

- Thank you very much for this chance
to say a few words
about J. Herbert Hollomon
for whom this symposium is named.

Let's deal with his name first.

If J. Herbert Holloman
sounds like a mouthful,
Herb thought so too,
so he changed his name.

His given first name was John
and at a certain point
in his early adulthood
he reinvented himself and became Herb.

Just about everyone called him that
from then on including his children
for about half the time.

So I think you can see from that alone
that he was a straightforward,
direct, and honest guy.

I met Herb just about at this point
in the year in 1974 and I was close to him
until his death in May 1985.

During those exactly 11 years,
when I worked both for and with Herb,
we did a lot of things,
wrote many papers together,
taught courses together,
testified more than once in congress
when Herb was in wheelchair.

We vacationed with families.

We played games.

We talked endlessly

and we ate and drank very well.

In retrospect, the tempo of those years
seems close to ceaseless
and it was certainly intense.

It has made me wonder what to say
to a gathering, what to say about Herb
to a gathering that may be
dedicated to peaceful meditation.

So I've decided to tell you
two sorts of things.

First, how Herb Hollomon's hyperactive side
has changed our lives,
even though you may not know it.

And second, to explain
how Herb's mellow side might give you
some avenues to change your lives further
even as soon as tonight.

Herb Hollomon, as you see
by the bio attached, was nurtured
at MIT continuously from his freshman year
to his Ph.D.

Long afterwards he used to say
that the best thing he did
in his undergraduate years
was to help abolish MIT football.

And that is something I see
that haunts this place to this day.

Ph.D. work in metallurgy had Herb
to write a textbook,
one that I understand is sometimes
still quoted around here.

During the 1950s

at the General Electric Company,
Herb oversaw and encouraged what some call
a golden age of U.S. innovation.

If you've used a Xerox machine or if
you've appreciated a synthetic diamond,
then you would have experienced some of
the innovations that Herb mentored.

Or if you have read any
of Kurt Vonnegut's work
about that time and place, work that,
by the way, was inspired by Bernie Vonnegut,
Kurt's brother, who was
the official GE historian
and a good pal of Herb's,
if you've read that work,
then you've come across
a couple of characters
that were consciously modeled on Herb's
hyper achieving side.

In GE days, Herb was a registered republican
and a corporate person,
things he eagerly left behind when he joined
the Kennedy administration
as the first assistant secretary
of Commerce for Science and Technology.

What was his job?

The way Herb liked to think of it
was an attempt to write the balance
between military and civilian
technology development, which at the point
during the cold war was so lopsided.

He thus became a ceaseless crusader
for the civilian side, arguing for
more public R and D, better patent laws
and revised tax system,
and curiously enough for the time,
a strong environmental
and safety regulatory presence.

The reason for this was that
at that time most such legislation
was passed under the authority
of the commerce power
and, therefore, its implementation
was assigned to the commerce department.

So, one task that fell to Herb
was to determine whether Rachel Carson,
who we now see as
the mother of the environmental movement,
was scientifically right about her
in her book, The Silent Spring.

Herb and his committee said she was
and so DDT was then banned.

Similarly, Herb and Ralph Nader,
whom you certainly have heard of,
became strange bedfellows,
one attacking from inside the government
and the other from the outside
to design the automobile
safety regulatory system that we now have.
During this period Herb gave a speech
proposing the creation
of a National Academy in Engineering
and its support has been

an important underpinning

of this very symposium series.

When Herb came back to MIT

in the early 70s

to start a Policy Research Center,

he ceaselessly accosted people

with the need to incorporate

the discussion of values

in the process of technological change.

Scott Paradise, who was then

the chaplain and pioneer

of this technology and culture forum, was a

usually willing target for Herb's enthusiasm.

At the end of his life,

terribly weakened by a stroke

that had put him in a wheelchair,

Herb was still asking these same questions.

Well, if this was Herb's hyper mode,

what can we say about the mellow side?

Herb's downtimes were not downtimes

in the conventional sense.

He was infamous for his five thirty visits

to staff offices when he would barely knock,

always occupy the nearest chair,

put his feet up on your desk,

and demand what have you learned today?

After a while, those of us

who were the target of these episodes

learned that it mattered very little

what should have learned that day

so long as you propose

something interesting to talk about

and that it extended you
beyond the routine of that day.

As you may gather,

Herb was an extemporizer,
a person who gloried in
spontaneous good talk as he put it.

And I think he preferred it
even to the written word.

While the details of these talks
cannot be remembered.

I think that all who experienced them
remember the sense of these occasions
as profoundly rejuvenated, times
when Herb parliament pressed us
and not all that gently to get ourselves
to question assumptions
and look toward new possibilities.

Herb also offered living proof
that good talk became better
with quantities of good food
and good wine.

He insisted on describing himself
not as a gourmet but as a Gourmont.

I am sure that he would have liked
the way this meeting has been constructed.

He would have earnestly plunged in
to the substance of it
generating more questions
that we would have tried for.

And he certainly would have appreciated
the chance
to continue with over food and drink.

I urge you all to do likewise.

Question your assumptions,
maybe change your life a little bit,
and make a quiet toast to Herb.

Thank you.

- Thank you, George.

So this evening, we'll be spending
the next hour plus here together listening
to Jon Kabat-Zinn and Tenzin
and having the chance to ask
some questions of both of them.

And then, as George reminded us,
the conversation will continue
at about seven fifteen or so.

We'll move from here upstairs
for a sort of working reception.

And we encourage you to stick around for
that reception and have some refreshments
and continue to ask questions of one another
and of our speakers and our moderator
and consider that part
of the learning this evening.

Two final reminders

before we get started,
the first is that we may have some people
coming in late
so if there's room in your row,
if you could kind of scoot in a little bit
so that people can just come
down the stairs who are late comers,
that would be really helpful.

And second, if you haven't

turned off your cell phone,
just reminder to do that now
in the spirit of the ceaseless society.

And, now, it's my great pleasure
to hand this program over to our moderator
for this evening, and our moderator
is Lee Moore, who is a rabbinical student
at Hebrew College and brings
to this discussion great wisdom
and interest in Sabbath practices.

And Lee will be sort of
framing our conversation
and then introducing the speakers
and moderating
the question and answer period.

So please welcome Lee Moore.

-So we've come here tonight to stop,
or at least to consider why we don't stop.

What are the implications of our society
which is ceaseless,
which just goes on and on and on.

What happens to us when we don't stop?

What happens to our planet?

What happens to our communities?

So I don't need to quote to you
statistics about what happens
to yourself when you don't stop
because you know that, right.

If you don't get rest,
you know what happens to your own body
and your ability to actually perform

or do the things that you like to do.

But as much as we know this intellectually,
nevertheless, it's really difficult for us
to actually sort of force ourselves
to take a break.

So I actually heard a rumor
that's a group of MIT students and faculty
have gotten together and are claiming
to have invented the seven day work week.

And the patents are forthcoming.

But I want to offer that as much as it seems
that this inability to stop may be,
you know, a modern kind of problem
that we're dealing with and it's true

that as we have these technological devices
which, you know, these time saving devices

which as we use them more and more,
somehow we have less and less time.

It's a fascinating paradox that perhaps,
we'll be able to get into tonight.

I want to suggest that as much
as we're full of this
with our technology that this is not
just a modern problem,
but that it actually
has ancient roots and perhaps
just has roots in our human condition.

And one way that I know this
just from my studies is that if you open up
an ancient text like the bible,
you'll see inside of this ancient text
that one of the primary focuses,
one of the primary imperatives,

is once a week, take a break.

This is a practice known as the Sabbath.
So, in fact, this practice is so crucial
and so important or was, you know,
back a few thousand years ago,
that it made its way
into the primary tenets
of the Abrahamic religions.

So it's kind of amazing
if you think about it that
what we know as the Ten Commandments,
right.

Don't kill. Don't steal.

Take a break.

That this is something that actually
has come to be,
has such an importance
that it's included in some of
these very basic ideas
around behavior
and what's going to help us
get through as communities.

So tonight we're very fortunate
to have somebody here
who has been telling us
for years now to stop
or at least to slow down a little bit.

Doctor Jon Kabat-Zinn
is the founding director
of the Stress Reduction Clinic
at the University of Massachusetts

Medical Center.

His research is in the field
of mind body medicine
with the focus on the performance effects
of mindfulness meditation training
on people experiencing severe stress.

Perhaps, like some of us.

His bestselling books include
Full Catastrophe Living,
Wherever You Go There You Are,
and Coming to our Senses.

After we hear from Doctor Kabat-Zinn
then we'll be able to hear some responses
from MIT's own Tenzin Priyadarshi.

The Venerable Tenzin Priyadarshi
is a monastic serving
as the Buddhist Chaplain
and Visiting Scholar at MIT.

Venerable Priyadarshi was born
in Vaishali, India.

He entered monastery
at the age of ten in Rajgir
near the ancient Nalanda University.

He trained in India and Nepal
and Indo-Tibetan and Japanese Buddhism
and he was ordained by His Holiness
the Dalai Lama.

