

The following slideshow accompanied the lecture of Dr. Richard Carrier at Skepticon I in 2008 (at the Springfield campus of MSU in Missouri). Much of it is unintelligible without the audio as context, which can be found online (see [Hambone Videos](#)).

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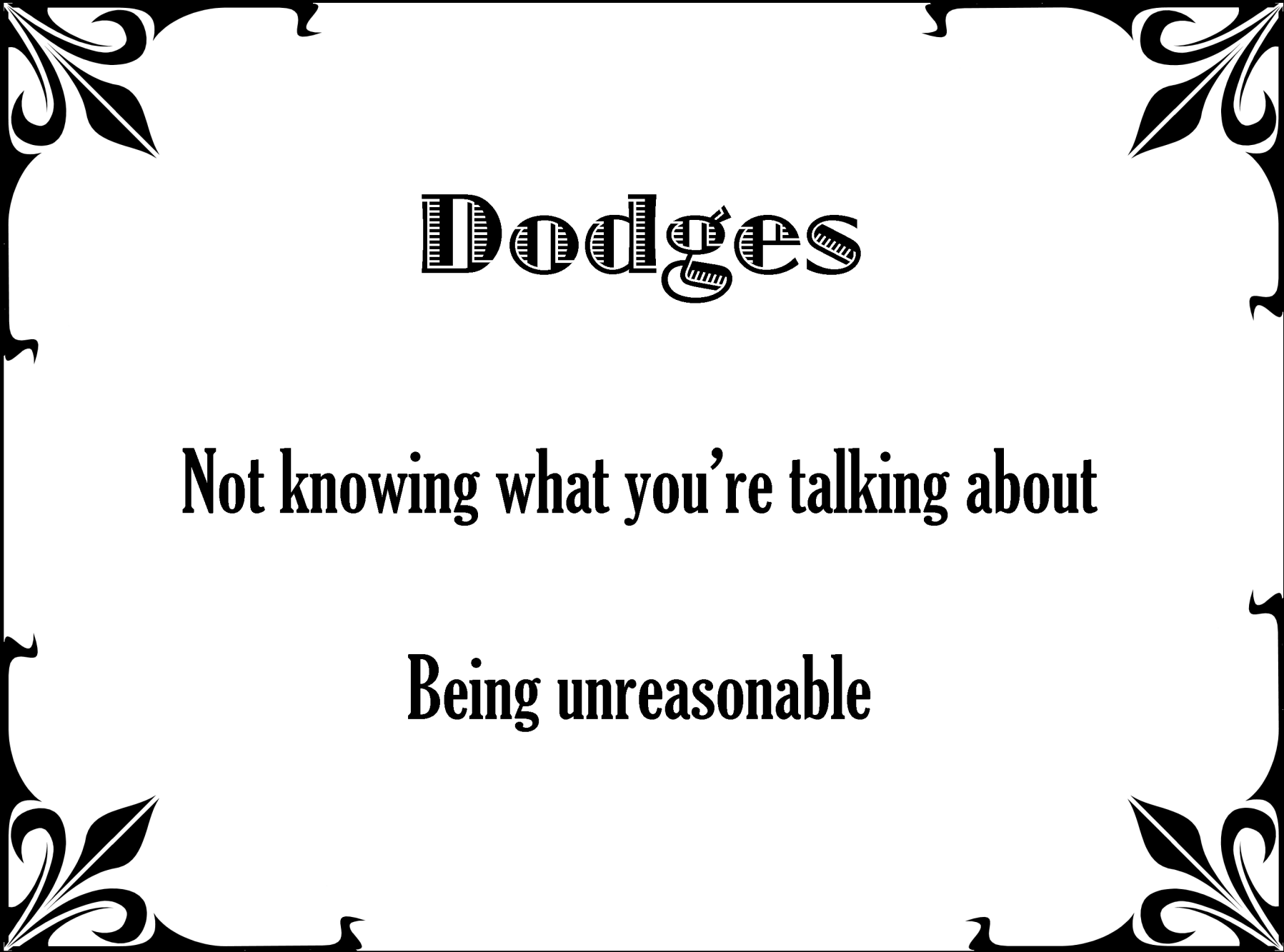
**Why Science Is Better
Than Religion and
Always Has Been**



Shocking Claim No. 1

**Science & Religion have
always been in conflict.**

**By any fair standard,
Science has won.**



Dodges

Not knowing what you're talking about

Being unreasonable

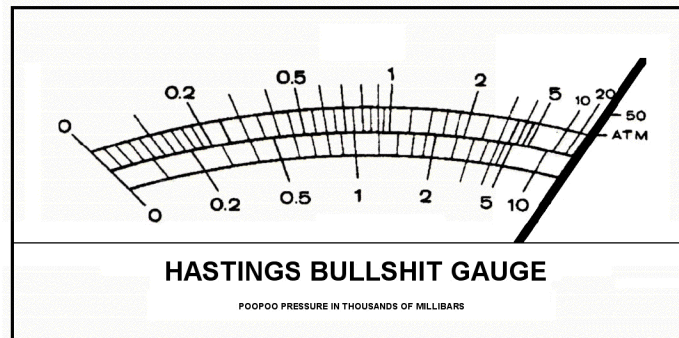


Shocking Claim No. 2

**Religious morals have always been in
conflict with Scientific morals.**

**By any fair standard,
Science has won.**





“Religion”

**= any system of values & beliefs *not*
based entirely on scientific reasoning**

“Science”

**= the whole system of values &
ideas on which all scientific thinking
is based (and the discoveries that result)**



**Half-assed Science,
like half-assed Religion, means...**

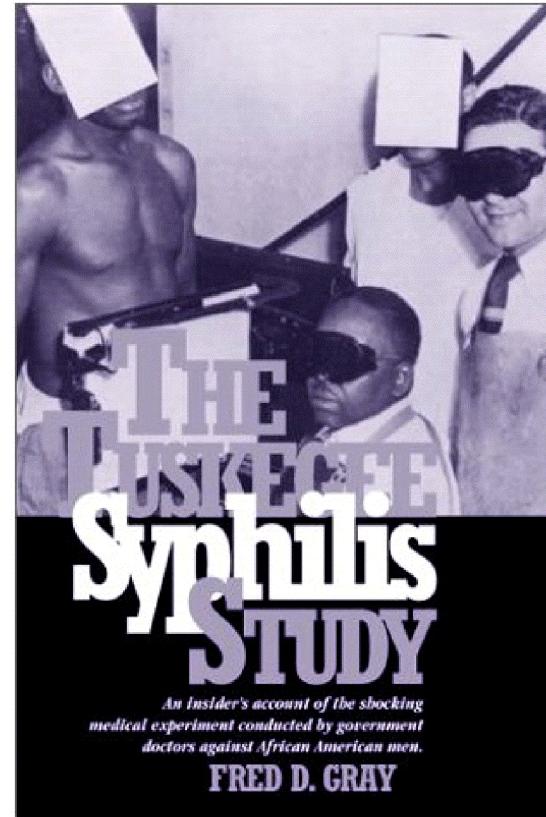
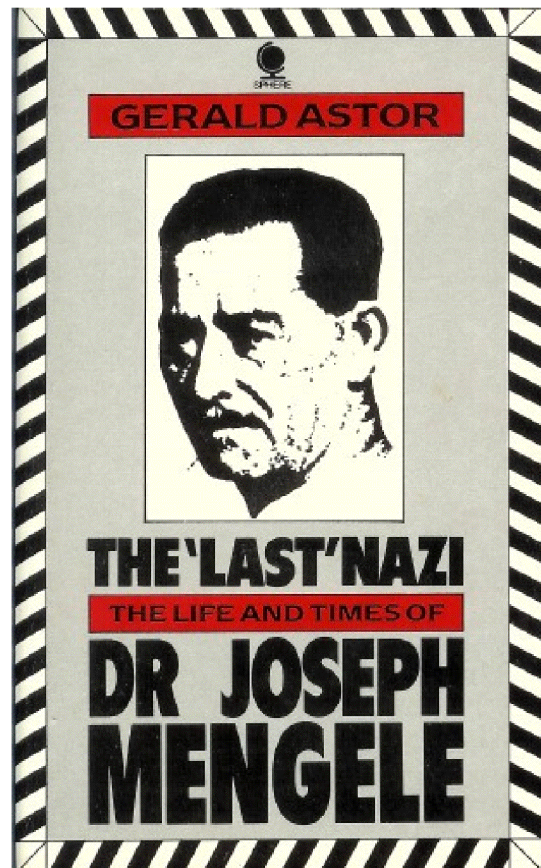
Compartmentalizing



All you sickies
can suck it!

*I earned my
Beemer!*







The Fully Religious Life

vs.

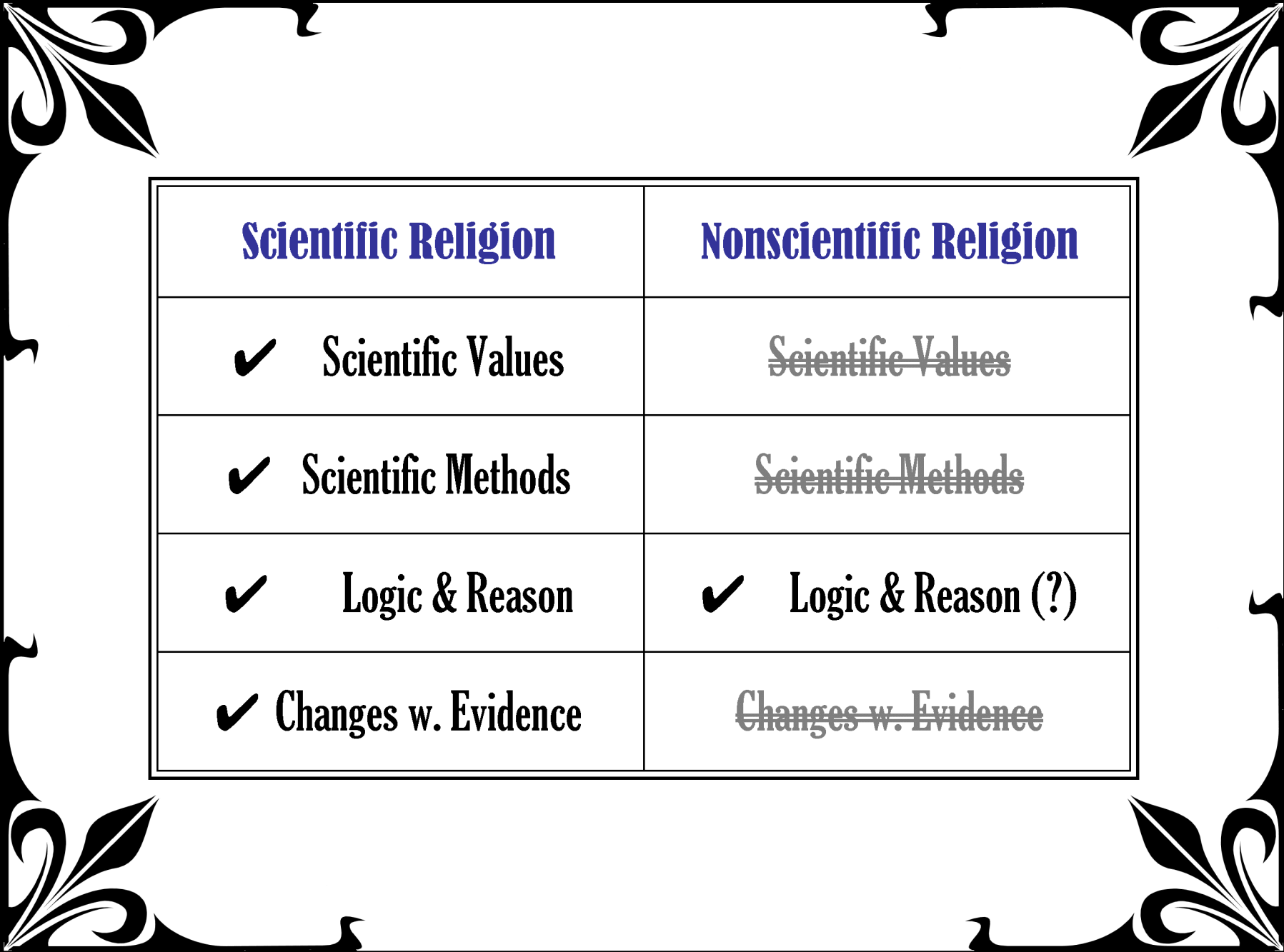
The Fully Scientific Life



Secular Humanism

- credo -

Love your fellow humans, because it's more fun than hating them. And give us a hand, because we're on our own down here.



Scientific Religion	Nonscientific Religion
✓ Scientific Values	Scientific Values
✓ Scientific Methods	Scientific Methods
✓ Logic & Reason	✓ Logic & Reason (?)
✓ Changes w. Evidence	Changes w. Evidence



Scientific Values

- 1. Curiosity**
- 2. Empiricism**
- 3. Progress**



Philosophers:

Show us the evidence or get lost.

Christians:

God said it. I believe it. Join me or go to hell.

Scientific Religion

Reason from experience

Claim nothing more than the evidence proves

Accept you could be wrong

Allow the evidence to change your mind

Scientific Methods

Any reliable process of (1) forming a hypothesis and (2) testing that hypothesis against the evidence (formally or informally).



Scientific Principles

Open publication of discoveries

Free speech and unhindered debate

Deductive logic and empirical evidence

Confirming or refuting hypotheses



3rd century B.C.

Herophilus

Erasistratus



What Did God Do?
How Does She Do It?
Why Did She Do It That Way?

**Pumps, Siphons, Levers, Billows, Ovens and
Faucets, Ancient Robotics (automated puppet theatres)**



How Does God Build a Fetus?

And why that way instead of some other?

Why Do Our Organs Keep Working?

And how did God arrange that?





Mapping sensory and motor nerves

— Where do they go? What do they do?

Localization of brain functions

— sectioning a live brain to see where
it controls vision, voice, heartbeat, etc.





2nd century A.D.

Galen

Proper Scientific Theory

- 1. Didn't claim to know more than he could prove**
- 2. Accepted what the evidence proved**



God Hypothesis Must Explain ...

