ing is free. No one can it har - ness. My log - ic soars  
Yes I think as I choose and by my de - si - re. The world may grow  
Ev-en if I am cast in - to deepest dung-eon. It gives them no  
So I bid a fare-well to sor-row for - ev - er. So pet - ty mise-

high, like ow - ls in darkness. No spy can dis - play it; no hunt-er can  
still; my int' - rest seeks high-er. My val - ues im - pli - cit: no one can in -  
aid; no game have they won then. If ram-part and tow - er face think-ing's own  
ry will trou - ble me nev - er. Odd word:play and deep truths, ro - man - ces and

slay it; With Glock nor U - zi. For my thinking are free!  
hi - bit. As 'twill al - ways be. For my thinking are free!  
pow - er, They'll soon cease to be. For my thinking are free!  
neat proofs. Stay al - ways in me. For my thinking are free!

# One Song, Many Tyrants

By Daniel Speyer

The song we just sang is older than you might think. There are hints of it as far back as the twelfth century, and the German lyrics had reached their canonical form by 1780 at the latest. The English translation we just sang, is, of course, far more recent, with a few liberties to ensure scansion.

This one song, which had to be written but once, has been a thorn in the side of every tyrant to oppress Germans ever since. From the Austro-Hungarians straight through to the eastern communists.

How *much* of a thorn was it? Unclear. Many oppressive governments withstood it. But enough of a thorn to be banned in 1848. That's a pretty good sign.

# Somewhere to Begin

Sara Thomsen

C G Am F C G C

C G Am F  
People say to me, oh, you gotta be crazy

C Am G  
How can you sing in times like these

C G  
Don't you read the news

Am F  
Don't you know the score

C  
How can you sing

Am G  
when so many others grieve

C G  
People say to me

Am F C  
what kind of fool believes that a song

Am G  
will make a difference in the end

C G Am F  
By way of a reply, I say a fool such as I

C G F  
Who sees a song as somewhere to begin

G Am F  
A song is somewhere to begin

C  
The search for something

Am G  
worth believing in

C G  
If changes are to come

Am F  
there are things that must be done

C G C  
And a song is somewhere to begin

C G Am F C C G

C G Am F C G C

G G Am F  
People say to me, oh, you gotta be crazy

C Am G  
How can you dream in times like these

C G  
Don't you read the news

Am F  
Don't you know the score

C  
How can you dream

Am G  
when so many others grieve

C G  
People say to me

Am F C  
what kind of fool believes that a dream

Am G  
will make a difference in the end

C G Am F  
By way of a reply, I say a fool such as I

C G F  
Who sees a dream as somewhere to begin

G Am F  
A dream is somewhere to begin

C  
The search for something

Am G  
worth believing in

C G  
If changes are to come

Am F  
there are things that must be done

C G C  
And a dream is somewhere to begin

C G Am F C C G  
C G Am F C G C

C G Am F  
People say to me, oh, you gotta be crazy

C Am G  
How can you love in times like these

C G  
Don't you read the news

Am F  
Don't you know the score

C  
How can you love

Am G  
when so many others grieve

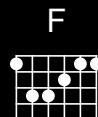
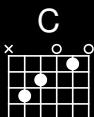
C G  
People say to me

Am F C  
what kind of fool believes that love

Am G  
will make a difference in the end

C G Am F  
By way of a reply, I say a fool such as I

C G F  
Who sees love as somewhere to begin



*G*                    *Am F*

And love is somewhere to begin

*C*

The search for something

*Am*                    *G*

worth believing in

*C*                    *G*

If changes are to come

*Am*                    *F*

there are things that must be done

*C*                    *G*

And love is somewhere

*Am*                    *F*

And a dream is somewhere

*C*                    *G*                    *C*

And a song is somewhere to begin

# **First Step**

**By Sir Terry Pratchett**

They do say that if you wish to walk the path to wisdom then for your first step you must become as a small child.

Do you think they've heard about the second step?

The path to wisdom does, in fact, begin with a single step.

Where people go wrong is in ignoring all the thousands of other steps that come after it. They make the single step of deciding to become one with the universe, and for some reason forget to take the logical next step of living for seventy years on a mountain and a daily bowl of rice and yak-butter tea that would give it any kind of meaning. While evidence says that the road to Hell is paved with good intentions, they're probably all on first steps.

Little one, little one, bitter wind blown  
(skip)  
Sun barely rising a-bove the hor-izon  
Little one, little one, bitter wind blown  
Flowers are withering, naked bark brittle oh,  
Little one, little one, bitter wind blown  
Don't understand why the light would abandon us,  
Little one, little one, bitter wind blown  
And I don't know how much more he may demand of us  
Little one, little one, bitter wind blown  
Sun, sailing a - way I don't know  
Where... I don't know why...  
Sky, darkening grey, wishing there  
weren't so man-y good - byes...  
little one, little one why...  
little one why...  
Asking me questions I don't have the answers to  
Little one, little one, bitter wind blown  
Watching you shiver, and I dont know what to do  
Little one, little one, bitter wind blown  
Maybe if we did the dance said the words just right  
Little one, little one, bitter wind blown  
Maybe he'd come back may-be things would be all right t  
Little one, little one, bitter wind blown  
Sun, sailing a - way I don't know  
Where... I don't know why...  
Sky, darkening grey, wishing there  
weren't so man-y good - byes...  
little one, little one why...  
little one why...  
little one why...

