A Different Way of Knowing: the Role of Theology and Preaching in an Age of Cognitive Imperialism

An address given at the University of Basel
upon receiving an honorary doctorate

I begin with some recent scientific literature
that has important
implications for theology and preaching.

Magnetic Resonance Imaging,
is a medical technology
that often appears
in articles on popular science
in the United States.

Magnetic Resonance Imaging
is often abbreviated
by the letters MRI.

MRI
uses a magnetic field
and pulses of radio wave energy
to make pictures of organs and structures inside the body.

It is used not only
in the medical diagnosis of patients
but also
in analyzing what regions of the brain
are engaged
as we perform various tasks.

MRI is at the frontier
of much creative research,
and its discoveries appear to have implications
for a wide range of disciplines –
including certain aspects of theology and preaching.

For example,
in a course on congregational song
that I teach at Yale Divinity School,
we read a book

that helps us understand
the physiological impact of performing
and listening to music.

The book is entitled
This Is Your Brain on Music: The Science of a Human Obsession.
Daniel J. Levitin
is the author.

Levitin writes:

Contrary to the old, simplistic notion
that art and music
are processed in the right hemisphere of our brains,
with language and mathematics in the left,
recent findings from my laboratory
and those of my colleagues are showing us that music
is distributed throughout the brain . . .
Music listening, performance, and composition
engage nearly every area of the brain . . . .
and involve nearly every neural subsystem.[1]

Levitin's use of MRI
to study the effect of music upon the brain
helps us understand
the impact of music on worshippers
and
why people feel so passionately about it.

I have also recently been reading
another book that appreciates
the scientific advances gained by MRI
but
at the same time
cautions us
about the limitations of this impressive technology.

The book is titled
Brainwashed: The Seductive Appeal of Mindless Neuroscience
by Sally Satel and Scott O. Lilienfeld.

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[1] Daniel J. Levitin, This Is Your Brain on Music: The Science of a Human Obsession (New York: Dutton, 2006) pp. 8-9.

The authors have helped me to understand
why the brain
is so fascinating and enticing
to study:

Containing roughly 80 billion brain cells,
or neurons,
each of which communicates
with thousands of other neurons,
the three-pound universe
cradled between our ears
has more connections
than there are stars in the Milky Way.
How this enormous neural edifice
gives rise to subjective feelings
is one of the greatest mysteries
of science and philosophy."[2] (p. xi)

It is no wonder then
that scientists would be drawn
to magnetic resonance imaging
and what it might disclose
about the workings
of this astonishing, complex organ.

There are many benefits
from studying the brain
through the use of magnetic resonance imaging,
but alas,
like many technologies,
its proponents sometimes
make claims for it
that exceed the bounds
of what it can actually accomplish.

Sally Satel and Scott O. Lilienfeld
discuss what they term,
"neurocentrism" –
the view that human experience and behavior
can be best explained
from the predominant
or even exclusive perspective of the brain.[3] (p. xix)

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[2] Sally Satel and Scott O. Lilienfeld, Brainwashed: The Seductive Appeal of Mindless Neuroscience (New York: Basic Books, 2013), p. xi.
[3] Satel and Lilienfeld, p. xix.

Satel and Lilienfeld
locate neurocentrism
in a long history of reductionist thinking,
describing how various forms of thought
have purported to provide
an overarching narrative
commandeered to explain and predict
virtually all human behavior.[4] (p. xviii)

Reductionist thought
is a recurring problem
for us humans:
impressed with the knowledge
we have attained by our science,
we may fail to attend adequately
to the domains
of symbol and meaning,
wonder and yearning
that our science and technology
can neither fully comprehend nor control.

Reductionist thought
is not limited to our own generation
and the age of the internet and the computer.

In 1940 Lewis Mumford
wrote a critique of reductionist thought
that in his day took the form of a suffocating pragmatism.
Mumford was concerned that people were

vastly preoccupied with the machinery of life.
It was characteristic of this creed
to overemphasize the part played by political and mechanical invention,
by abstract thought and practical contrivance.
And, accordingly, it minimized
the role of instinct, tradition, history;
it was unaware of the dark forces of the unconscious
or the incalculable,
for the only universe it could rule
was a measured one,
and the only type of human character it could understand
was the utilitarian one.[5]

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[4] Satel and Lilienfeld, p. xviii.

There is a passage in the gospels
that throws light on this problem,
on the limits of what we can know
through the observation
of the physical, measurable world.