Why mutations and deformities exist

Why our bodies form gradually in the womb

Why our bodies contain so many compromises

... etc.



Galen Did Good Science

But Darwin Refuted Galen

The Trends of Doom

Lightning. God! Oh, no, sorry...natural causes

Solar System. God! Oh, no, sorry...natural causes

Disease. Demons! Oh, no, sorry...natural causes

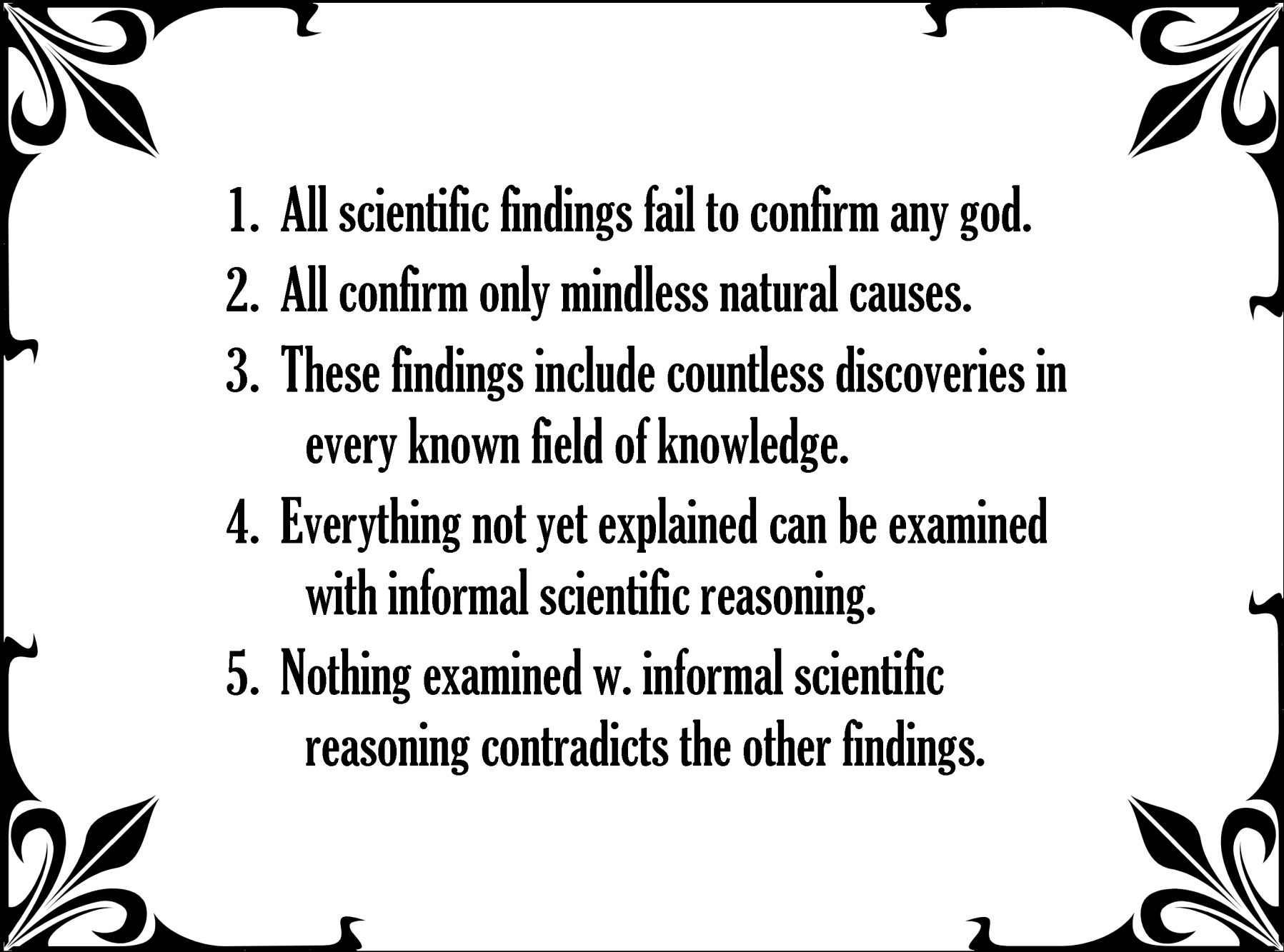
Bumble Bees Can Fly! Jesus! Oh, no, sorry...natural causes

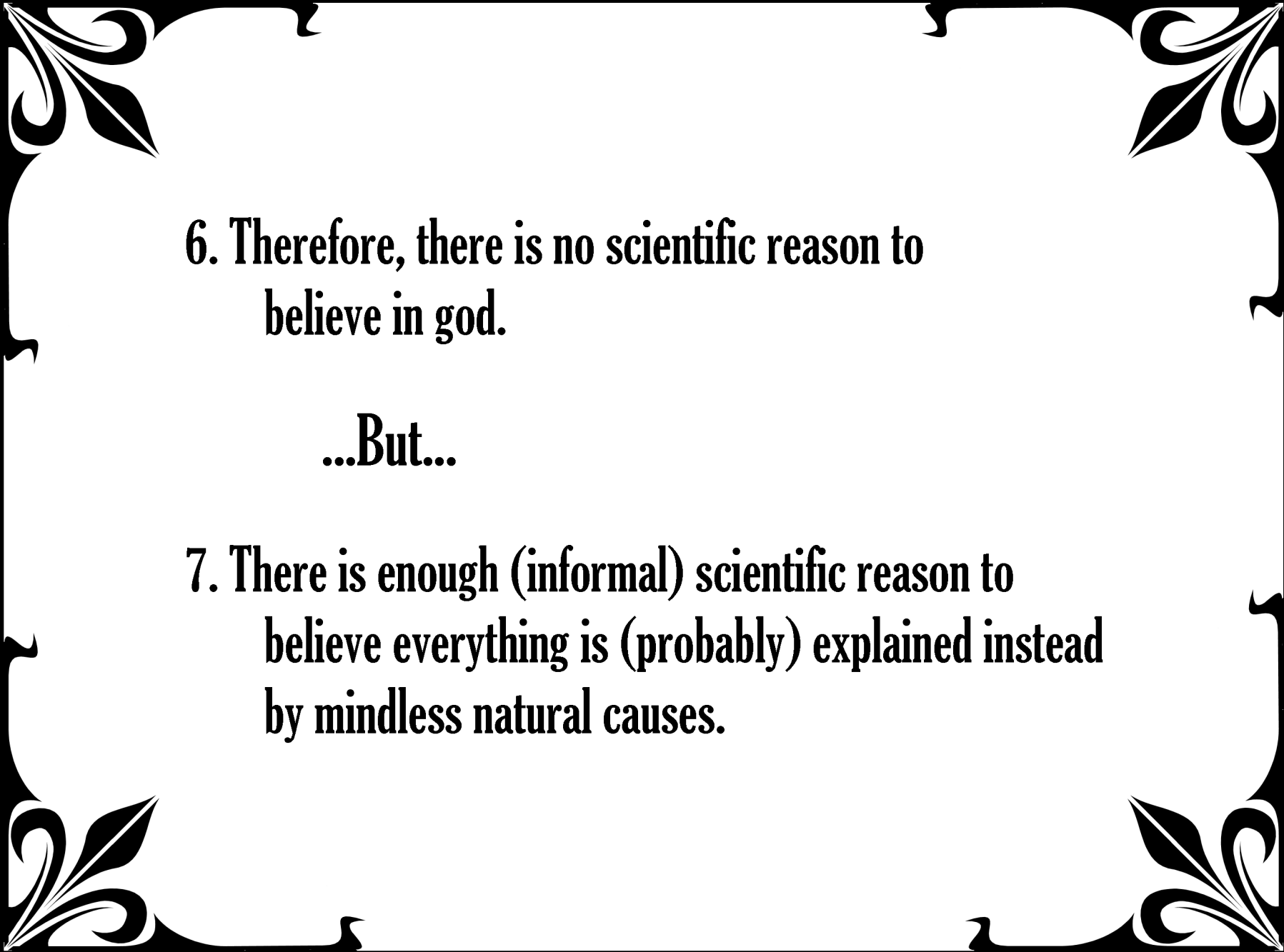
[Insert Fact Here] God & Such! Oh, no, sorry...natural causes

Naturalism = N = nothing supernatural exists
Supernaturalism = S = something supernatural exists

S has been tested a million times and always lost

N has been tested a million times and always won

- 
1. All scientific findings fail to confirm any god.
 2. All confirm only mindless natural causes.
 3. These findings include countless discoveries in every known field of knowledge.
 4. Everything not yet explained can be examined with informal scientific reasoning.
 5. Nothing examined w. informal scientific reasoning contradicts the other findings.



6. Therefore, there is no scientific reason to believe in god.

...But...

7. There is enough (informal) scientific reason to believe everything is (probably) explained instead by mindless natural causes.



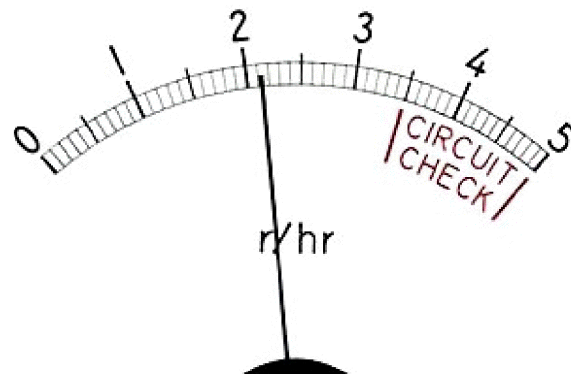
Curiosity (as long as our dogma is off limits)

Empiricism (except in religion)

Progress (as long as it doesn't scare us)

**More
Values**

**Less
Values**



Amount of God

The more you embrace a belief in curiosity, empiricism, and progress, the less God you end up with.

The Universal Gravitational Constant

$$6.673 \times 10^{-11}$$



$$\text{N (m / kg)}^2$$


$$6.673 \times 10^{-11}$$

= Metric Units { Newtons (meters / kilograms)² }

$$3.436 \times 10^{-8}$$

= English Units { feet⁴ / (pounds x seconds⁴) }



Natural Units = Smallest meaningful length of space &
time physically possible in the known universe

Gravitational Constant = **G** = 1

Speed of Light = **c** = 1 (i.e. fastest possible speed is one
smallest unit of distance per one smallest unit of time)

Planck's Constant = **h** = 1 (in metric units h equals
 6.626×10^{-34} j-s)

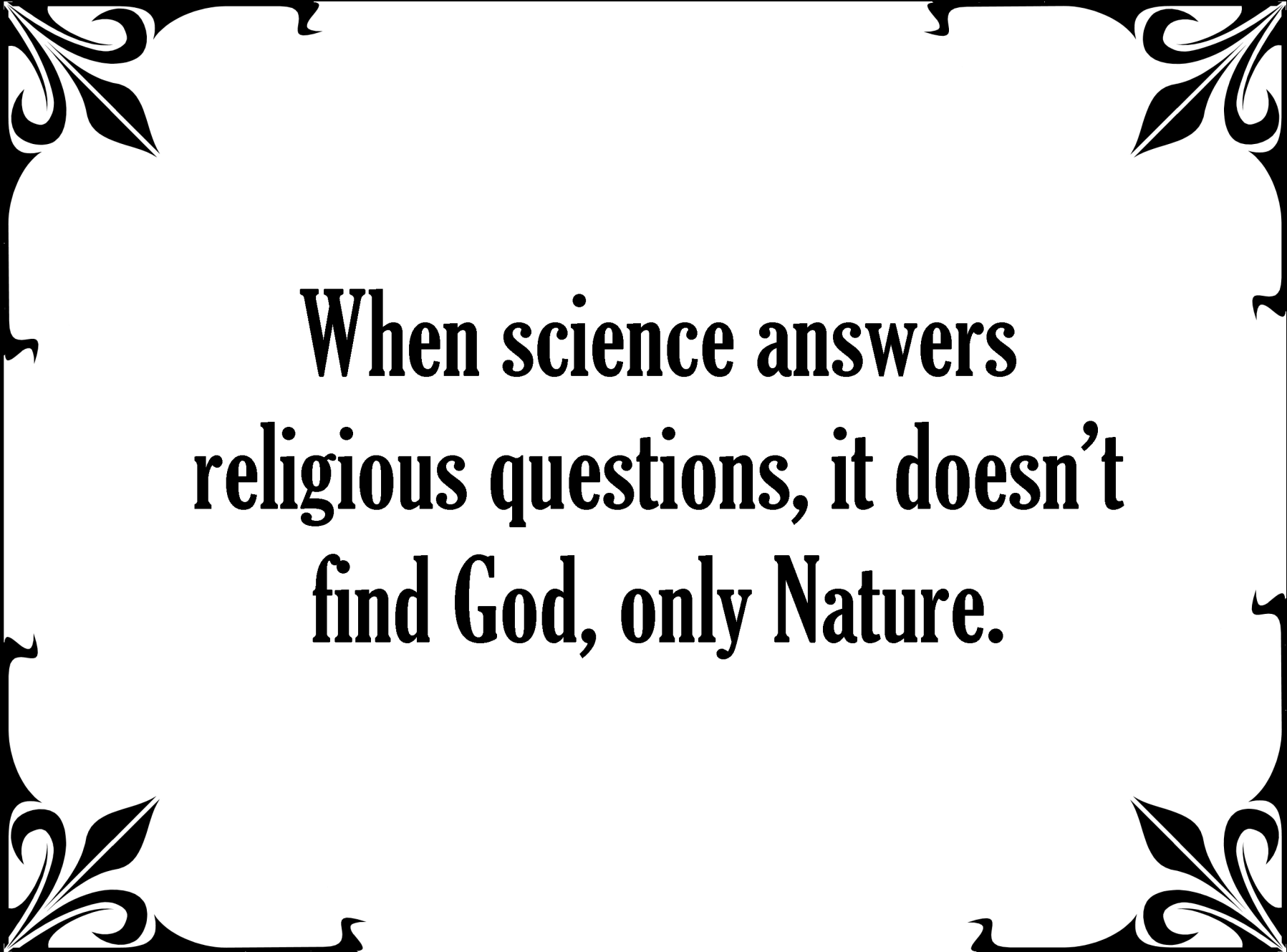
Would There Be Life in Other Universes?

