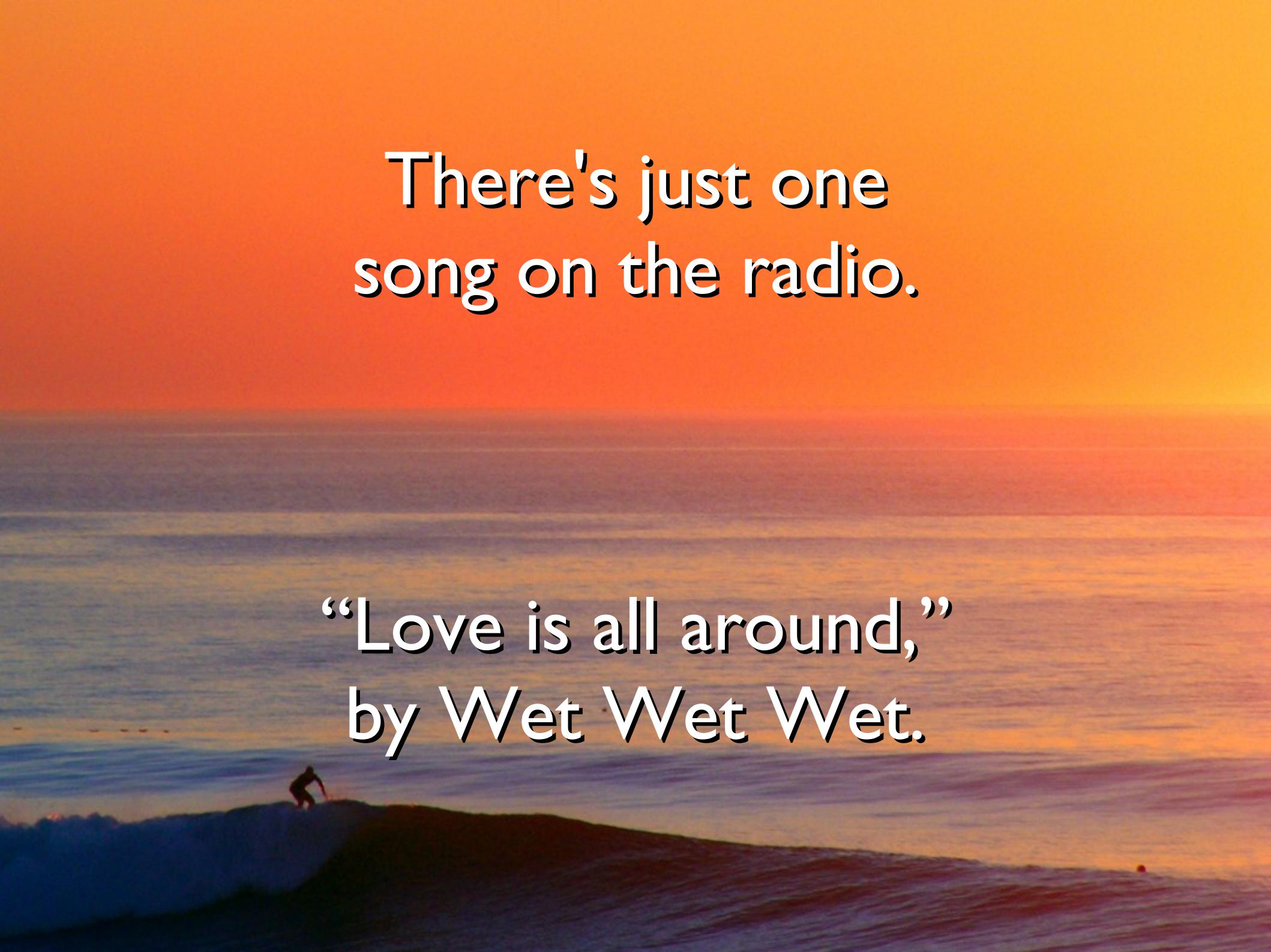




Real World Haskell.

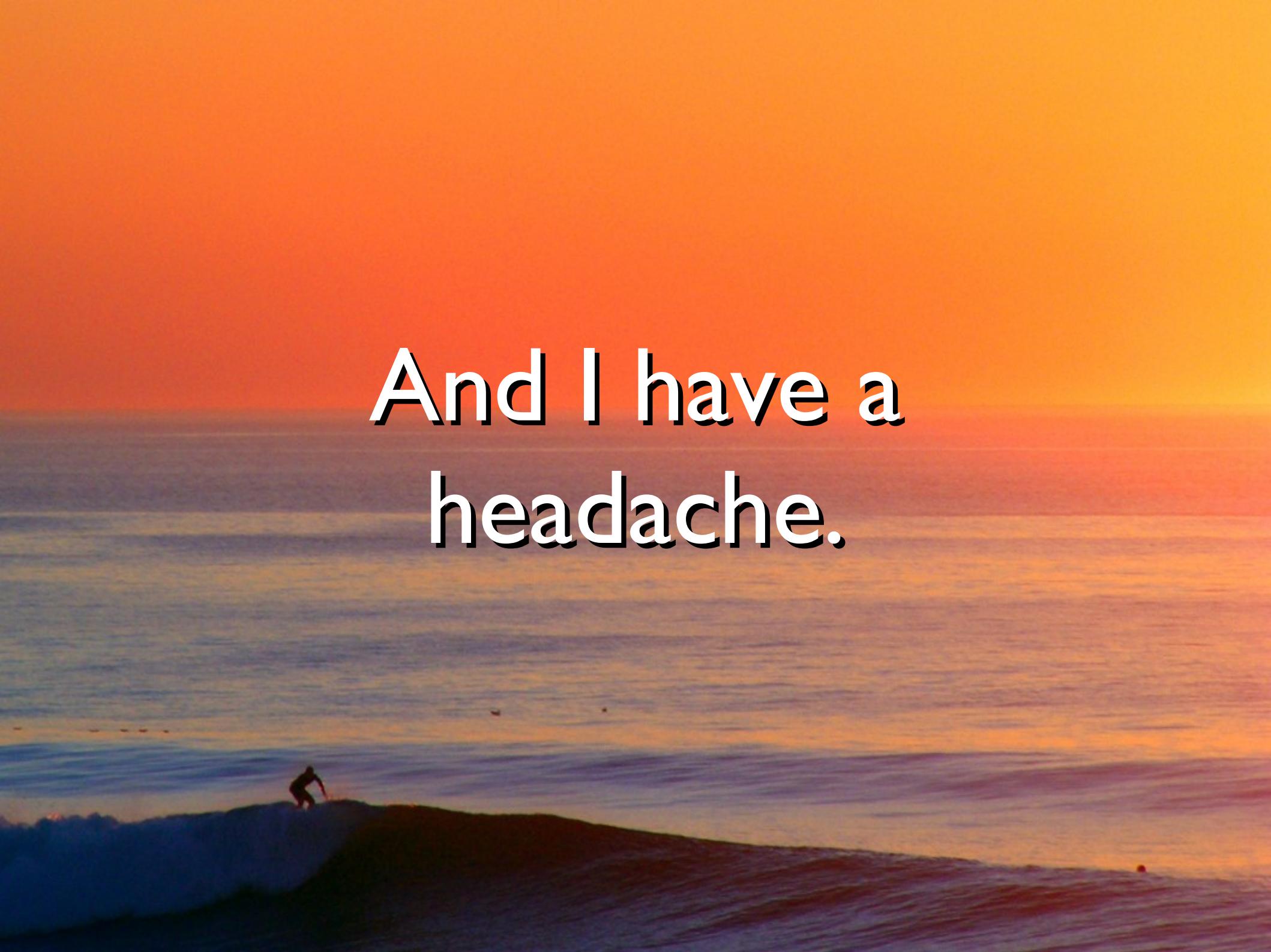
A photograph of a surfer riding a wave at sunset. The sky is a vibrant orange and yellow, reflecting off the calm ocean water. The surfer is silhouetted against the bright horizon, positioned on the left side of the frame. The overall mood is peaceful and nostalgic.

It's 1994.

A photograph of a sunset over a calm ocean. The sky is a gradient from deep orange at the horizon to a lighter yellow-orange higher up. In the lower-left foreground, a dark silhouette of a person is riding a surfboard on a small wave.

There's just one
song on the radio.

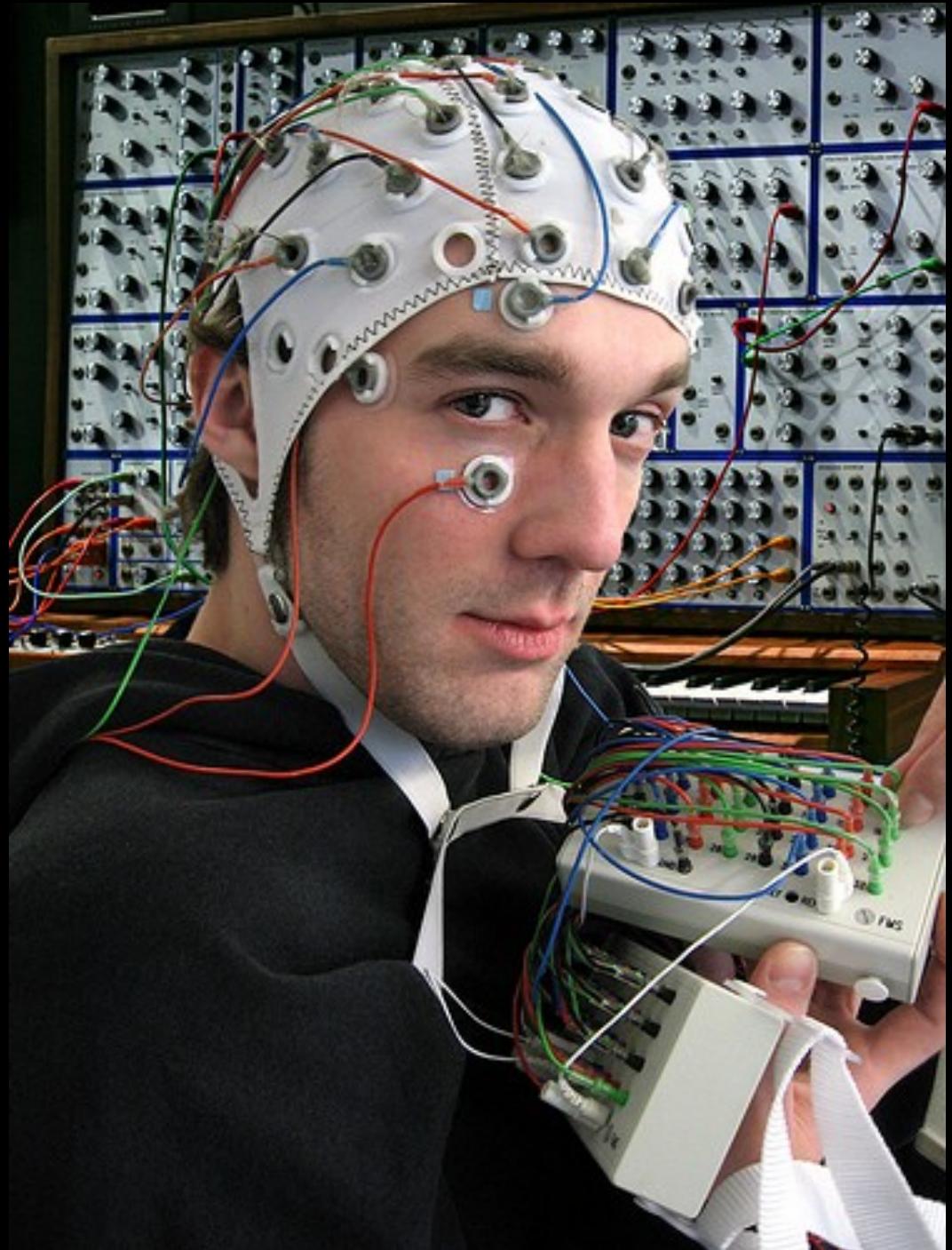
“Love is all around,”
by Wet Wet Wet.

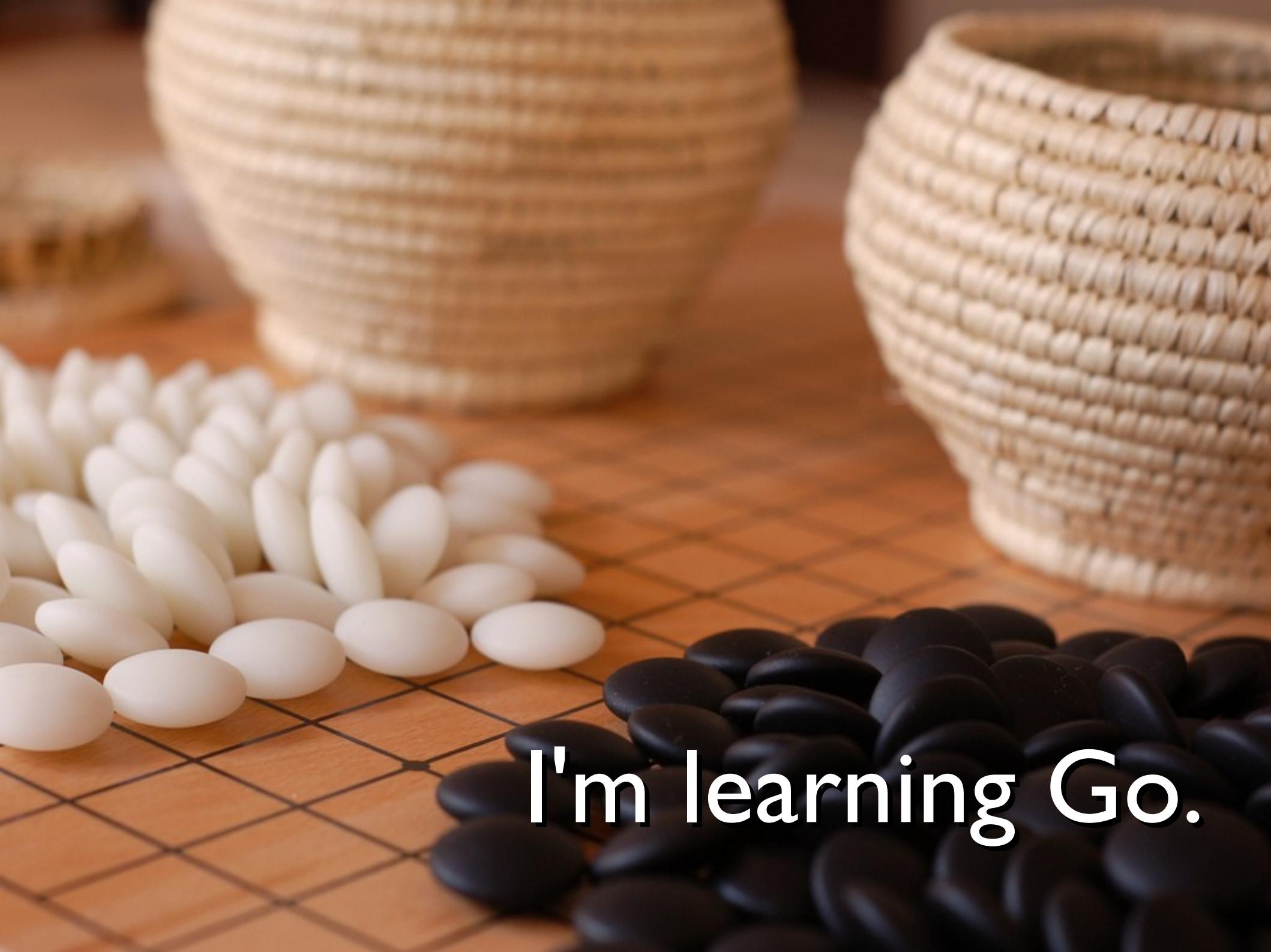
A photograph of a sunset over a calm ocean. The sky is a gradient from deep orange at the horizon to a lighter yellow-orange higher up. In the foreground, the dark silhouette of a person is riding a surfboard on a small wave. The ocean surface reflects the warm colors of the sunset.

And I have a
headache.

I'm in
Glasgow.

I'm learning to
hack on GHC.



A wooden Go board with a light-colored grid is shown from a top-down perspective. On the left side, there is a large pile of white stones, and on the right side, there is a large pile of black stones. In the background, two woven baskets, one light brown and one white, are visible.

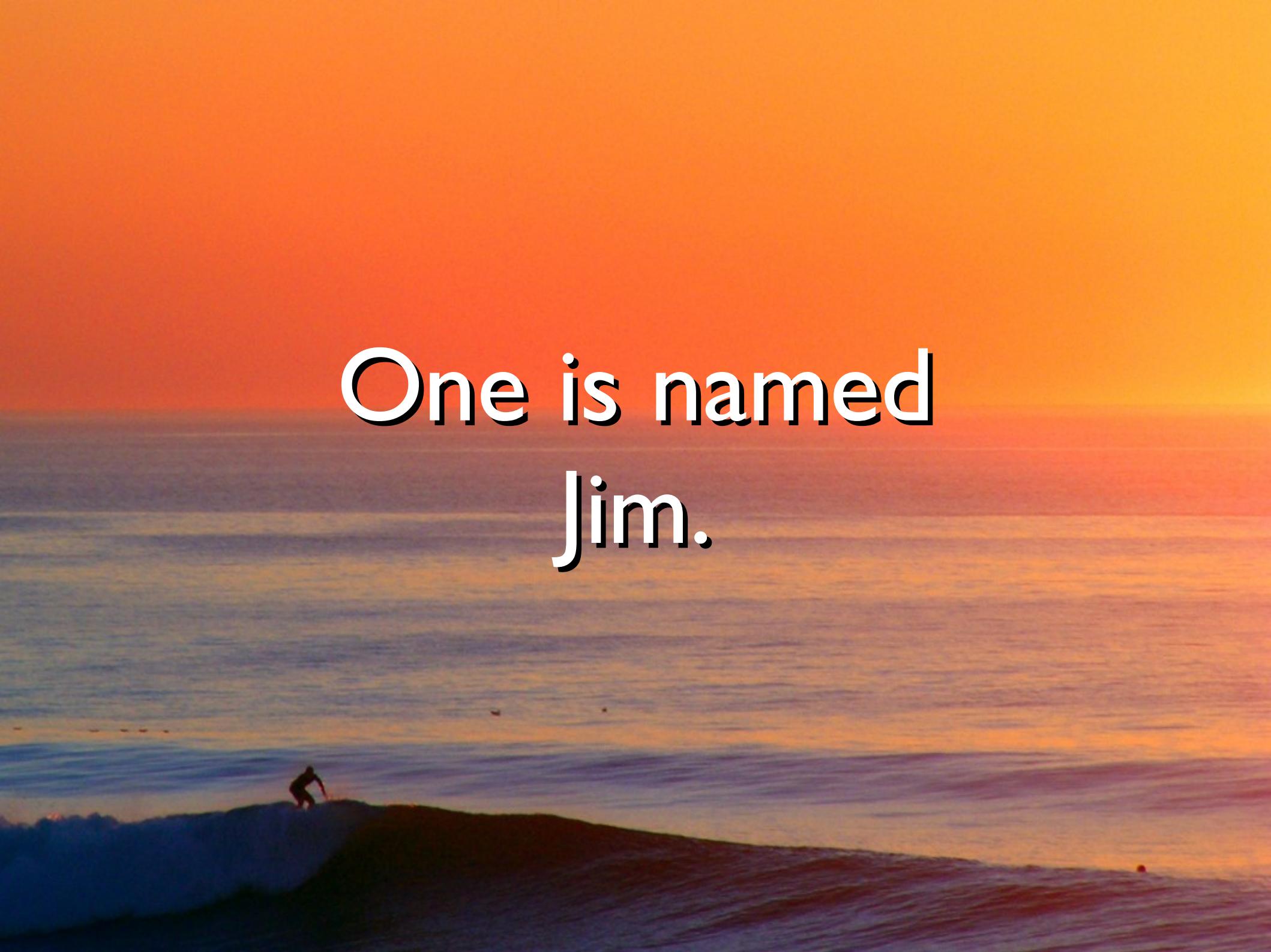
I'm learning Go.