He received training in Sanskrit text
in Sarnath, Calcutta, and in Delhi.
And he completed his graduate work
in Comparative Religion
and Philosophy of Religion
at the Harvard Divinity School.

Venerable Priyadarshi is also
an adjunct faculty
at the Namgyal Monastery Institute
of Buddhist studies, the north
which is the North American Sea
of His Holiness the Dalai Lama,
and that's in Ithaca, New York.

So, as Amy was saying,
after we hear from our speakers,
we will continue the conversation,
both your question and answer here
as well as in the reception.

So without further ado, please join me
in welcoming Doctor Kabat-Zinn.

- Thank you. Well, it's a delight to be here
and the title of this talk was given to me
so I just put it on my Power Point slide
so don't take
the ceaseless society too personally.
It can be understood, I guess,
in a whole lot of different ways.

I did not know Doctor Hollomon but
because I left MIT in 1971 and I guess
he just came back in 19 - oh, I left in 71,
he came in 72 so...

But he sounds like
the kind of guy I would have liked
to have known when I was here.

And it's a pleasure for me
to be back, actually, at MIT,
which I left a long time ago.

And I trained with Salvador Luria
in the Biology Department
in Molecular Biology here
and was very involved
because that was the 60s,
very involved in all sorts of issues
that went on on campus those days
around the nature of science
and relationship to culture
and society and technology
and it is interfacing with human values
and so forth.

And I don't need to tell you that that was
a very, very formative
and extremely creative and also divisive time
that polarized a lot of people on campus
but also woke us up in a way that, I think,
was really in the long run quite valuable.
And I got to meet really an enormous number
of extraordinary people here
on the faculty and students
and it's just one of the happiest periods
of my life looking back on it.

And also, no question about it,
one of the most creative because I feel
like the culture here at MIT really does
from the get-go encourage us
to question our assumptions and that is
obviously extremely important
in science because it's so easy,
I guess we all know,
to bias ourselves with how

we want things to turn out.

And the power of the mind
to create self delusion is enormous
and scientists have to
guard against that 24/7.

Therefore, in some ways,
they make the best meditation students
because what people don't really understand
about meditation which is a long way,
you might say, from Molecular Biology,
but somehow my career unfolded
in a kind of very unusual fashion.

Although it actually
the seeds of it started at MIT
and so I wound up studying the effects
of meditation training as you heard
on people with a whole range
of chronic health related conditions
and diseases associated with stress,
pain, and various kinds of illness.

And doing research on it and the effects
of what we now call the mind-body connection
in terms of not only driving disease
processes from the way we live
and the lifestyle, but the potential
to actually reorient ourselves
in relationship to both mind and body,
heart, soul, spirit, whatever you want
to call those deeper, more difficult ways
to describe the actuality,
what it means to be fully human

beyond the intellect
and beyond the physical body
and our emotional comport.

And we've seen a science grow out of this
in the past 25 years so that even here
at MIT now, the Dalai Lama,
we held a conference called
Investigating the Mind back in 2003
over at Kresge
with the Mind and Life Institute
in collaboration with the Broad Institute
and the Dalai Lama was here
in conversation with neuroscientists
and psychologists,
western scientists on the whole question
of how to investigate the human mind.

So in the time frame that I have here
I'm kind of reluctant

first of all because I can't see
any of you beyond the first few rows,

because I'm being blinded,
but now I can see.

It's nice that you're here.

And I'll feel you if I can't see you.

And I guess that's because
things are being videoed.

So in the timeframe that I have,
which is about half of what
I was sort of thought that
I was going to have,
I'd rather not subject you to one more
Power Point presentation
no matter how fantastic.

But rather, actually, be in more of a kind of conversational interactive mode with you and just see how that develops and because when we're talking about society, whether we want to call it ceaseless or not, this is not an invitation to sort of celebrize and intellectualize about what's going on in our society.

This really has to do with us ourselves and as you pointed out, we all know what it does to the body and what it does to the mind and what it does to the spirit when we run ourselves ragged in what you might call the doing mode, when we are just ceaselessly doing, doing, doing, driving for some kind of particular outcome, that by the time we get it is no longer what we're after anymore and so we're continually moving on to the next thing no matter how wonderful the result was that we finally got.

And so there's a sense of perpetual, in some sense, dissatisfaction or groping or striving for some kind of result that will be satisfactory and, often, the process gets lost in the process.

So there's some value, and not necessarily in stopping, but in a sense to open, opening to the actuality of our experience

while we're having it,
because when you come right down to it,
if we're continually living for the future,
then we might miss
the most precious aspects of our lives
because our life is only involved
here and now,
only involved in the present moment.
So if we're, the present moment
is always a clever way
to get some place else,
then we're actually, when you start
to look at it carefully, never where
we actually are because we're always
in some way caught up in our heads
or in our dreams or in something
or other that worthy as they may be.
And transformative and healing
as they may be,
always have one element of sort of busyness
or preoccupation or agitation of mind
or a certain price that you pay
for that in terms of losing touch
with other aspects of our being
which often includes our children
or our partners or our bodies
because who's got time for the body.
And in the process, maybe generating
huge amounts suffering
without any awareness that we're actually
collaborating in that process
and then we just blame it on,
oh, the ceaseless society or,

you know, or MIT's culture
or wherever it happens to be
where things are just at the digital age
where things are
just so sped up that, you know.

I mean, I can think back very easily,
and I'm sure the older ones of you can,
to the days when, you know, before
personal computing and personal computers.

And, you know, with the advent
of the personal computer and the laptop,
I mean, it was obvious,
I can get more work done
and better work in a day
than I can get done in a month.

In many, many ways
it was unbelievably convenient.

But it's also, maybe you've noticed,
unbelievably seductive.

Yes, unbelievably seductive.

So the digital revolution
which you could say was inevitable
because it's the way electrons function
and the way matter functions
and sooner or later clever people,
even if it wasn't that MIT and Stanford,
were going to figure out how to make it run
and integrate at circuits in ways
that would in some way or other
allow us to interface with the world
in an interesting fashion.

So you could say it was inevitable.

You don't have to blame

MIT and Stanford for it.

But, you know, one of the interesting things
that you can pay attention to

is how the digital revolution
has changed our relationship to work.

So that, for instance, there used to be
what was quaintly called a workday.

And they used to be what was
quaintly called the work week.

Now, unless you take really stringent
disciplined interior measures,
the "work," in quotation marks,
can just consume everything because
you can work, as they say,
anywhere, 24/7,
and there are advertisements,
full page advertisements
in the New York Times
and every place else,
you know, extolling the virtues
of 24/7 connectivity.

And there are tremendous virtues,
that 24/7 connectivity.

But you know, it may be
that we are so connected

I'd have to shut mine off.

We are so connected but nobody ever calls me
because I don't give people the number.

But we are so connected with the world
that we don't even think.

It never occurs to us that we may actually
be slightly disconnected from our self
and we no longer know how to tune in.

We may have to sort of pay Verizon

to call ourselves up and say,
hello, Jon, are you still here?

And if I'm living in my head all the time,
I may not be actually fully here because
I'm always on the way to some place else,
at some better something,
some better outcome,
some better gathering, some better place,
some better condition of my body.

So there's a way in which
we can get entrained into the rhythms
of the society almost as if we are
and we are, when you come right down to it,
guinea pigs in an uncontrolled experiment
run wild because
no one's really minding the store.

And so this digital revolution
which has hardly began to reach
the real exponential possibilities
that it has inherent in it,
but still following moral's law,
we have no idea that the effects
of this on our biology, which is after all
millions of years old
and that digital revolution that way
15 years old for most of us,
20, 30 years old for MIT people.

We have no idea what this does
even to attention.

Have you ever noticed that you sometimes
like lose track
of what you're actually doing because

you're speeding along so fast,
you could have, like, what am I
supposed to be doing here
or maybe multi-tasking so effectively
that you've got so many balls in the air
that they're hard to keep track
of it actually. Why are we doing this?
I love it when people would come in
and into the lab and say,
what are you doing, and you know,
you have to say, Louie did this all the time.

They said why are you doing that?

Well, it's a really good question.

Sometimes we get so into our assumptions
and into the sort of momentum
of what we're doing that we stop remembering
like every day, maybe it would be
a good idea to ask why am I doing
this rather than something else today?

Because the, well, in an institution
like this, we know the power of thought.

There are other aspects that a human
the human repertoire, if you will,
or human faculties that are equally,
equally powerful,
but they're not taught anywhere.

Never mind at MIT, they're
not taught in our educational system.
Much of scientific creativity
doesn't actually come
exclusively out of thought.

And if we start with measurement

for instance, what is it that we measure
because measure
is so fundamental to science.

We'd measure things
and we understand relationships,
but how do we know what to measure.

Well, we have to sense them.

We have instruments,
and instruments sense
the outer world or the inner world,
whatever it is that we want to study.

So we have all these instruments.

They're actually extensions
of the five senses.

Actually, there are more than five senses.