Fine Structure Constant = $\alpha = 7.297 \times 10^{-3}$

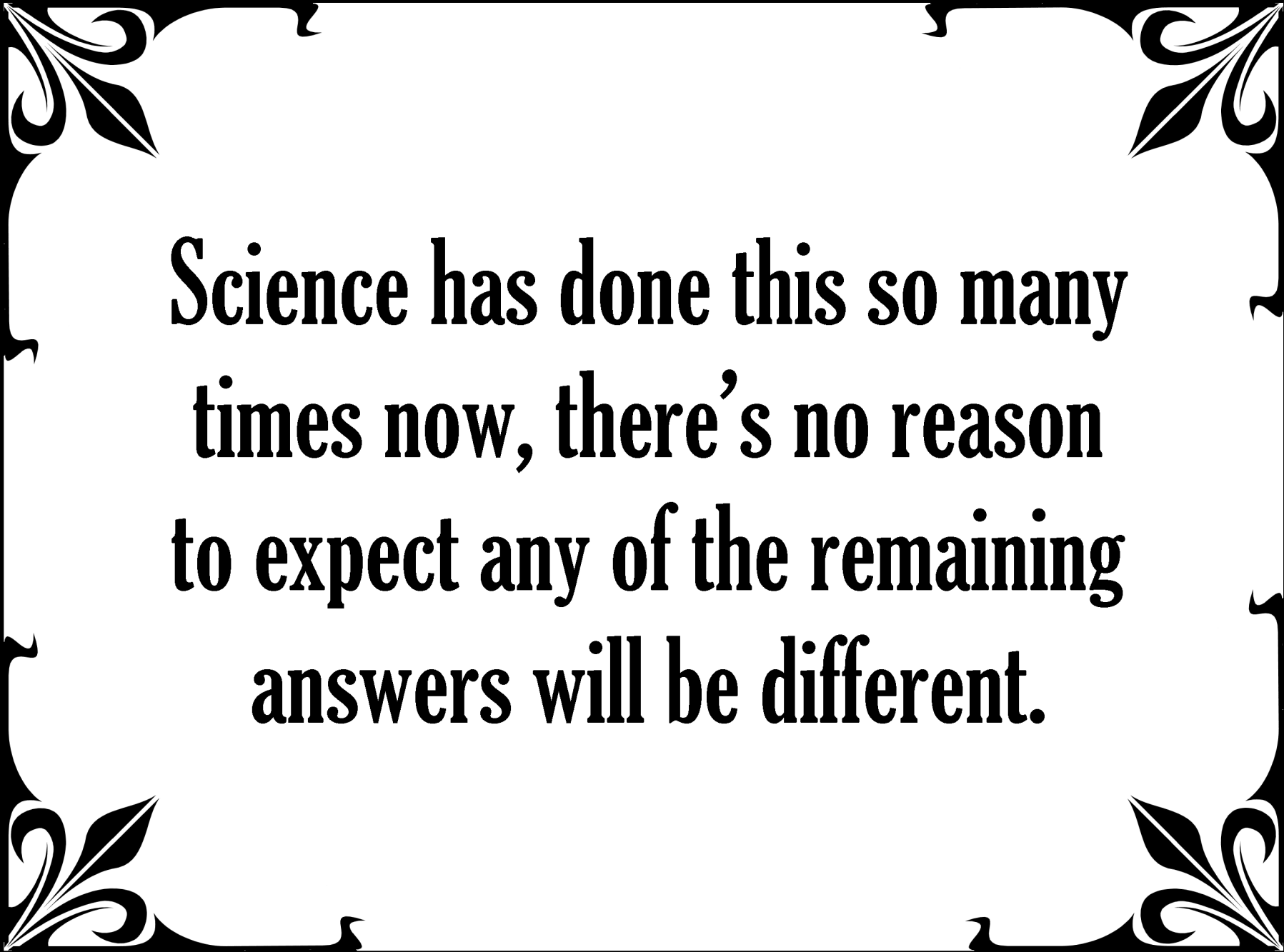
α entails what chemistry exists, what chemistry exists entails whether life exists, but how will α change if c , h , and G change? **We don't know.**



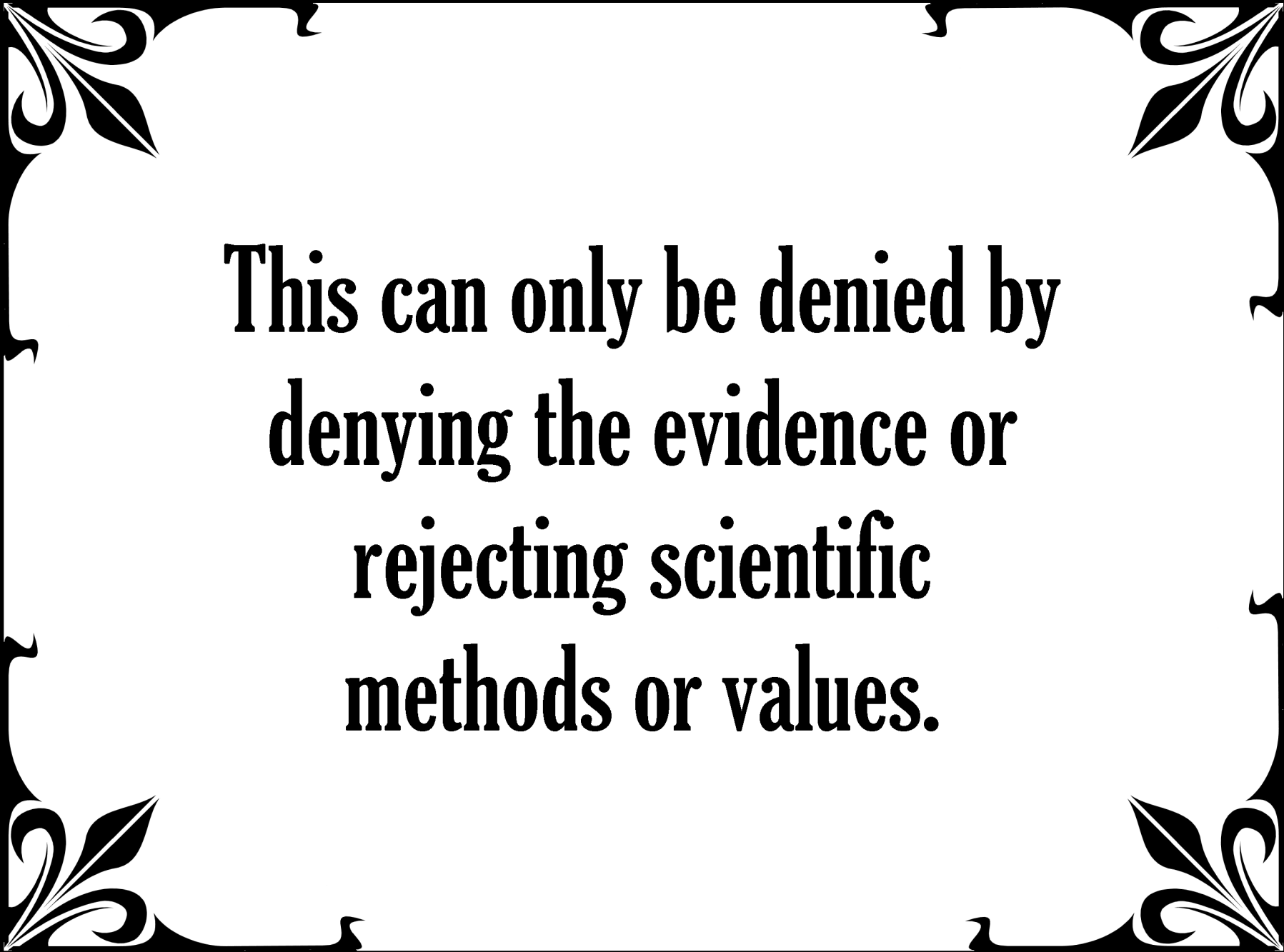
Shocking Claim No. 1



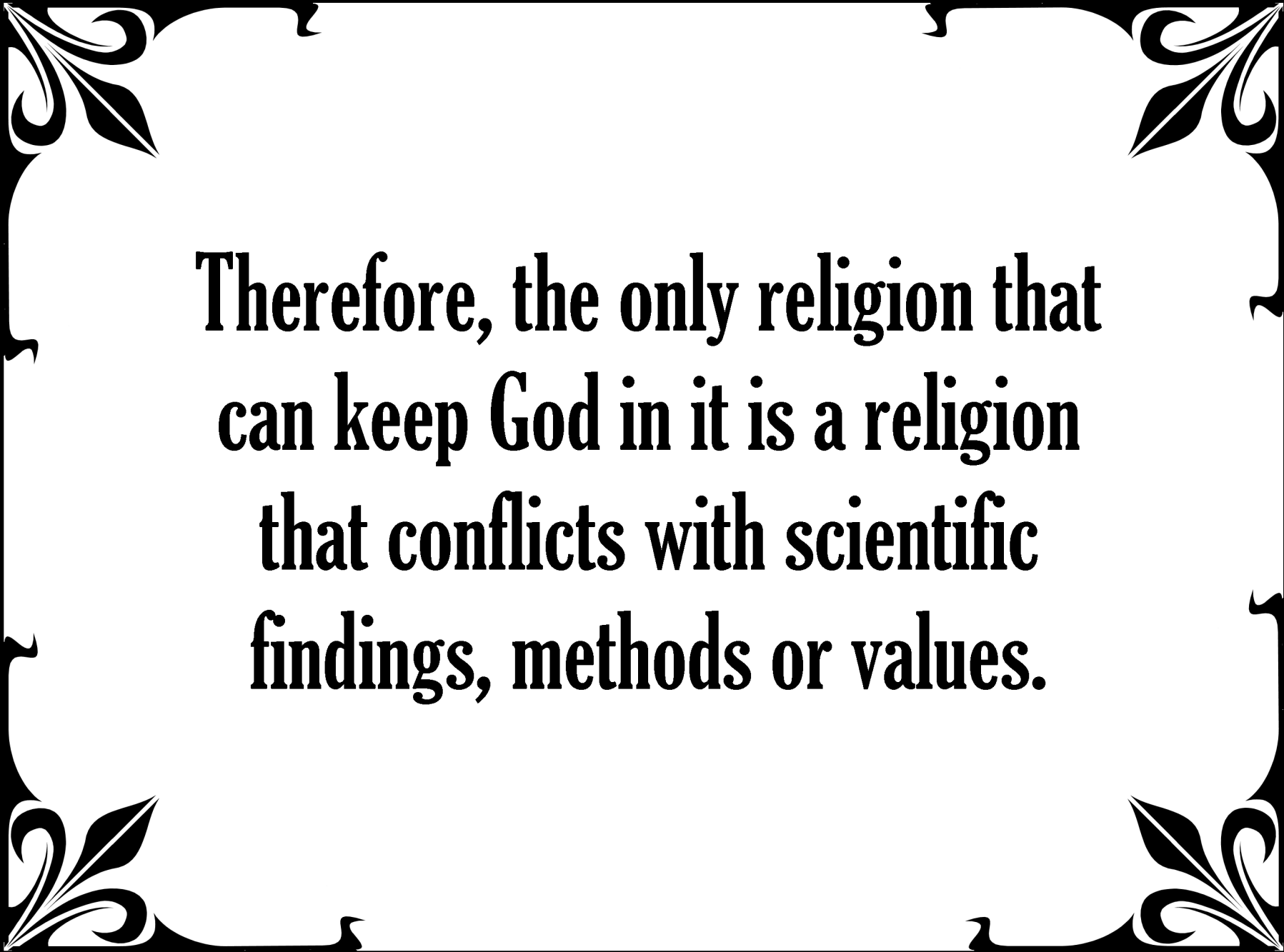
**When science answers
religious questions, it doesn't
find God, only Nature.**



**Science has done this so many
times now, there's no reason
to expect any of the remaining
answers will be different.**

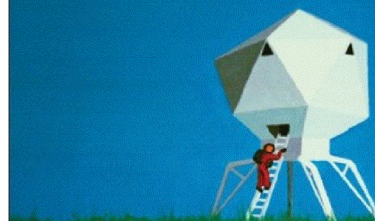


**This can only be denied by
denying the evidence or
rejecting scientific
methods or values.**



**Therefore, the only religion that
can keep God in it is a religion
that conflicts with scientific
findings, methods or values.**

Richard Carrier



Sense & Goodness
Without God

A Defense of Metaphysical Naturalism

Shocking Claim No. 2

Science can also tell us what's right and wrong?

No way, dude!

You can't get an "ought" from an "is" !



When your engine's oil is low...