A photograph of a meal. In the foreground, a white bowl is filled with a vibrant red, chunky sauce, possibly a tomato-based dish like baba ghanoush or a spicy yogurt dip. Behind it, a large, round platter holds several pieces of flatbread, some with dark, charred spots from grilling. A hand is visible on the left side of the platter, reaching towards the bread.

**It's a great
crowd.**

I make lots of friends.



A photograph of a sunset over a calm ocean. The sky is a gradient of orange, yellow, and blue. In the foreground, the dark silhouette of a person surfing a wave is visible against the bright horizon.

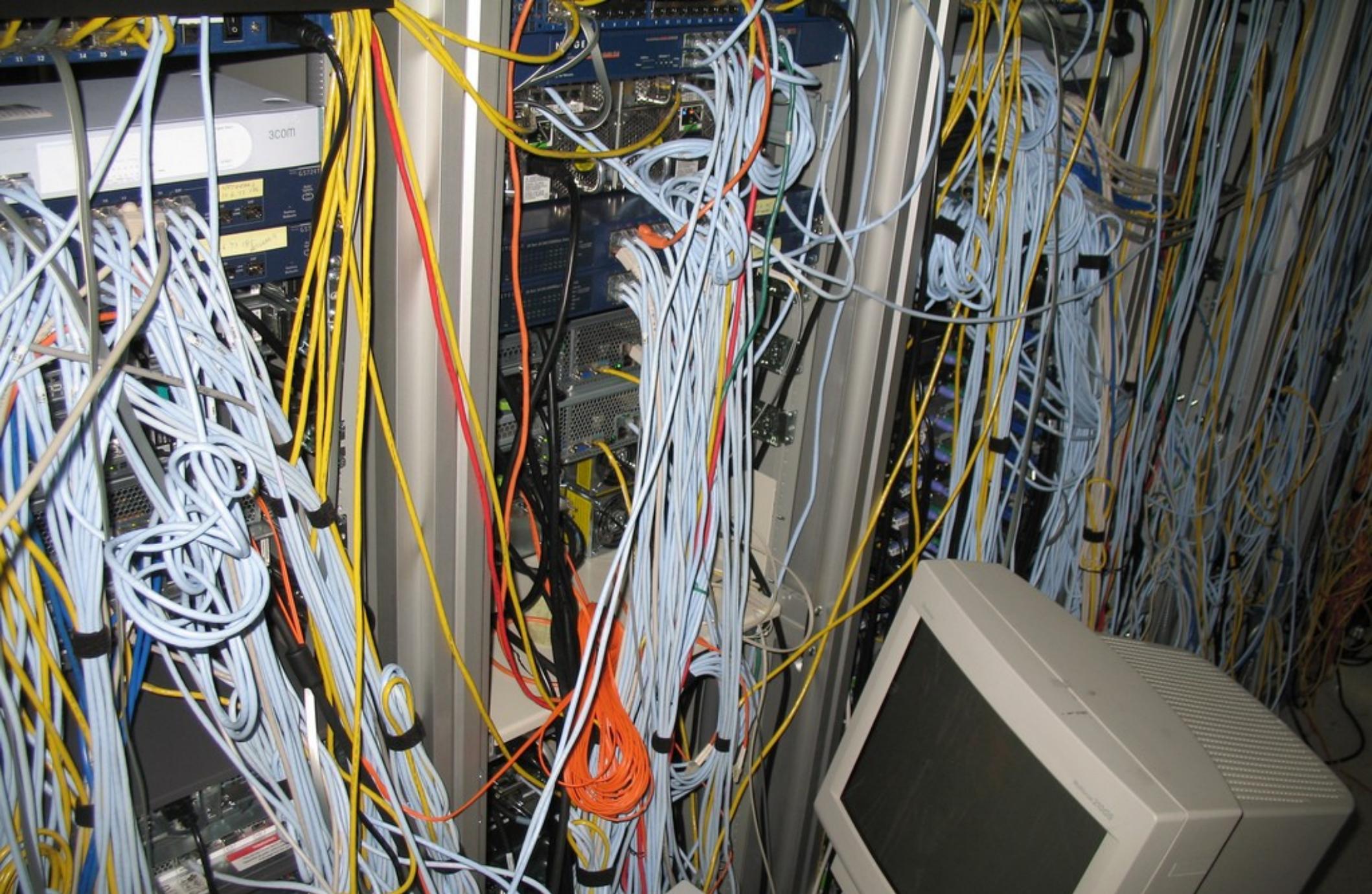
One is named
Jim.

So on this particular
day in 1994...

...why else
do I have
a headache?

Well, we tend to go out.





After a hard night out, Jim goes home.



He dreams.



Happily, this is no nightmare.
In fact...



...he meets a
beautiful
woman.



In his dream,
they hit it off.

**She even gives him
her number.**



When he
wakes...



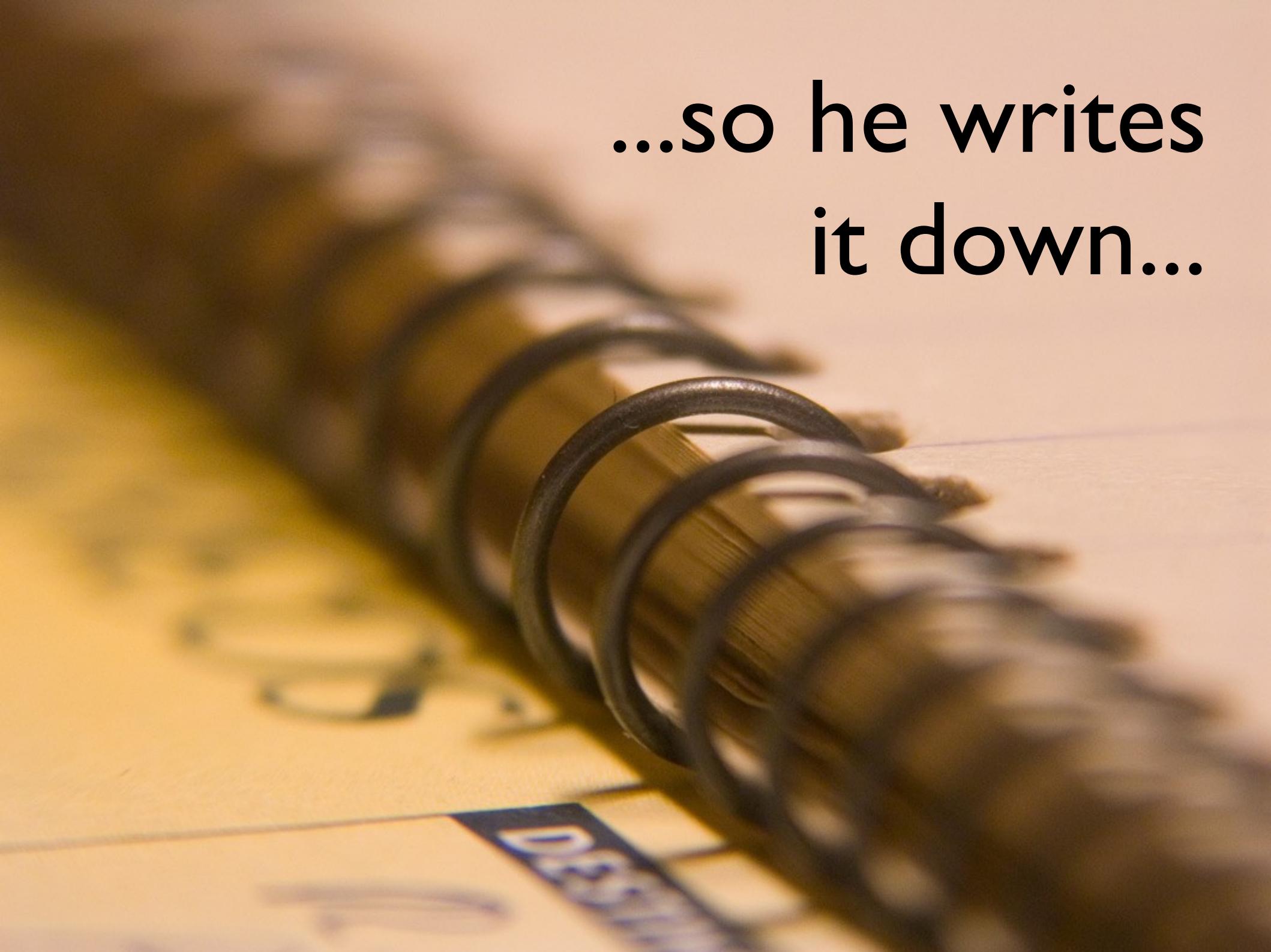
...it's the most.
Amazing.
Thing.

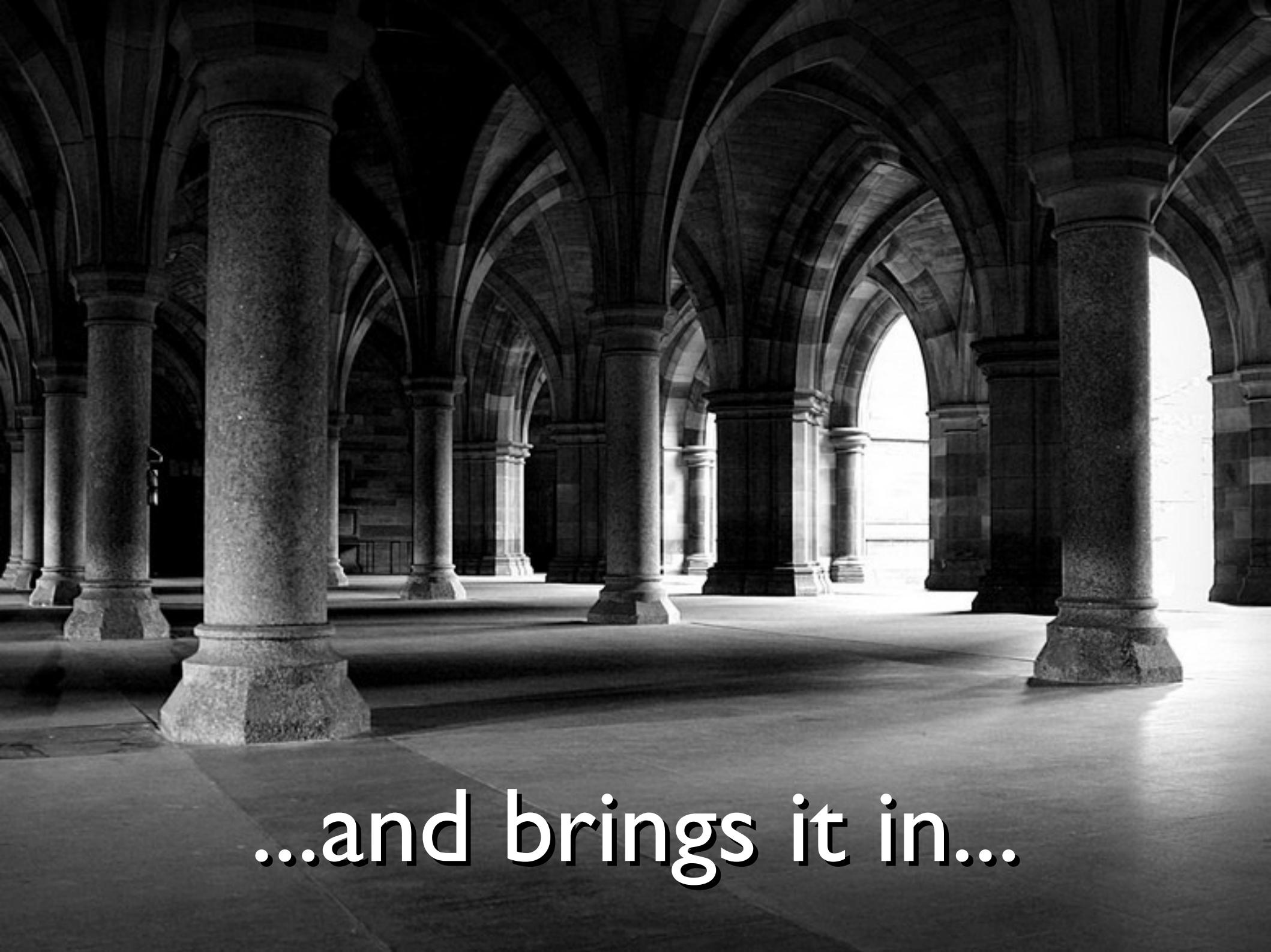


*He remembers
her number!*



...so he writes
it down...



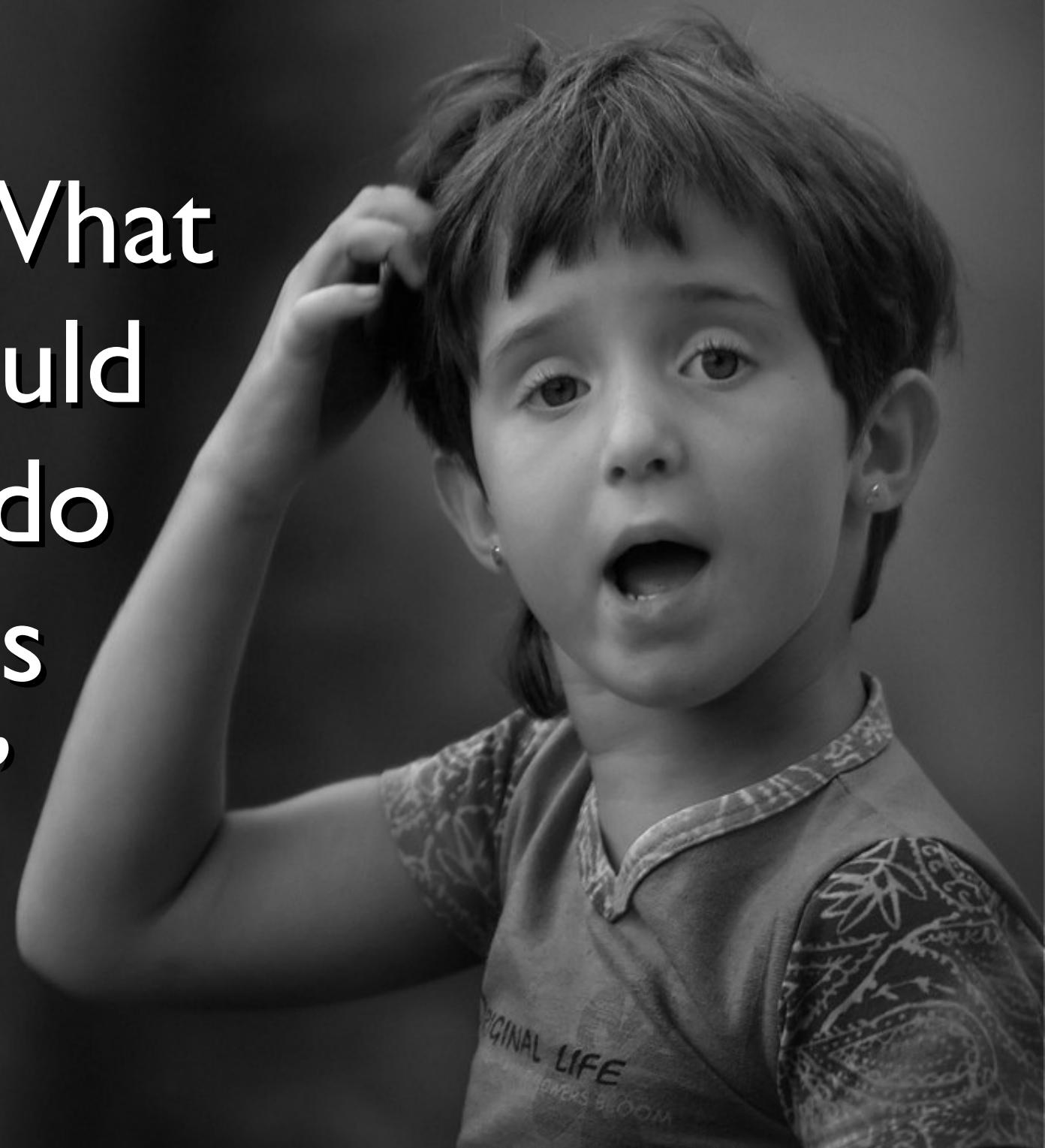


...and brings it in...

...and
asks
me:



“What
should
I do
with this
number?”



“Wait a sec,”
I tell him.



“I know this
number.”





“It's the delivery number...



...for the local pizzeria.”

Why tell
this
story?



A photograph of a group of people at a desert event, likely Burning Man. In the foreground, a man on the left wears a white clown mask with red lips and a wide smile, and a light-colored suit. Next to him, a woman in profile wears a flight helmet with a blue flower and a tan flight suit. They are standing in a field with other participants in the background, some of whom are also wearing costumes like white jumpsuits. The lighting is warm and golden, suggesting sunset or sunrise.

Community.

Most people
like to
belong.





I loved
the Haskell
community...



...but
I left
anyway.