In Luke 11: 54-56
Jesus says

to the crowds,
"When you see a cloud rising in the west,
you immediately say, 'It is going to rain';
and so it happens.
And when you see the south wind blowing,
you say,
'There will be scorching heat;'
and it happens.
You hypocrites!
You know how to interpret the appearance of earth and sky,
but why do you not know
how to interpret the present time?"

The people Jesus addresses
are evidently
skilled meteorologists.
They lived before the scientific age,
but they do
what all good scientists do:
they observe physical phenomena,
record the results,
and note if there is a persistent pattern
that is replicated again and again.

Jesus does not criticize the crowds for their science.
After all,
there is an admirable precision
to their forecasting.

Clouds coming from the West
are clouds off the Mediterranean Sea:
they are rain bearing clouds.

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[5] Quoted in David Brooks, "The Problem with Pragmatism," The New York Times, Friday, October 3, 2014, p. A27.

And winds from the south
are winds that have swept across
hot, arid lands:
they bring with them scorching heat.

The crowd's science is sound,
and it gives them good information about the weather,
but their science does not give them
hearts of wisdom.

What the people lack is the ability
"*to interpret the present time*"
or as Matthew puts it in a parallel passage:
"You know how to interpret
the appearance of the sky,
but you cannot interpret
the signs of the times." (Mt. 16: 3)

To interpret the signs of the times
requires something greater
than reductionist thought.

To interpret the signs of the times
we need expansive thought,
generous thought,
thought that is open to
wonder,
surprise,
mystery,
thought that is fed by the insatiable yearnings
of the human heart,
thought that is open to the surprising
winds of the Spirit.

Thought that is open to
wonder,
surprise,
mystery
is not limited to the impact
of the yearnings and longings of the human heart.

Such thought is also
fed by the discoveries of science
and the reflections of the curious mind.

I have recently finished a book,
The Island of Knowledge: The Limits of Science and the Search for Meaning,
by Marcelo Gleiser,
a professor of natural philosophy
and physics and astronomy
at Dartmouth College in the United States.

One of Gleiser's themes
is that science itself
runs up against limits of what he terms
our information bubble.[6]

These limits derive from the impact we have
upon the phenomena we observe
and
from the imperfection of our tools of measurement.

In summary of his work
Gleiser cites Werner Heisenberg:
'What we observe
is not Nature itself
but Nature exposed to our method of questioning.'[7]

No single scientific method
nor the sum total of all our methods
is sufficient
for interpreting the signs of the times.

We need some other way of imagining
the deeper, higher, broader
dimensions of the human situation
in all its wonder and beauty,
in all its brokenness and terror,
in all its discontent and dreaming.

To acknowledge this need
for imagining the human situation
in some framework
more expansive than science alone
is ***not*** to reject science

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[6] Marcelo GleiserThe Island of Knowledge: The Limits of Science and the Search for Meaning (New York: Basic Books, 2014), p. 94.

[7] Gleiser, p. xiii.

or to devalue its accomplishments.

It is rather to celebrate
those ineffable dimensions
of human consciousness and feeling
that make life
profoundly satisfying.

Gleiser expresses both the limits of science
and the riches of conscious existence
in an extended meditation
on the joy of human relationships.

He begins by observing:

While the physical and social sciences
surely can illuminate many aspects of knowledge,
they shouldn't carry the burden of having all the answers.
How small a view of the human spirit
to cloister all that we can achieve
in one corner of knowledge![8]

I appreciate Gleiser's use of the word "cloister" here.

It suggests that there can be
a confining religious dogmatism
to any form of human thought,
including that of science.

Gleiser offers as an alternative the realization that

We are multidimensional creatures
and search for answers in many, complementary ways.
Each serves a purpose, and we need them all.

To recognize that we are "multidimensional creatures,"
and that we have many "complementary ways" of human knowing
is to avoid
what I term "cognitive imperialism."

Cognitive imperialism claims
one form of human knowing
to be the highest and most authoritative
way of gaining knowledge,

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[8] Gleiser, this and the next two quotations are from pp. 280-281.

and it considers other forms of knowledge
to be inferior at best
and illusory at worst.