But one of my dilemmas here tonight
is given the amount of time,
I don't have, I won't have the opportunity
to weave all of these threads together,
so I'm going leave
a lot of loose ends hanging
and just say that I tried to put them
all in a book
and the book wound up being 650 pages.

And it is quite coherent
and comprehensive,
but, and very, very relevant to science
and culture and technology because, actually,
it's all coming out of the human mind.

And one of the interesting characteristics
of the human mind, well we call ourselves

homo sapien sapiens.

That's what we name our species
which means basically in Latin
it's the present participle
of the verb sapere, to taste.
Okay, again, sense or to know.

And the Buddhists often speak
about this knowing quality of mind
that's not thought based
but more intuitive based,
more direct apprehension through the senses,
through like kind of experience as knowing
or what we could call awareness.

Of course, it interfaces with thought,
but it's another faculty,
the faculty of direct perception,
awareness, and knowing.

So with the species that knows
and knows that it knows,
a double doze, homo sapien sapiens.
Awareness and meta-awareness,
wouldn't that be nice?

I don't think so.

This is one of, I think,
the great tragedies of our species so far
is that so much beauty, science, art, music,
poetry comes out of the human mind,
you know, and so much, man comes out
of the same human mind,
same human heart in a sense
because in some sense we don't know
how to run the apparatus

that we've been given and sometimes
it takes over and it, on good days
just blinds us and we sort of make mistakes
on bad days, it blinds us
to other people's pain
and we can create an enormous
amount of pain in the world
out of our own pain
and out of our own ignorance
and out of our own ambitious greediness,
I guess I'd call it, to want things
to be different,
so that I will feel better.

And usually, that happens
at the expense of other people
because when you really come
right down to it if we're not careful,
we wind up with the kind of conceit
that we are the center of the universe.

It's part of the,
it's an occupational hazard
of being packaged in a body
that the whole universe is outside
and you're obviously the center of it.

And you relate to it through all your senses
including potentially this capacity for knowing,
for awarenensing,
if you want to coin the term.

It's a present participle.

Awarenensing.

That to me is kind of
a working definition of meditation.

What is meditation?

It's not necessarily stopping
in the kind of usual way
that we would think of stopping.

Stopping's good and it's, of course,
we're all going to be stopped.

Sooner or later, the ultimate stop.

Some people don't necessarily think
it's the ultimate stop, but that's
we're not going to go there tonight,
okay.

We work a lot with medical patients
who have tremendous suffering.

I track record with the dead,
it's not so good.

So one of the sort of
cardinal rules of thumb is
that as long as you're breathing,
our perspective is on our
the people that we, who come
to our stress reduction clinic.

As long as we are breathing, we consider
that no matter what's wrong with you
and no matter what the doctor sent you for,
no matter whether it's prostate cancer,
breast cancer, heart disease of one,
you know, kind of another, back pain,
as long as you're breathing,
no matter what's wrong with you
from our perspective, there's more right
with you than wrong with you, okay?

But, can we learn to add or pour some energy
into what's already okay with us?

What you could call health
in the most profound of ways
and see what happens if we were
to actually collaborate in our own,
you could say, full health?

Our own interface with the
not only the outer world
but also the interior world
of our own thoughts, our own emotions,
our own sensory experience in ways
that would actually have
some degree of balance,
some degree of inter-relationality

because of the senses
are actually interrelational,
so that while you're
the center of the universe,
okay, so is everybody else.

So as everybody else,
the center of the universe,
so that means in a sense,
there's no center.

Cosmologists know this.

Topologists know this.

There's no center
and there is no periphery.

But we live in a kind of mostly
three dimensional sort of contraption

and so we bang around kind of
in a Newtonian Billiard Ball like world

and so do our politicians.

And if you think you're driven
by certain degree of ambition or selfing,
you know, politicians almost by definition

have to do that just to get reelected
and by the time they're reelected, they may
have lost track of what they're doing
and why they were elected and what
their real calling is
of the kind of government
or the kind of society that we have,
and then just become grist for the mill
just like anybody else
and wind up so stressed.

And I've given talks on Capitol Hill
and run meditation retreats on, you know,
for members of congress and psych.

It's mayhem up there too, of course.

You can read that in the Times
everyday or anywhere else.

But the question is what if we were to take
the name we gave our species seriously
and actually train to familiarize our self
with the full perspective,
the full dimensionality of what it means
to be really human
of our interior capacities for our learning,
for, what you be thinking of,
for learning, growing, healing,
and for that matter of transformation
across that whole life span?

We've been finding in our work
that that's not only possible for the people
that we see in the stress reduction clinic.

Of course, it would be much better
if they had, in some way or other,

learned what they learn
in the stress reduction clinic
30 or 40 years earlier.
And then we'll say that,
I wish I knew this
when I was like a young person.
I would say it doesn't matter.
Now is the only time that we're alive.
So now is a good time.
And the rest is all thinking.
So our thinking is really wonderful.
There are other elements of our humanity
that could be cultivated
in the disciplined way and that's what we do
in what's called
mindfulness based stress reduction.
This approach that we developed
27 years ago now
at the University of Massachusetts
Medical Center
which involves training regular people
like you and me
in Buddhist meditative practices
without the Buddhism.
Or you could say
with the absolute heart of Buddhism
because Buddhism is about non-duality.
So in a sense, if you make yourself
into a Buddhist, in your mind,
I'm not saying you can't be a Buddhist,
I mean there are Buddhists
and they are just like everybody else,

you know.

But if you think you're a Buddhist,
in a sense you're not a Buddhist.

If this is beginning to sound
a little bit like Zen,

that's why Zen sounds that way.

They're trying to point to something
that the intellectual capacity

that we have can't figure out because it's
jumping through another dimensionality.

So if you make a separation,

Buddhist and non-Buddhist

and then you align with the Buddhism,
we are over here and we are more relaxed.

Or whatever, you fill in the blank,
whatever you want to say, the Buddhist,
this is all loose, you know,
and insightful and compassionate, you know.

Okay, you've created a story.

You've created a total caricature.

In a sense, you've robbed them
of their humanity.

And then you've created
all these non-Buddhists over here
not quite as hip or whatever.

So Buddhism is about non-duality.

As soon as you make this
and that in your mind, you've lost
some underlying connectivity, unity.

It's not like there's no night
and there's no day.

Oh, yeah, Buddhists,

they're not into dualism.

So there's no night and there's no day.

Of course, there's night and day.

But if you get attached to one

or the other

like I only do night, I don't do day.

These are very famous.

And some people do.

I mean, there are people

in this university in particular,

at least when I was here,

they never ever saw the light of day.

They were in

and they gave us the digital revolution,

the internet, email, all of it.

There's a very famous fairy tale,

not fairy tale.

It's from the Arthurian tradition,

Sir Gawain and the Loathly Lady.

I'm not going to tell it to you,

but it has to do

with night and day

and non-attachment.

And it also has to do with a Ch'an

which is in the Zen tradition,

a question that a teacher often poses

to a student that cannot

be answered by the conceptual mind.

So this one is what is it

that all women most desire?

It first appeared in the Wife of Bath tale,

Geoffrey Chaucer, and now it's in this.

What is it that all women most desire?

It was posed to King Arthur himself,
but you can ask yourself
whether you're a man or a woman
and as soon as the mind starts
cogitating on it, you're off.

I mean off to the races
and also off like wrong place.

So there's this other capacity
that we have called awareness.

When was the last time
you took a course in awareness,
unless you've gone
to Buddhist retreat centers?

That's what it's about.

It's about paying attention,
meditation, my working definition of it.

To boil it down,
there are all sorts of complexities to this.

But to boil it down it's about
paying attention on purpose,
in the present moment, non-judgmentally.

And that's called mindfulness,
paying attention on purpose
in the present moment non-judgmentally.

Ultimately, it stops being on purpose.

That's called deliberate mindfulness.
It's cultivated just like you'd cultivate,
you know, vegetables.

But ultimately, it becomes, in a sense,
I shouldn't say second nature.

The Buddhists would call it your true nature
and it starts to become
what you could call
effortless mindfulness.

You'll just hear more.

When you were in school,
they don't do this at MIT, of course,
but they take attendance, you know.

I mean, still,
I think in that elementary school.

And what do you say
when they call your name?

You say, present.

But most of the time,
you're only
like they should be qualified.

I'm present to a degree, but actually,
my mind is off outside in the tree
with the bird or whatever,
because a lot of time
it's more interesting than
what's going up
in front of the blackboard
which is a problem for education.

But imagine if we had an education
that actually cultivated this capacity
for awareness among
slightest capacity for thinking
and brought them into
a certain kind of balance
that manifested into an interior world,
in a sense,

even just in terms
of being embodied.

Just, I say just embodied.

Sometimes, you know,
there's no word inheaded,
but most of us are inheaded.

We're not embodied.

There's a wonderful mind
that I like to quote a lot
from James Joyce,
one of his short stories in Dubliners,
goes, there's a line in there
that goes a little bit like this:

"Mr. Duffy lived
a short distance from his body."
You can live a short distance
from your body for 20 or 30 years
and then the heart attack wakes you up
and says, aha, there was some
you were getting signals
for a number of years,
do you remember those phone calls
that you were getting?