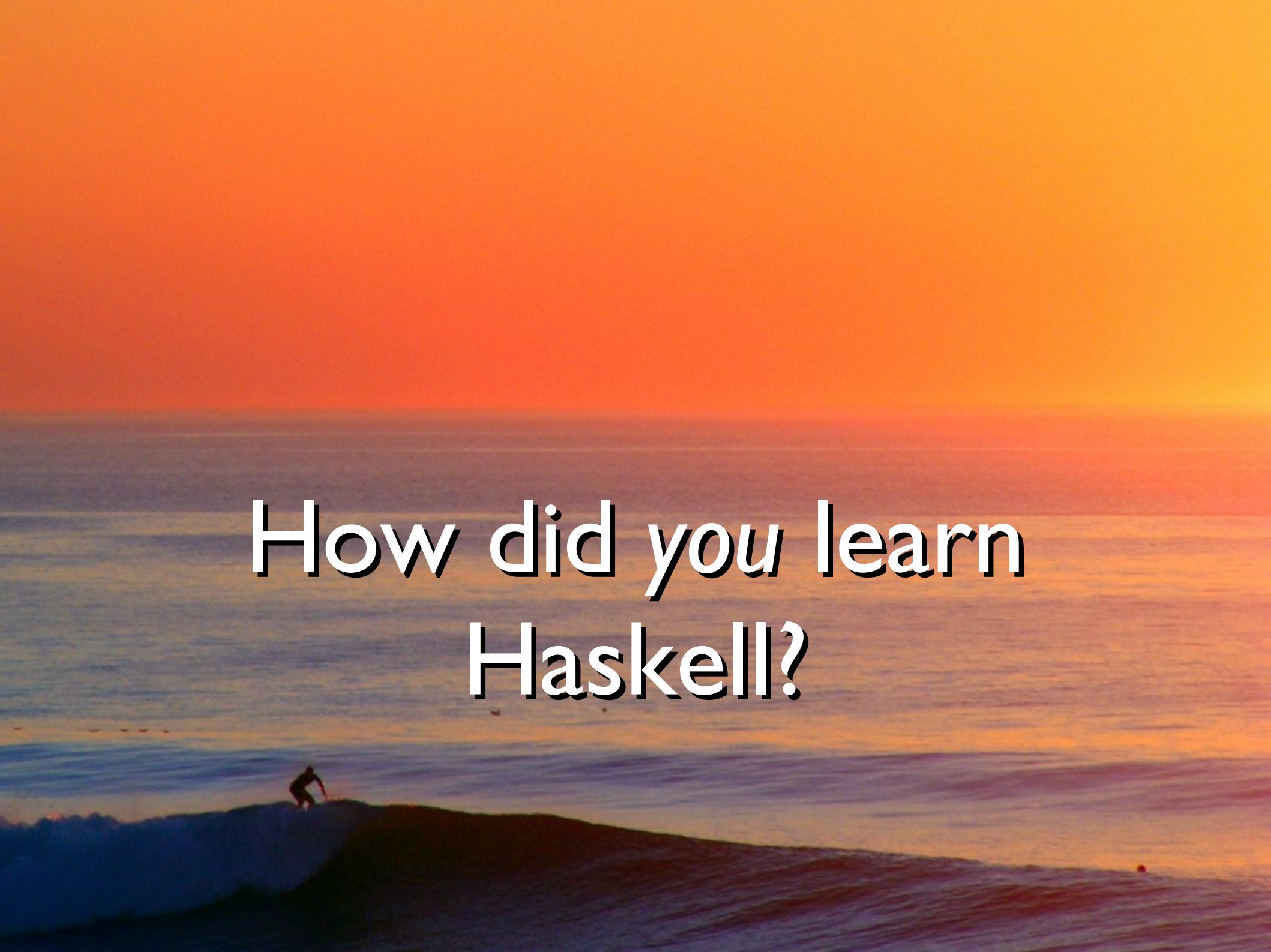
Over a decade
passed.

A close-up photograph of a man with a long, light brown beard and dark hair, wearing glasses and a dark shirt. He is holding a large, ornate wooden torch with both hands, its flame bright and yellow. The background is dark and out of focus, with a few blurred lights visible.

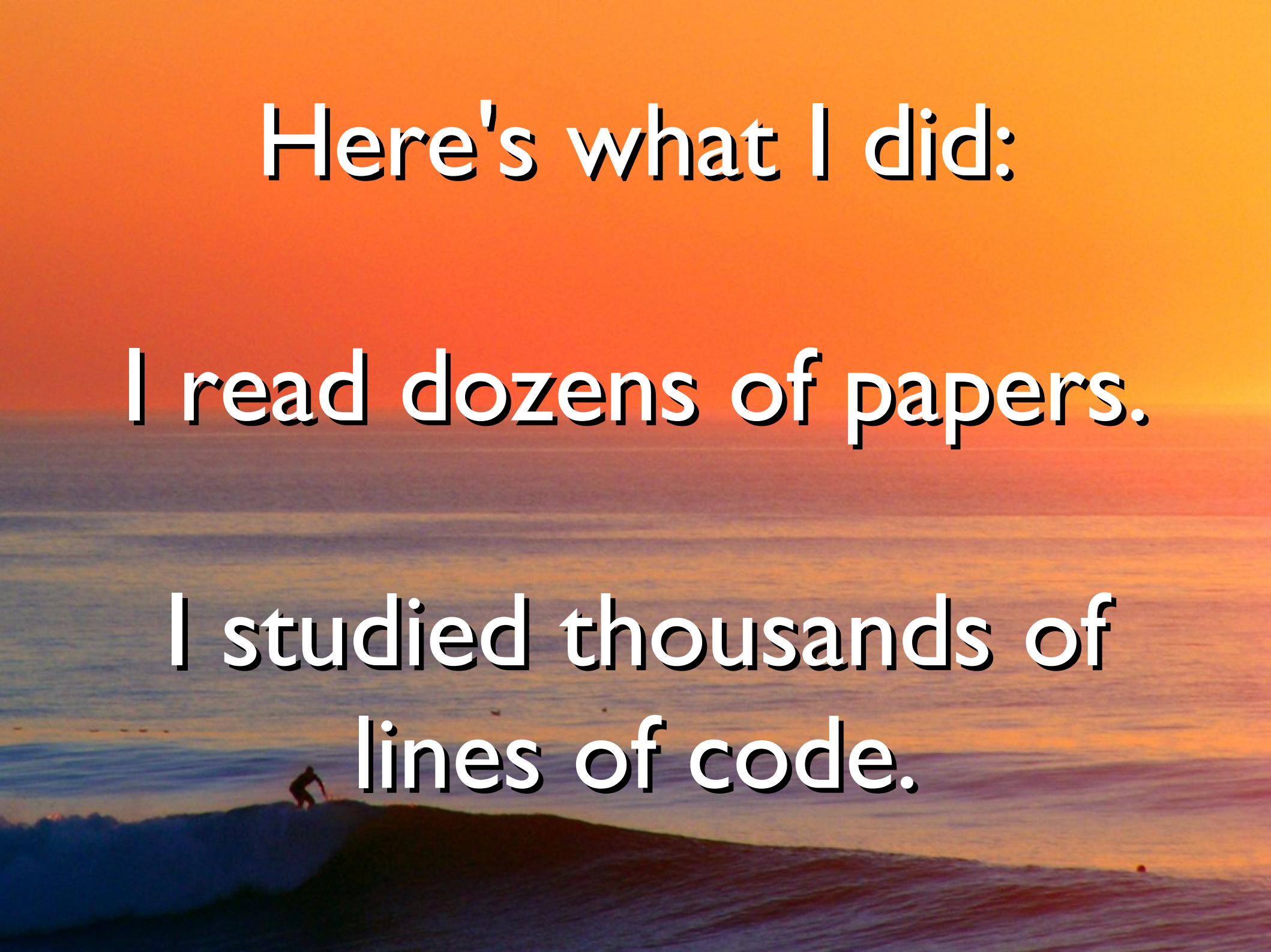
When I returned, the
community was still *beautiful*...



...and serenely inward-facing.

A photograph of a sunset over the ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. The ocean waves are visible in the foreground, and a single surfer is silhouetted against the horizon, riding a wave.

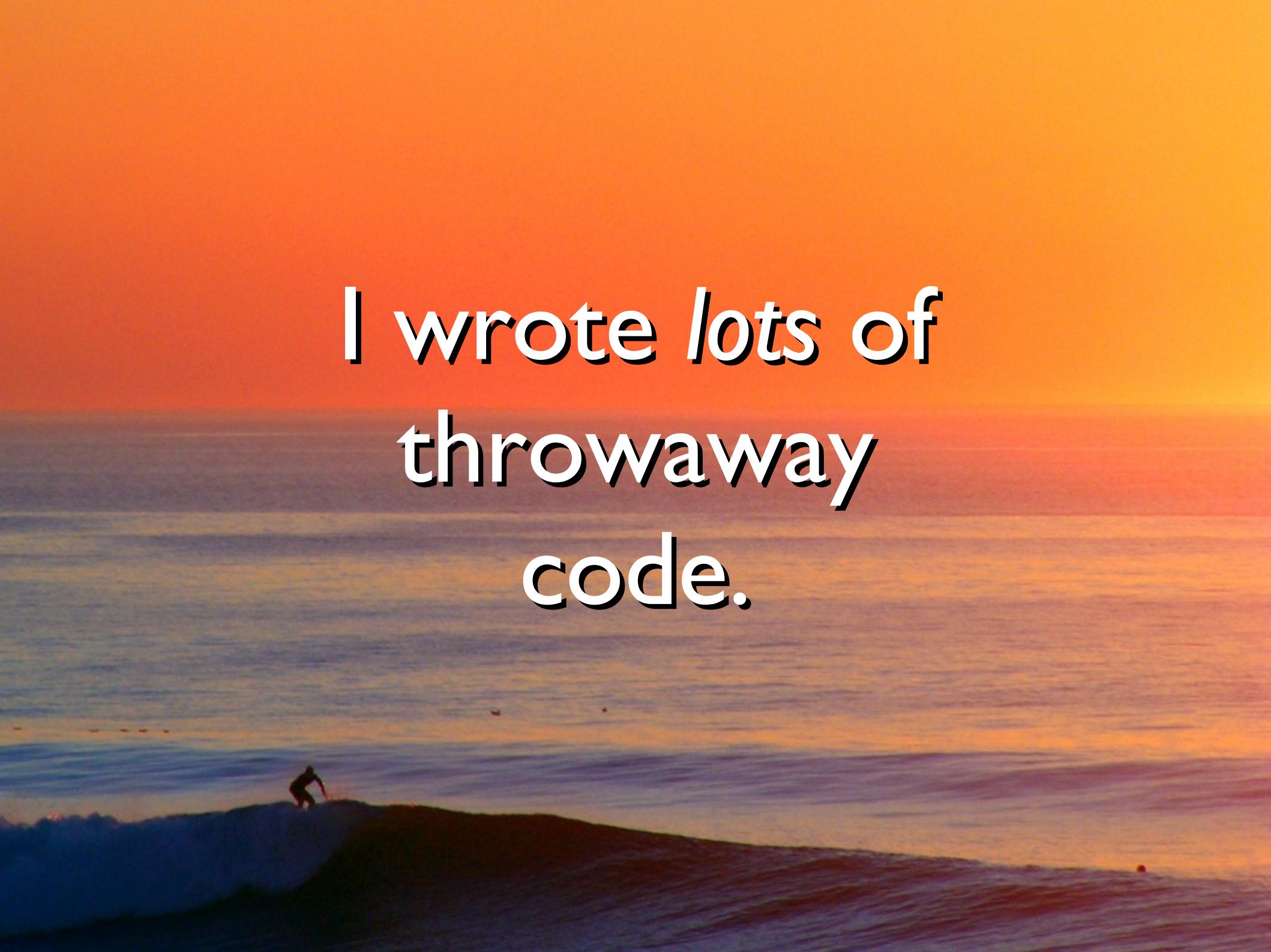
How did you learn
Haskell?

The background of the slide features a photograph of a sunset over the ocean. The sky is a warm orange and yellow, transitioning into a darker blue at the horizon. The ocean waves are visible in the foreground, and a small silhouette of a person surfing a wave is on the left side.

Here's what I did:

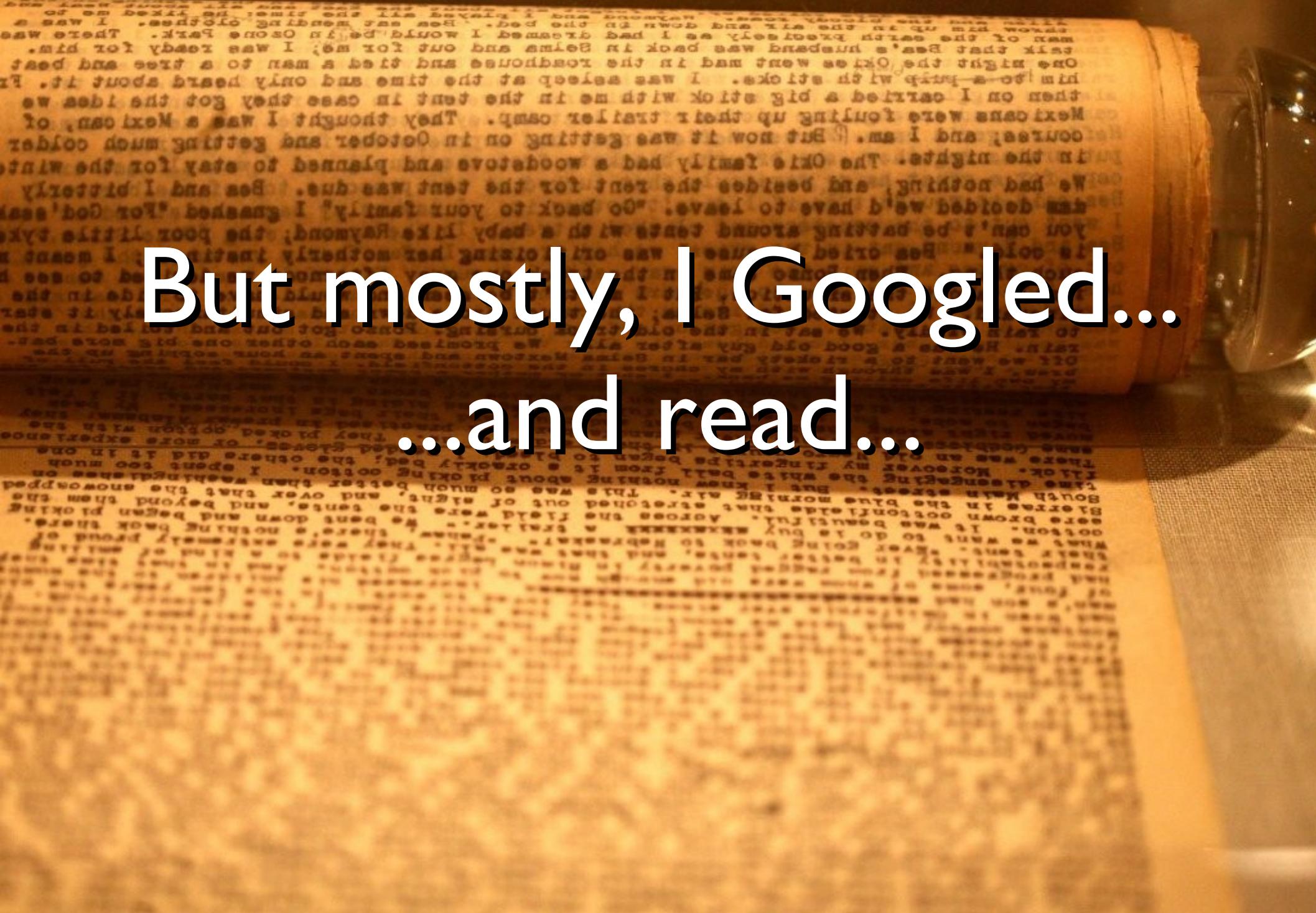
I read dozens of papers.

I studied thousands of
lines of code.

A photograph of a sunset over the ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. The ocean waves are visible in the foreground, and a single surfer is silhouetted against the horizon, riding a wave.

I wrote *lots* of
throwaway
code.

But mostly, I Googled...
...and read...



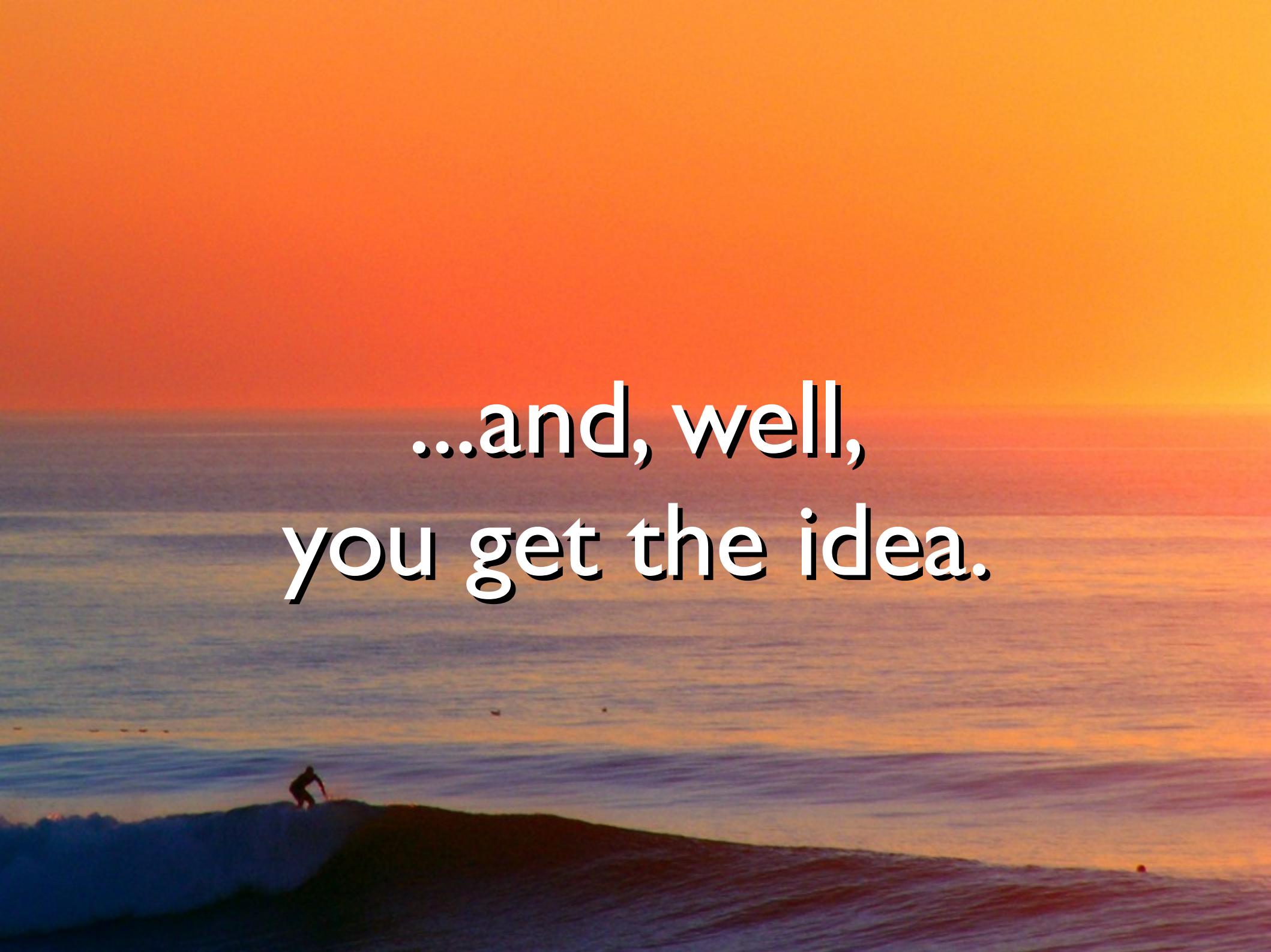
...and Googled...