# Chasing Patterns Chord Chart

## Chasing Patterns

|   |  |   |
|---|--|---|
| This whole song hangs out on a E chord  | G# - A - B - E ..... B - G# A G# E   |   |
| Verse I: Just guitar and piano          | Chasing patterns in the sky...<br>Look around and wonder why...<br>Vernal flower, summer breeze...<br>Fractal patterns, golden mean  | Trace the line from star to star<br>Where we going who we are<br>Cricket wing and autumn leaves<br>Whispers of a world unseen.  |
| Chorus: Add in Cello/Bass               | Looking for a signal... hidden in the noise<br>Where we come from, where we going?<br>Looking for an answer... to give the girls and boys, asking<br>Where we come from, where we going?<br>Oh...<br>Oh... | Where we come from, where we<br>Where we come from, where we<br>Fit the pieces, best you can<br>Something we can understand     |
| Verse 2 - Add drums                     | Chasing patterns in the sky<br>Birds depart and crickets die<br>Track the omens, year by year<br>Tell a story they can hear  | Feeling lost, alone and small<br>Frost encroaching, winter falls<br>Fit the pieces, best you can<br>Something we can understand |
| Chorus - More intense                   | Looking for a signal... hidden in the noise<br>Where we come from, where we going?<br>Looking for an answer... to give the girls and boys, asking<br>Where we come from, where we going?<br>Oh...<br>Oh... | Where we come from, where we<br>Where we come from, where we<br>Fit the pieces, best you can<br>Something we can understand     |
| Verse 3: Get much quieter, remove drums | Chasing patterns in the sky<br>Weather vane and satellite<br>Spiral Arm and Golden Mean<br>Seeking worlds yet unseen   | Seasons turn and stories change<br>Rising tide and hurricane<br>Trace the line from star to star<br>Where we going, who we are? |
| Repeat and fade out                     | Where we going, who we are?  |   |

# John Snow and the Broad Street Pump

By Kathleen Tuthill and Daniel Speyer

In August of 1854 Soho, a suburb of London, was hit hard by a terrible outbreak of cholera. Dr. John Snow lived near Soho, and immediately went to work to prove his theory that contaminated water was the cause of the outbreak.

“Within 250 yards of the spot where Cambridge Street joins Broad Street there were upwards of 500 fatal attacks of cholera in 10 days,” Dr. Snow wrote “As soon as I became acquainted with the situation and extent of this eruption of cholera, I suspected some contamination of the water of the much-frequented street-pump in Broad Street.”

Dr. Snow worked around the clock to track down information from hospital and public records on when the outbreak began and whether the victims drank water from the Broad Street pump. Snow suspected that those who lived or worked near the pump were the most likely to use the pump and thus, contract cholera. His pioneering medical research paid off. By using a geographical grid to chart deaths from the outbreak and investigating each case to determine access to the pump water, Snow developed what he considered positive proof the pump was the source of the epidemic.

Besides those who lived near the pump, Snow tracked hundreds of cases of cholera to nearby schools, restaurants, businesses and pubs.

Snow also investigated groups of people who did not get cholera and tracked down whether they drank pump water. That information was important because it helped Snow rule out other possible sources of the epidemic besides pump water.

On 7 September 1854, Snow took his research to the town officials and convinced them to take the handle off the pump, making it impossible to draw water. The officials were reluctant to believe him, but took the handle off as a trial only to find the outbreak of cholera almost immediately trickled to a stop. Little by little, people who had left their homes and businesses in the Broad Street area out of fear of getting cholera began to return.

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With that one action, Snow stopped the cholera outbreak, showed a skeptical world that disease could be transmitted by contaminated water, and invented the field of epidemiology.

A metaphor we'll return to tonight is moving the world with a long enough lever. He did all that with the absence of a lever.

# Time Wrote The Rocks Chord Chart

| Time Wrote the Rocks |      |      |      |    |              |                             |         |
|----------------------|------|------|------|----|--------------|-----------------------------|---------|
| Intro                | Dm   | C    | Dm   | C  |              |                             |         |
| Verse 1A             | Dm   | C    | Dm   | A  | (hi A)       |                             |         |
|                      | Dm   | C    | A    | A  | (low A)      |                             |         |
|                      | Dm   | C    | Dm   | A  | (low A)      |                             |         |
|                      | Dm C | F G  | Dm C | Dm |              |                             |         |
| Verse 1B             | C    | C    | Dm   | Dm |              |                             |         |
|                      | C    | C    | Dm   | A  | (hi A)       |                             |         |
|                      | Dm   | C    | Dm   | A  | (low A)      |                             |         |
|                      | Dm C | F G  |      | F  | C            |                             |         |
|                      | Dm   | C    | Dm   | C  |              |                             |         |
|                      | Dm C | F G  | F C  | Dm |              |                             |         |
| Verse 2A             | Dm   | C    | Dm   | A  | (hi A)       |                             |         |
|                      | Dm   | C    | A    | A  | (low A)      |                             |         |
|                      | Dm   | C    | Dm   | A  | (low A)      |                             |         |
|                      | Dm C | F Gm | Dm C | Dm |              |                             |         |
| Verse 2B             | C    | C    | Dm   | Dm |              |                             |         |
|                      | C    | C    | Dm   | A  | (hi A)       |                             |         |
|                      | Dm   | C    | Dm   | A  | (low A)      |                             |         |
|                      | Dm C | F G  |      | F  | C            |                             |         |
|                      | Dm   | C    | Dm   | C  |              |                             |         |
|                      | Dm C | F G  | F C  | Dm |              |                             |         |
| Verse 3A             | Dm   | C    | Dm   | A  | (hi A)       |                             |         |
|                      | Dm   | C    | A    | A  | (low A)      |                             |         |
|                      | Dm   | C    | Dm   | A  | (low A)      |                             |         |
|                      | Dm C | F Gm | Dm C | Dm |              |                             |         |
| Verse 3B             | C    | C    | Dm   | Dm |              |                             |         |
|                      | C    | C    | Dm   | A  | (hi A)       |                             |         |
|                      | Dm   | C    | Dm   | A  | (low A)      |                             |         |
|                      | Dm C | F C  |      | Dm | C            | (hi Dm/C)                   |         |
|                      | Dm   | C    | Dm   | C  |              |                             |         |
|                      | Dm C | F G  | F C  | Dm |              |                             |         |
| Verse 4A             | Dm   |      | F    | A  | (hi A)       | (No drums, single chords)   |         |
|                      | Dm   |      | A    |    | (low A)      |                             |         |
|                      | Dm   |      | F    | A  | (low A)      |                             |         |
|                      | Dm C | F G  | Dm C | Dm |              | (full drums, normal chords) | The pro |
| Verse 4B             | C    | C    | Dm   | Dm |              |                             |         |
|                      | C    | C    | Dm   | A  | (hi A)       |                             |         |
|                      | Dm   | C    | Dm   | A  | (low A)      |                             |         |
|                      | Dm C | F C  |      | Dm | C            | (hi Dm/C)                   |         |
|                      | Dm   | C    | Dm   | C  |              |                             |         |
|                      | Dm C | F G  | F C  | Dm | (retardando) |                             |         |

color

(color)