They weren't coming through Verizon,
they were actually coming
through your sensor,
some outer sensory system,
and you were too busy to pay attention.
Do you remember those?

Well, our patients will say, you know,
that heart attack that I had
that didn't kill me,

it was one of
the greatest years of my life.

Why?

And they'll say it just this way,
it woke me up.

That's what the Buddhist talk about,
waking up.

Waking up from what?

Well, it can be said
in a lot of different ways,
but they would say from ignorance,
ignoring certain aspects of the world,
the inwardly and outwardly,
that turned out we thought trivial,
it turned out not to be trivial,
turned out to be important,
not to become obsessed with,
not to become a narcissist,
much so with my body.

I love this yoga, you know,
you can see that I'm a yogi.

No, that's all just like Madison Avenue,
more pumping up the personal pronouns,
I, me, and mine.

Yeah. My center of my universe
is doing very well, thank you,
and includes being embodied,
healthy, you know.

No, it's about non-attachment to the ways
in which we grasp on to concepts
that actually keep us at a distance
from the actuality of reality,

if you want to call it that.

Now, I know, that's bringing reality
that brings in an awful lot of conversation
and since this is about conversation,
we can certainly
visit that in the discussion.

But I would like to weave it
in another direction and say,
okay, if meditation is
about paying attention and awareness,
and we're, and the subject in some ways,
the ceaseless society,
and you know what this does
to your body and your mind
and your creativity for that matter
or your capacity for love.

I could ask all the time because I,
when I give medical grand rounds,
but mostly, I speak to medical audiences,
and they'll say,
oh, meditation is really
about paying attention.

Do you think it might have
any sort of benefit
for people with
attention deficit disorder?

It's a perfectly valuable valid question.

And the answer is,
well, if there was something
that was learnable
that you could actually train in

that cultivates something

and you just had to take a drug
and just jump there right away

but the drug had a lot of different other
side effects that might not be so healthy.

Do you think of any value

in actually doing the training?

No, too busy. I'll just take the drug,
thank you very much.

And, you know, people say that about
stress reduction in the medical center,
you know, all the residents
want stress reduction,
any new medical residency,
even with the new changes,
still one of the most
stressful jobs on the planet.

They want, all want stress reduction,
but until recently, it's like,
well, do you have it in pill form?

That goes I always got time
to stop or to practice.

This is the other thing about meditation.

When you get into it,
it looks an awful lot like nothing.

I mean, it look so much like nothing
that your thinking mind just goes like,
this is bullshit, this is nothing.

It's just nothing.

It's the emperor's new clothes.

There's nothing happening here.

That was about 15 thoughts
that the mind secreted in reaction.

Actually, it's not true

that there's nothing going on.

For one thing, you know, there's a lot

that we don't notice,

their sounds, their scents,

S-C-E-N-T-S,

I think that's how you spell it,

their sights.

There's this sense of the body

sitting or standing and being in some way,

not in this room, but caressed by the air.

What air? The geniuses here.

It happens, you know,

oh, yeah, we forgot about the air.

Oh no, then we're getting plenty of air

but then you can't hear.

And I'm not knocking the architect chair.

I mean, it's just like, you know,

this moment is this way

from where I'm standing.

But when you say nothing,

the mind says nothing,

there's an architecture to nothing.

It's not really nothing.

You could say in a sense, it's everything.

So nothing and everything

have a very interesting inter-embeddedness

and so does thinking and awareness.

They intermingle. They are co-creative.

I was in Bon not long ago

doing some teaching

and I was wandering around the,
you know, sort of, in Bon.

I had a few hours.

And I'm passing by across the street
from a beautiful yellow building
that was obviously a university building.

So I went over, saw the
department of microbiology and chemistry,
and there's a big statue in front of it
and I thought who's going to be,
you know, the statue?

It turns out it's Kekule.

Maybe that doesn't move you here,
but Kekule is very famous in chemistry,
and many scientists know
the story of Kekule.

I asked my hosts who were Buddhists,
do you know who that is?

And they said, no, no.

That's Kekule,

and they said, well, great.

Never heard of him.

But Kekule was an organic chemist
who was trying to discern
the structure of Benzene,
and every time he did the analysis
it came out that the number of hydrogens
and the number of carbons was the same.

It was like six and like,
how do you do that?

And what was required is what's often
required in scientists as a kind of

a leap of understanding
that doesn't come out of thought.
Thinking, thinking, thinking.
After a while we call it
banging your head against the wall.
And then the story is he went to sleep
one night after doing this for months
and he had a dream
and the dream was, famously,
that he dreamed of a snake
swallowing its own tail.
And that was the beginning
of our understanding
of atomic orbitals, molecular orbits
that, oh, okay, the electrons are shared
among the entire,
why didn't I think of that?
Well, that's what we all say whenever
somebody has some profound insights.
Why didn't I think of that?
That's why there's so much
competition inside.
How didn't I think of that?
Well, we don't know.
Creativity is mysterious,
but one way to generate
or tilt the probability of creativity
is to cultivate
more spaciousness in the mind
because thought tends to sort of contract
and then get a certain,
since it gets stymied

when it can't get the next thought
and sometimes, if you learn
how to just stand there
at what the Zen people in the
Zen archery will call
the point of highest tension.

Nobody could string or hold back
Oedisius' ball except the disease.

Nobody. But when you can stand
at the point of highest tension
with your thoughts going nowhere
and hold it in something bigger,
wakefully, not necessarily in a dream,
but actually wakefully,
interesting connections seem to appear
because they're already here.

But we are in some sense
blind to them because our thinking itself
acts like lenses and prevents us
from seeing orthogonal opportunities,
opportunities that are rotated in some way
in relationship to the passive assumptions
to what's already known.

And what science is about is going between
what's already known
and the next that's going to be known
but how is it going to happen
and part of that
is just an incredibly beautiful adventure.
So and you say in a sense, well,
scientists are already meditators in a way

but it's important to know it
and to actually practice cultivating this
if this, what I'm saying
speaks to you in any way
because it's not a good idea.

Mindfulness is not just a good idea.

I'll be more mindful.

I'll be less stressed.

The ceaseless society
won't be a problem for me.

No, this is something that requires
continual dancing with
and really allowing ourselves
to not be so caught
in what we know that we don't any longer
feel comfortable in not knowing.

Now, remember it was sometimes
very, very difficult
to ask stupid questions here.

Very difficult, and I always loved that
when someone else had the courage
to ask a really dumb question,
usually turned out to be really important,
and it free, it was freeing.

So as soon as we can't
go into where we don't know,
then what's known becomes dead
because the interface is what's important.

So maybe I'll say a few things
and wrap up. That'd be all right?

One is that an interesting study was done
at UCSF a couple of years ago.

Maybe I will show it to you.

If you, by the way, I was hoping
I would tell a lot of stories about MIT,
and I learned meditation
here at MIT for the first time.

You know, you ask people who have
been meditating for three to four years.

How did you get into meditation?
Well, I went to India

or I went to Thailand
and sat in a forest refuge,
or monastery or whatever.

Well, the people ask me,
how did you learn meditation?

Oh, I was at MIT.

I was walking down the halls one day
and I saw a sign. The three pillars of Zen.

It was 1966, and it was like
the Vietnam war was just beginong

cooking, just beginning
to cook the gulf of tanking
and so I'm just like,
this place was really interesting.

And I was alienated out of my mind and I saw
the sign, the three pillars of Zen.

I had no else to do that afternoon,
nothing was working in the lab,

and, you know, I didn't know what Zen was.

It was, at the invitation of Houston Smith,
I'd never heard Houston Smith.

He was a professor of philosophy here
and a very august character.

And it was a talk given
by Philip Kapleau.

I've never heard of Kapleau,
who started the Rochester Zen Center,
where I'm actually going next weekend
to give the keynote
for their 40th anniversary celebration.

Kapleau died last year.

It's like really weird karma.

So I go to this talk out of all of MIT,
there were four people there.

I kid you not.

I had seminar hour,

four o'clock in the afternoon,

and I wrote it up in Coming To Our Senses.

And I also wrote up my thesis defense
in Coming To Our Senses

because I'd put something.

I was so tired of this place by the time
I got through with my thesis.

I'd put on a page
all by itself in the thesis.

He who dies before he dies
does not die when he dies.

It was like, yeah.

And I'm not, and you know my thesis defense
lasted three hours or something like that.

An hour and a half was on that line.

That's how it started out.

They say, Jon, what is this all about,
you know,

this he who dies before he dies?

And, you know, all of,

my whole thesis, you know,
committee were like, you know, members of
national academy and Nobel Laureates,
Luria was a Nobel Laureate,
and they took 45,
they were all like ten years
at least younger than I am now
and they took at least, you know,
an hour on what does this really mean?
And they wanted to know.

I mean they were really like,
you what, they
it tweaks something in them.