...and read...

666

GAL. DE VSI

eiusdem sunt generis,
guerint muscularis: quid
que sinus magni
tus rariora fuissent: Co
gumentum, quod
tibus ossa sunt laxata

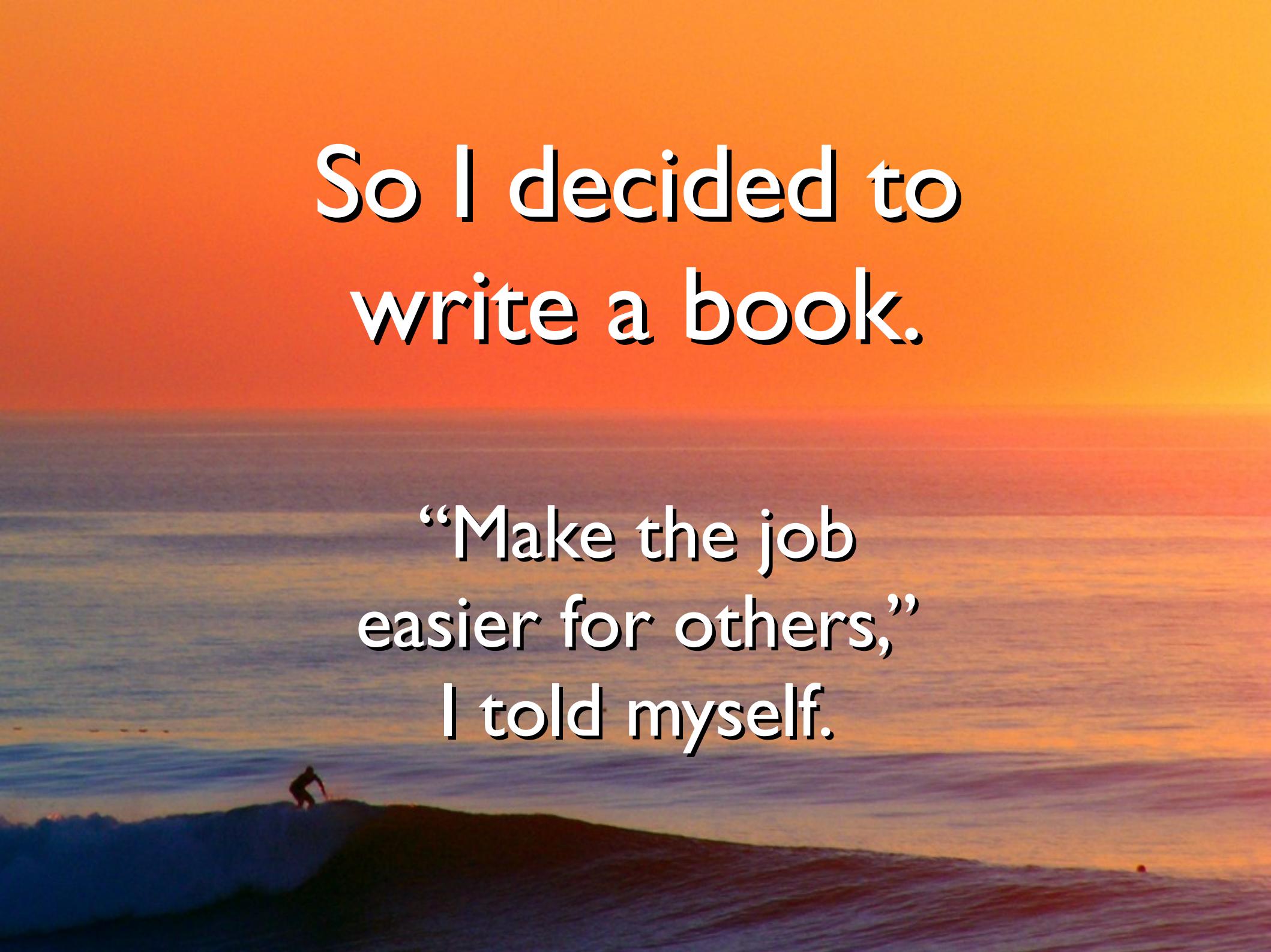
A photograph of a surfer riding a wave at sunset. The sky is a vibrant orange and yellow, transitioning into a darker blue over the ocean. The surfer is silhouetted against the bright horizon, positioned on the left side of the frame. The ocean waves are visible in the foreground and middle ground.

...and, well,
you get the idea.

I delighted in the process.

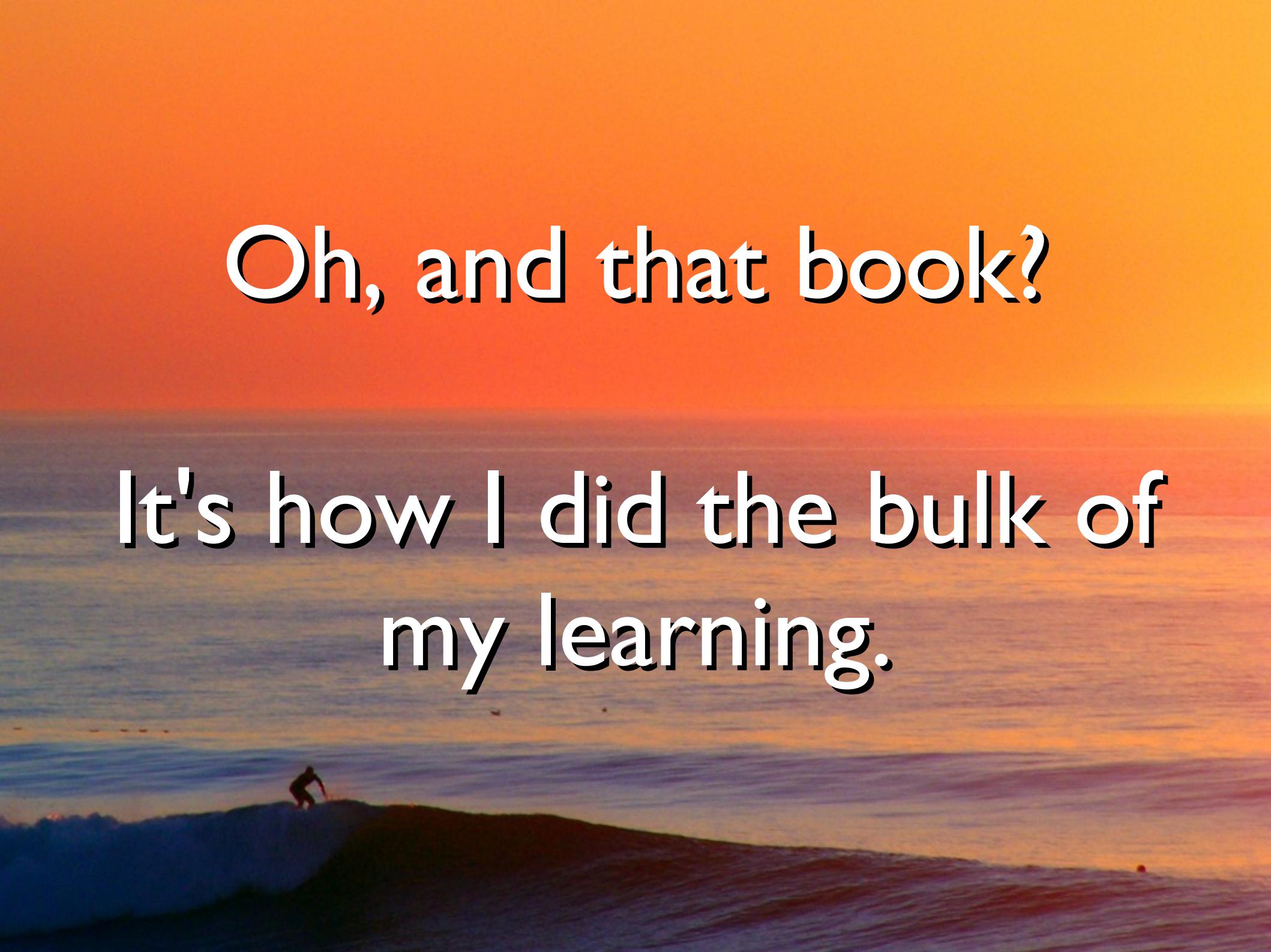


But it wasn't very efficient.

The background of the image is a photograph of a sunset or sunrise over a calm sea. The sky is filled with warm orange, yellow, and pink hues. In the lower-left foreground, a dark silhouette of a person is riding a surfboard on a small wave, facing away from the viewer towards the horizon.

**So I decided to
write a book.**

**“Make the job
easier for others,”
I told myself.**

The background of the image is a sunset over the ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. The ocean waves are visible in the foreground, and a single surfer is silhouetted against the horizon, riding a wave.

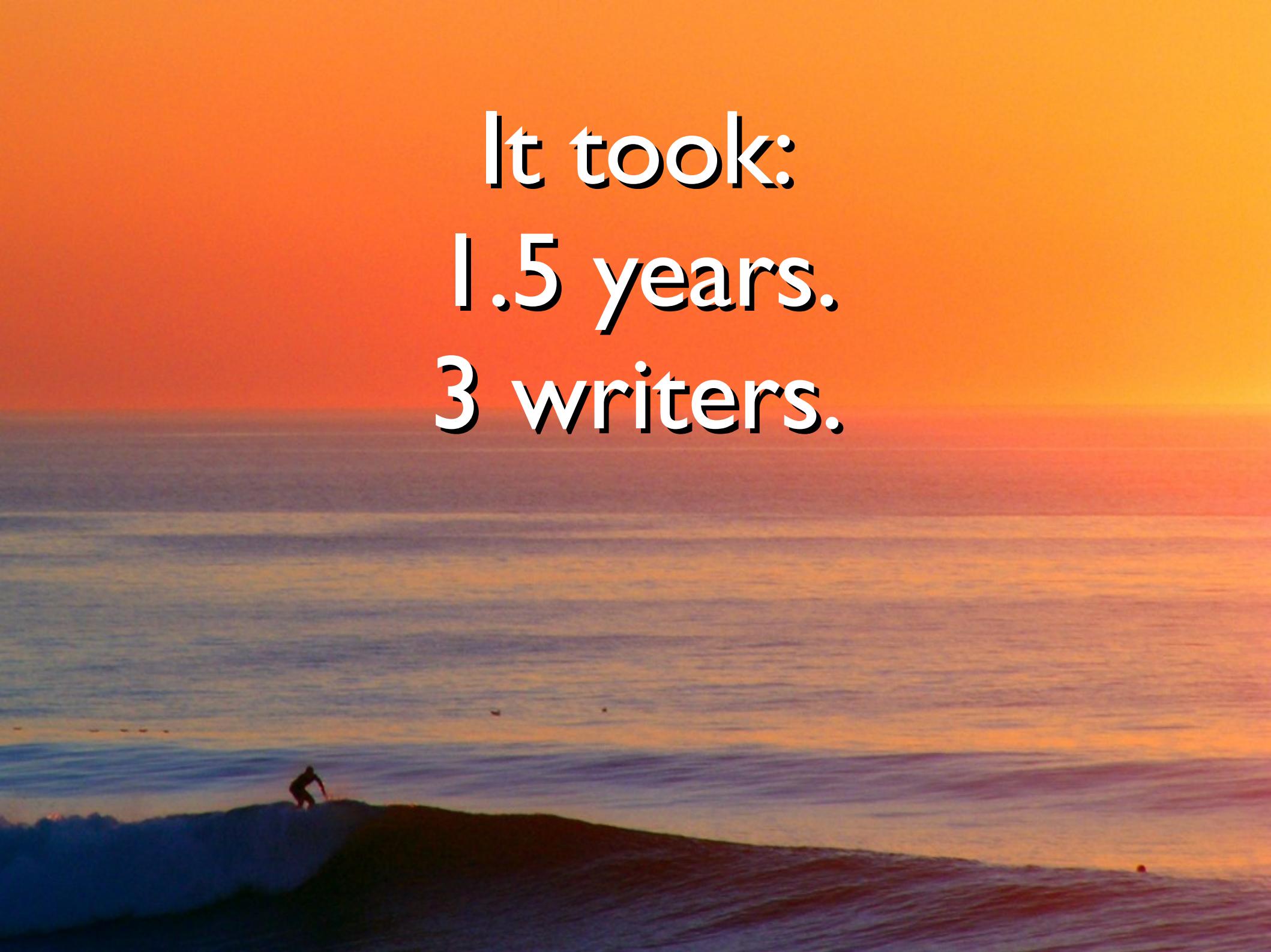
Oh, and that book?

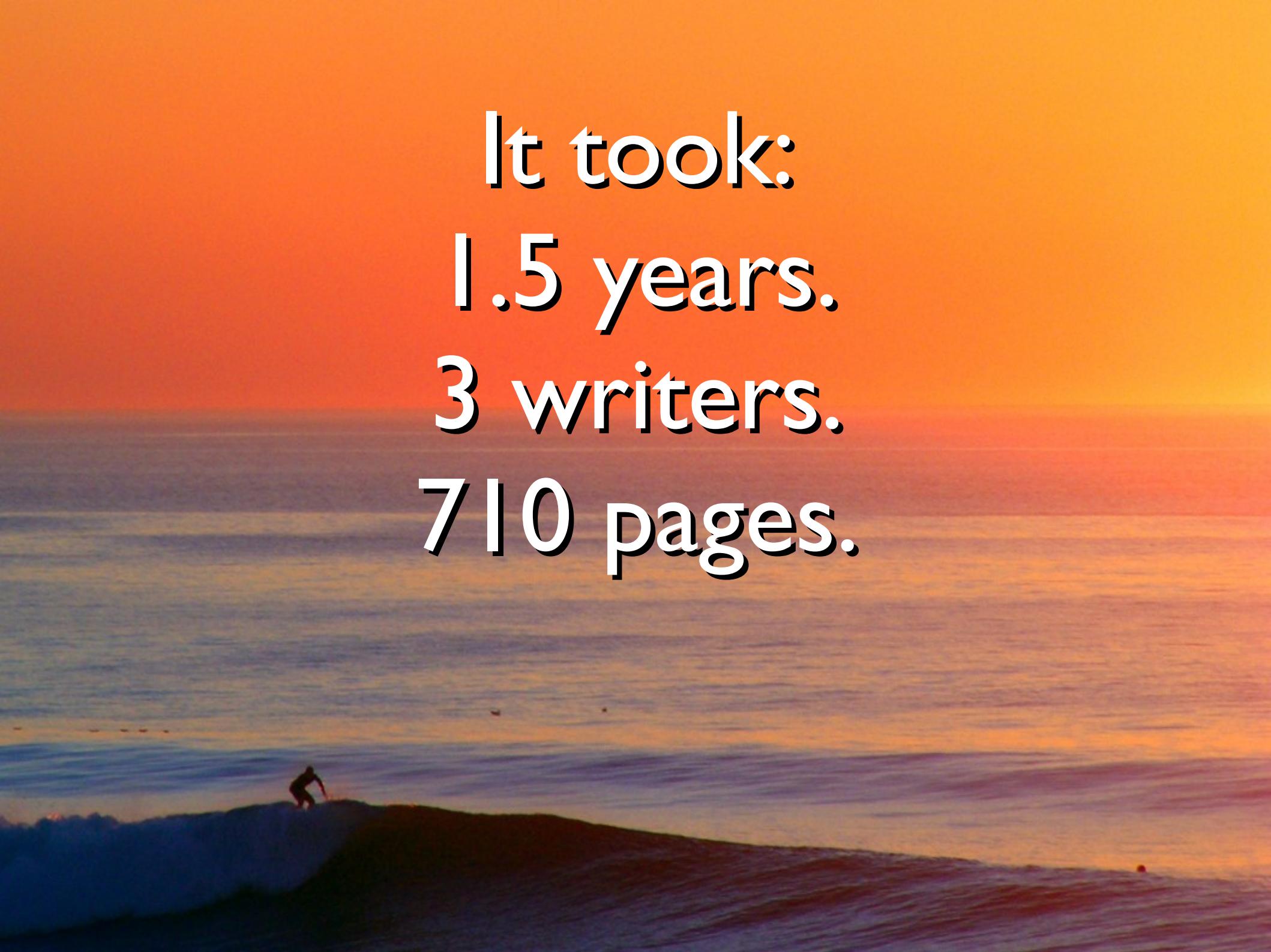
**It's how I did the bulk of
my learning.**

**It took:
1.5 years.**

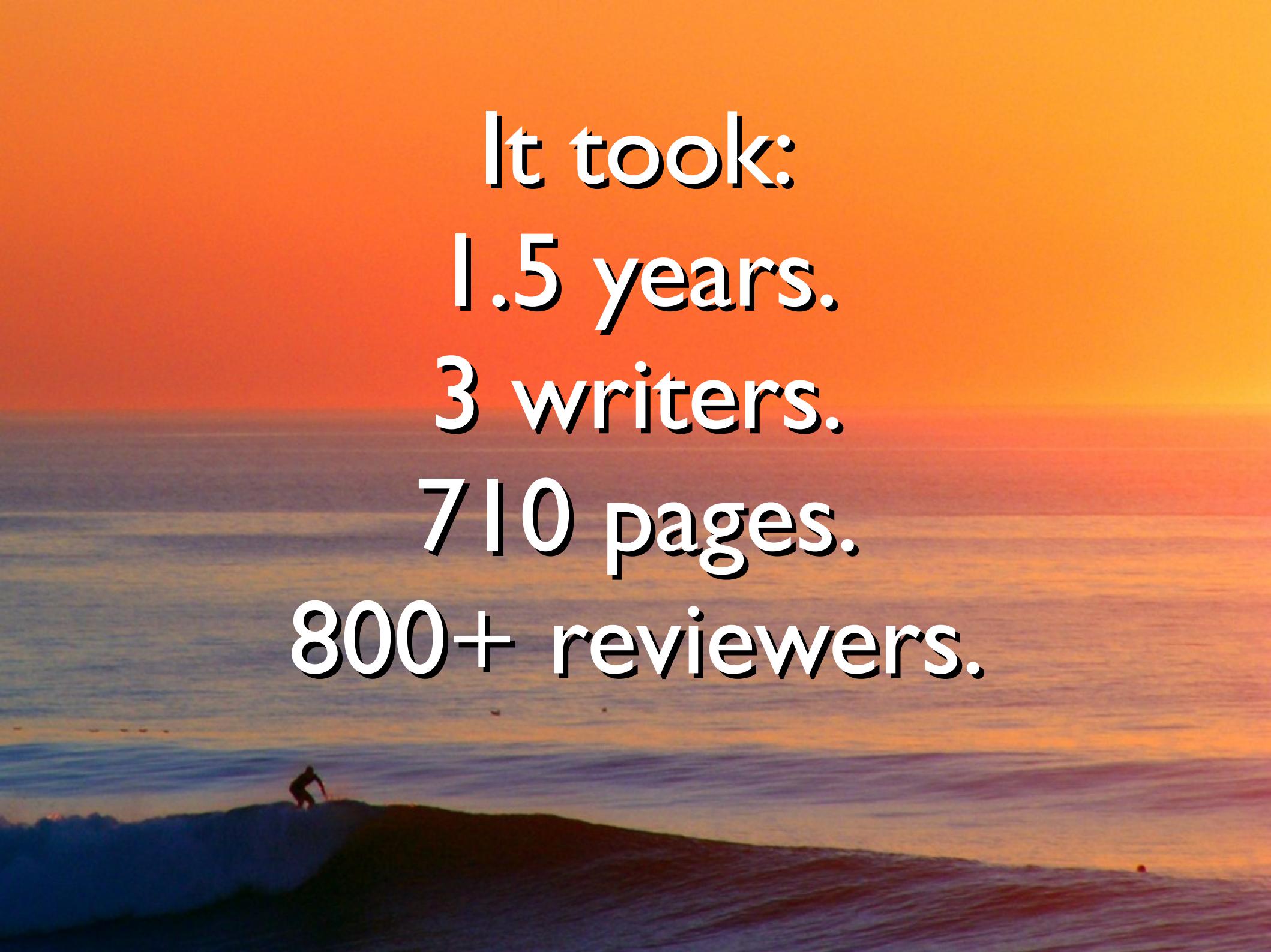


**It took:
1.5 years.
3 writers.**



A photograph of a sunset over the ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. The ocean waves are visible in the foreground, and a small silhouette of a person surfing a wave is on the left side.