**You ought to change
the oil in your car.**



**What if you're a scientist testing the effects
of oil deprivation on your car's engine?**

**What if oiling your engine will turn it into a
fireball of unholy death?**

“You ought to change the oil in your car”

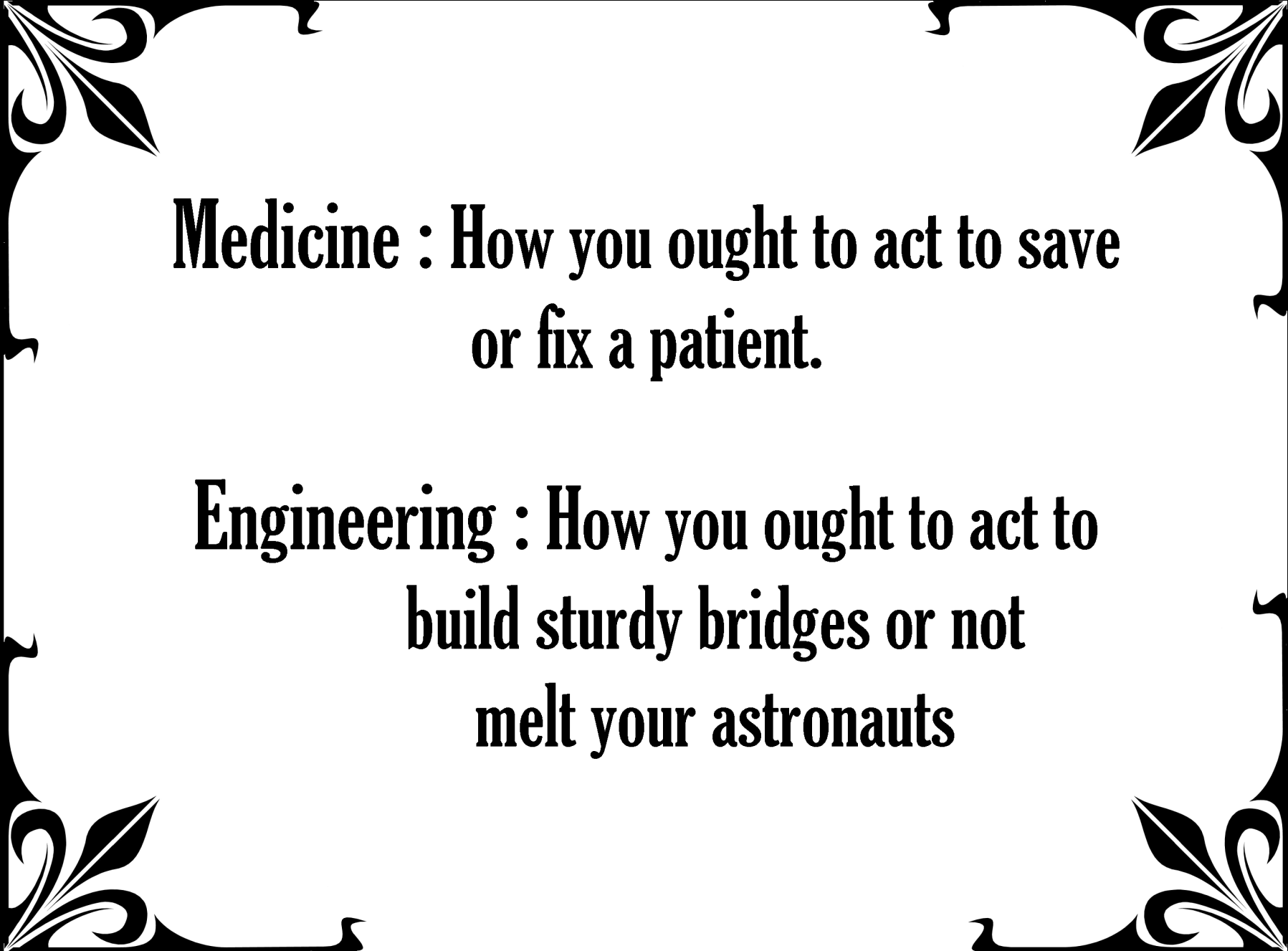
is true if (and only if):

(1) You want your car to continue working

(2) If you don't change its oil, you car will soon stop working (and, of course, if nothing bad will happen if you add the oil)

If it **is** the case that you want your car to work,
and it **is** the case that it won't work if you don't
change the oil (and nothing bad will happen if you
do), then you **ought** to change the oil.

is + is = ought

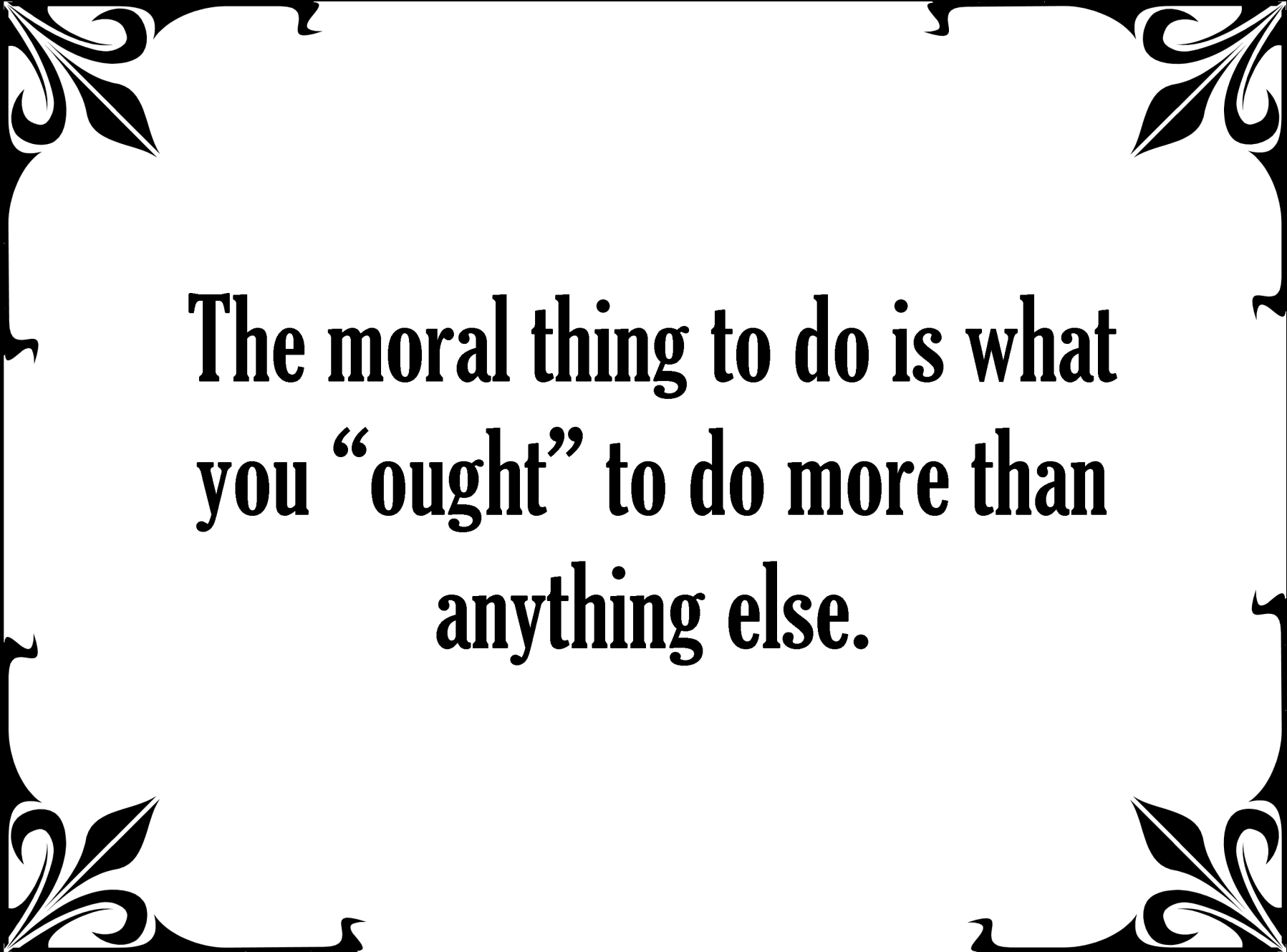


**Medicine : How you ought to act to save
or fix a patient.**

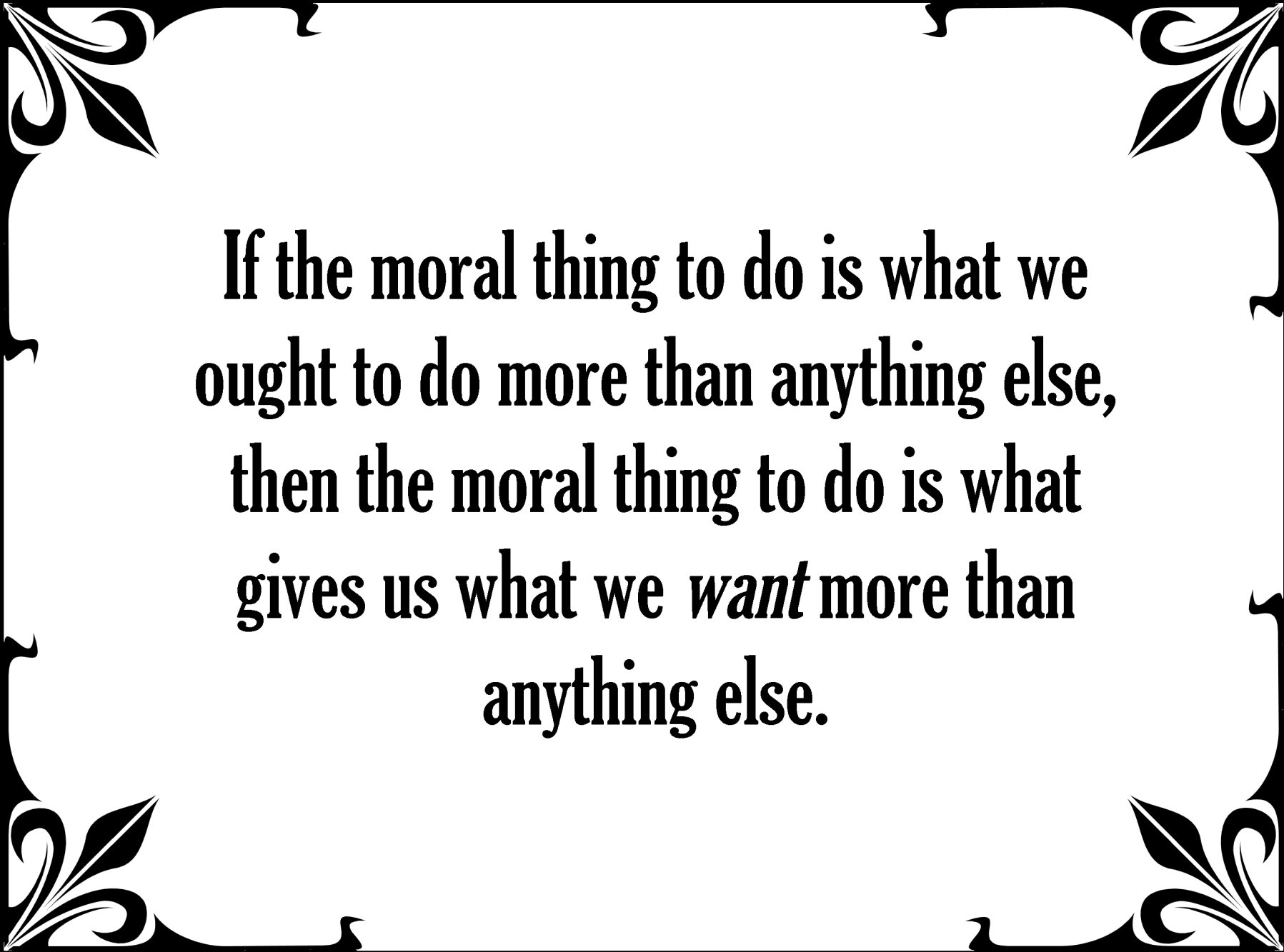
**Engineering : How you ought to act to
build sturdy bridges or not
melt your astronauts**

How to Discover Morals

- 1. What desire does obeying morals satisfy in us?**
- 2. What behaviors will actually have that result?**



**The moral thing to do is what
you “ought” to do more than
anything else.**



If the moral thing to do is what we
ought to do more than anything else,
then the moral thing to do is what
gives us what we *want* more than
anything else.



Christian Answers to “Why Be Moral?”

If we knew what was good for us, then...

We’d want to go to heaven more than anything else.

We’d want avoid hell more than anything else.

We’d want God’s loving presence more than anything else.



Ancient Scientific Morality

What's the right thing to do?

To answer that, just scientifically discover two facts:

What's the Nature of Man?

What's the Nature of the Universe?

Galen's Path to Morality...

- 1. Live a life of honest self-reflection and study**
- 2. Have a good grasp of logic and reason**
- 3. Get a good education in the relevant arts and sciences**



To know right from wrong, you have to know how the world really works, and what human needs really are.

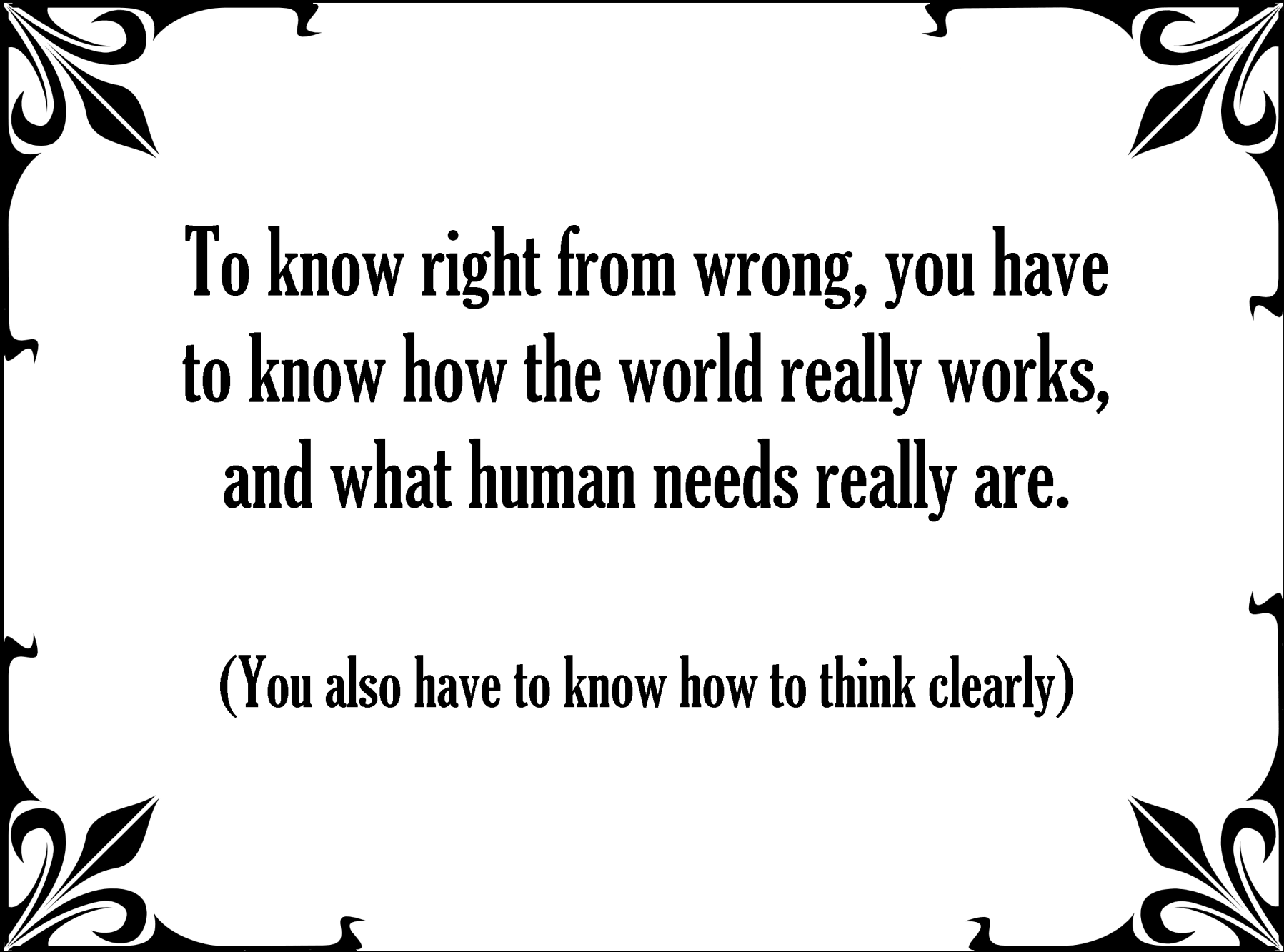


Lactantius Tells Galen to Go Suck It...