So anyway, I wrote about all these things,
and I had the thought, wow,

if I had hours here, I could bear
an awful lot of different threads
that I could draw it together here
that are very much related to like
how we live our lives

and how it manifest in our work,
in our relationships,

in our relationship to our body,
in our health across the life span.

And when it comes right down to it
and something even more important,
and that would be,

there I used the word here, happiness.

In our level of profound well-being
that's grounded in self-compassion
and compassion for others
and the degree of understanding
about the human condition

and life on this planet
that sort of wisdom and compassion
would emerge out of that.

I consider that to be,
not only a human birthright,
but that is our inheritance.

And if we squander it, it's
you know, there's nobody else to blame.

Blame Bush, you know, if you want.

But, you know, in a sense,
we're creating it and everybody else.

This is like a co-creative universe.

So this was the cover of Time Magazine
before many of you were born
but they do this every six months.

They do this every six month.

Stress is not going away, okay?

And those of us who
are in the Buddhist tradition
or understands something about dharma
the word dukkha is very often
translated as stress.

Dukkha is that kind of first noble truth
as the actuality of the human condition
in regard to dissatisfaction
and the fact that we suffer.

Fact that we suffer,
and there's nothing gloomy
or annihilistic or pessimistic about it.

It's an observation and what the Budo
is interested in, is it possible

to hold the suffering
in a way that is liberating?

And here's the answer. It was yes.

And I think there'd be more like
a research scientist and like a spiritual figure
in some ways who had very, very
no instruments other than his own mind
and body to investigate
the nature of mind and body and suffering,
and he calibrated those instruments
in a way that most of us never do
and then used them to look.

So this is the study I want to show you

by Elissa Epel

and her colleagues

in Black Burns Laboratory.

They'd been studying telomeres which are
the repeat units
on the ends of all
of our chromosomes.

They're repeat units of, you know,
strings of As and Gs and Ts.

And it turns out
that when you carry out like cells divide,
the telomeres get shorter.

Every time the cells divide,
the telomeres get shorter.

And telomere shortening
has a certain kind of rate,
and that rate, this study shows,
is dependent on stress,
that the rate of telomere shortening

which is deep dramatically
associated to aging
is actually related
to the levels of chronic stress we're on
and chronicity.

So that means, have you ever heard the words
come out of your mouth,
god, this is taking years off my life.

It's true.

So when we're talking about time
in this ceaseless society, I mean,
there are all sorts of
very interesting paradoxes about time.

Have you ever had the words
come out of your mouth,

I don't have any sign for this or I just,
I don't have any time. I'm out of time.

Well, you know,
we start to believe our own PR
and after a while we live that way like,
I'm sorry I'm just too busy,
I don't have any time.

Well, we men don't have any time to be alive,
to be awake, to be in touch.

We're so busy getting some place else,
so caught up in the future

worrying about what hasn't happened.

We're obsessing about what's already over.

Present moment can very easily get squeezed.

Now the interesting thing
about this study is,
so chronicity of care givers, these are parents
excuse me, parents of children who are

have chronic illness.

So you can't just like say
I had to reduce my stress,
leave my, abandon my children and just,
you know, forget about it.

It's like, no, that's not part
of the invitation here.

Now, the interesting thing is
they also looked at parents
who didn't have children
who have chronic illnesses,
but they ask them their level
of perceived stress, in other words,
how much stress are you under in your life?

And the interesting thing is
that this relationship of the,
can't make this one, you can't see it.

But that the relationship of more increase
in the rate of telomere shortening,
well, my lasers don't want to work on it
is not only to the actual stress,
but it's related to perceived stress.

That very, very important because while
you can't change the actual stress
that you're under in many in these cases,
how you relate to it,
you can change enormously.

How you relate to it can change enormously.

How you relate to it means
how am I going to be in relationship
to the actuality of my moments
as they unfold moment by moment,

the good ones, the bad ones,
and the ugly ones.

What Zorba the Greek called
the full catastrophe.

And that is unbelievably promising
and they are now doing
this is hot stuff
in on this particular field.

They are now doing a lot of research
to look more deeply
into this sort of acceleration
of the aging process with stress,
that stress can be thought based.

I mean it can be just as stressful
to think that you're in trouble
as to be in real trouble.

The body does not
really know the difference.

When the brain gets going, it's so creative
it create any reality at once,
including I'm living in a nightmare.

Well, be careful what you tell yourself
because if you believe it,
it may not be true,
even if it's very painful.

If there's a way to be
at wise and compassionate
relationship with your pain,
with your fear, with all of what
the Dalai Lama calls
your afflictive emotions,

there's nothing wrong with them.

There's nothing wrong with anger.

There's nothing wrong with sadness.

There's nothing even wrong with jealousy.

And when you get caught
is when you're in trouble.

If you notice an impulse of envy
and you see what it is,
it's like touching it with
a soap bubble with your finger.

It goes poof.

And like it arose and it passed away.

And it's impermanent.

It doesn't grab you.

But when you're attached to something,
I want this and I don't want that,
that is the root in some sense of suffering.

And these are the kinds of things that
we work with in the Stress Reduction Clinic.

We do not call ourselves human doings.

I was suggesting earlier that
what we're really talking about
is not nothing but none doing,
you could call it being, okay.

Now, if doing is associated with thought,
let's just give me that for a second.

Doing and thinking, they kind of
go together, okay.

What would being go with?

Being would go with awarenensing, okay.

It would go with this other quality
of mind and heart that we have

that we don't ever refine, cultivate.

There's no place to do it
in school or anything else.

You'd have to discover your goal
or meditation or Buddhism or
it's in all the tradition.

But it has to do with a cultivation
of aspects of our being
that are not part of our curriculum.

It's just making its way
into the mainstream big time.

This was one of our professional
training programs
for 150 physicians
and other health professionals
and will spend a huge amount of time doing
what looks from the outside like nothing.

But it's not doing. It's being.

And it's, I want, don't want
to leave you with the impression
that it's entirely wonderful experience.

It's the hardest work in the world
and it's entirely wonderful
to have any experience whatsoever
and be in touch with it.

And when you start to practice
being in relationship
to the experience that you're having
as opposed to the experience
that your mind says
you want to be having,

you have the potential to reclaim
your life, your body, your heart,
your world in ways that are
in some sense unimaginable and, therefore,
maybe we should begin to imagine them.

MBS,

this Mindfulness Based Stress reduction,
is now spread around across the country
and around the world.

This is an old map.

And it's being funded
to the tune of tens and hundreds
of millions of dollars to do research
in mindfulness based stress reduction
in these meditative practices
and their relationships to the mind,
the body, the health, and so forth.

And this is a poster
for the last public meeting
between western scientists
and the Dalai Lama.

The first one happened at MIT.

The last time it happened
in Washington D.C.
back in November.

I'm going to stop at this point
and just leave you with a line
from T. S. Eliot's Four Quartets.

If you haven't read

T.S. Eliot's Four Quartets recently or ever,

I suggest you go back and read it.

Let me make two recommendations

in terms of scientific reading.

One is Hermann Hesse's Siddhartha. If you haven't read it in the past five years, go back and read it again.

Hermann Hesse got something.

He understood something.

And it's under a hundred pages.

It's one of the most beautiful works of art but it's the art of heart, on the mind.

And the other is

T. S. Eliot's Four Quartets.

So two little things, one is and he placed on this because it's quartet.

It's a musical theme. He's using words as music, as sounds, as notes.

And at one point he says quick, now, here, now, always, quick, now, here, now, always, ridiculous to waste that time stretching before and after.

And then at the end in the last stanza, he says quick, now, here, now, always, a condition of complete simplicity costing not less than everything.

Put that in parenthesis by the way.

That stanza starts with we shall not cease from exploration.

In the end of all our exploring will be to arrive where we started

and know that place for the first time.

This knowing that MIT is all about,
that science is all about,
that art is all about, it's boundless.

It's got no center and no periphery
but it is no oboe.

And if we don't cultivate those aspects
of our being that can be in
what you may call wise relationship to
or you want to call the ceaseless society
or the ceaseless mind
that never shuts down,
you don't have to travel far
to find the ceaseless mind.

And it will happen as, it was pointed out,
that's been the case all throughout history.

If we can learn to be
in right relationship to it,
in some sense that is the path
of well-being, happiness,
and for the bally politic, too,
not just for us as individuals.

If we can't, the shadow side
of being human is not going
to magically go away no matter
how wonderful that technology gets.

You may have noticed a lot
of it's devoted to better ways
to kill ourselves and each other.

So I will, at this point, stop
and just thank you for your attention.

I realize that, you know,
you've got better things

to do with your day

than come to something like this.

You know, as they say in car talk,
you know, well, now you've wasted
another perfectly good hour
listening to flipping clacks.

So I want to just thank you
for your attention and to say
that if any of these touched you
in even the slightest of ways,
there are many, many, many resources
beyond even T.S. Eliot and Siddhartha
that might tickle whatever nerves
have been touched in this room
and it becomes literally
the adventure of a lifetime.

And I want to thank you
just for coming and listening.

- Now I understand why the Dalai Lama
resorted to visors.

About two weeks ago
I was teaching in Colorado
and it was one of those two days
in a month when I look at the newspaper.