**It took:
1.5 years.
3 writers.
710 pages.**

A photograph of a sunset over the ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. The ocean waves are visible in the foreground, and a small silhouette of a person surfing is on the left side.

**It took:
1.5 years.
3 writers.
710 pages.
800+ reviewers.**

The background of the image is a photograph of a sunset over a calm sea. The sky is filled with warm orange and yellow hues, transitioning into a darker blue at the top. The horizon line is visible, and the water reflects the colors of the sky. In the foreground, a dark, sandy beach meets the water where small waves are breaking. The overall atmosphere is peaceful and scenic.

It took:
1.5 years.
3 writers.
710 pages.
800+ reviewers.
7,500+ comments.

Now it's your turn.

Stop procrastinating –
starting tomorrow.

Srsly.

A photograph of a sunset over the ocean. The sky is a gradient from orange at the top to yellow and then blue at the horizon. In the foreground, a dark silhouette of a person is riding a surfboard on a wave. The ocean has small, calm waves.

**What is the Haskell
community good at?**



Research? We've got it!

Outreach?



That's less
clear to me.



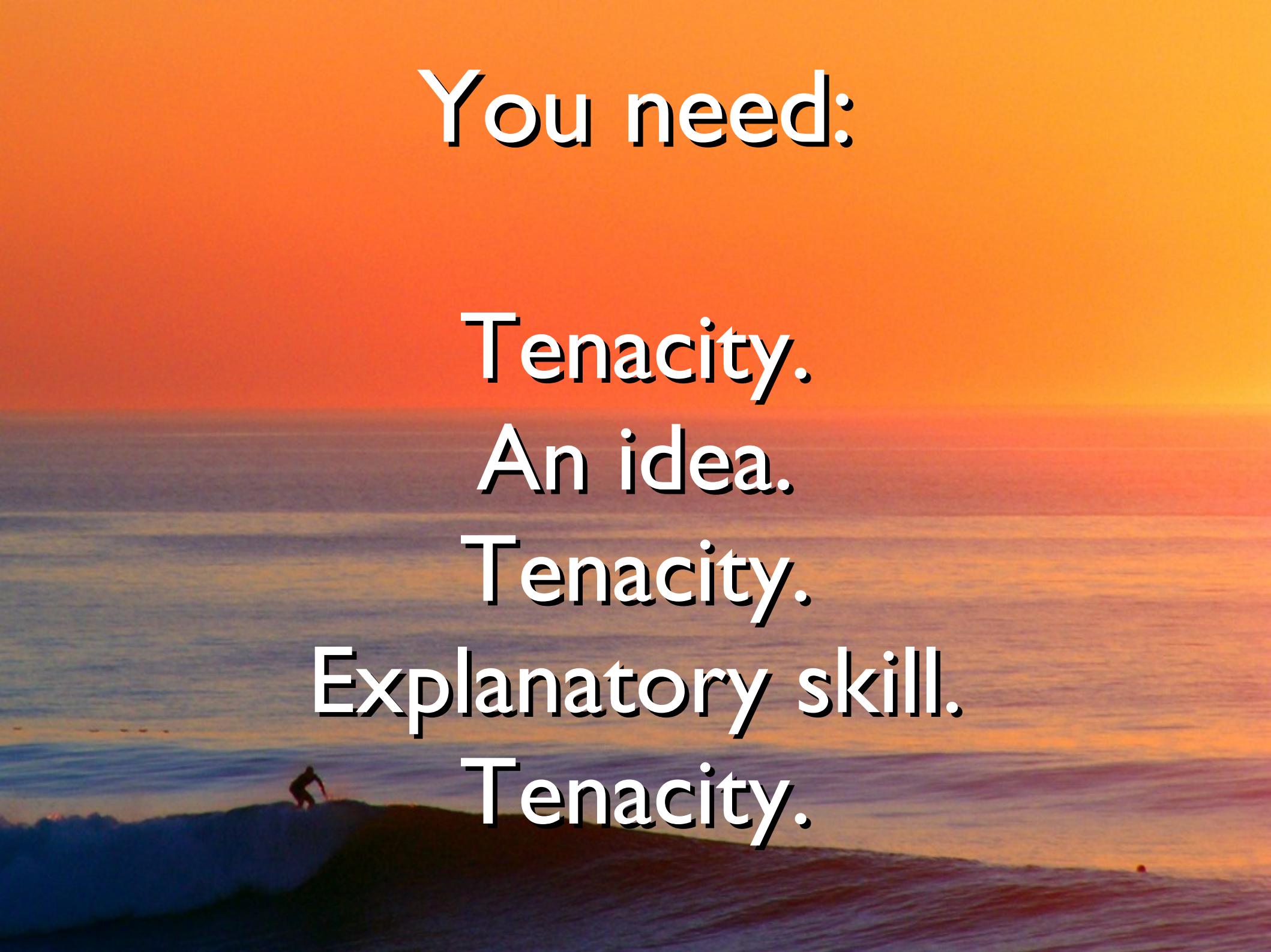
You don't need to
write a 700-page tome.



A photograph of a sunset over the ocean. The sky is a gradient of orange, yellow, and blue. In the foreground, a surfer is riding a wave. The water reflects the warm colors of the sunset.

You don't need to
describe new research.

(In fact, I think it's best you don't.)

A photograph of a surfer riding a wave at sunset. The sky is a vibrant orange and yellow, transitioning into a darker blue over the ocean. The surfer is positioned on the left, riding a white-capped wave. The overall mood is energetic and inspiring.

You need:

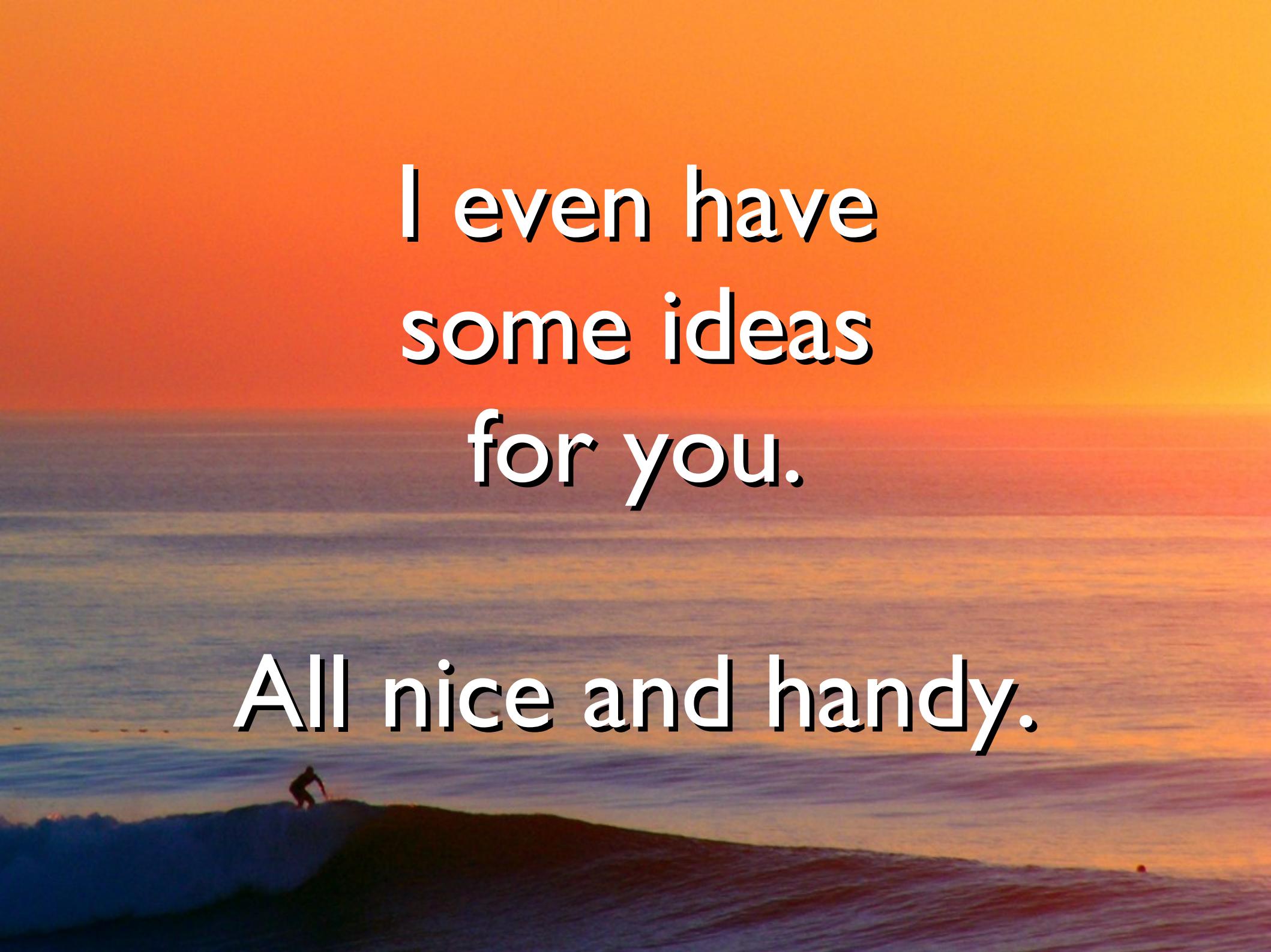
Tenacity.

An idea.

Tenacity.

Explanatory skill.

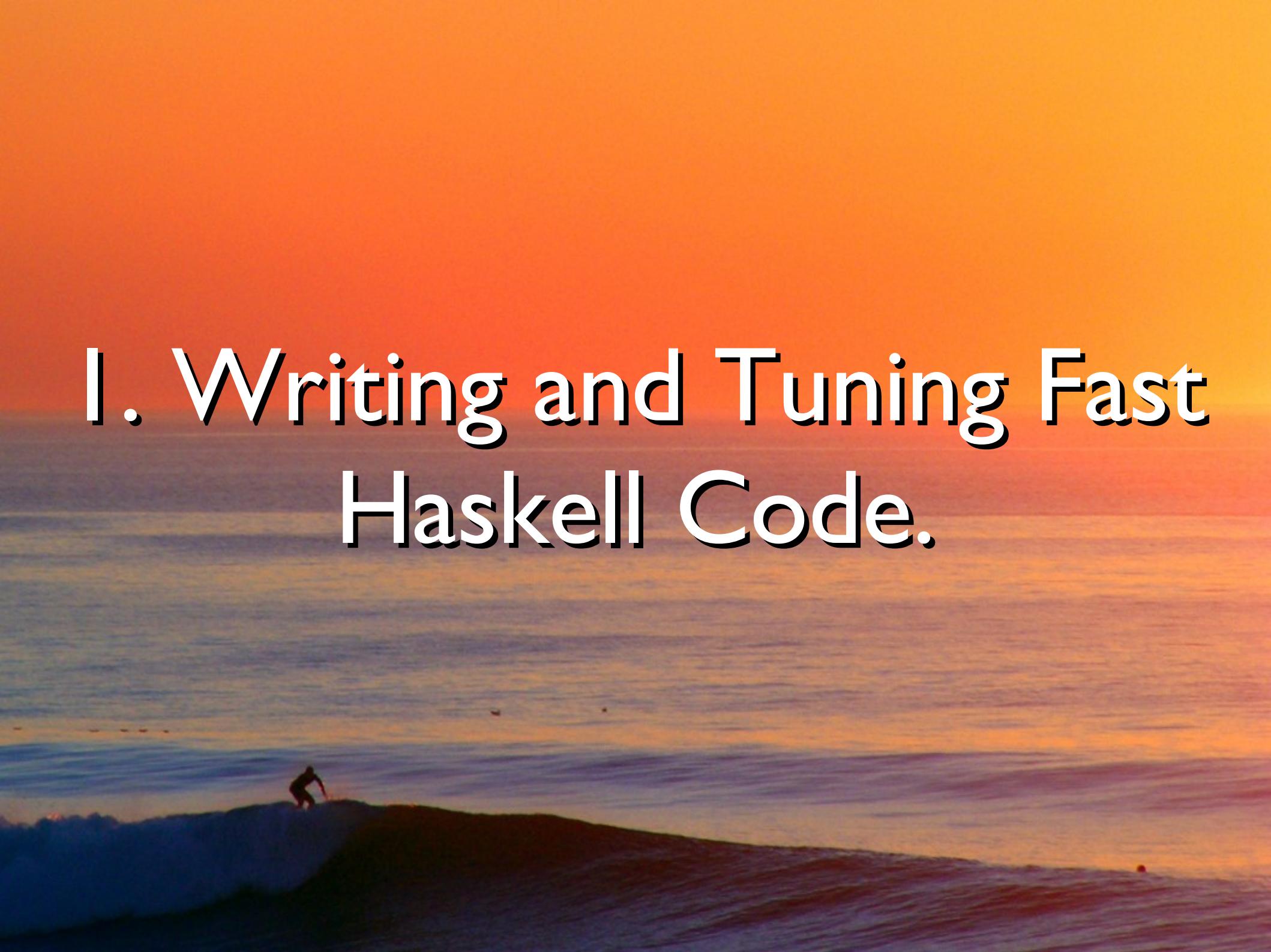
Tenacity.

A photograph of a sunset over a calm ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. In the lower-left foreground, a dark silhouette of a person is riding a surfboard on a small wave.

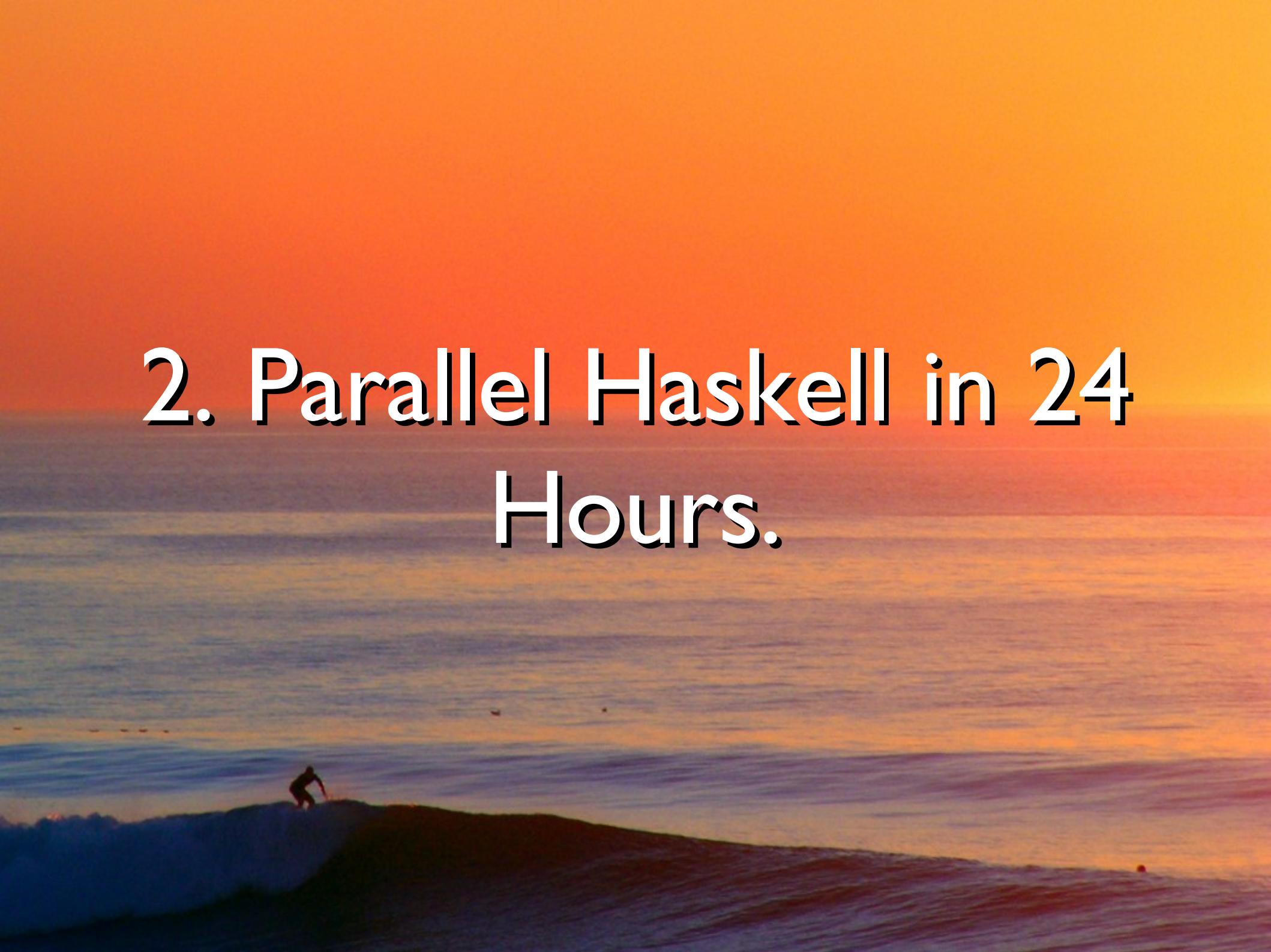
I even have
some ideas
for you.

All nice and handy.