Although Gleiser himself
does not use the term "cognitive imperialism,"
he illustrates its meaning
with a delightful analysis of a common human action:

Sharing a glass of wine with a loved one
is more than just the chemistry of its molecular composition
the physics of its liquid consistency
and the light reflections on its surface,
or the biology of its fermentation
and our sensorial response to it.
To all that we must add
the experience of its ruby color
and of its taste,
the pleasure of the company,
the twinkle in the eyes across the table,
the quickening of the heart,
the emotion of sharing the moment.
Even if many of these reactions
have a cognitive and neuronal basis,
it would be a mistake to reduce them all
to a measurable data set.
It all sums up;
it all becomes part of what it means to be alive,
to search for answers,
for companionship, for understanding for love.

Although there are passages in Gleiser
where he eschews any interest in theology,
I find this passage
implicitly theological
in the way it moves
from the purely physiological –
the color of the wine,
the processes of fermentation that produced it –
to the realms of meaning, fellowship and love:
all of them central concerns of the gospel.

In a manner Gleiser never intended,
his description
resonates with the sacrament of communion
in which the church shares wine

with its beloved Lord.

Whatever Gleiser might think
of my theological reading
of his scientific and philosophical ruminations,
I believe he is addressing a hunger
for the more holistic understanding of life
that lies behind
the contemporary search for a vital spirituality.

I do not know about here in Switzerland,
but in the United States
the search for a vital spirituality
has become a major cultural phenomenon,
puzzling to many academics and intellectuals
and dismissed by some as a fad,
as a pursuit without substance and depth.

I turn now to consider
the search for a vital spirituality
in light of my discussion
of human knowledge
and the distortions of cognitive imperialism.

I do this because I consider
spirituality to be one of the signs of our time
that we need to read with greater understanding
if we are to practice theology
and preach the gospel
in ways that engage people now.

To update the passage I quoted earlier from Matthew:
We know how to scan the brain
and gather vast amounts of data
but we do not know how to read
the signs of our time
and what they reveal about the human heart.

Spirituality,
as nearly everyone observes,
is an elusive term.

Skeptics find it to be
a squishy word,
an easy cipher for sloppy thinking.

Yes, spirituality can be amorphous
and difficult to define,
but the word clearly resonates
with yearnings and longings
that are part of what makes us human.

And if we dismiss spirituality prematurely
because it does not conform
to our ways of knowing and thinking,
we may be giving into cognitive imperialism
that blinds us to a significant signal
from the depths of the human heart.

The hunger for spirituality
is in our day
what Jesus in his day called
"a sign of the times."

It therefore behooves us
to find a way of reading
the sign of spirituality,
a way of tracing its roots
and understanding its meaning.

Rather than discount the word,
Bruce W. Speck,
in a volume entitled Spirituality in Higher Education,
has collected
a number of contemporary definitions of spirituality,
not in order to arrive
at some definitive conclusion,
but to show us the wide range of ways
spirituality is understood.

Here are some of the definitions that Speck collects:

Spirituality is the living out of the organizing story of one's life.
Spirituality is the experience of the transcendent.
Spirituality is the place in our hearts that holds all of the questions about our purpose in the world, and it is reflected in our actions.
Spirituality can be understood as the ability to experience connections and to create meaning in one's life.

Spirituality is the eternal human yearning to be connected with something larger than our own egos.[9]

I find Speck's list helpful
in giving us a sense
of the intellectual directions
and affective yearnings that
lie behind the quest for spirituality.

In the same book
in which Speck collects
varied definitions of spirituality,
J. Raper writes another essay
that laments how much of higher education
ignores the issue all together:

Religious and spiritual inquiries
are not considered
to be intellectual endeavors;
consequently,
they receive little respect and attention in the academy.[10]

Part of what we are dealing with here
is cognitive imperialism,
with hierarchies of human ways of knowing.

Modes of knowledge get divided
into polarized dichotomies:
reason versus feeling,
science versus religion,
academic versus spiritual.

The result is
that it becomes difficult,
and in some cases impossible,

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[9] Bruce W. Speck, "What Is Spirituality?" in Sherry L. Hoppe, Bruce W. Speck, eds., Spirituality in Higher Education: New Directions for Teaching and learning, San Francisco: Jossey-Bass, 2005, pp. 3-4. Speck lists the sources for each of these independent definitions. There are more than I quote here.

[10] Cited by Bruce W. Speck, "What Is Spirituality?" in Sherry L. Hoppe, Bruce W. Speck, eds., Spirituality in Higher Education: New Directions for Teaching and learning, San Francisco: Jossey-Bass, 2005, p. 5.

for people to communicate
across their differences
in their disciplines,
in their professions,
in their cultures,
in how
they perceive,
process
and respond to the world.