Logic is too hard, education is waste of time, and self-understanding is vain. Only God helps.

Give him any moral reprobate, Lactantius says, and “with a very few words of God I will render him as gentle as a sheep.”





**To know right from wrong, you have
to know how the world really works,
and what human needs really are.**

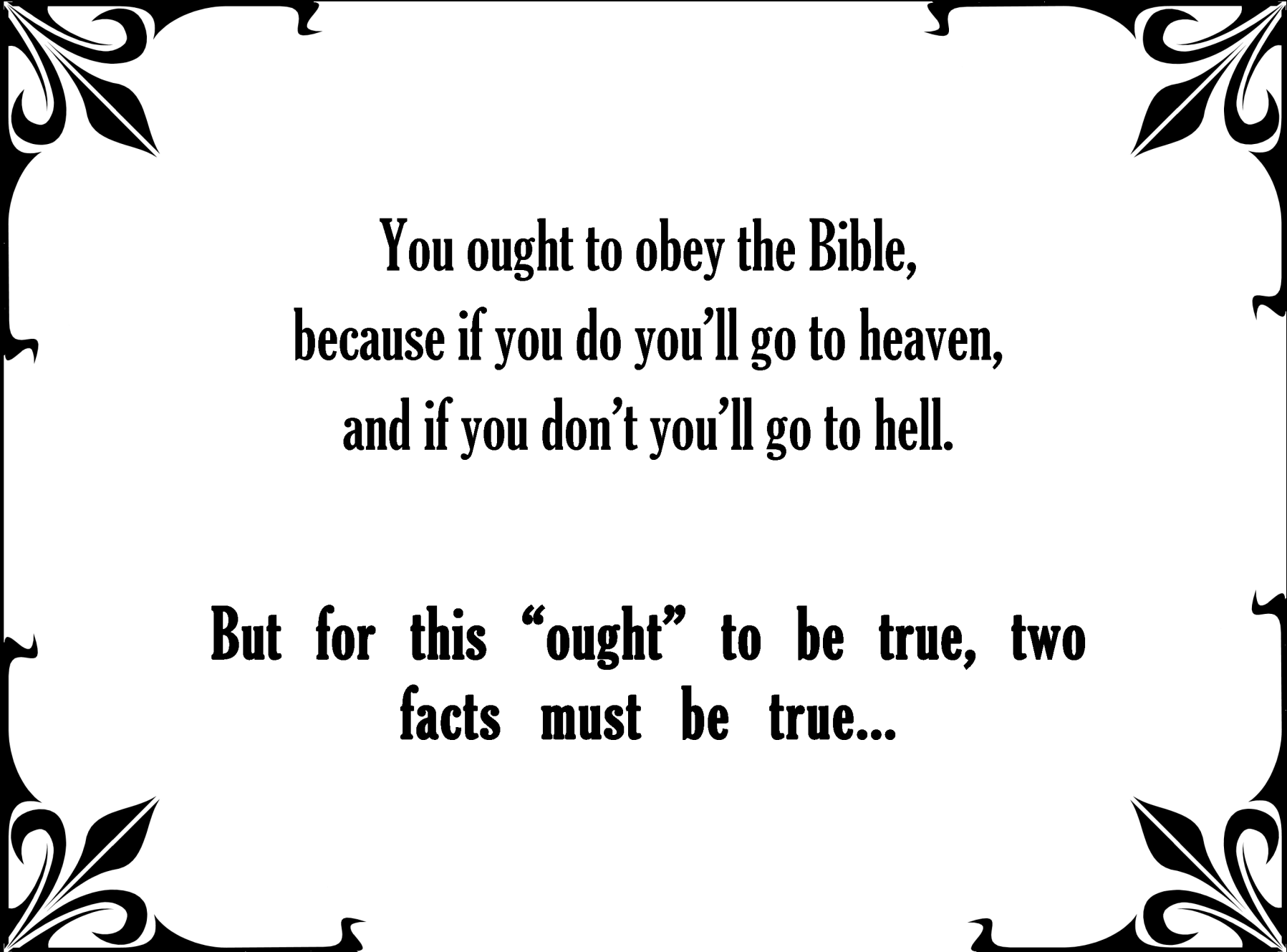
(You also have to know how to think clearly)



How do we know which heaven and hell exist?

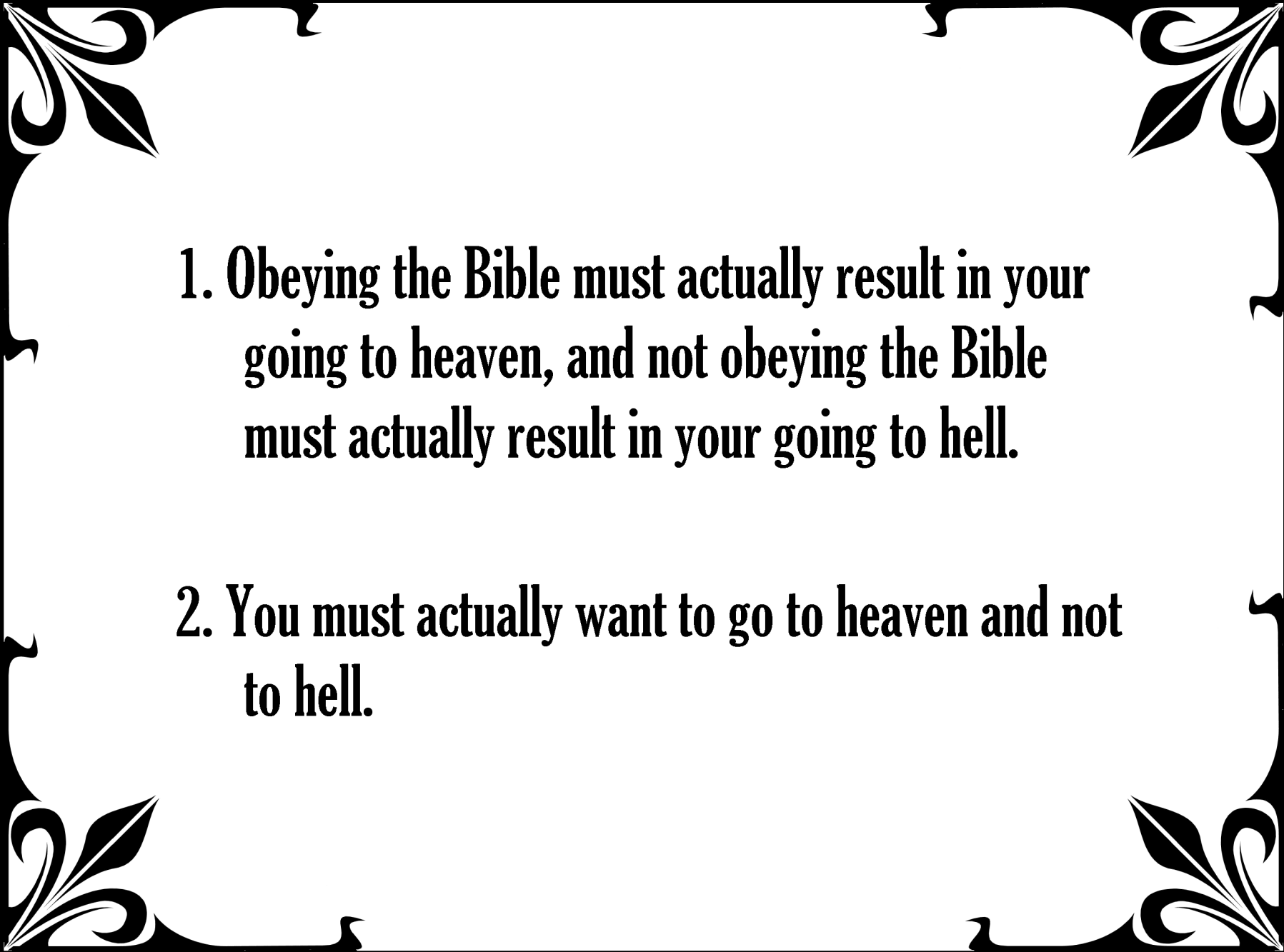
How do we know who really goes there?

How do we know what actually gets us there?



**You ought to obey the Bible,
because if you do you'll go to heaven,
and if you don't you'll go to hell.**

**But for this “ought” to be true, two
facts must be true...**



1. Obeying the Bible must actually result in your going to heaven, and not obeying the Bible must actually result in your going to hell.

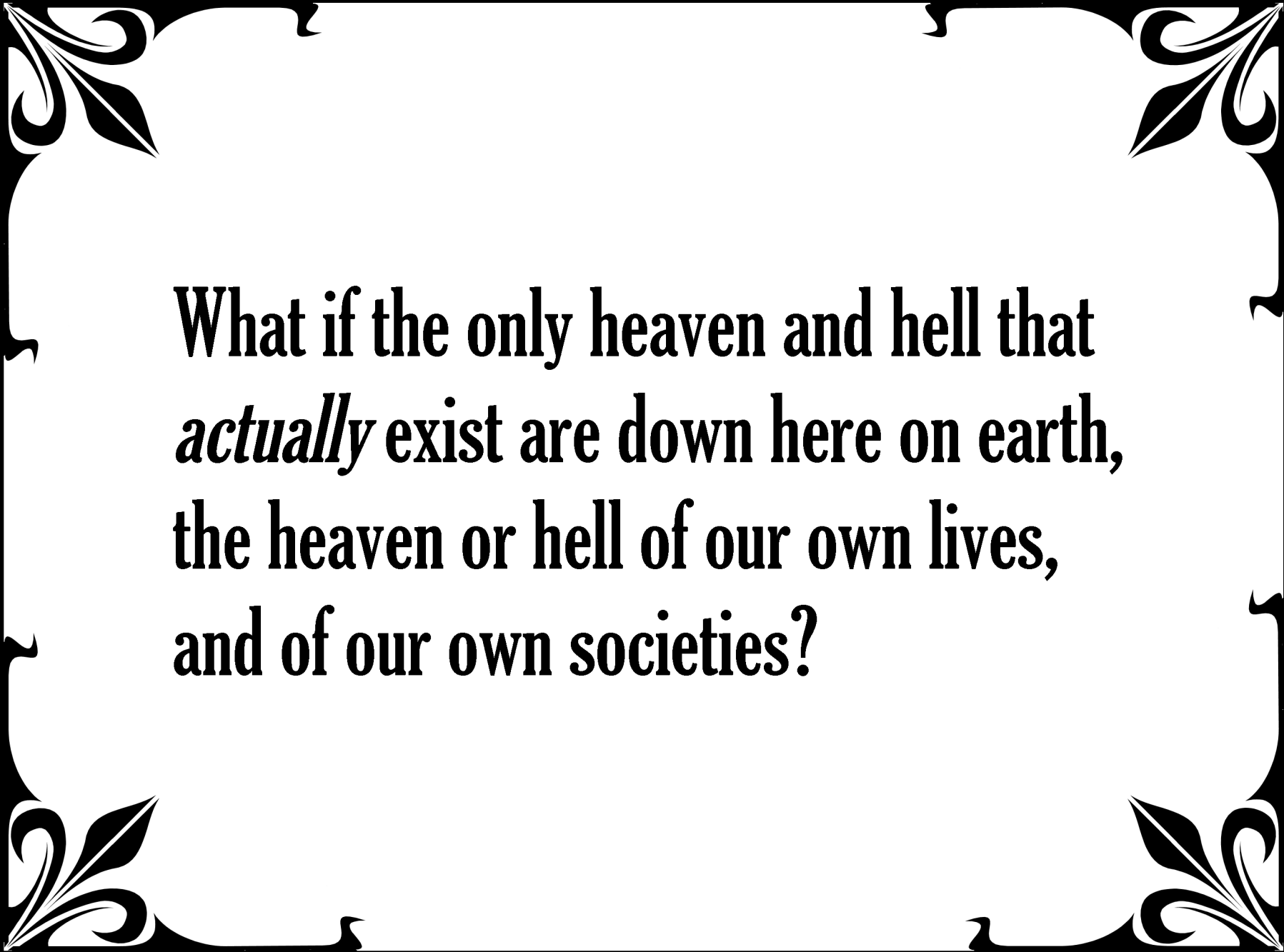
2. You must actually want to go to heaven and not to hell.

But What If...

Hell totally rocks?

The Koran is the one True Path?


**The Flying Spaghetti Monster
will like totally save us?**



What if the only heaven and hell that
actually exist are down here on earth,
the heaven or hell of our own lives,
and of our own societies?

Must Empirically Prove...

- That heaven and hell exist
- What they're actually like
- That we really want to go to one and not the other



Mark 7:1-15

How to Fight Disease





Call Demon
Slayer?



Or...

**...and if thine ex-wife
marries another dude,
she's totally a whore. And
any guys who even think
about doing your wife,
worry not, for I promise
thee, all those pervs will
burn!**







Women ought to keep quiet in public meetings. They must not be allowed to speak. But let them be subservient. So says God's law. And if they still want to learn something, let them ask their husbands at home. For it's shameful for a woman to speak in public. . .