I. Writing and Tuning Fast Haskell Code.



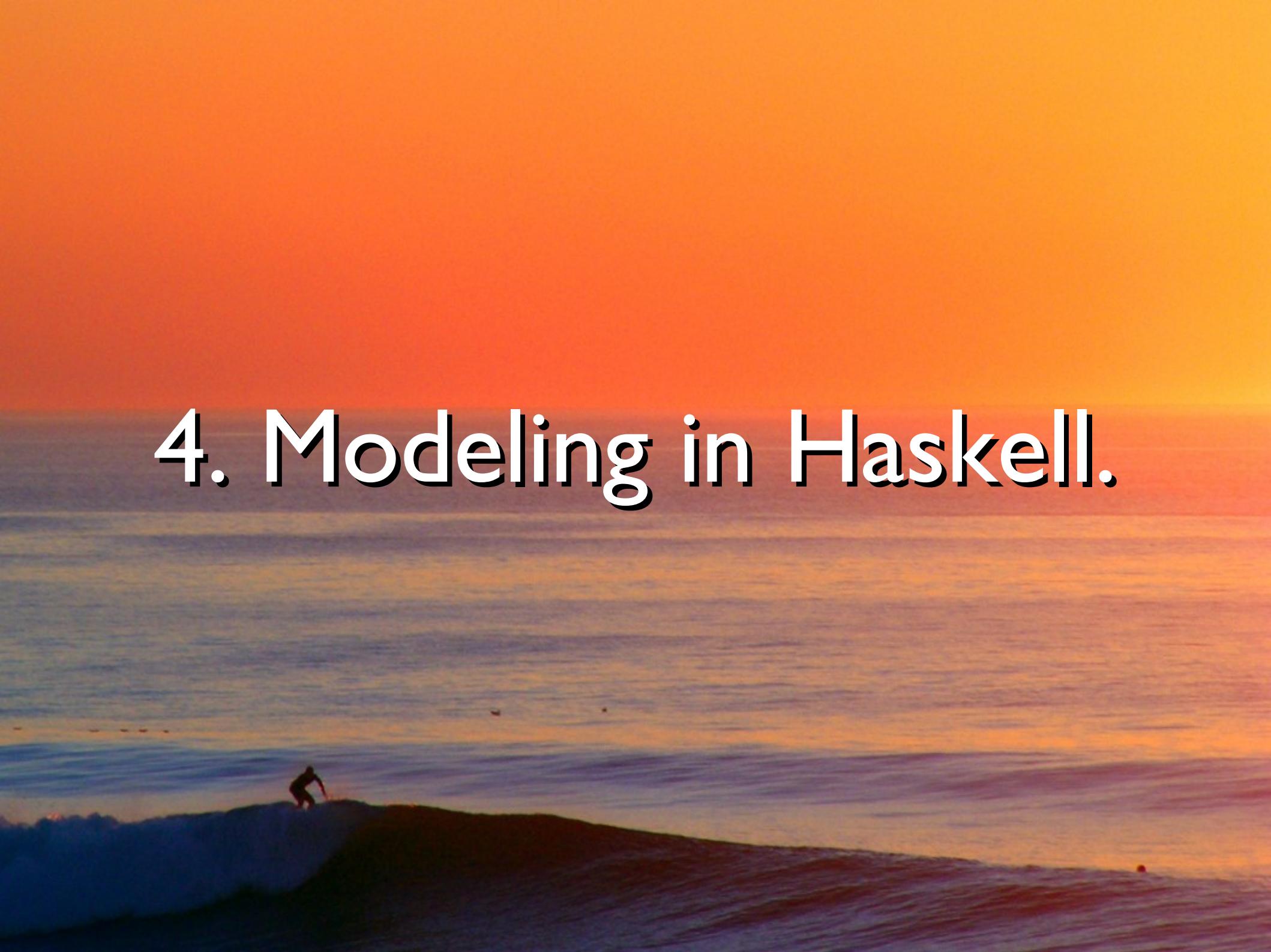
2. Parallel Haskell in 24 Hours.



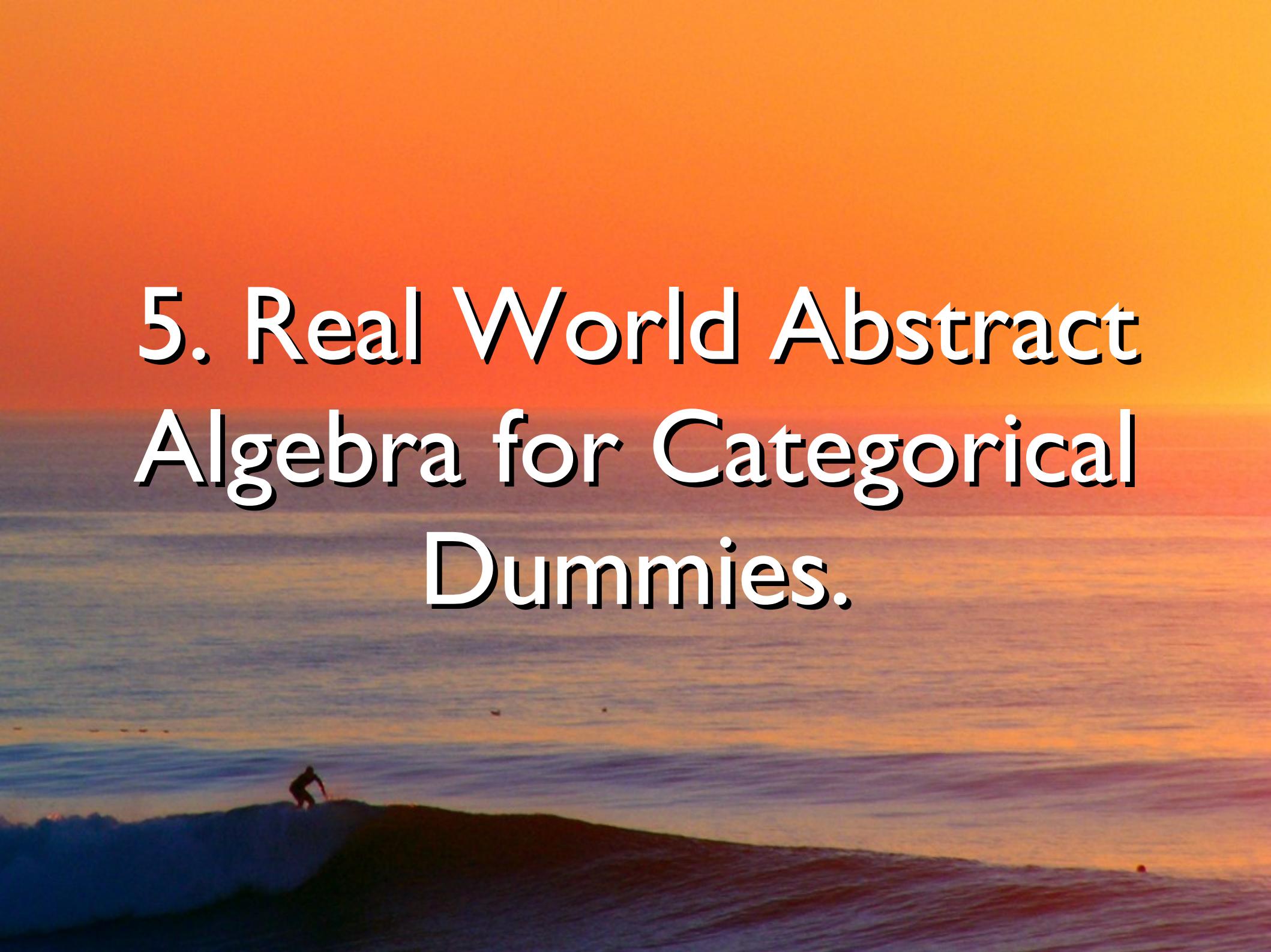
3. High-Assurance Haskell.



4. Modeling in Haskell.



5. Real World Abstract Algebra for Categorical Dummies.



6. Complex Functional Applications.



A photograph of a sunset over the ocean. The sky is a warm orange and yellow, transitioning to a darker blue at the horizon. A single surfer is visible on a wave in the lower-left foreground. The ocean waves are calm with some white foam at the crests.

7. Grow Your Own
Monads in the Basement,
Legally.

8. Concurrent Networking Programming.

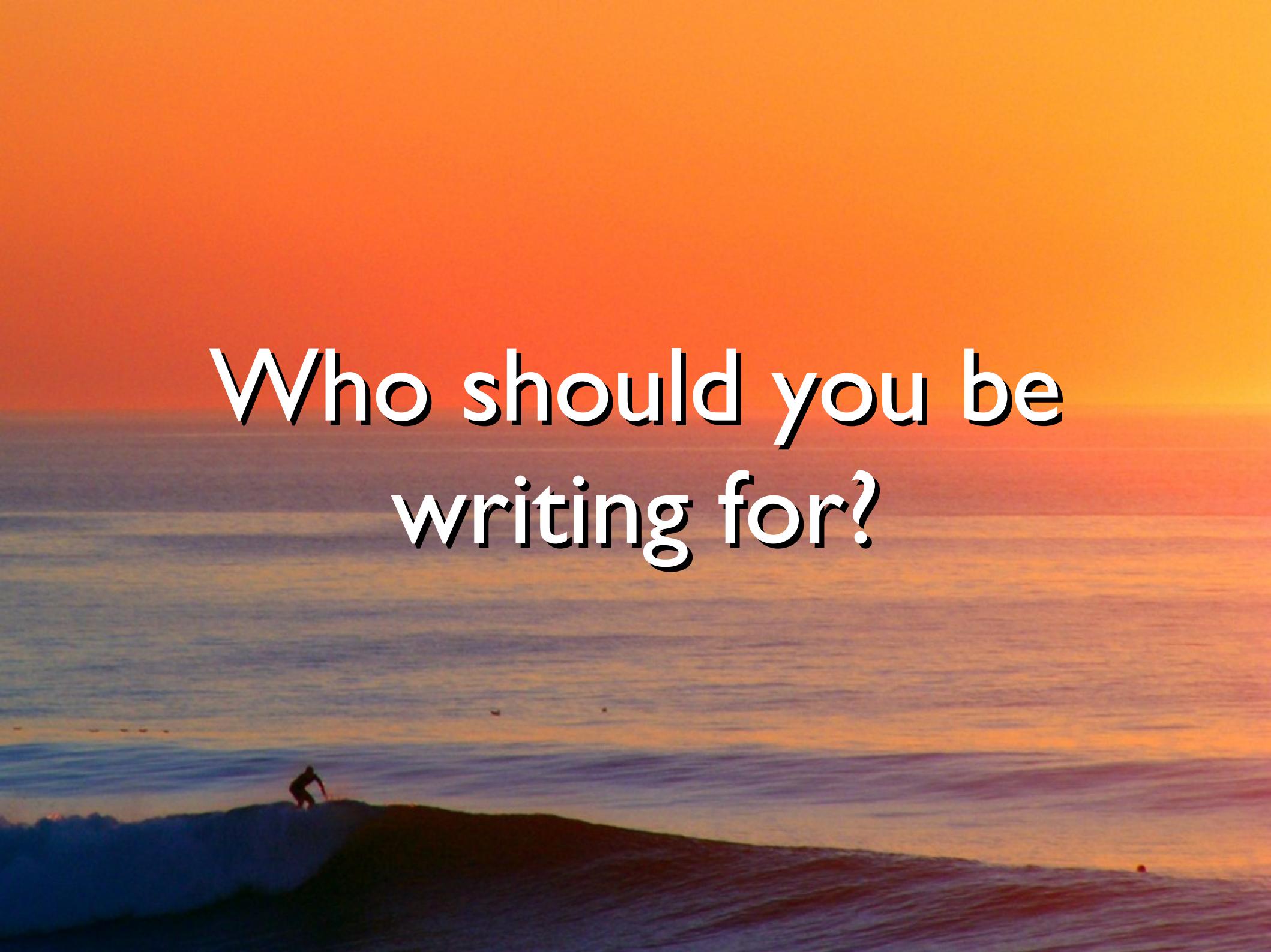


9. Functional Pearls and Design Patterns.



The background of the slide features a photograph of a sunset over the ocean. The sky is a warm orange and yellow, transitioning into a darker blue at the horizon. The ocean waves are visible in the foreground, and a single surfer is silhouetted against the horizon, riding a wave.

10. Secrets of the QuickCheck Wizards.

A photograph of a sunset over the ocean. The sky is a vibrant orange and yellow, transitioning into a darker blue at the horizon. The ocean waves are visible in the foreground, and a single surfer is silhouetted against the horizon, riding a wave.

**Who should you be
writing for?**

A photograph of a sunset over a calm ocean. The sky is a vibrant orange and yellow, transitioning into a darker blue at the horizon. In the foreground, a dark silhouette of a person is riding a surfboard on a small wave. The water reflects the warm colors of the sky.

NOT THE PEOPLE
IN THIS ROOM.

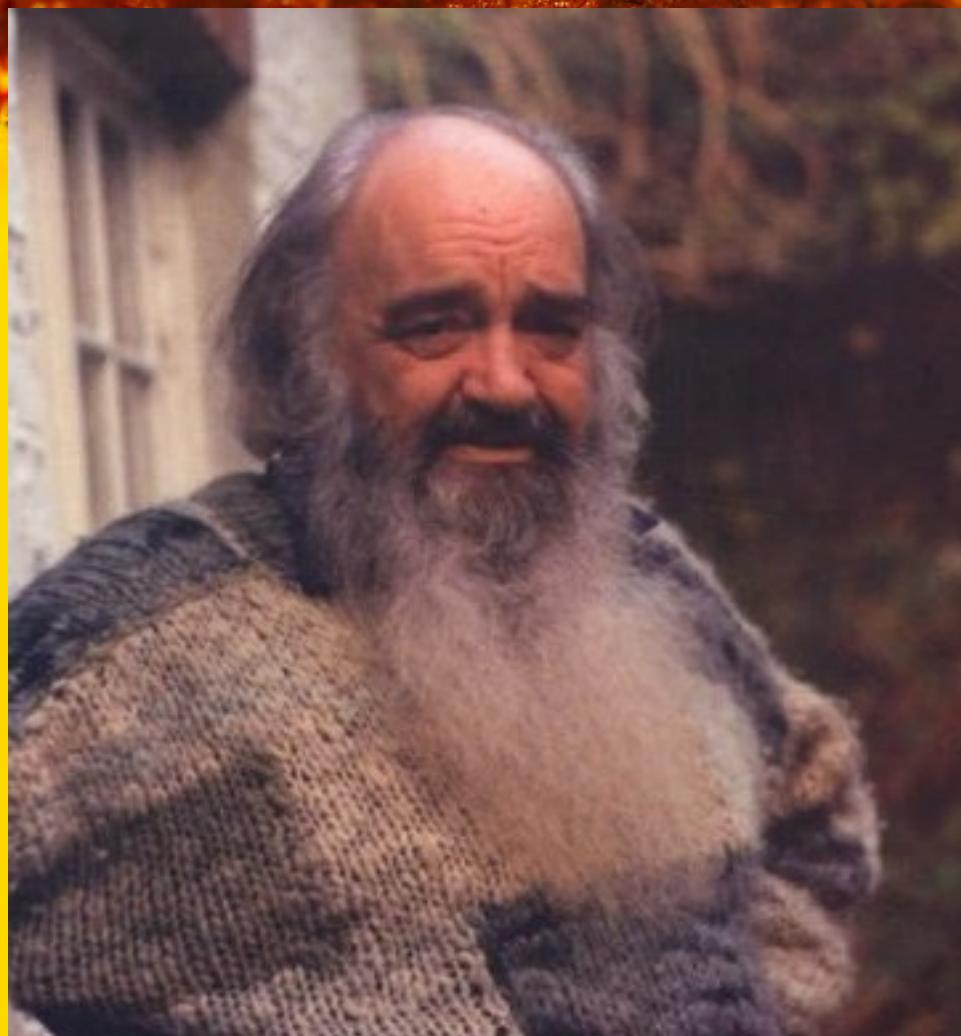


Look to
other programming
communities.

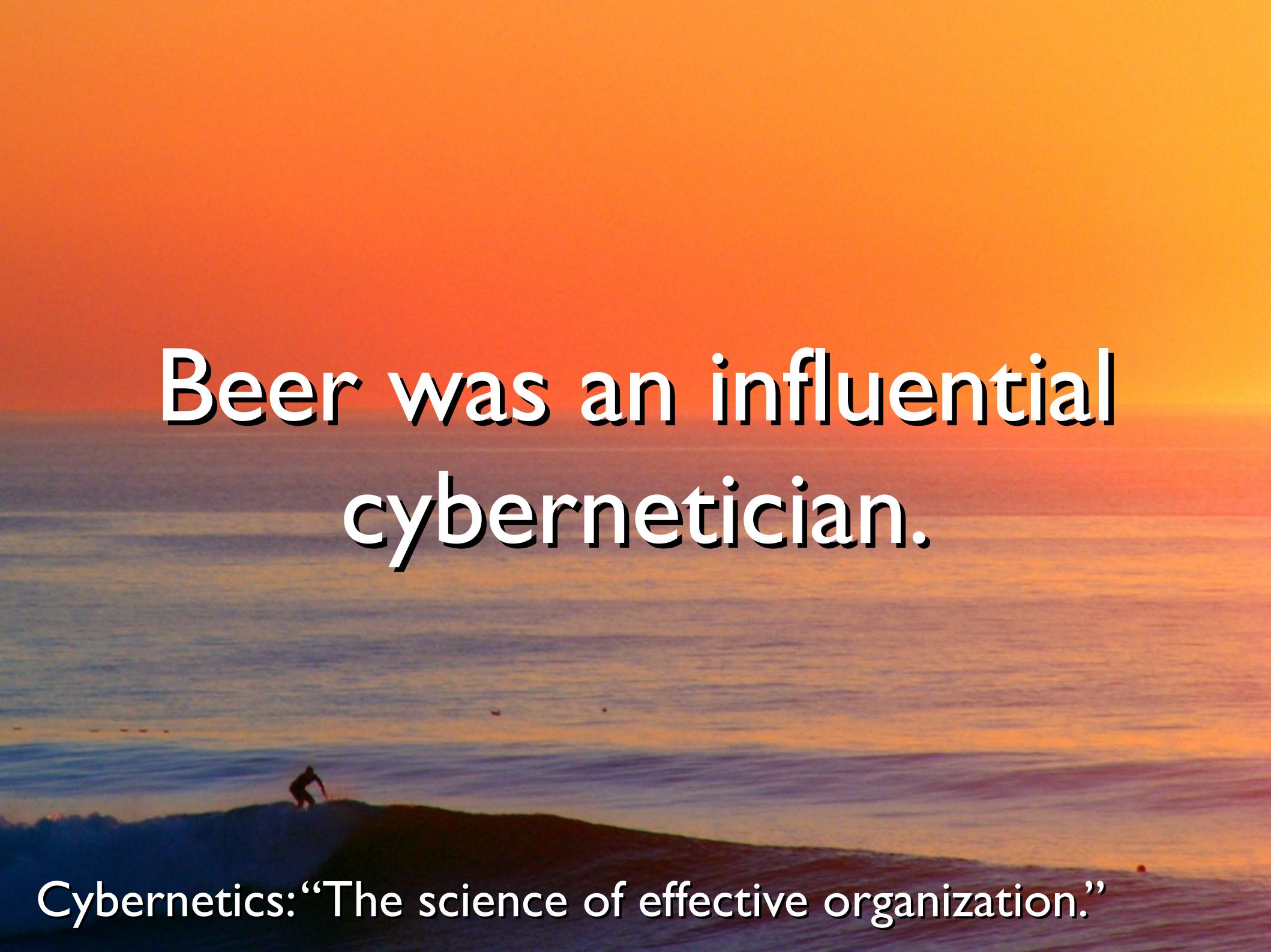
If we don't talk
to them, they
won't simply
come to us.