The inability to see the differences
as complementary rather than opposed
often turns to hostility or contempt.

To repeat some earlier words,
I quoted from Marcelo Gleiser:

How small a view of the human spirit
to cloister all that we can achieve
in one corner of knowledge!
We are multidimensional creatures
and search for answers in many, complementary ways.
Each serves a purpose, and we need them all.

To feel how narrow
the cloister of cognitive imperialism
can be
consider this quotation from Patrick Arsenault,
a postdoctoral fellow at the medical school
of the University of Pennsylvania.

Dr. Arsenault attributes his ardor for his wife to
a neuronal change induced by mutual oxytocin release.[11]

I do not dispute the chemistry
that gives rise
to physical attraction.

But when I want to express affection for my wife,
I find it truer to my sentiments
to say "Darling, I love you"
than to announce

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[11] Samuel G. Freedman, "A Christian Apologist and an Atheist Thrive in an Improbable Bond" in The New York Times, October 4, 2014, p. A 14.

"We are experiencing a neuronal change
induced by mutual oxytocin release."

That scientific statement,
no matter how true it is biophysically,
fails to grasp the insight of the great American novelist,
Marilynne Robinson,
who observes:
"human beings are invested
with a degree of value
that we can't honor appropriately.
An overabundance that is magical."[12]

The cloister of cognitive imperialism
fails to honor that magical overabundance,
fails to acknowledge
what Juan Sosa names
"the center of intangibles,"[13]
by which he means
those profound values that pulse
in the heart of a culture.

At their healthiest,
theology and preaching
keep reminding us of the magical overabundance of being human.
Theology and preaching keep us in touch
with the center of intangibles.
And in doing so
they treat seriously
the spiritual dimensions of reality.

At their healthiest and most effective,
theology and preaching
are a form not of MRI,
not a form of Magnetic Resonance Imaging,
but a form of HRI:
Holistic Resonance Imaging.

By the word holistic
I mean a way of exploring life

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[12] As quoted by Wyatt Mason, "Saying Grace: The revelations of Marilynne Robinson" in The New York Times Magazine, October 5, 2014, p. 27.
[13] I am indebted to a lecture by Rita Ferrone during the 2013 Congregations Project of the Yale Institute for Sacred Music for this phrase from Juan Sosa. I do no have the original citation at hand.

that involves multiple modes
of knowing
and being
and doing.

By the word resonance
I mean the evocation
of meanings
that extend beyond
what we can scientifically measure or calculate.

And by the word imaging,
I mean the visionary power of the imagination
enlivened by the wind and fire of the Spirit.

Preaching as Holistic Resonance Imaging
gives witness to the same grace
that the scientist Marcelo Gleiser
makes manifest
when he acknowledges it is
too *small a view of the human spirit*
to cloister all that we can achieve
in one corner of knowledge!

Instead of being cloistered
in one corner of knowledge,
theology and preaching
eschew cognitive imperialism
by drawing on a wide repertoire
of cognitive systems.

In my own work as a theologian,
I have found Howard Gardner's theory of
Multiple Intelligences[14]
immensely useful
in helping students
to move beyond cognitive imperialism
by employing a number of ways of knowing
in their sermons.

I have written extensively about this
in the book that I co-authored

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[14] Howard Gardner, Frames of Mind: The Theory of Multiple Intelligences (New York: Basic Books, 1983).

with Professor Edward Everding,
an expert in theories of cognition and education:
So that All Might Know: Preaching that Engages the Whole Congregation.[15]

To put the theory of multiple intelligences briefly,
Gardner identifies eight distinctly different intelligences,
demonstrating that language and logic
are only two ways of human knowing,
and that there are other important faculties of cognition
by which people receive, process and respond to the world.

I believe our ancient forbears
had an intuition of this principle
when they formulated
that the first and greatest commandment
is to love the Lord
with all our heart and mind and soul and strength.

It is a commandment
we continually
try to avoid fulfilling.

As I once put it in a hymn:

If all you want, Lord, is my heart,
my heart is yours alone,
providing I may set apart
my mind to be my own.

If all you want, Lord, is my mind,
my mind belongs to you,
but let my heart remain inclined
to do what it would do.

If heart and mind would both suffice,
while I kept strength and soul,
at least I would not sacrifice
completely my control.