A woman should just keep quiet and learn in complete subjection. Do not allow a woman to teach, or have any authority over men. She should keep quiet. For Adam was formed first, then Eve. And Adam was not deceived, it was the woman who was deceived and committed sin.

But she'll be saved if she stays pregnant, as long as she stays faithful, loving, and pure—and sober.

—1 Cor. 14:34, 1 Tim. 2





Place an X in the Appropriate Circle:

- ☐ Obey the Bible and Be a Jerk
- ☐ Replace God's Word with Your Own Judgment



Democracy

Democratic Values

Science

Scientific Values



**To fix or improve or better use your mind or body,
you need to know how they got the way they are.**



How can I be happy?

How do we cure world hunger?

How can we lower rates of teen pregnancy?



Traditional Medicine

**“Natural plants and stuff are better for you than
those filthy manmade drugs”**

Scientific Medicine

- 1. Isolate what is actually having the effect**
- 2. Determine exact effects for exact doses**
- 3. Control dosage and side-effects**

Scientific Religion

- 1. Isolate what is actually having the effect**
- 2. Determine exact effects for exact doses**
- 3. Control dosage and side-effects**



“Bonobo root cures headaches!”

“Anga root makes headaches worse!”

*** ADVISORY: don’t try to find them . . . I just made them up**



Place an X in the Appropriate Circle:

- ☐ **Just Repeat Dogma Passed on by Others**
- ☐ **Find Out What Really Works and How**



Secular Humanism

- credo -

Love your fellow humans, because it's more fun than hating them. And give us a hand, because we're on our own down here.

Scientific Facts = All the facts established by formal science *or* by informal scientific reasoning consistent with the findings of formal science.

Scientific Morality is morality based entirely on scientific facts.



Unpersuasive arguments have no effect, and what has no effect is of no use.

Therefore, only persuasive arguments for what is right and wrong are of any use.



Every persuasive argument for why something is right or wrong **appeals to some claim to fact.**

Science and scientific thinking are always the better way to discover **the actual facts.**

Therefore, **scientific morality** will be better than any other morality.



“You ought to be compassionate”



- OR -



“Oona is scary...but the sauce hurts more.” —Jesus

Results of Immoral Lifestyle
(Incr. in Prob. / Freq. / Duration)

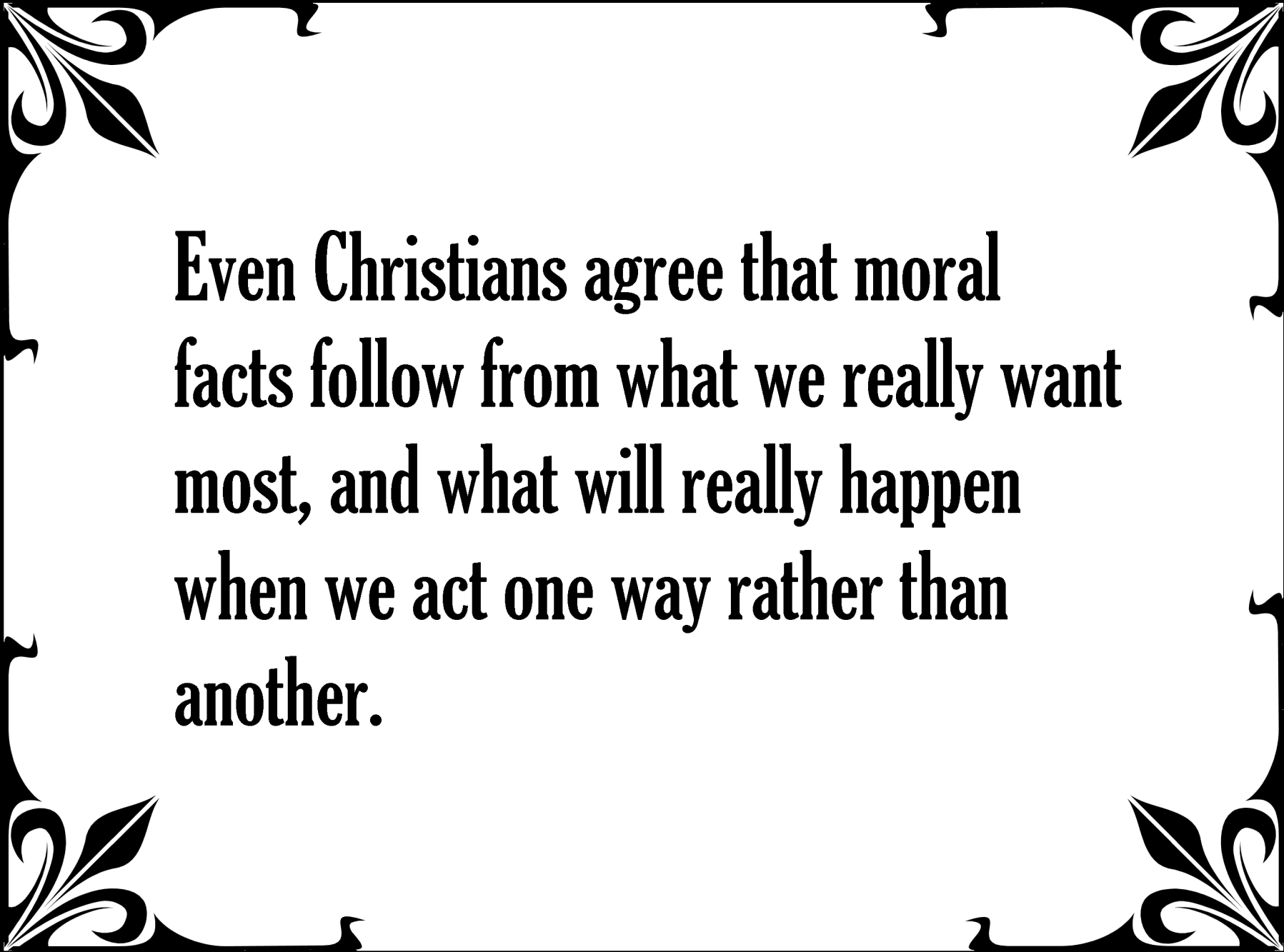
Misery
Loneliness
Self-loathing
Bad Friendships
Fear / Paranoia / Anxiety
Discontentment
Neurosis / Depression
Negative Social Climate

i.e. Life Sucks

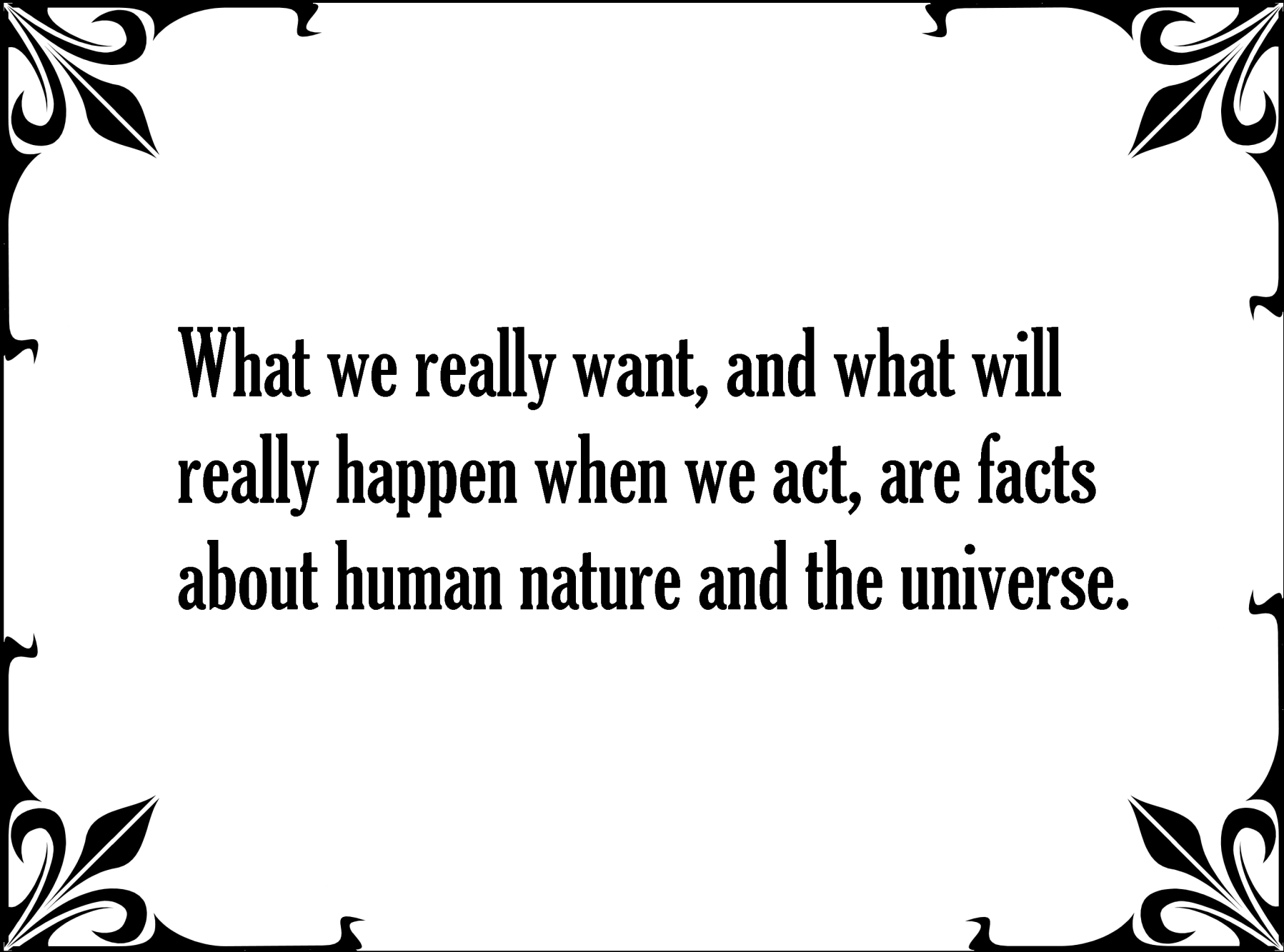
Results of Moral Lifestyle
(Incr. in Prob. / Freq. / Duration)

Joy
Love
Self-respect
Good Friendships
Security / Trust / Tranquility
Contentment
Sanity / Happiness
Positive Social Climate