# Do You Realize Chord Chart

## 09. Do You Realize?

|          |           |       |    |       |      |     |    |    |    |  |   |
|----------|-----------|-------|----|-------|------|-----|----|----|----|--|---|
| INTRO:   | C         |       | Em |       | Am   |     | D7 |    |    |  |   |
| VERSE 1: | C         |       | Em |       | Am   |     | G  | F  |    |  | Do you realize.... that you have the most beautiful face              |
|          | C         |       | Em |       | Am   |     | D7 |    |    |  | Do you realize... we're floating in space                             |
|          | C         |       | Em |       | Am   |     | G  | F  |    |  | Do you realize... that happiness... makes you cry                     |
|          | C         |       | Em |       | Am   |     | F  | Fm |    |  | Do you realize... that everyone... you know... someday... will die    |
|          | C         | Cadd9 | C  | Cadd9 | F    | Am  | G  |    |    |  | And instead of saying all of your goodbyes, let them know you         |
| CHORUS:  | C         | F     | C  | G     | C    | Em  | G  | F  |    |  | realize that life goes fast. It's hard to make the good things last.  |
|          | G         | C     |    | Fm    | Bb   |     |    |    |    |  | You realize the sun don't go down. It's just an illusion caused by th |
| BRIDGE:  | Eb        |       | Gm |       | Cm   |     | Ab | F  |    |  | Do you realize... ah ah ahhh.... ah ah ahhh... ah ahhh..              |
| VERSE 2: | C (DRUMS) |       | Em |       | Am   |     | G  | F  |    |  | Do you realize... that you have the most beautiful face...            |
|          | C         |       | Em |       | Am   |     | D7 |    |    |  | Do you realize... we're floating in space                             |
|          | C         |       | Em |       | Am   |     | G  | F  |    |  | Do you realize... that happiness makes you cry                        |
|          | C         |       | Em |       | Am   |     | F  | Fm |    |  | Do you realize... that everyone... you know... someday... will die    |
|          | C         | Cadd9 | C  | Cadd9 | F    | Am  | G  |    |    |  | And instead of saying all of your goodbyes, let them know you         |
| CHORUS:  | C↓        | F↓    | C↓ | G↓    | C↓   | Em↓ | G↓ | F↓ |    |  | You realize that life goes fast. It's hard to make the good things la |
|          | G↓        | Am↓   |    | G↓    | F↓ ↓ |     |    |    |    |  | You realize the sun don't go down. It's just an illusion caused by th |
| TAG:     | C (strum) |       | Em |       | Am   |     | F  | Fm | C↓ |  | Do you realize... that everyone... you know... someday... will die    |
|          |           |       |    |       |      |     |    |    |    |  | (ritardando....)  |

color

## **Fritz Haber**

**By Daniel Speyer**

In 1910, Chemist Fritz Haber invented a way to fix nitrogen directly from the air using metallic catalysts rather than live legumes. This led to a six-fold increase in crop yields, and pushed the long-expected mass starvation back several decades, until Borlaug could pick up the task.

In 1914, he made a similarly brilliant discovery in the scalable refinement of Chlorine gas for use in chemical warfare, then spent the rest of the war developing more effective poisons. His work is estimated to have killed ninety thousand men, and horribly injured many more.

You win some; you lose some.

# Attempts Were Made

By Daniel Speyer

Scott Alexander once described a particular building in Europe thusly:

It seems haunted. It's beautiful enough, full of artwork praising peace and the brotherhood of mankind, complete with Latin invocations and Biblical quotes on all the walls. In the center is a great council chamber, where the delegates used to meet. But yesterday it was dead silent. There's something eerie about sitting there, in this empty room where people once tried to save the world, failed, and then disappeared...

And you may say: the world is still here. The horror those people fought was not literally the end of the world.

Still, they gathered: the greatest idealists of the age. The organized. They built a grand headquarters. All to one aim: to ensure that no matter what happened in politics or economics or technology, *there would never be a second world war*.

The building is still there.

The League of Nations was not the only such attempt. In the wake of World War One, The Oxford Union, a debating society at that university, adopted a motion that "This House will under no circumstances fight for its King and country". This promise spread throughout the world, exact phrasing changing as needed, with sixty thousand young men swearing it in the United States alone. As the same age cohort of a later generation would say, what if they threw a war but nobody came?

Nevertheless, the war was thrown. And as its nature became clear, a great many of those who had taken the oath volunteered and fought anyway.

And some historians have argued that by making certain countries look vulnerable, the oath actually encouraged the war. Causality in history is always hard to determine.

Nor were idealists the only ones making the attempts. The maginot line was an attempt to make such a war tactically unviable. And one can hardly fault their willingness to work hard on it.

And the crippling sanctions were probably someone else's attempt to prevent a war.

So many attempts. So many mistakes. So many failures.

And so, so many people who trusted and were disappointed.

Speaking of mistakes and untrustworthiness, I've maintained the tradition of having a deliberate error in this speech. Just so that nobody moves from counting

on some nebulous idea of ‘them’ keeping us safe to counting on me.

Because the warning signs of coming dangers are gathering again. The danger of yet another world war not least among them.

And there’s still no sign of adults in the room.

At all.

At least, not yet.

Momma, hey momma  
Come lookin' for me  
I'm here in the meadow  
By the red maple tree

Momma, hey momma  
Look sharp, here I be  
Hey, hey  
Momma, look sharp

Them soldiers, they fired  
Oh, ma, did we run  
But then we turned 'round  
And the battle begun

Then I went under  
Oh, ma, am I done?  
Hey, hey  
Momma, look sharp

My eyes are wide open  
My face to the sky  
Is that you I'm hearin'  
In the tall grass nearby?