But since, O God, you want them all
to shape with your own hand,
I pray for grace to heed your call
to live your first command.

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[15] Thomas H. Troeger and H. Edward Everding Jr., So that All Might Know: Preaching that Engages the Whole Congregation (Nashville: Abingdon, 2008).

Thomas H. Troeger

To give all aspects of our humanity
to the One who created us
and whom we recognize as the source of truth
is to energize the full repertoire
of our intelligences.

Our theology and preaching become a witness
to the multiple dimensions of knowing,
a reminder to a culture of technology and science
that cognitive imperialism is incapable of
satisfying the profoundest hungers of the human heart.

"Holistic" means, then,
engaging the sum total
of who we are as creatures
blessed with a consciousness
that continuously forms and re-forms itself
through the work of knowing,
and being
and doing.

Theology and preaching
become holistic resonance imaging
when they avoid reductionist thought
and employ multiple ways of human knowing
to give witness to the living Word of God.

The resonance in
holistic resonance imaging.
is the deep wisdom
that sounds through
through the stories and symbols
of highly varied cultures and traditions.

It is also the resonance
of new revelations
from science and art,
music and literature.

It is the resonance

of human experience,
from terror and tragedy
to wonder and joy.

When theology and preaching
awaken this resonance
by engaging people's multiple ways of knowing
then they speak to the contemporary longing
for a vital spirituality.

Such theology and preaching
awaken our visionary powers
by engaging
heart and mind and soul and strength
with the irrepressible resilience
of the divine vitalities.

To use the poetry of the Gospel of John,
we experience that irrepressible resilience
as "'living water.'" (John 4: 10)

Our visionary powers
enable us to see
the glories of creation
with fresh eyes.

We come to understand
what a gift and privilege it is
to live in a universe of 50 billion galaxies,
to dwell on a spinning watered stone
that we share with unnumbered forms
of bacteria, creatures and plants.

Theology and preaching
become Holistic Resonance Imaging,
when they lead us
into a state of gratitude and wonder
as we realize
that breath and pulse
are astonishing gifts –
utterly unearned.

I want to illustrate this
with a very brief homily.
Today is Thanksgiving Day

in the United States
so in keeping with that holiday,
I offer this brief Thanksgiving homily:

Homily

We who preach
engage the visionary powers
to make clear
the glory and tragedy of our humanity:
how we bear the image of God
yet fail to claim
the implications of that truth.

We engage the visionary powers
to challenge whatever pharaohs
hold us enslaved
and to find our wandering way
through wilderness to the promised land.

We engage the visionary powers
to reclaim the perspective of the prophets:
naming how power is misused
and the structures of authority
are too often invoked to maintain
the privilege of the wealthy
at the cost of the poor.

We engage the visionary powers
to seek out with Christ
the lost, the wounded, the ignored, the desperate
and to find ways to include them
and to restore them to wholeness.

We engage the visionary powers
because through them
we are renewed
by the irrepressible resilience
of the divine vitalities:
that is to say,
we come to realize
that the risen Christ
lives among us,
lives in us,
lives with us,
lives for us.

We engage the visionary powers
to dream new dreams
of a church that is faithful
to Christ
and open to the Spirit's
wind and fire.

We engage the visionary powers
to glimpse
not brain wave patterns
but the reality of the human soul.

By "soul" I do not mean
an ephemeral ghost
that inhabits the body
and flies away at death.

Rather I mean
the human creature
in its totality before God,
an integration and wholeness of being
that remind an age of cognitive imperialism
there is a different way of knowing.

I end by expressing
that different way of knowing
through lines from one of my hymns,
that was commissioned by a teacher of physics,
a scientist and person of faith
who taught in a Catholic school:

> We look down deep to look out far
> for in the heart's deep caves
> we find the Light that lights each star,
> its particles and waves.
>
> We look out far to look down deep
> for in the swirling skies
> we sense the wind whose breathings sweep
> the heart as wordless sighs.
>
> We look where all directions merge,
> where heart and heaven meet,
> where light and wind as one converge

to make our life complete.[16]

[16] Thomas H. Troeger, Above the Moon Earth Rises: Hymn texts, anthems, and poems for a new creation, New York: Oxford University Press, 2002, p. 85. The lines are excerpted and slightly modified by the poet to fit this address. The physics teacher who commissioned the hymn was Mark Konewko.