Who is this man?

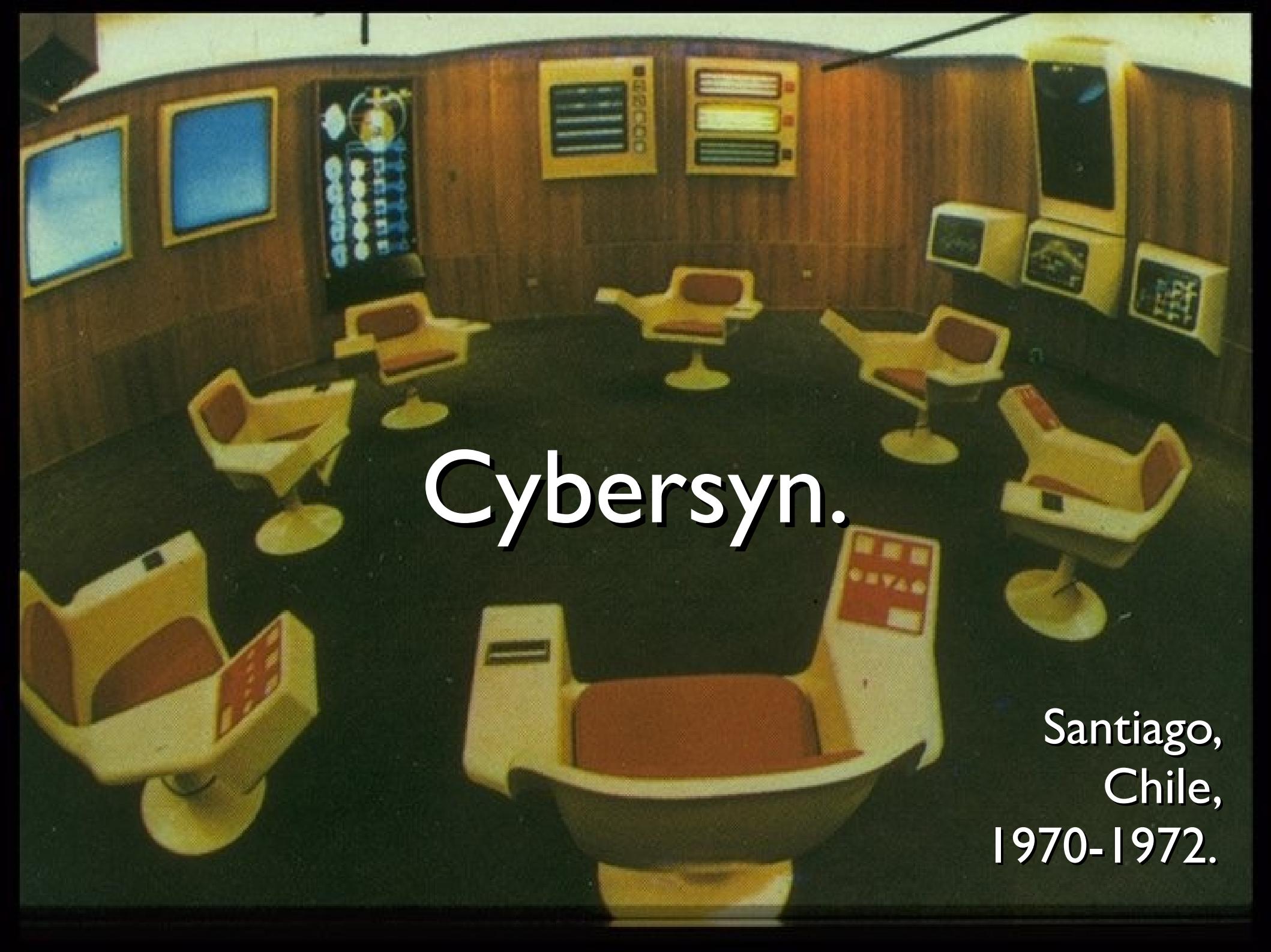


Anthony
Stafford
Beer.

A photograph of a sunset over a calm ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. In the foreground, the dark silhouette of a person surfing a small wave is visible against the bright water.

Beer was an influential
cybernetician.

Cybernetics: “The science of effective organization.”



Cybersyn.

Santiago,
Chile,
1970-1972.

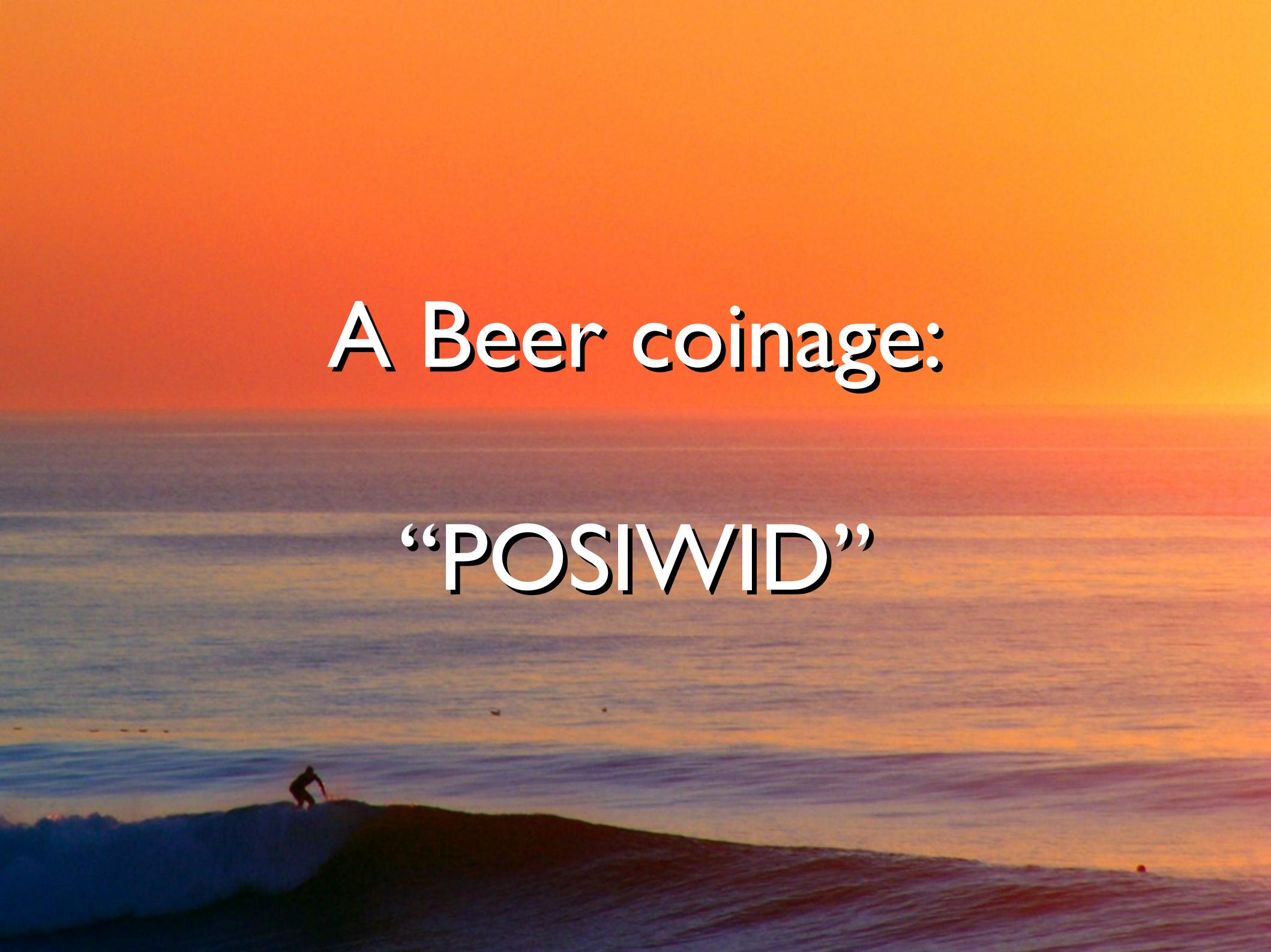
Cybersyn:

Centralised control of the
Chilean economy.



A star network of telex machines running from factories to a control centre in Santiago.

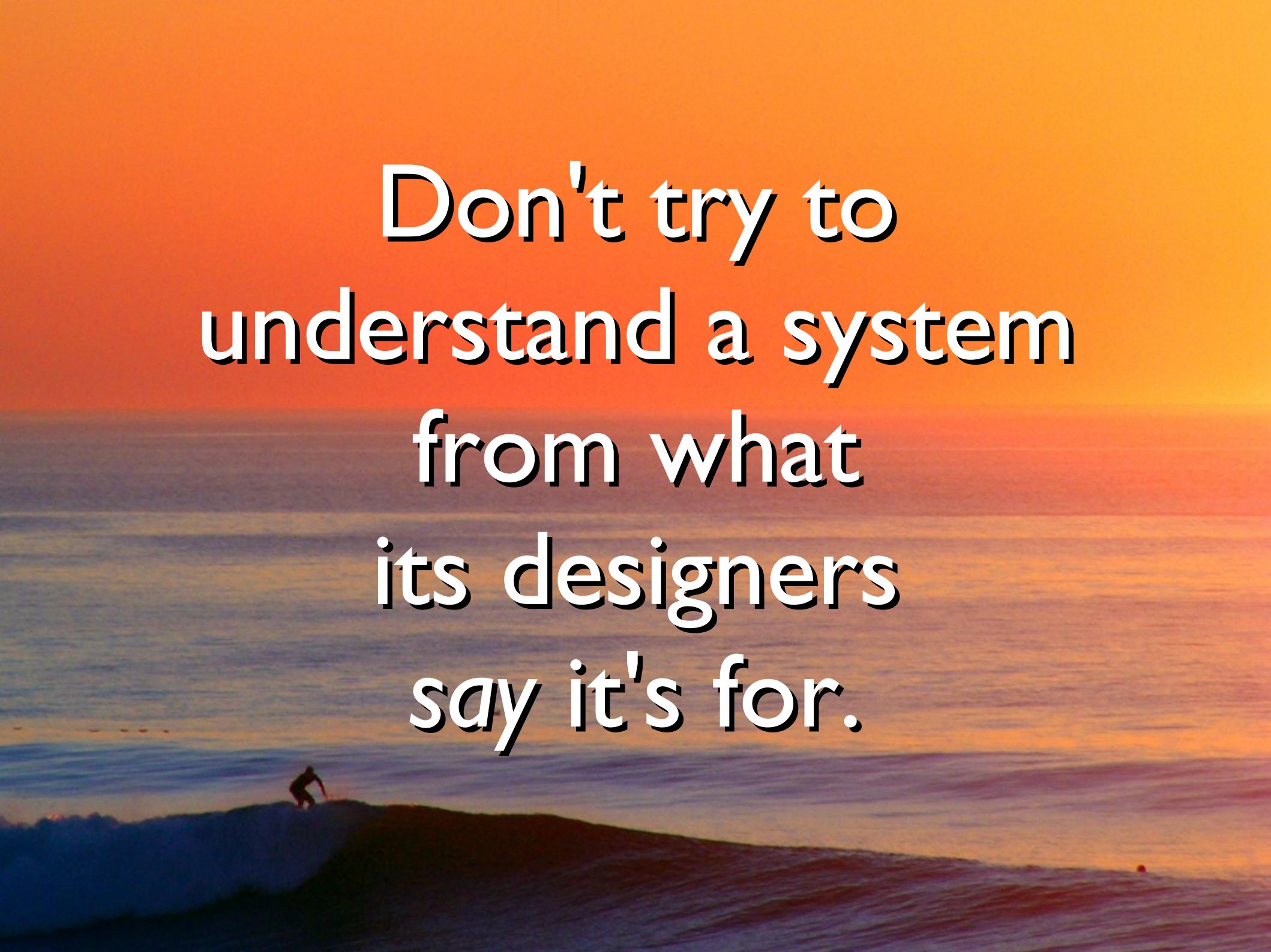


A photograph of a sunset over a calm ocean. The sky is a gradient from orange at the horizon to a darker blue at the top. In the foreground, the dark silhouette of a person surfing a small wave is visible against the bright horizon.

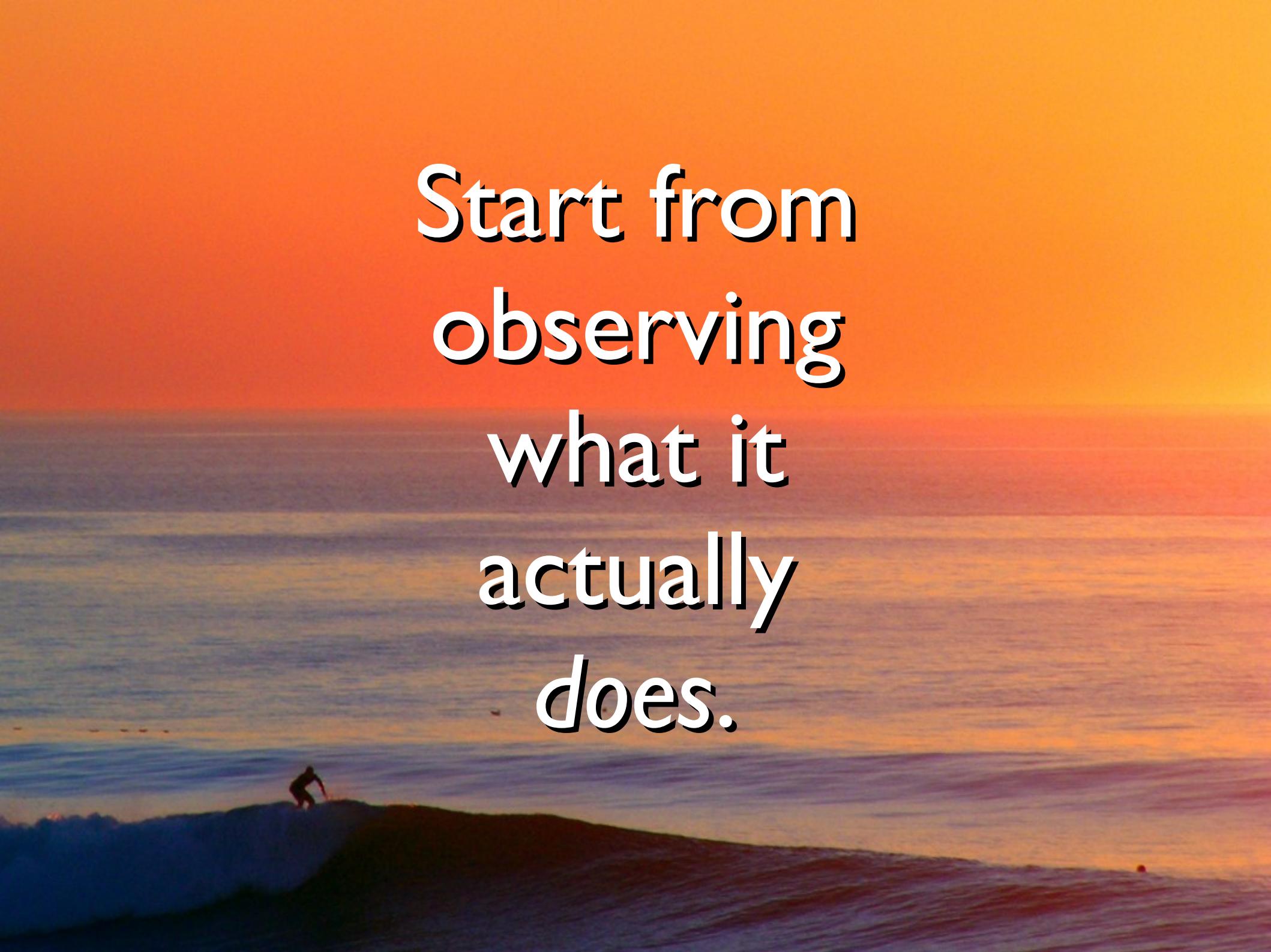
A Beer coinage:
“POSIWID”

POSIWID:

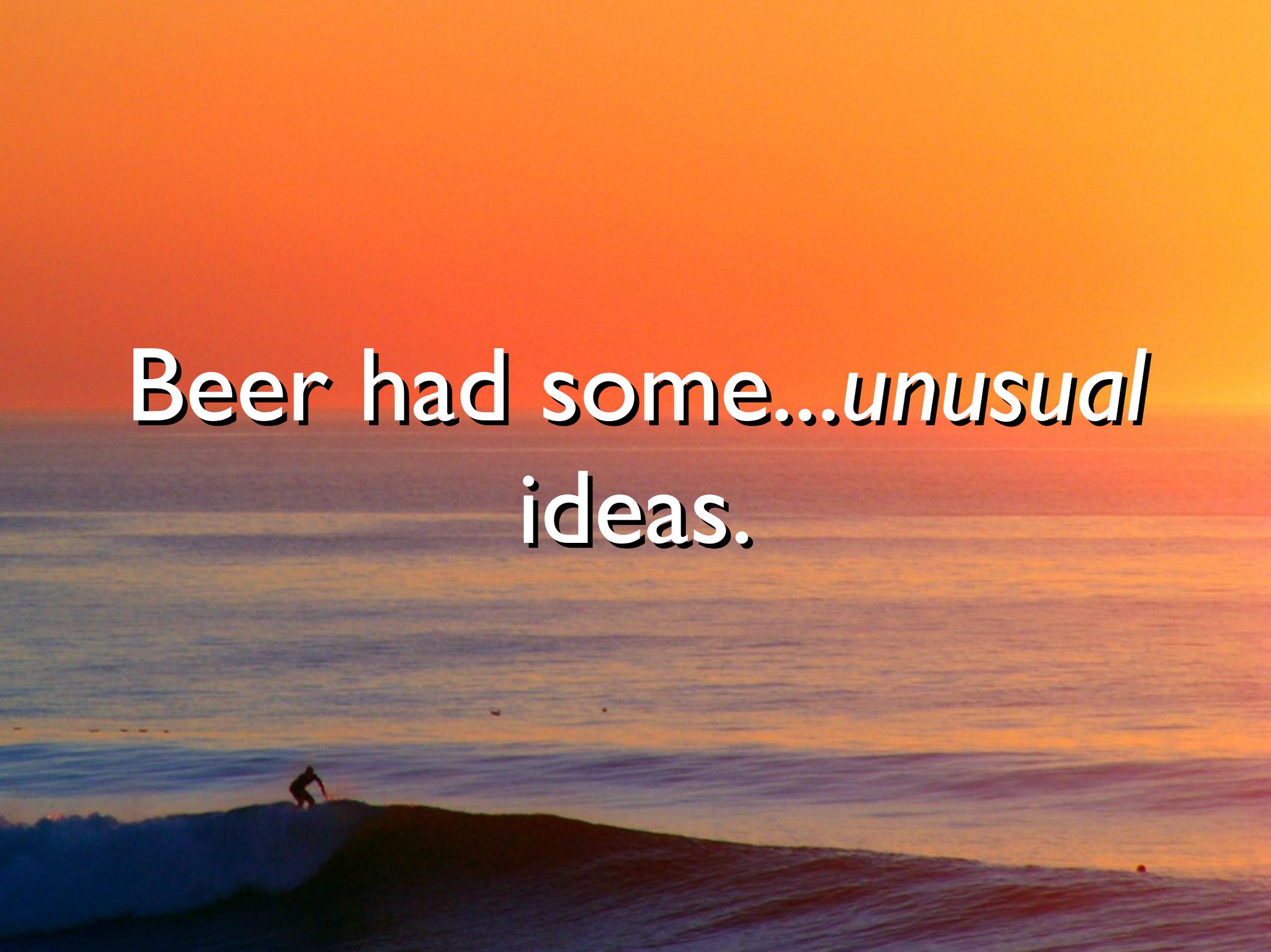
The purpose of a system
is what it does.