Momma, come find me  
Before I do die  
Hey, hey  
Momma, look sharp

I'll close your eyes, my Billy  
Them eyes that cannot see  
And I'll bury ya, my Billy  
Beneath the maple tree

And never again  
Will you whisper to me  
Hey, hey  
Oh, Momma, look sharp

# The Voicing of Fear

## A Song of Night

Daniel Speyer

VOI&CEL      PIANO

This section shows the first eight measures of the score. The VOI&CEL part consists of two staves, one in treble clef and one in bass clef, both in common time (indicated by '4'). The PIANO part is in bass clef, also in common time. Measure 1 starts with a single note in the treble staff. Measures 2-8 show a rhythmic pattern of eighth and sixteenth notes in the treble staff, while the bass staff has sustained notes and chords.

VC      P

This section shows measures 9 through 17. The VC (Violin/Cello) part is in treble clef, and the P (Piano) part is in bass clef. Measure 9 begins with a sustained note in the treble staff. Measures 10-17 feature a steady eighth-note pattern in the treble staff, with the bass staff providing harmonic support. The lyrics 'Is there some one out there to hear? The' are written above the staff.

VC      P

This section shows measures 18 through 26. The VC part continues its eighth-note pattern. The lyrics 'voic-ing of my end-less fear: that all I love will fade like grass, be-' are written below the staff. The P part provides harmonic underpinning with sustained notes and chords.

VC      P

This section shows measures 27 through 35. The VC part continues its eighth-note pattern. The lyrics 'fore the dark - ness draw-ing near.' are written below the staff. The P part continues to provide harmonic support.

2  
35

VC      P

I      beg each sea-son to re - turn,      The

3

44

VC      P

wise to teach, the young to learn, The sand to stay beneath my feet,      That not the

3

54

VC      P

towns and oceans burn.

4

63

VC      P

May I survive my wander - lust,      With time for love and for

3

72

VC what is just May I af-ford a chance to play. To live more life than

P

82

VC what I must.

P

90

VC All hope is si - lent to me still I gird my heart and set my skill 'Cause

P

99

VC someone must and no one will 'Cause someone must and

P

4  
109

VC

P

A musical score page featuring two staves. The top staff is for the Voice (VC), starting with a dotted half note followed by a rest, then a melodic line with lyrics: "no one will". The bottom staff is for the Piano (P), showing a bass line with a sustained note and a treble line with eighth-note patterns. The key signature changes from A major (no sharps or flats) to E major (one sharp). Measure numbers 4 and 109 are at the top left, and a rehearsal mark 'P' is on the left.

# Bitter Wind March

**Open fifth chords, very sparse, piano only**

A5 A5 A5 Am

... ... ... ...

## Verse 1A

A5 C5 D5

Sun barely rising a-bove the hor-izon

A5

Little one, little one, bitter wind blown Little one,

G5 D5

little one, bitter wind blown

A5

Flowers are withering, naked bark brittle oh,

C5 D5

Flowers are withering, naked bark brittle oh,

A5

Little one, little one, bitter wind blown Little one,

G5 A5

little one, bitter wind blown

## Verse 1B

[enter strings]

A5 A5 C5 D5

Good folk are gonna die, sun-god ain't shedding tears

A5 A5 G5 D5

Little one, little one, bitter wind blown

A5 A5 C5 D5

I just stare at the sky, digging the graves each year

A5 A5 G5 A5

Little one, little one, bitter wind blown

## Chorus

Dm Dm C C

Sun, sailing a - way I don't know

C C G G

Where... I don't know why...

Dm Dm C C

Sky, darkening grey, wishing there

C C G G

weren't so man-y good - byes...

G G Am Am

little one, little one why...

[enter drums]

Am Am Am Am

little one why...

## Modulation

Cm

...

Cm/A Bb b

... ... ...

Cm

...

Cm/A Bb b

... ... ...

## Verse 2A

Cm

Maybe if we looked a while and found a stone

Cm/Ab

Little one, little one, bitter wind blown

Cm

Dragged it a hun-der-ed miles and got it home

Cm/Ab

Little one, little one, bitter wind blown

## Verse 2B

Cm

Eb/C F/C

dig us a henge, raise those bluestones up high

Cm/Ab Bb/Ab Ab

Little one, little one, bitter wind blown

Cm

Eb/C F/C

two hundred years we could look at the sky

Cm/Ab Bb/Ab Ab

Little one, little one, bitter wind blown

## Verse 2C

Cm

Eb/C F/C

children would know when the winter was coming,

oh

Cm/Ab Bb Fm

Little one, little one, bitter wind blown

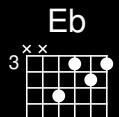
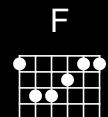
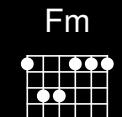
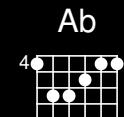
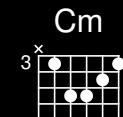
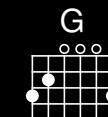
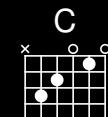
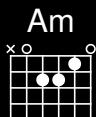
Cm

Eb/C F/C

Looking and laboring, doing what must be done

Cm/Ab Bb F

Little one, little one, bitter wind blown



## Chorus

*Fm Eb*  
Sun, sailing a - way I don't know

*Bb*  
Where... I don't know why...

*F Eb*  
Sky, darkening grey, wishing there

*Bb*  
weren't so man-y good - byes...

*Bb*  
...

**exit drums**

## Verse 3A

*Cm*  
maybe some good folk are still going to die

*Cm/Ab Bb/Ab Ab*  
Little one, little one, bitter wind blown

*Cm Eb/C F/c*  
mothers shake helpless with rage and denial

*Cm/Ab Bb Fm*  
Little one, little one, bitter wind blown

## Verse 3B

*C5 C5 (hi) Bb5/C F/C*  
maybe it might be less deep of a sorrow

*C C5/F F*  
Little one, little one, bitter wind blown

*C C5 (hi) Eb/C F/c*  
Not quite so many graves dug up tomorrow

*C C5/F C*  
Little one, little one, bitter wind blown

# We Are Here

By Daniel Speyer

Is there someone out there to hear?

Yes.

I am.

And you are.

And I know that isn't the answer some of you were hoping for. But it's true.