Those are the days of my confessions.

And I quickly turned
to the most pertinent page on the newspaper,
the cartoon section.

And there was this cartoon
situated in the 1800s
where these two guys
were talking to each other
and one was saying, you know,

I've been hearing rumors that in the future
there are these things called computers
and it always keeps human beings busy.

So rest as much as you can now.

Thank you very much, Jon,
for that wonderful talk.

And this whole idea of ceaseless idea
or cultivating, at least,
a mind that ceases at certain times
is sort of a very important focus
in any kind of contemplative tradition.

It's just, I think, due
to the corporate nature of this world
that Buddhists are trying
to monopolize it to some degree.

One of my hopes while being at MIT
is that once I'll get this big endowment
and then I'll start a department
of screenplay writing because, you see,
when you look at your mind,
you know, all of you are wonderful authors.

A thought arises, another thought arises,
another thought arises.

And after five thoughts you realize
that there is no correlation
between the first thought that arose
and the fifth thought. You see.

But it's a wonderful cycle
of how these thoughts arise.

And then with these thoughts
also arises certain kinds of emotions.

For example, you think of a person,
then things arise
like likeness or dislikeness
about his person.

And then your mind gives this running
background commentary on the sense of
likeness and dislikeness and next thing you
an hour has passed just being
in your mind, and another wonderful story,
but not of much use that has come out.

So my hope is that once we start
this department at MIT,
we will be able tap into these thoughts
and create wonderful screenplay
and, you know, make it sort of
nice Hollywood productions.

But that is the sort of the purpose
of our gathering today
is how to cultivate the mind that learns
as a cultivation,
that learns to pay attention to
the present moment, to live in this moment.

You see most often,
when they look at the mind,
it is either dwelling in
experiences of the past,
incidents that has already happened.

So it's reminiscing and feeling sort of
the aftermath of those experiences.

And these experience could have happened
ten years ago, but the mind,
this dwelling mind, it still dwell.

And if it was a joyous experience or what
you characterize as a happy experience,

then this dwelling mind dwells in there
and tries to recreate that experience,
try to at least recreate that kind of feeling.

Not always successful.

And then, you have this mind
that is always anxious,
anxious about the future.

What's going to happen next?

What's going to happen
in five minutes, five hours,
five days, five years, retirement?

But, of course,
you don't want to think after that.

For example, the grateful stuff
. So mind conveniently thinks of things
that he want to think about,
you see, but it is never
actually at the present moment.

It is either in the past or in the present.

- Future.

- Future, oh yes.

I think I'm a little bit on the present.

So that is sort of the function
of cultivating as
when we talk about paying attention,
meaning how to live in every moment,
how to live in every moment.

There is a, I mean, yes, again,
we can't, you know,

we have this tendency of what
the called is it,

that we like to project things.

Of course, all the good things,
as Jon said,
we are the center of the universe
or we have it, but all the bad things
it's in the other person,
was in the group of people
so we like these projections.
And part of the trouble
with these projections is that we are,
we are never able to sort of look back and
see where are these problems really? You see.
Whether they're really outside of me
or whether they are inside me
and, moreover,
whether they are inside my mind.
And how do I sort of pay attention to it
in a systematic way?
And then try to eliminate these problems
because problems of the mind
also can be eliminated
like other problems,
but it's simply an issue
of whether we focus.
So we're going to more conversations
but I just wanted to emphasize this
by narrating to you a story
about the Zen master, EQ.
EQ had this wonderful disciple
who travelled for years and months,
you know, searching different Zen masters.
And then after six months of travel
he arrives at EQ's monastery.
And he comes to EQ and he gives
this long profess that, you know,

' I've travelled so much,
I've searched for truth here and there
and people said
you are the most brilliant of Zen masters,
can you give some profound teaching?'

And EQ picks up his brush
and writes a character in Japanese
which meant attention.

Of course, this visitor is disappointed.

He said, 'you know, I travelled
for six months and all you can offer me
is this, one word, attention? Can't you
say something more profound?'

EQ writes again. Attention.

Now, this visitor is a bit frustrated
and he goes again,
'well, really, you know, I don't have
much long to live
and I really travelled a lot.

Can't you be more, can't you give me
some more profound teachings?'

And EQ writes attention means attention.

So we'll do some question and answers
and, hopefully, most of the questions
will be directed towards Jon.

- So there is a mike up there on the,
all the way at the top
and if you have a question or comment,
please raise your hand
so that I can kind of see you,
and the mike will come down to you.

Okay, why don't we start right up there?

Yes.

- I was wondering, I've been doing research and some other things I guess, is there any taxonomy in terms of what's positive psychology, what's flow, what's mindfulness?

This seems like, I mean, Harvard is now running a class, which is I think the most popular class on campus, but has anyone made an effort to sort of unify the desperate efforts in this area to avoid duplication?

- I don't, I'm not sure duplication is necessarily a bad thing and it wouldn't be duplication anyway because there's a huge kind of natural diversity to this.

And so if you think of it as kind of a stage in the evolution of society, that may be this fecundity is really valuable.

You're right that there is somebody at Harvard teaching George Walt's old NATSCI V course and bringing meditation into it and, apparently, it's the most popular course in the school.

That would certainly be the case if this will happen in MIT too.

And the reason for it is that it relates the outer to the inner in a way that,

I think, in a sense, we starve
we're starving for,
paying a very high price for it.
So, potentially, education is moving
in a direction that will actually
systematically develop
how to cultivate awareness on the one hand
and everything that goes along with it.

That's umbrella term
for a huge epistemology,
many epistemologies.

And thought on the other and where
emotion fits in all of these.

I mean, what I didn't get
to in my presentation was
some of the actual brain studies
that we've been doing and immune studies
looking at how emotion regulation changes
in the brain is effective, as a function
of training and mindfulness based
stress reduction and so forth.
So there is a scientific literature
that's beginning to develop
and as you put at taxonomy that I would say
that, really,
this whole field is virtually in its infancy.

And so there's a certain richness
and sorting out now
that you wouldn't want to collapse
into some kind of overwriting
one unity too soon
but let just ferment like that.

- Next question.

- Telling us what
- Wait.
- Here you go, give the microphone and other people can hear better.
- How does what you've been talking about relate to disease?
- To disease?
- To disease.

- That's a really profound question,
and in coming to our senses
I actually deal with that questioning
in multiple ways,
one of which is to split that word,
the very word disease
into dis-ease and there is
there are a number of schools of thought
that recognize that disease is the end point
of a long concatenation of different kinds
of disregulatory phenomena
in the mind-body, so to speak,
because they influence you, each other.

And Gary Schwartz a long time ago
when he was at Harvard
actually talked about
disattention leads to disconnection.
Like not paying attention to the body
and the first thing you know is like,
you have a heart attack, but that's
because you weren't paying attention.

That's like, you know, someone says,
well, you know, my wife left me.

And, well, were there any
early warning signs? No, she just left.

It's very unbelievable that
your first symptom is your last.

Sometimes happens
with sudden cardiac death,
but even there it may have to do
with not awareness, non-awareness of,
you know, emotional reactivity.

So disattention leads to disconnection leads
to dysregulation leads to dis-ease, ok.

There may be another step in there
but there's a concatenation of things
and the words bite nicely.

On the other hand, if you flip it,
attention would lead to connection
to the recognition of connection
to the non-disruption
of interconnections and regulation,
therefore, to ease,
so to speak, what we call health.

So this has profound implications
in relationship to disease
both in terms of the ideology of many of
our chronic stress related disorders
and also in terms of reversing that flow
from training the mind
actually has profound influences on the body.

We did one study with people with psoriasis,
the skin disease which is not a cancer,
but it is an uncontrolled self proliferation
in the epidermis.

And it's very labile to emotional stress
and there's no cure for it

and the biology is not fully understood,
but it has a lot to do with growth factors
and apoptotic factors and so forth.

And what we did was show
that people who are receiving
ultraviolet light treatments for psoriasis,
when you're out in the sunlight,
your skin actually,
the psoriasis will go away.

So we have the genetic potential for
the skin to be in two different conditions.

The people who are meditating
while they were receiving
the ultraviolet light treatments
healed at four times the rate
of the people who were just getting
the ultraviolet light by itself.

That was so amazing to me,
we, I replicated the study and got
the same result before I published it,
but there are ways in which the mind
can actually influence the body
and, again, the science of this
is in its absolute infancy.

But whether it's emotional regulation
or immune function, and we've showed that,
you know, that meditation practice
can enhance the response
to a full vaccine, for instance,
anti-body response to flu vaccine.

These things need a great deal more study,

but now, at least happily,
there is funding for this kind of research.

So thank you for that question.

- Yes, right here. Way in the back.

Okay.

- Okay. Following up on that question,
where does

- Raise your hand so

okay, got you.

- Where does mental illness
fit into the picture?

If you have a mind that is out of control,
how do you meditate?

I've never heard anyone address that issue
as far as meditation is concerned.

- Well, mental illness is
a very, very big umbrella.