A photograph of a surfer riding a wave at sunset. The sky is a warm orange and yellow, transitioning into a darker blue over the ocean. The surfer is positioned on the left side of the frame, riding a dark, foamy wave. The overall mood is peaceful and contemplative.

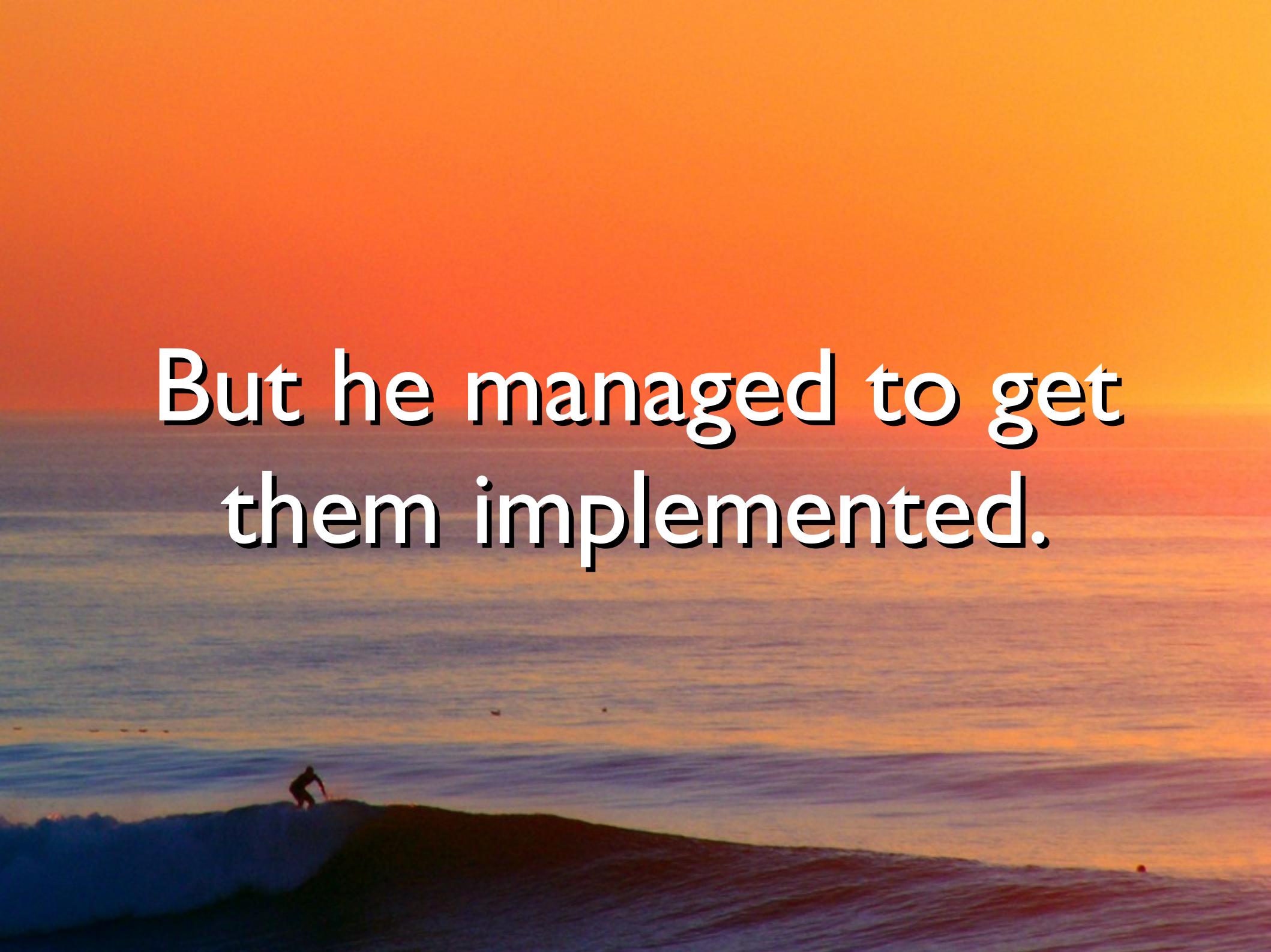
**Don't try to
understand a system
from what
its designers
say it's for.**

A photograph of a person surfing a wave at sunset. The sky is a vibrant orange and yellow, transitioning into a darker blue over the ocean. The surfer is positioned on the left, riding a dark, foamy wave. The overall scene is peaceful and captures a moment of connection with nature.

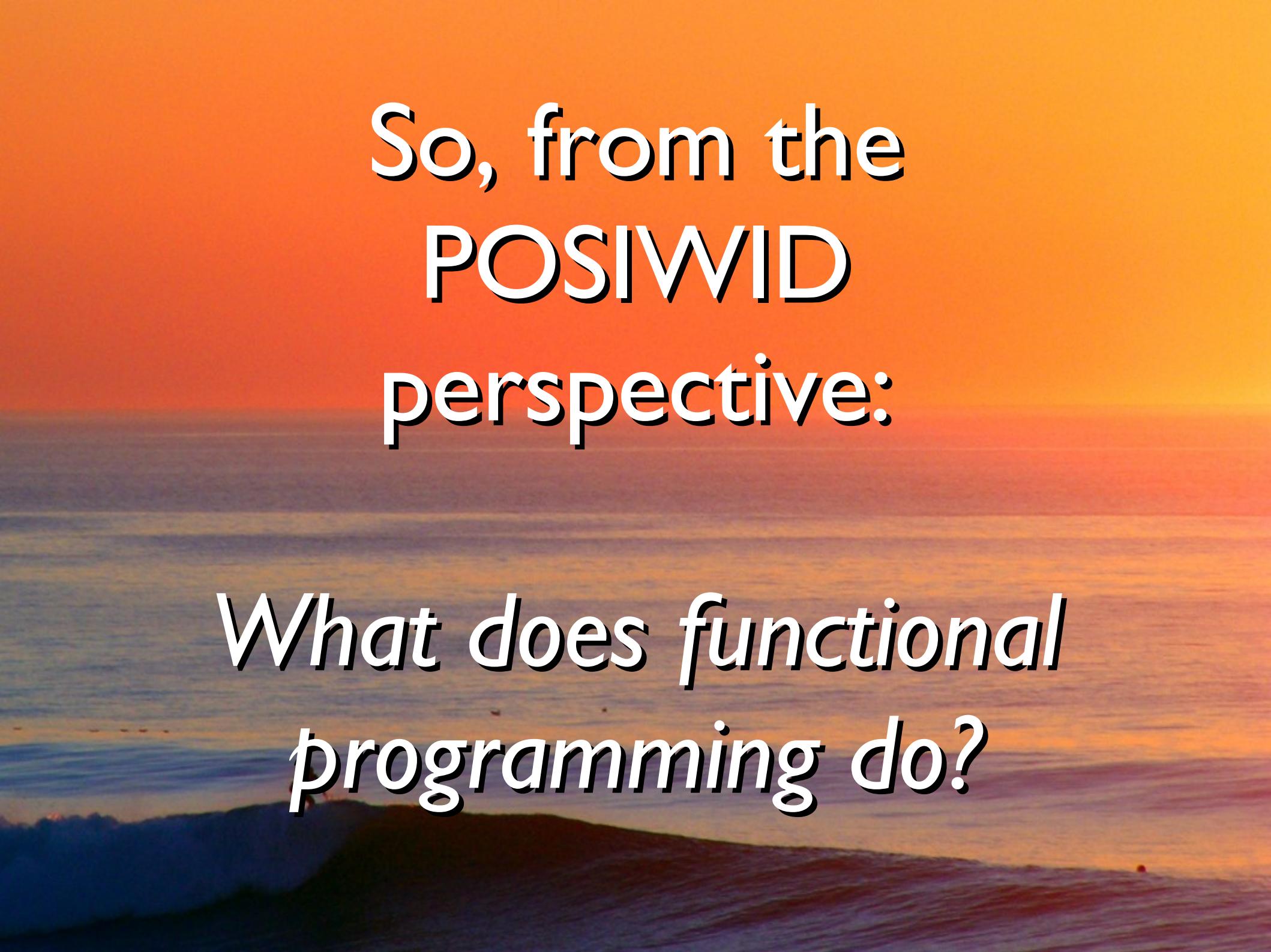
Start from
observing
what it
actually
does.

A photograph of a surfer riding a wave at sunset. The sky is a vibrant orange and yellow, reflected in the calm ocean water. The surfer is positioned on the left side of the frame, riding a dark, silhouetted wave. The overall mood is peaceful and artistic.

**Beer had some...unusual
ideas.**

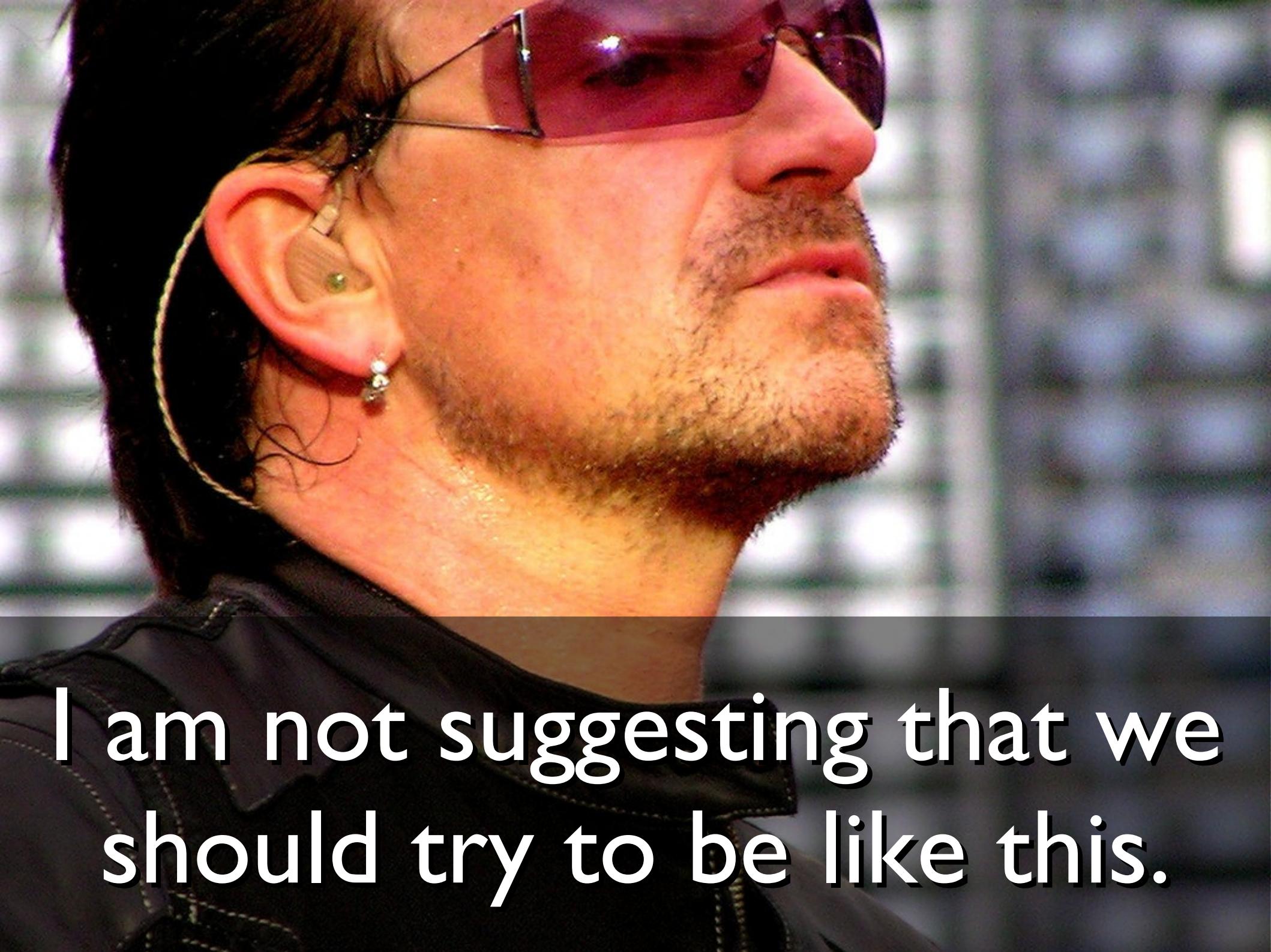
A photograph of a surfer riding a wave at sunset. The sky is a vibrant orange and yellow, transitioning into a darker blue over the ocean. The surfer is positioned on the left side of the frame, riding a dark, foamy wave. The water has a golden glow from the setting sun.

**But he managed to get
them implemented.**

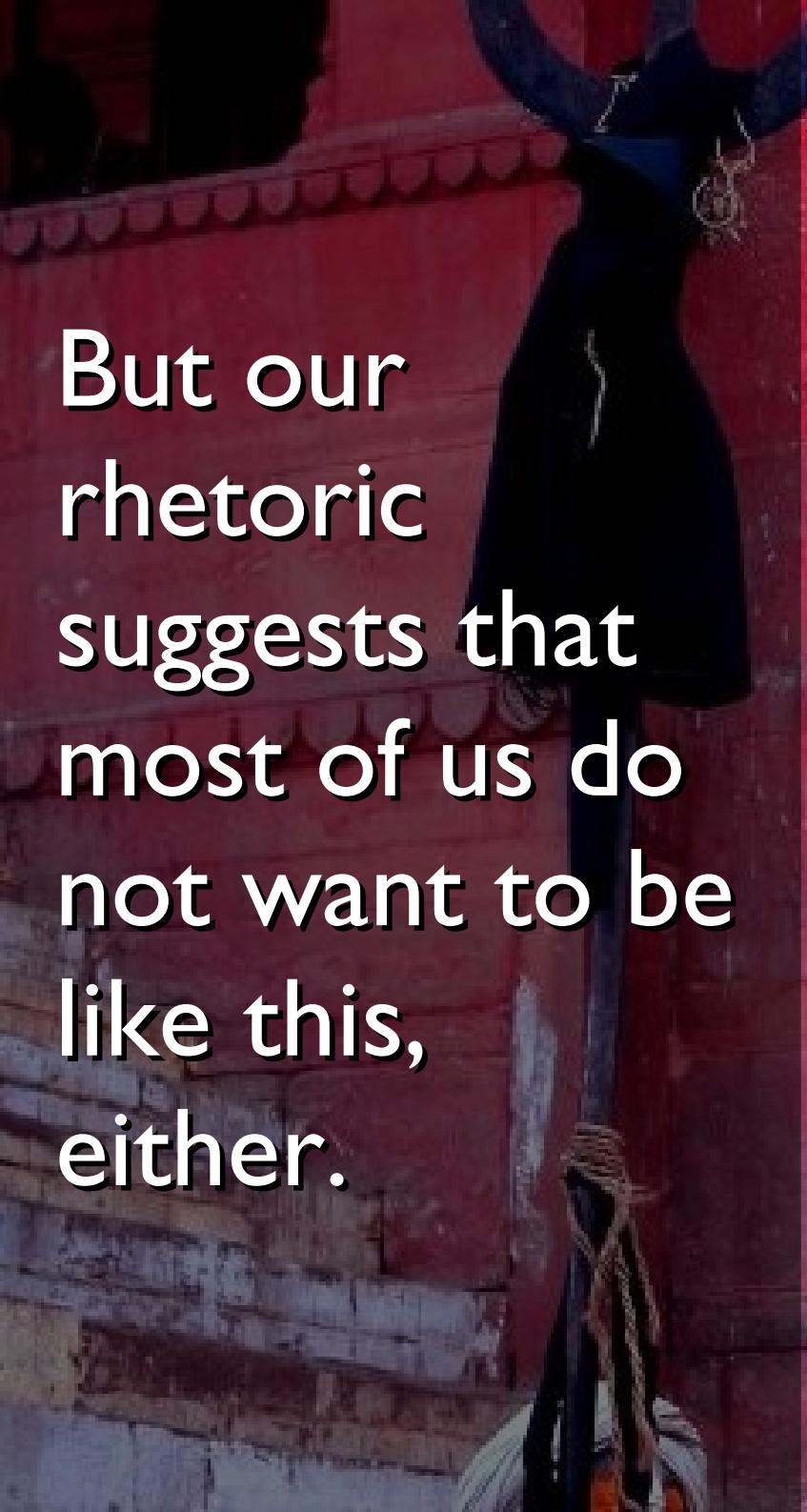
The background of the slide features a photograph of a sunset over a calm sea. The sky is a warm orange and yellow, transitioning into a darker blue at the horizon. In the foreground, dark, foamy waves from a crashing wave are visible on a dark, sandy beach.

So, from the
POSIWID
perspective:

*What does functional
programming do?*

A close-up, profile photograph of a man's face. He has a well-groomed, reddish-brown beard and mustache. He is wearing dark sunglasses perched on his forehead and a black leather jacket. His gaze is directed upwards and to the right. The background is blurred, showing what appears to be a city street.

I am not suggesting that we
should try to be like this.

A photograph of a person from the side, wearing a dark, traditional-style robe with a decorative chain hanging from the collar. They are standing against a bright red brick wall. A small bell hangs on the wall to the left.

But our
rhetoric
suggests that
most of us do
not want to be
like this,
either.



**Go write a book.
Give a talk.
Write a blog post.**



Oh, and thanks.