I told you before that tonight isn't about blind hope, and it's not. But it is about hope. A brighter future can happen if people like us make it possible.

And I know that there are people in this room working toward making tomorrow dawn brighter, or to protecting the chance the it dawns at all.

So if you are working directly toward one of those goals, whether in science or art, politics or business – whatever field you have found to be a lever fitted to your hand and long enough to nudge the world with – then I ask you to rise and say that you are here.

And if you are working indirectly, by giving money, evaluating levers, administering, inspiring – whatever the means – I ask you also to rise and say that you are here.

If you want to do something, or hope to do something, but it will have to wait until you find the right lever, or until you grow stronger, (and I fully expect that everyone in this room will grow stronger), then please rise and say that you are here.

If you are prepared to be a friend to someone who is doing something, please rise and say that you are here.

If anyone is still seated, please rise.

## Call and Response: Defiance

By Jai Dhyani (Abridged by Daniel Speyer)

(Speaker lines in *italics*, audience response in **bold**)

*The universe is vast, and dark, and cold.*

**But we are not.**

*The laws of physics are indifferent to hope, or desperation, or love.*

**But we are not.**

*There is no destiny written for us.*

**Then we will write our own.**

*Does anything in the universe care?*

**Yes! We care! There is light in the world, and it is us!**

Countless winter nights ago,  
A woman shivered in the cold.  
Cursed the skies, and wondered why  
The gods invented pain.

Aching angry flesh and bone,  
Bitterly she struck the stone  
Till she saw the sudden spark  
Of light, and golden flame.

She showed the others, but they told her  
She was not fit to control  
The primal forces that the gods  
Had cloaked in mystery

But she would not be satisfied,  
And though she trembled, she defied them  
Took her torch and raised it high  
Set afire history.

Tomorrow can be brighter than to-day,  
although the night is cold.  
The stars may seem so very far a-way...

But courage, hope and reason burn,  
In every mind, each lesson learned,  
Shining light to guide our way  
Make tomorrow brighter than to-day...

Oh... Brighter than to-day.

Ages long forgotten now,  
We built the wheel and then the plough.  
Tilled the earth and proved our worth,  
Against the drought and snow.

Soon we had the time to fathom  
Mountain peaks and tiny atoms,  
Beating hearts electric sparks  
So much more to know.

Tomorrow can be brighter than to-day,  
although the night is cold.  
The stars may seem so very far a-way...

But courage, hope and reason grow  
With every passing season so we'll  
Drive the darkness far away  
Make tomorrow brighter than to-day...

Oh... Brighter than to-day.

The universe may seem unfair.  
The laws of nature may not care.  
The storms and quakes, our own mistakes,  
They nearly doused our flame.

But all these trials we've endured  
The lessons learned, diseases cured  
Against our herculean task  
We've risen to proclaim.

Tomorrow can be brighter than to-day,  
although the night is cold.

12/10/22, 7:43 AM

The stars may seem so very far a-way...

But courage, hope and reason bloom  
Across the world and one day soon, we'll  
Rise up to the stars and say:  
Make tomorrow brighter than today

Mama's been waiting, huddled out - side.  
Brother is quietly holding her tight  
Hurrying home and I hope there's still time for  
One... more... night...  
Slowly she turns... opens her eyes  
Struggles to stand point to the sky  
Barely can breathe but she's telling the stor-ies  
One... last... time...  
And she whispers of hunters and dra-gons and gods  
Wanderers roaming the stars up a - bove  
Holding her hand in that moment I wonder,  
Can't help but wonder at all... those...  
End... less... lights... burning with  
Un... told... sto-ries, each of them  
One... more... reason to wonder  
Is anyone out there, is anyone out there?  
anyone out there tonight

Father is waiting for sister and me  
Thousands of miles away, over the sea and we're  
Flying as fast as the Boeing'll carry us  
One... last... time...  
Thinking of stories he told from the war  
Terrible jokes that he made us endure  
Daylight is ending, the plane is descending  
Just... in... time... ... as the  
clouds part around us, a dazz-l-ing city  
A ppears like a jewel in the night...  
And I look at our home and its lights all a - glow'n and I  
Can't help but wonder at all.. those...  
End... less... lights, burning with  
Un... told... sto-ries, each of them  
One... more... reason to wonder  
Is anyone out there, anyone out there?  
End... less... night cradling  
Count... less... voices, reaching  
A cross.. the vast-ness...  
With beau-ti-ful stories, lasting as long as they  
can...  
Beau-ti-ful stories, lasting as long as they  
can...

Grandma's been waiting for clues in the dark, and I'm  
Journeying millions of miles to take part.  
And finally I see her glint in the viewing port,  
Right... on... time...  
Weightless em brace as the airlock re- seals,  
Space station turning and slowly re- veals:  
Rows upon rows of her telescopes listening  
Deep... through... time... C F  
And maybe there's some kind of somebody o-ut there  
Listening in on our radio calls  
Or maybe there's not there's just one pale blue dot to give  
Meaning and beauty and worth to it all.

12/10/22, 7:43 AM

But holding her hand in that moment I wonder,  
Can't help but wonder at all wonder at all... those...  
End... less... lights, burning with  
Un... told... sto-ries, each of them  
One... more... reason to wonder  
Is anyone out there... anyone out there?  
End... less... night cradling  
Count... less... voices, reaching  
A cross... the vast-ness...  
With beau-ti-ful stories, lasting as long as they  
can...  
beau-ti-ful stories, lasting as long as they  
can...  
beau-ti-ful stories, lasting as long as they long as they  
can

... Here comes the sun ... Here comes the sun, and I say  
... it's all right  
... Little darling, it's been a long cold, lonely winter  
... Little darling, it feels like years since it's been here  
... Here comes the sun ... Here comes the sun, and I say  
... it's all right

... Little darling, the smiles re turning to their faces  
... Little darling, it seems like years since its been here  
... Here comes the sun ... Here comes the sun, and I say  
... it's all right

Sun, sun sun, here it comes  
Sun, sun sun, here it comes

... Little darling, I feel that ice is slowly melting  
... Little darling, it seems like years since its been clear  
... Here comes the sun ... Here comes the sun, and I say  
... it's all right  
... Here comes the sun ... Here comes the sun, and I say  
... it's all right  
... it's all right