So there are, you know,
sort of gradations and spectra of all sorts
of different kinds
of diagnostic problems.

I'm not suggesting that meditation
is the answer to all life's problem
including, you know,
severe mental illness.

But there are many interesting studies
now being done where people are actually
trying to teach people
with various mental disorders to meditate,
to cultivate body awareness for instance
or to be more in the present moment,
to learn self calming strategies,

all sorts of the things,
and so the jury is still out on where
this might be of use and where not.
In terms of things like depression
and anxiety disorders,
which are basically under that umbrella,
but the prevalence of depression
and anxiety in our society lifetime
and at any one moment is huge.

It's already being shown
and we've done studies
and many other people around the world
are doing studies that show
that meditative programs can actually
influence how you are in relationship
to depressive rumination or to
your anxious thoughts and so forth.

And you can go from being in some sense
caught or needing to have, you know,
lifetime medication to be able to live
to freeing yourself from some
of that through
these self regulatory practices.

So it's a wide open field and
but I don't want anybody to walk away
thinking that we, I or anybody else,
think that meditation is like
the answer to all life's problems.
It's just one more piece
in a very large puzzle,
but it's a very, very important piece

because it has a dimensionality
that's usually not present
in various kinds of either psychotherapies
or physical clinical practice.
And there are movements
in physical clinical medicine
to actually bring great mindfulness
and in part because
we've all kind of the experience.

Doctors are under so much stress
that, in a sense, they don't have
enough time to be with you
and get what they think
they need to get done,
so they'll sacrifice the being with you
and you feel disregarded
and that is an awful feeling
and is iatrogenic in its own right
and so we have to actually begin
to train the medical students in ways
to be present even though
the impulse is to cut and run,
and we're doing that.

- I joined the MIT faculty in 76
and lucky enough to know Salvador Luria,
who also used to ask me
why I was doing things,
so I share that experience.

I was struck
by many of the things that you said.
They seem to resonate with me,
but I guess the thought I had

as you were talking was there are certainly
some things that if identified
with periods of quiet,
but there also seemed to be
many of the things you said
which I sort of feel like I experienced
almost sort of in the midst
of an ongoing day, and I wondered
if you would comment on sort of
the relationship of some of those moments
sort of without setting it aside
as a period of meditation
and how that relates to how this might go in

I'm not trying to argue
for not stopping, but I do think
- Yeah, but maybe part of your mind says,
well, but maybe it's the way,
there's a way to keep doing and still be.

- Well, I think something, you know,
for example, the creativity doesn't usually
ever come to me
when I'm sitting quietly somewhere.

It just suddenly erupts in the middle
like something else
and that was partly triggered this question.

- Well, that's great and I don't
another impression I do not want
to leave you with is that meditation
is only about stillness, okay?

Stillness is folded into movement
and movement is folded into stillness,

and someone asked about flow
and mentioned the flow
and all of these things
are deeply connected.

And if you read the Four Quartets
, it's all about stillness inside the motion
and motion inside the stillness.

"The still point of the turning world,"
T. S. Eliot quote.

So, really, the real meditation practice
is your life, okay?

It's not pretending you're a statue
in the British Museum
or the Museum of Fine Arts.

It's not.

This is important.

There are many different ways to do it.

You can do the form of meditation practice
lying down, standing, sitting,
sitting cross-legged on the floor, standing
on your head, hanging from your toes.

I mean, you can do it many different ways,
but it's all about cultivating
certain qualities of heart and mind.

The word for heart, the word for mind
are the same word in all Asian language.

So that's another thing,
when I use the word mindfulness,

I also mean heartfulness.

So can you be in the present moment

wholeheartedly with whatever you're doing?

A lot of people say use running to tune out,

but what if you use running
as your meditation to tune in?

All world class athletes, they tune in.

They are with every footfall,
proprioception, which is in another sense.

They are totally with that,
the answers, musicians, every
so there are thousands of ways
to cultivate mindfulness.

From slicing vegetables to cooking dinner,
to making love,
to saying goodbye to your children I mean,
or waking them up in the morning.

There are ways to do it that are mindless
where you're already out the door
and there are ways to do it that honor
the preciousness of those moments
and don't get caught in the fortresses,
well, I have tomorrow,
because you don't know.

So, again, I'll say it again just so that
it's quite clear.

The real meditation practice is
none other than your life.

It's not some kind of dying stored caricature
of what we think of as meditation.

But the dying store caricatures aside,
the formal practice of meditation
is extremely important,
and the more you don't like it,
the more you have

resistance to any of this.

That's where it put the energy.

That's the way to start investigating.

Who is it that doesn't like this?

Why is it that I don't like this?

Why do I have an aversion

against attention in some areas

and no aversion to it maybe even

an addiction to it in another?

Well, then you begin to sort of begin

to ask deep penetrative questions,

and look where you're pointing

to yourself and that's when

other dimensions of our being

and other dimensions of connectivity.

And what is creativity if not

connecting this and that

and all of the sudden seeing

a relationship no one saw before,

but it was there before, okay,

even if it's a painting,

a formless painting, an abstract painting.

So this is a, you know,

an ongoing process

that no two people

will ever practice the same.

So it's not like you should practice

tensions meditation

or mind meditation.

You have to in some sense find out,

what is mind meditation?

What is my karmic assignment

on this planet?

Who am I?

These are all deep meditative questions
and the thinking mind
is not just you're prepared
to answer those questions.

It's incapable of answering those questions
and that's very humbling.

But out of aspects of the mind,
not at all.

Thank you.

- Jon, can I actually ask you
to say a little more on this.

There is this, I think,
popular misconception regarding
my patient that it is only relaxation
or it is mindfulness.

If you could speak on more
on the alertness and say,
the practice of developing insights.

- Well, I say in coming to our senses
that relaxation, meditation
is not relaxation spelled differently.

So a lot of people think yes. I'll lose
my microphone and I'm totally free.

I don't have to look for it anymore.

And I'll go into near bond
and everything will fall away.

It's not that that might not happen,
but if you attached to that,
it's the non-attachment that's simple.

So now, like I'm a great meditator,
uh-huh, except for the personal pronoun,
it might be true.

So with relaxation for instance,
you say, oh, that was so relaxing.

That was the greatest exercise.

I felt so good at the end.

It really works.

With meditation, you can't say that
because it's like what is a good meditate,
oh, it was such a good meditation,
I didn't have any thoughts.

Oh, it was a terrible meditation,
my mind was plagued by thoughts.

From our perspective, these are the same.

The important thing is the awarenensing,
the awarenensing,
no thoughts, thoughts.

Now, a lot of the time, you think,
oh, well, the idea of meditation
is to make your mind blank, you know,
just shut you're your thinking.

Shutting off your thinking
is just gonna give you a headache.

If you try to shut off your thinking,
it's like trying to make the ocean

Atlantic Ocean stop waving.

It's in the nature of the mind to wave.

So, if you're doing,
forcing anything in any way, no.

It's about awareness, pure and simple.

Can I, and the word is,

the verb that's often used is speaking

of this ceaseless society,

can I rest in awareness?

Can I rest in awareness?

For most of us that's like strange,
juxtaposition of words and concepts,

but keep it in mind as a question,
is it possible for me

to rest in awareness in this moment

without having to have anything

be different from how it already

is in this moment.

Then, those, that creates the conditions

for seeing

beneath the surface of appearances.

That's what insight is.

It's seeing beneath the surface

of the world of appearance

and very often, we are so caught

in the world of appearances.

We have so many stories

about my relationship to experience

and to my relationship to appearance

and my relationship to whatever,

and no awareness that we're running down

an interesting story

that's preventing us

from actually being here.

We're in our head.

We're in our story.

There's nothing wrong with that.

We all do it a million times a day.

That's how the mind waves.

That's how the mind works.

But the awareness and it
we'd begin, we're doing studies.

I didn't show you the slides
with Tibetan monks
who have been practicing meditation
for 30, 40, 50 years, and it's like,
you know, if you put

Lance Armstrong at

I have a slide of Albert Einstein
on a bicycle,
and I'm sure many of you have
seen that famous, and then I have
a picture of Lance Armstrong on a bicycle.

It's the same concept, okay,
but Lance Armstrong's
relationship to his bicycle is different
from Einstein's relationship
to his bicycle,
but it's, one's not better than the other.

Would you rather be Lance Armstrong
or Einstein, well, you don't have a choice.

You only get to be yourself, okay?

So you're not Lance Armstrong
and you're not Einstein.

Humiliating isn't it?

Or humbling.

But you do get the chance on the planet
to be you

and then to be in relationship to the bicycle.

Well, the meditation

is the practice is the same way.

It's like, you know,
some of us have been meditating
and we get a certain kind of something
from other people.

You know, use it in a different way.

It's the same practice,
but how liberating,
how insight comes from it,
how the heart opens has to do more
than anything with passion,
with the degree to which you are willing
to live this way
instead of now making the story.

Besides, all the other story,
things about me, I bet you didn't know.

I'm meditating now. Really great.

Great stuff. You should do it.

It's been, be really good for you.