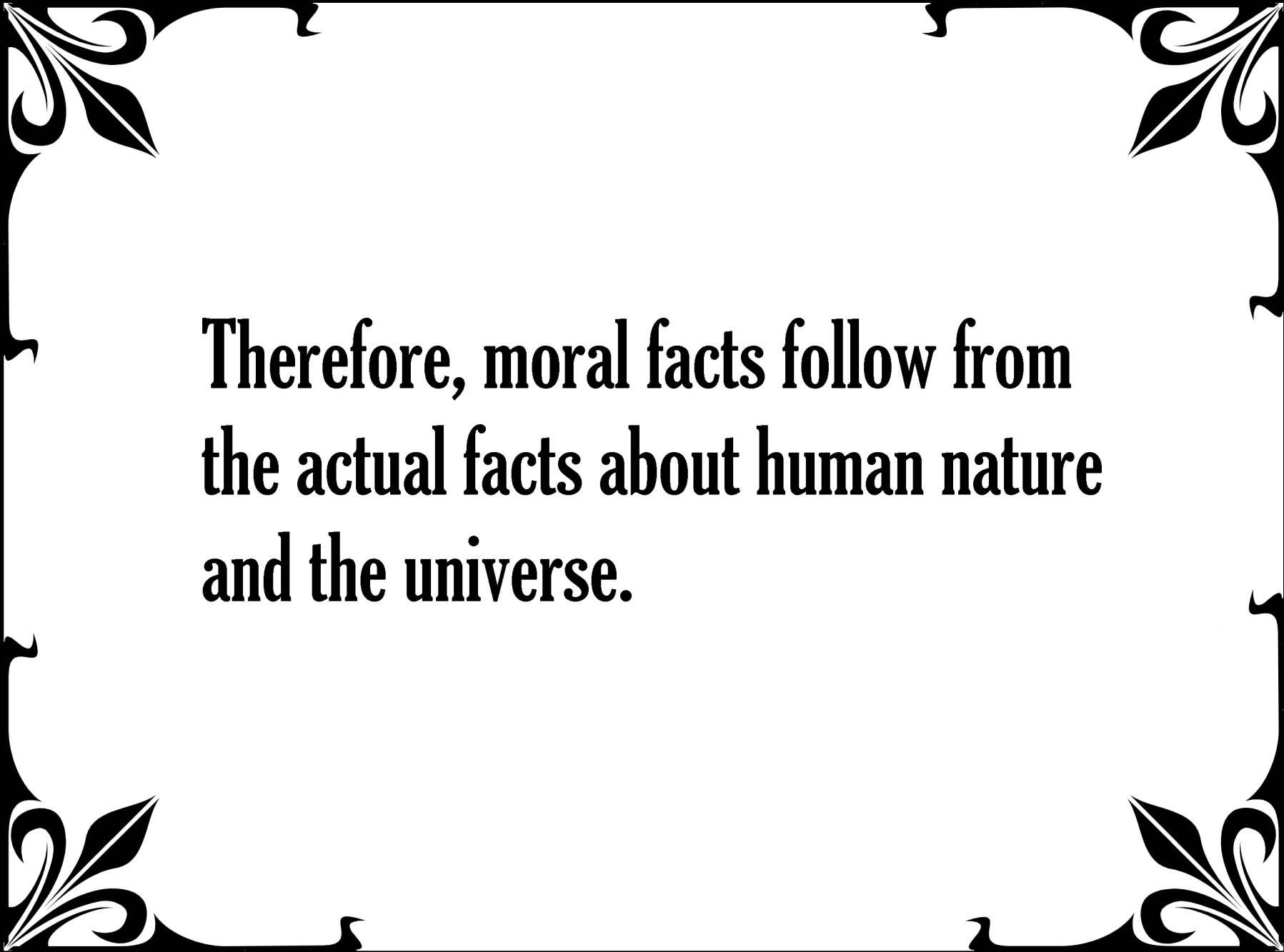
i.e. Life Doesn't Suck



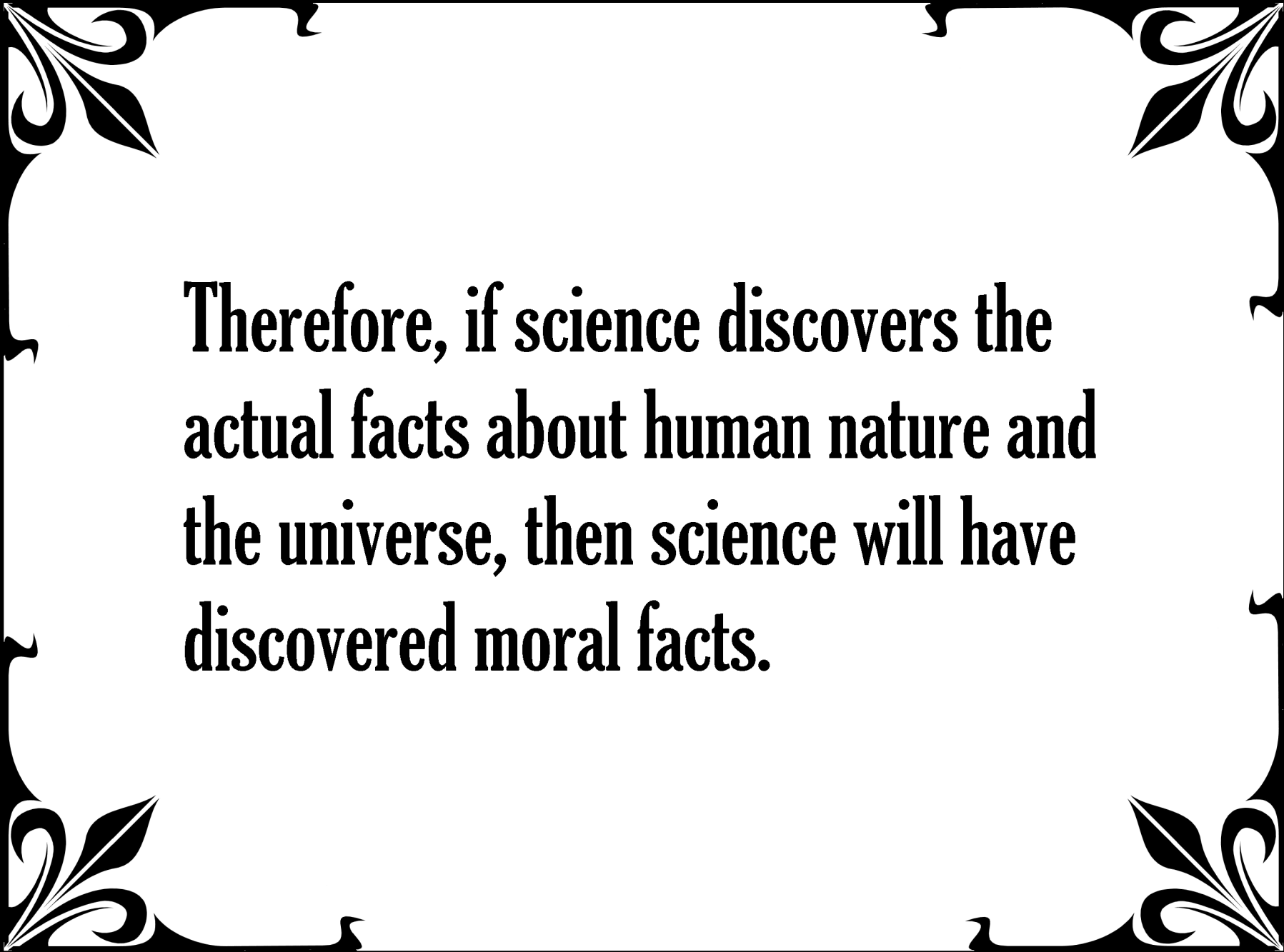
Even Christians agree that moral facts follow from what we really want most, and what will really happen when we act one way rather than another.



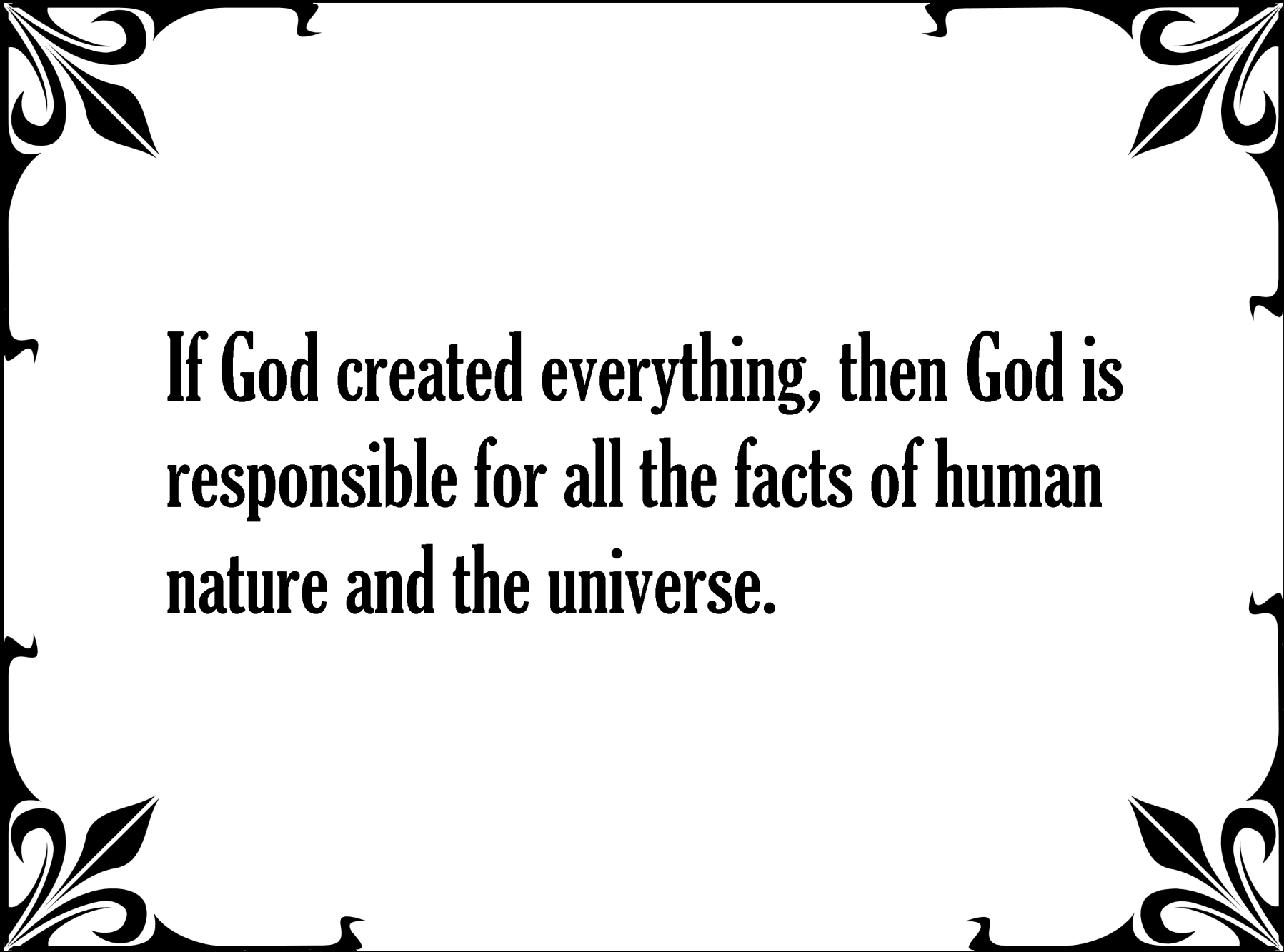
**What we really want, and what will
really happen when we act, are facts
about human nature and the universe.**



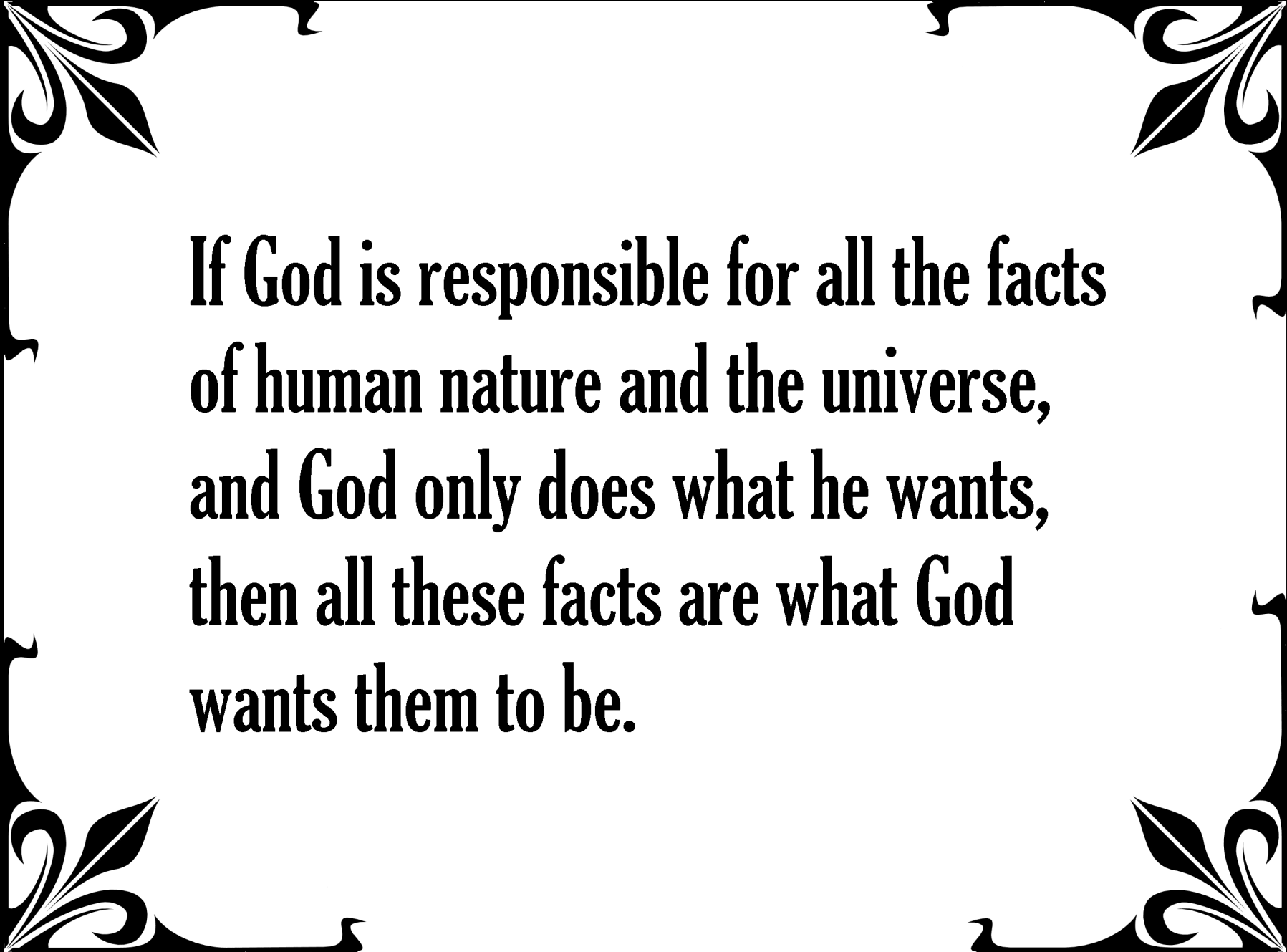
**Therefore, moral facts follow from
the actual facts about human nature
and the universe.**



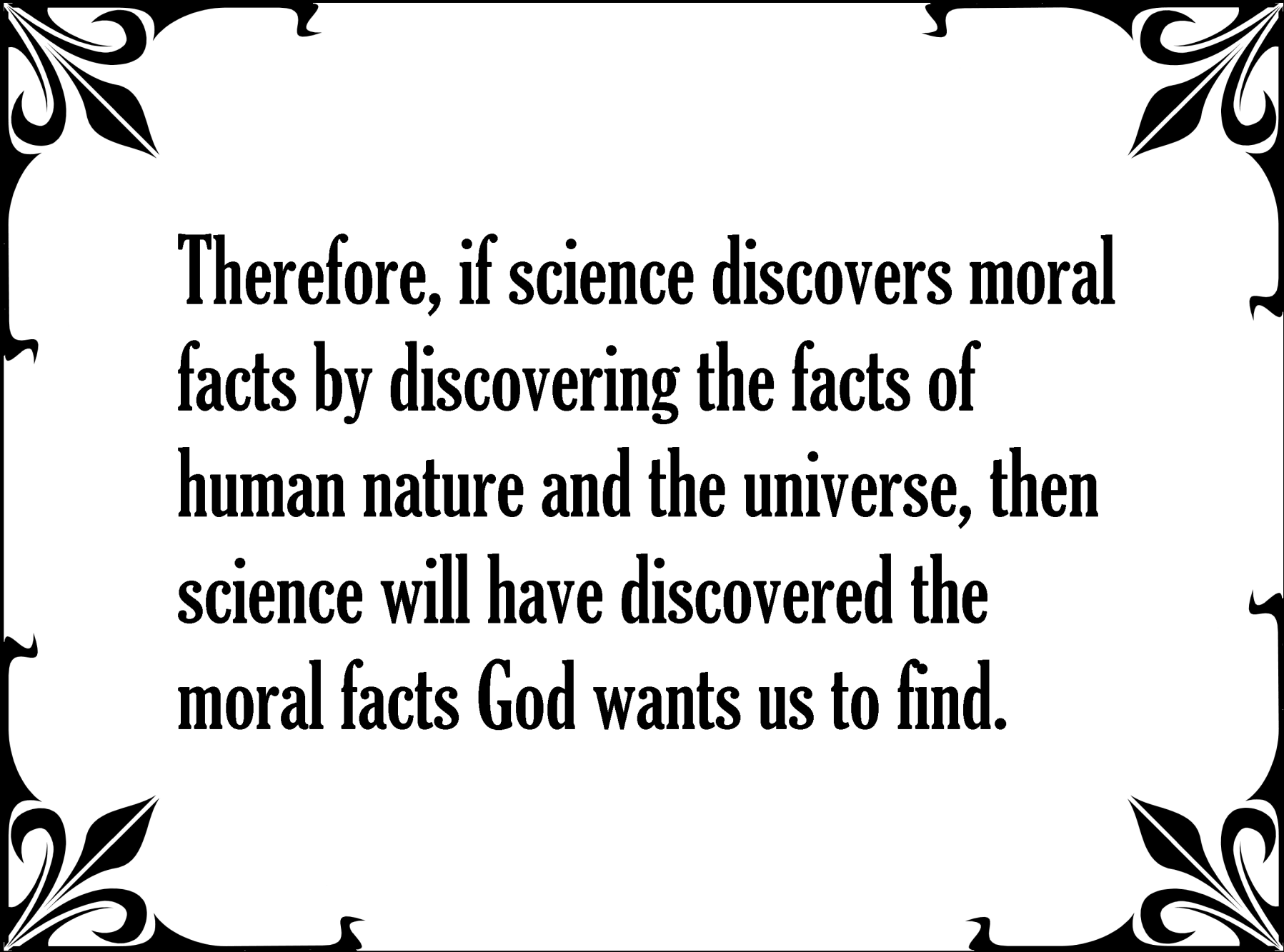
**Therefore, if science discovers the
actual facts about human nature and
the universe, then science will have
discovered moral facts.**