Grandma told me stories... 'bout life from way back when  
Walking uphill both ways through the snow.  
Rugged people trudging down the narrow path a - head  
Going where their dad-dy said to go  
Way back when... Everything seemed simple baby  
Some day soon... maybe it'll all make sense again but  
Here and now... got a world to explore. Got some  
Riddles to un - ravel, ba by what you waiting for? for?  
Here and now... here and now... we got choices all a - round  
Here and now... here and now... now... we got interest com - pound...ing.  
Taking things for granted that'd shatter Newton's mind  
What'll we find in to - morrow's here and now

Way back when... Everything seemed simple baby  
Some day soon... maybe it'll all make sense again but  
Here and now... got a world to explore. Got some  
Riddles to un - ravel, ba by what you waiting for? for?  
Here and now... here and now... we got pens instead of swords  
Here and now... here and now... now... turning ploughshares into tractors  
Taking things for granted, super- stim-u-lus ga - lore  
What's in store for to - morrow's here and now now  
Way back when... Everything seemed simple baby  
Some day soon... maybe it'll all make sense again but  
Here and now... got a world to explore. Got some  
Riddles to un - ravel, ba by what you waiting for? for?  
Here and now... here and now... (here and now... here and now...)  
Here and now... here and now... (here and now... here and now...)  
Here and now... here and now... we got smallpox locked up tight  
Here and now... here and now... Summon cookies late at night!  
Here and now... here and now... gotta run and catch my flight  
But I'll see you in to- morrow's here and now now  
Here and now... here and now... we got robots driving cars  
Here and now... here and now... now... Elon's col-o-ni-zing Mars  
Here and now... here and now... now... we got smart philanthro-py  
With some sci-en-tific rigor and some met-a-na-ly - ses. Yeah!  
Way back when... Everything seemed simple baby  
Some day soon... maybe it'll all make sense again but  
Here and now... got a world to explore. Got some  
Riddles to un - ravel... ... tell me what you waiting  
for... ... tell me what you waiting  
for... ... tell me what you waiting  
for...

# I Have Seen the Tops of Clouds

A Song of Morning

Daniel Speyer

Voice       $\text{♩} = 150$

Piano

Piano

V  
ec - hoes of night - mares just roam - ing my skin. All the  
Kel - vin as - sured us that steel can - not fly. His mis -

P

P

V  
wrongs, all the dang - ers I hold off in day - time re -  
take was quite sub - tle and all we need hope for Is

P

P

V  
turn to my thoughts as the night clos - es in.  
si - mil - ar er - rors in proofs we'll all die.

P

P

2  
18

V ♫ z z | z z z z z z z z z z z z z z z z |  
It gets so much hard - er when mon - sters are true. I  
And if we yet meet with the end that we fear, 'Twill  
P ♫ - . | - z z z z z z z z z z z z z z z z |  
P ♫: | : z z z z z z z z z z z z z z z z |  
: | : z z z z z z z z z z z z z z z z |

23

V ♫ z z z z z z z z z z z z z z z z |  
can't quite i - mag - ine just what we could do. A  
still have been good that this once we were here: For  
P ♫ z z z z z z z z z z z z z z z z |  
P ♫: | : z z z z z z z z z z z z z z z z |  
: | : z z z z z z z z z z z z z z z z |

27

V ♫ z z z z z z z z z z z z z z z z |  
mi - ra - cle's need - ed to see us all through. But  
one shi - ning mom - ent life saw it - self clear, And  
P ♫ z z z z z z z z z z z z z z z z |  
P ♫: | : z z z z z z z z z z z z z z z z |  
: | : z z z z z z z z z z z z z z z z |

31

V ♫ z z z z z z z z z z z z z z z z |  
what have we got? We've got me; we've got you. And I...  
dreamed of how soon to the stars it might steer. And how...  
P ♫ - - - - | - - - - | - - - - | - - - - | - - - - |  
P ♫: | : z z z z z z z z z z z z z z z z |  
: | : z z z z z z z z z z z z z z z z |

36

V: - . - . I have seen the tops of clouds. I can breathe be - neath the sea.

P: - . - .

P: - . - .

45

V: - . - . I laugh with friends from a - cross the world. Where I go a li - brary goes with me.

P: - . - .

P: - . - .

55

V: - . - . Yes I have seen the tops of clouds (tops of clouds)

P: - . - .

P: - . - .

62

V: - . - . And you can breathe be - neath the sea (the sea)

P: - . - .

P: - . - .

67

V: - . - . And how we laugh with friends from ac -ross the world

P: - . - .

P: - . - .

4  
72

V ♯ Where I go a lib - ra - ry goes with me.

P ♯

P ♯

77

V ♯ Goes with me. Goes with me!

P ♯

P ♯

# An Unexpected Victory

By Zvi Mowshowitz

A miracle occurred back in October of 2021. Everyone I have talked to about it, myself included, was shocked that it happened. It's important to

- Understand what happened.
- Understand how and why it happened.
- Understand how we might cause it to happen again.
- Make sure everyone knows it happened.
- Update our models and actions.
- Ideally make this a turning point to save civilization.

That last one is a bit of a stretch goal, but I am being fully serious. If you're not terrified that the United States is a dead player, you haven't been paying attention – the whole reason this is a miracle, and that it shocked so many people, is that we didn't think the system was capable of noticing it had a stupid, massively destructive rule with no non-trivial benefits and no defenders. Much less scrapping said rule within a day. If your model did expect it, I'm very curious to know how that is possible, and how you explain the years 2020 and 2021.

First, the setup:

- The Ports of Los Angeles and Long Beach together are responsible for a huge percentage of shipping into the Western United States.
- There was a rule in the Port saying you could only stack shipping containers two containers high.
- This rule was created, and I am not making this up, because it was decided that higher stacks were not sufficiently aesthetically pleasing.
- In normal times, this was annoying but not a huge deal. But thanks to Covid-19, there was increased demand to ship containers, creating more empty containers, and less throughput to remove those containers.
- Trucking companies started accumulating empty containers.
- The companies ran out of room to store the containers, because in many places they could only stack them in stacks of two, and there was no practical way to move the containers off-site.
- Trucks were forced to sit there with empty containers rather than hauling freight.
- With trucks sitting idle, there was less ability to clear containers

At peak, over a hundred full size cargo ships were queued up at the port, waiting for capacity to unload them to become available.