You are, it's like,
look like nervous wreck to me,
why don't you start meditating?
Pretty soon you're advertising meditation.

You got no time to do it anymore.

You're too busy on the lecture circuit,
you know. It's an occupational hazard.

- I agree.
- Some of what you said about the
being at the
- Wave your hands.
- Right up here.
- All right, okay.
- Being at the,

putting yourself at the center,
you sort of making yourself
the center of the universe is
reminds me of the environmental read
of Bill McKibben and he's,
he did this experiment
where he watched television for,
he watched everything that was on
one cable station for an entire day,
and what he took out
of that was that the images,
the messages that are coming out
of the commercials
and all of the TV shows is that, you,
the viewer, is the center of the universe.

- Yeah.

- And I would be interested to know,
I'd like to hear what you have to say
about the overconsumption
of the society and how, what you're doing,
how it relates to environmental work
and also sort of
just media images and kind of thing?

- Well, that's a wonderful question.

I really appreciate it
and I'm only going to answer it
very partially because I don't want to
sort of impose another sort of
nuanced response to, you know,
you've been sitting there
for very long time.

I do write about this at great length
in Coming To Our Senses.

Let me just sort of in a global way
say that, yeah,
the people who put stuff on television,
they know enough a lot about the human mind
and about entraining the human mind
and that doesn't have to do with
just the message that
you're the center of the universe,
whether you are really important,
but it's really important for you
to actually buy this product
rather than that product
and identify yourself
as one of those people
that drives my product or brushes his teeth
with my product or whatever
and there's a huge degree of conditioning
associated with that.

It's almost like have love in conditioning
and we all are salivating, you know,
on and on
very much caught in conditioning.

And what this practice is all about,
ultimately, is liberation from habits
and conditions, conditioning of the mind,
so that we discover that it's possible
to be happy as the Buddhist would say
independent of causes and conditions.

Now, this is one of the reasons
why this is no joke.

This is not just time story relaxation.

This is the hardest work in the world.

It's the work of being human
and you could say and I do that
from the global, you know,
planetary ecosystem's perspective,
the human species is,
and autoimmune disease of the planet.

It's both the disease vector, and the
ultimate victim of its own ignorance,
of its own delusion,
of its own lack of awareness.

And we're taking down
a lot of other species with us
and a lot of future generations with us
potentially if we don't wake up,
and there are also designs, you know,
that planetary scientists and,
you know, argue about
and write about all the time.

So mindfulness, being about attention
is in some way it's universal.

It doesn't have to do with religion,
philosophy, it's not just a good idea.

It's pointing to something universal
in the human heart and the human,
sort of, organism, so to speak,
that is in its infancy but it's here.

It's the kind of H₂O of ice, water,
liquid water, and gas.

It's like the true nature of

our being independent
of the phased changes that happened
with changing conditions.

And if we learn how to actually recognize
our true nature,
our whole society
and our relationship to consumption
will be extraordinarily different.

Actually, consumption,
just to close with that,
is actually another word
for tuberculosis and, you know,
there's a real relationship there.

I mean to a disease state
because we're continually consuming
in endless hunger
without awareness
of whether that completes us
in any way or shape or form.

- To just add a little bit onto that, one of
the concepts in environmental economics,
economists who are trying
to wrap their head around, heads around
valuing the environments have come up
with this idea of something
in the environment having a non-use value.

In otherwise, in other words, it's useful
to us because we are not using it.
So it seems to me that this fits very well
with what we're talking about
that if we can really understand
our own non-use value

that we can just stop and be ourselves.

It entrains us to really appreciating
the non-use values
of the things that are around us as well.

So, we have time for about
two more questions.

I'll take this gentleman right here
and right down here. The mike's coming.

- Let me ask you an inappropriate question for MIT.

- Wait.

- Wait for the microphone so we can record it.

- And wave your hand so we can see
where the inappropriateness is coming from.

- You present a story
that is very appealing and it says, hey,
I want to learn more about that.

I wonder why you spend so much effort
trying to prove scientifically
that this is good for you
because that thought dawned on me
when I saw some graphs that look
like buckshot
through which you put a straight line
and said, see, that proves it.

And so I just wondered
if you could explain a little bit.

- First of all, I want to applaud you
for asking that question
in that particular way.

First of all, you just also said
those weren't my graphs

so that they could have been,
you know.

That's, and it shows that in a sense,
science is its own religion
and a lot of things are taken on faith.

And when you don't want to hear
a scientific talk
on how those graphs came to be,
that's what you get.

Now, why do it at all or why should

I talk about something like that?

And I think that there's a way
in which the coming together
of the western scientific tradition
and eastern contemplative practices
and talk crosstalk them
and investigation of the mind
from these different perspectives
in a collaborative way can actually,
I think, profoundly move
culturally and socially and, ultimately,
politically as well as scientifically
are species, if you will,
or culture in that,
as a planet in a direction
of greater wholesomeness and well being
and beneficence as opposed
to ignorance and potential violence
and mayhem.

And so we're using
everything at our disposal to do that.
And if people will credit meditation,

I mean if I had just set up
the Stress Reduction clinic 27 years ago
at UMass and not studied it at all,
do you think that the NIH
would actually be spending
hundreds of millions of dollars
to study it now?

It's because it was done
in the language of science
and the language of medicine
that there's some kind of credibility.

And I'm not saying just for myself,
but from a whole range of colleagues
in different institutions who are
generating a field
that has elements of validity
but then you don't want to reify that
from science into scientism
in the same way as you wouldn't
want to do that
in any other discipline of science.

But in the domain that it has validity,
it can be profoundly useful
in many different ways
both politically and socially
as well as scientifically to enrich our
understanding of what might be possible

- Thank you.

- If I can comment on that,
you see my undergraduate work
was in physics, and I remember

the last day of the final semester
during this college application process.

I went to my adviser and he asked me
what I wanted to study further
and I said,

I was going into
the field of theoretical physics.

And he looked at me very sadly and said,
well, as your adviser, I must confess
there's not much market
for theoretical physics
and that was true, you know.

If you studied theoretical physics,
you will either end up
teaching in a university,
go to a research lab,
or you'll end up in Wall Street.

And Wall Street was the best of choices
because, of course, the six figure salary.

But then I looked him and I said,
you see, since I'm a monk already
and religion has been a stable market,
I will go back to being a monk.

But during this late, in terms of science
being the new sort of dominant religion,
you see if I go an audience and say,
you know, meditation is good for you.

I mean, look at your own mind.

It's in a state of hustleness
or complete mess, is it?

And meditation is studying
how to get out of it.

People seldom pay attention unless they are looking at their own mind.

But if I preface the sentence and say, scientists say that my division is good for you.

They have no clue what research or data I'm talking about, but because I have prefaced the word with science or scientist, it goes immediately and says, oh, meditation must be good for me.

So that's sort of the psychological effect on people.

- Thank you again.

- Our last question.

- Hi, I've been teaching mindfulness based stress reduction and using the image of the Mandala, the center of the circle and the sides of it are never separate.

In that way, what we have got on the inside is never separate from what's going in the world around us.

I'm so glad you made that explicit in coming to our senses.

I teach meditation at Wellesley College.

In my experience higher education tends to be very Cartesian, and I wonder if there were more opportunities for this connected milling of bringing the inner life and the outer life together.

Wouldn't that be

a potentially transformative
in a way that people receive
their education?

- I think you know the answer to that.

And you spoke it

and stated it very beautifully.

And so in a sense,
we're at a very interesting,
what I call range point as a culture
where mindfulness made its way
into the mainstream
through medicine, okay.

But now it's moving into law,
it's moving into sports,
it's moving into education, it's moving
into a lot of different domains.

And so if, in fact, it did restore
some element to education
that has been denatured in a certain way
by being too obsessed

with some brilliant, creative,
in some sense precocious aspects

of the human brain and mind,
but at the expense of other aspects

that have been withering

in certain way, yeah,

you're not kidding that that would

breathe the life back into the education

that would look a lot

like Nalanda University or universities

when they first, you know,

came into western civilization.

And they all came out of an interface
between the contemplative
and the sacred and the secular
and the renaissance.

And so, like maybe,
what we are sitting on top of is
the tipping point that could tip us
if we participated in the tipping
because otherwise, it could tip very much
in a way we don't want it to go
into a renaissance that would make
the European, Italian renaissance
look like kids play by comparison
because of the scientific
and communication's capacities
that we have now if we could actually
tap into these elements
of our own being and understand the beauty
of the interconnectiveness
of the outer and inner in the Mandala
that you're speaking of, which is ultimately
just the Mandala of the human heart.

Then, I think what education
is really meant to do,
it would do a lot more effectively
and it would give rise
to different kinds of work in our society
that might be incredibly beneficial
to the health of the planet,
the health of the nation,
the health of all of us.

Now, that's a big, you know,
that's a big thing to talk about renaissance
like that, but why the hell not.

What do we have to lose?

- Once again I'd like to encourage you
to please do join us at the reception
just upstairs while we continue
with the conversation.

Thanks again to both of our speakers.