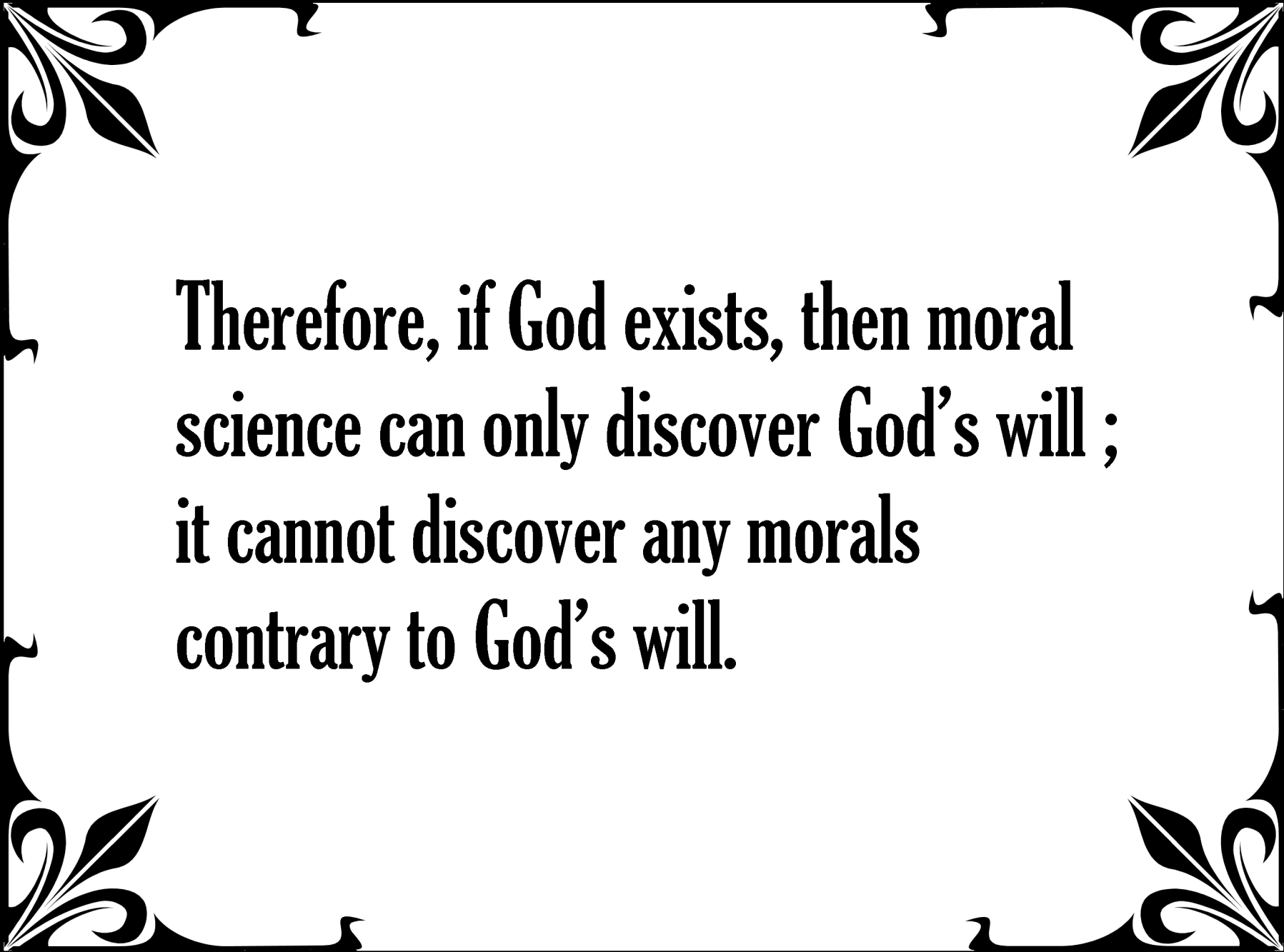
If God created everything, then God is responsible for all the facts of human nature and the universe.



**If God is responsible for all the facts
of human nature and the universe,
and God only does what he wants,
then all these facts are what God
wants them to be.**



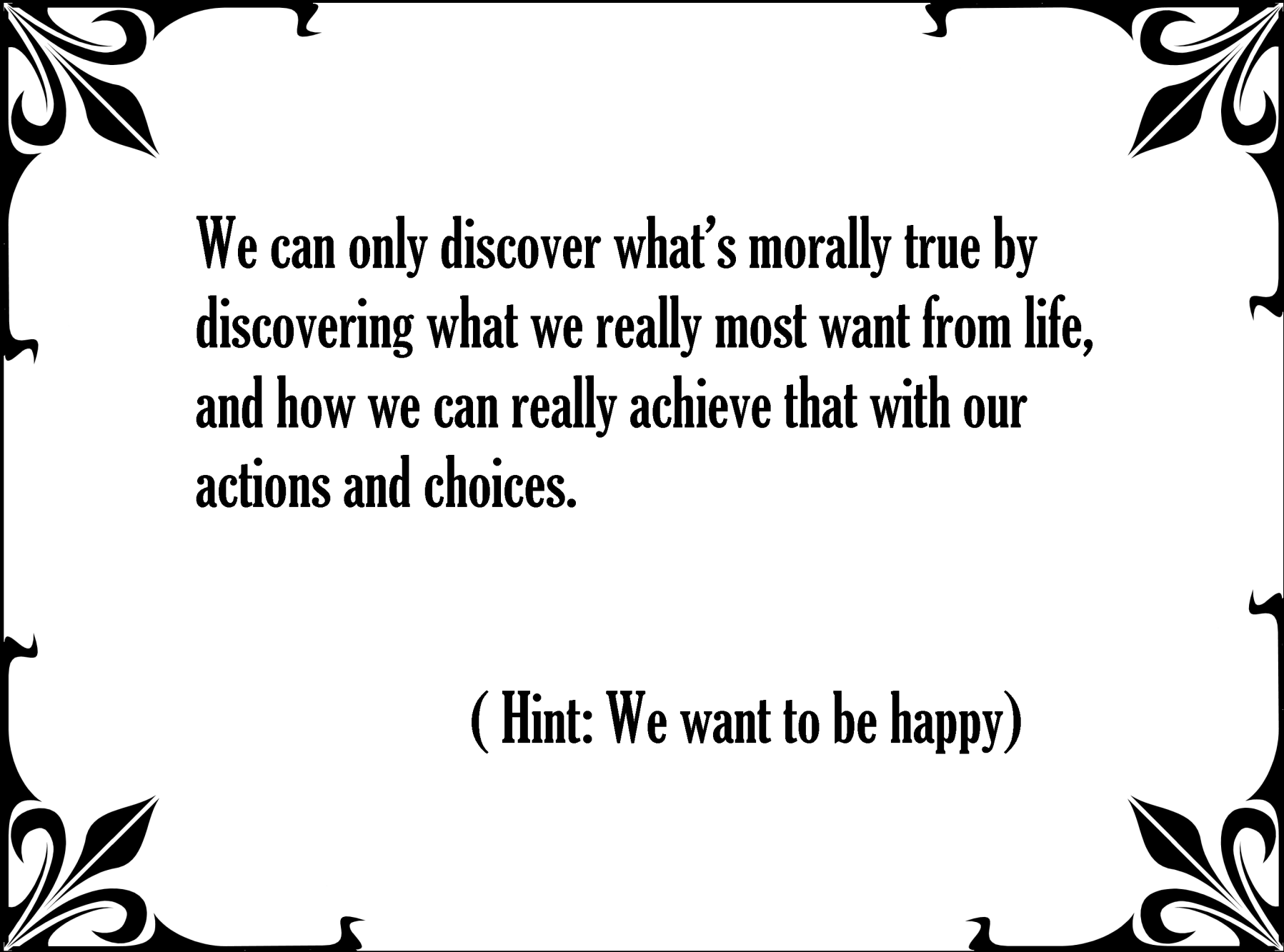
Therefore, if science discovers moral facts by discovering the facts of human nature and the universe, then science will have discovered the moral facts God wants us to find.



**Therefore, if God exists, then moral
science can only discover God's will ;
it cannot discover any morals
contrary to God's will.**



Shocking Claim No. 2

A decorative rectangular frame with rounded corners, featuring stylized leaf and scrollwork motifs in each of the four corners. The background within the frame is white, while the area outside is black.

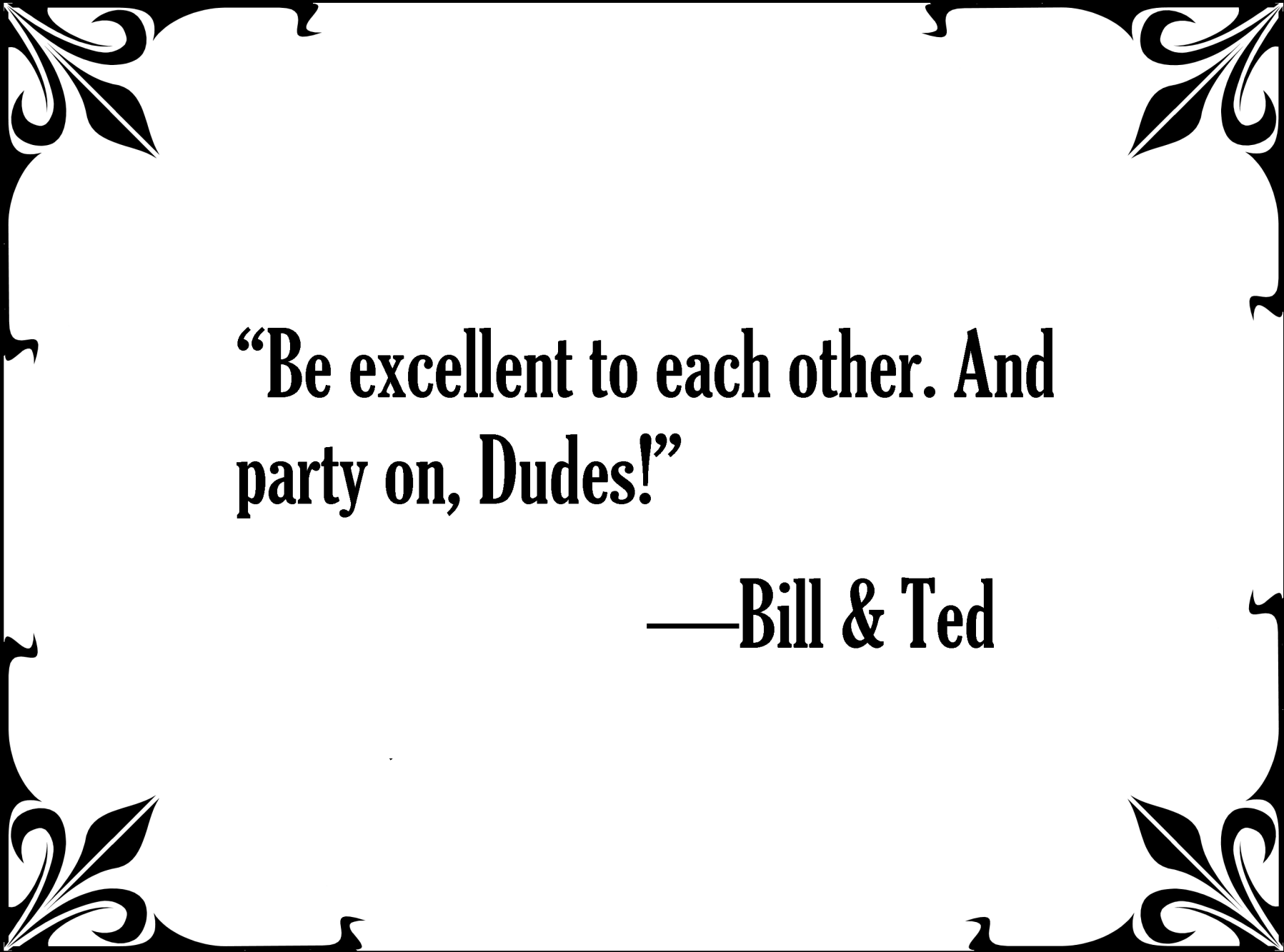
**We can only discover what's morally true by
discovering what we really most want from life,
and how we can really achieve that with our
actions and choices.**

(Hint: We want to be happy)



The Bible can't tell us these things. Because...

- **It's ignorant of the facts of the universe**
- **It's ignorant of the facts of human nature**
- **It's ignorant of how societies, economies work**
- **It fails to recommend the only reliable methods:
science, education and self-reflection.**



**“Be excellent to each other. And
party on, Dudes!”**

—Bill & Ted