Then in stepped Ryan Peterson, a businessman who worked in logistics but had no special connection to the port. He took a boat tour of the harbor, which doubled as a chance to have a really long conversation with a boat captain who

worked there. And then he posted a series of thirty-two tweets, ending with six action items. The first item was to change the stacking rules. Which the mayors of Los Angeles and Long Beach could do for their respective cities unilaterally.

That initial tweet got 16k retweets and 33k likes, and even the others got thousands of likes as well, so this successfully got many people's attention. It's worth paying attention to the details here, as this was crafted in order to spread and be persuasive, and also not crafted to make people angry or to blame anyone. It's a call to positive action. In particular, I notice these characteristics:

- Starts with a relatable physical story of a boat ride, and a friendly tone.
- Tells a story that implies (without saying anything false) how the ride led him to figure these things out, which gives rhetorical cover to everyone else for not knowing about or talking about the problem. We can all decide to pretend this was discovered today.
- Invokes social consensus by saying that 'everyone agrees' that the bottleneck is yard space. Which is true, as far as I can tell, everyone did agree on that.
- Describes a clear physical problem that everyone can understand, in simple terms that everyone can understand but that don't talk down to anyone. He makes this look easy. It is not easy, it is hard.
- Makes clear that the problem will only get worse on its own, not better, for reasons that are easy to understand.
- Makes clear the scope of the problem. Port of Long Beach effectively shuts down, we can't ship stuff, potential global economic collapse. Not clear that it would be anything like that bad, but it could be.
- Gives a shovel-ready solution on how to begin to overwhelm the bottleneck, at zero cost, by allowing containers to stack more.
- Gives a sense of urgency, and also a promise of things getting better right away. Not only can you act today, Sir, you are *blameworthy* tomorrow if you do not act, and you will see results and rewards tomorrow if you do act. Not only reactions to the announcements, physical results on the ground. That's powerful stuff.

Despite this, again, no one I've talked to about this expected the problem to be fixed.

But nine hours later the mayor of Long Beach issued an executive order allowing higher stacking. And the cargo started to move.

# Move the World

D D7  
Archimedes said if I wanna move a load, gotta  
G C  
get myself a lever, lay it on a fulcrum.  
D D7  
Little bit of effort, quite a bit o' distance.  
G C  
I can move a load, big as I wish....

(beat, beat, beat), I can

D  
Move the World, if my lever is long enough  
D7  
Move the World, and I've a place to stand  
G  
Move the World, make myself strong enough to  
D F D  
Move the World, if I got a good plan, yeah  
D F D  
.... If I got a good plan, yeah

D D7  
But I must admit, world's pretty big  
G C  
And all I got here, is a pitiful twig.  
D D7  
But if I had a friend with a great big beam,  
G C  
I could say "Hey Friend!" if you share my dream

(beat, beat, beat), you can

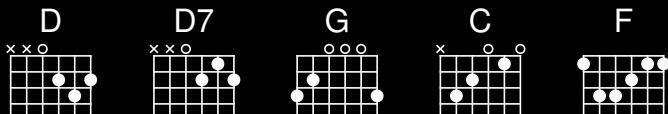
Move the World, if your lever is long enough  
Move the World, and you've place to stand,  
Move the World, make yourself strong enough  
Move the World, if you got a good plan, yeah  
.... If you got a good plan, yeah

D D7  
But it seems the beam is still not long enough.  
G C  
Simple tools are cool but this is kinda tough But  
maybe  
D D  
If we work together we can build a bigger lever,  
G G  
We can make the world better if we give it a shove.

(beat, beat, beat) we can

D  
Move the World, if our lever is long enough  
D7  
Move the World, with a place to stand  
G  
Move the World, make ourselves strong enough to  
D F  
Move the World, if you got a good plan, we can

D  
Move the World, if our lever is long enough  
D7  
Move the World, with a place to stand,  
G  
Move the World, make ourselves strong enough to  
D F  
Move the World, if you got a good plan, we can  
D F D  
.... If you got a good plan, yeah  
D F D  
.... If you got a good plan, yeah  
D F D  
.... If you got a good plan, yeah



# **Literally Moving the World**

**By Daniel Speyer**

At the beginning of this evening's festivities, we celebrated how astronomy allows us to predict the return of the sun, just as it has returned every year. But in the long run, that same astronomy tells us the sun is unstable. In the next billion years it will increase in brightness by eleven percent. Long before the infamous Red Giant phase, it will eliminate any flesh-based civilization still located on Earth.

But a billion years still gives us a lot of prep time. And Professor Korycansky at UC Santa Cruz has a solution.

He calculates that a ten-to-the-twenty-second gram asteroid in an extremely elliptical orbit could make close flybys of both Earth and Jupiter once every six thousand years. Its consistent-direction flybys of Earth would pull our planet into a higher, still near-circular orbit. While its flybys of Jupiter would maintain its own kinetic energy. Its resulting orbit would be close enough to stable (in a four-body sort of way) that simple fusion rockets powered by the ice on the object will suffice for any needed corrections.

It's good to know this problem is taken care of.

# Uplift Chord Chart Tools

## Drones

### Uplift

|     |        |        |        |                      |   |                                       |                |         |
|-----|--------|--------|--------|----------------------|---|---------------------------------------|----------------|---------|
| Em  | G D A  | D      | A      | (just guitar)        | Hands chip the  | flint, light the                      | fire, skin the | kill    |
| Em  | G D A  | D      | A      |                      | Feet move the tribe                                     | track the herd with a will            |                |         |
| Em  | G D A  | D      | A      |                      | Human-kind  | struggles, on the                     | edge of histo  | ry      |
| Em  | G D B7 | D      | B7     |                      | Time to settle  | down, time to                         | grow, time to  | breed.. |
| B7  | B7     | B7     | (skip) |                      | ...   |                                       |                | (skip)  |
| Em  | G D A  | D      | A      | (other instruments   | Plow tills the soil, plants the seed, pray for rain     |                                       |                |         |
| Em  | G D A  | D      | A      | but no drums yet)    | Scythe reaps the wheat, to the mill, to grind the grain |                                       |                |         |
| Em  | G D A  | D      | A      |                      | Towns.. and.. cities spread to empire over - night      |                                       |                |         |
| Em  | G D B7 | D      | B7     |                      | Hands keep building as we chant the ancient rite...     |                                       |                |         |
| B7  | B7     | B7     | (skip) |                      | ...   |                                       |                | (skip)  |
| Em  | G D A  | D      | A      | (drums kick in)      | Coal heats the steam, push the piston, turns the wheel  |                                       |                |         |
| Em  | G D A  | D      | A      |                      | Cogs spin the wool, drives the horses made of steel     |                                       |                |         |
| Em  | G D A  | D      | A      |                      | Lightning harnessed does our will and lights the dark   |                                       |                |         |
| Em  | G D B7 | D      | B7     |                      | Keep rising higher, set our goal, hit the mark...       |                                       |                |         |
| B7  | B7     | B7     | (skip) |                      | ...   |                                       |                | (skip)  |
| Em  | G D A  | D      | A      | (violin solo)        |   |                                       |                |         |
| Em  | G D A  | D      | A      |                      |   |                                       |                |         |
| Em  | Em     | Em     | Em     |                      |   |                                       |                |         |
| Em  | D      | Em     | Em     |                      |   | Crawl.. out.. of... the mud.          |                |         |
| Em  | A      | Em     | Em     |                      |   | On... go... ing... but slow.          |                |         |
| G   | D      | Em     | Em     |                      | For the   | path...                               | that is        | easy    |
| G   | D      | B7     | B7     |                      | Ain't the   | one... that...                        | makes us       | grow    |
| B7  | B7     | (skip) | (skip) |                      |   |                                       | (skip)         | (skip)  |
| Em  | G D A  | D      | A      |                      | Light push the sails, read the data, cities glow        |                                       |                |         |
| Em  | G D A  | D      | A      |                      | Hands type the keys, tap the screen, out we go!         |                                       |                |         |
| Em  | G D A  | D      | A      |                      | Our voices carry round the world and into space         |                                       |                |         |
| Em  | G D B7 | D      | B7     |                      | Send us out to colonize another place.                  |                                       |                |         |
| B7  | B7     | B7     | (skip) | (quieter)            |   |                                       |                | (skip)  |
| E   | G D A  | D      | A      | (note: major chords) | Tools, make the tools, light fire, plant the grain      |                                       |                |         |
| E   | G D A  | D      | A      |                      | Drones, track the herd. Build a world. Begin again...   |                                       |                |         |
| A G | Am     |        |        |                      |   | (transition directly into 5000 years) |                |         |

color

(color)

# Five Thousand Years Chord Chart

|                  |            |      |      |      |  |
|------------------|------------|------|------|------|--|
| INTRO:           | Am ↓       | -    | Am ↓ | -    |  |
| VERSE 1:         | Am ↓       | G ↓  | Dm ↓ | F ↓  | A possible child, / Dreaming through the longest night, / A possible smile, / Waking to a dist   |
|                  |            | C ↓  | D ↓  | F ↓  | A whole world of possibilities / Tell me what you see, / Where's that child going, tell me / W   |
| CHORUS:          | Am ↓       | G ↓  | Dm ↓ | F ↓  | In (Five thousand years) / (Whatcha want to do, whatcha wanna see, in another) / (Five thou      |
|                  |            | C ↓  | D ↓  | F ↓  | (Five thousand years) / (If we boldly set our sights, ) / (And journey through the coldest nigh  |
| Post-Chorus Tag: | Am ↓       | G ↓  | Dm ↓ | F ↓  | ... / (Five thousand years...)   |
| VERSE 2:         | Am (strum) | G    | Dm   | F    | Build ourselves a brand new home, / Raise the glass domes high. / And in a century or three      |
|                  | Am         | C    | D    | F    | And then at last they'd see / That distant yellow sun. / The cradle of humanity, / And all the t |
| CHORUS:          | Am         | G    | Dm   | F    | In (Five thousand years) / (Whatcha want to do, whatcha wanna see, in another) / (Five thou      |
|                  |            | C    | D    | F    | (Five thousand years) / (If we sailed across the stars.) / (Unimaginably far) / (In five thousan |
| GUITAR SOLO:     | Am         | G    | Dm   | F    |  |
|                  | Am         | G    | Dm   | F    |  |
| VERSE 3:         | Am (arp)   | G    | Dm   | F    | And maybe good folk still might die, / But maybe not, we gotta try / I don't quite know what     |
|                  | Am         | G    | Dm   | F    | I don't quite know how things might change / I don't quite know what rules we'd break / Our      |
| VERSE 4:         | Am (strum) | G    | Dm   | F    | Entropy is bearin' down / But we got tricks to stick around. / And if we live to see the day / T |
|                  | Am         | C    | D    | F    | We'll take a moment, one by one / Turn to face the dying su-un / Bittersweetly wave goodby       |
| CHORUS:          | Am ↓ strum | G    | Dm   | F    | In (Five thousand years) / (Whatcha want to do, whatcha wanna see, in another) / (Five milli     |
|                  | Am         | C    | D    | F    | (Five billion years) / (When all that we once knew is gone) / (We'll find a way to carry on) /   |
| CHORUS:          | Am ↓       | G ↓  | Dm ↓ | F ↓  | (Five billion years) / (Whatcha want to do, whatcha want to see-ee) / (Five billion years) / (W  |
|                  | (alt. end) | Am ↓ | G ↓  | Dm ↓ | (Who we wanna be?) / Where we wanna go... / Who we wanna be?                                     |
|                  | Dm         | Dm   | C    | C    |  |
|                  | C          | C    | G    | G    |  |
|                  | Dm         | Dm   | C    | C    |  |
|                  | C          | C    | G    | G    |  |

color

# The Road to Wisdom

By Piet Hein

The road to wisdom? — Well, it's plain and simple to express:

Err

and err

and err again

but less

and less

and less.