

STAR moments and wonder

Telling Stories with Data

December 6, 2017



Plan for today

Translation

STAR moments and wonder

HOW TO MAKE STRESS YOUR FRIEND

BAD NEWS FIRST

Kelly McGonigal has bad news for us, if you stress (which we all do), and you think that stress is bad for your health; your chances of dying will dramatically increase. This new study shows that those that not only stress but also think that stress is harmful to your help has a 43 percent increased risk of dying. Over those eight years, that the study by Abiola Keller et al. took place 182,000 died prematurely not from stress but the belief that stress what bad for them. These overwhelming results scared Kelly McGonigal.

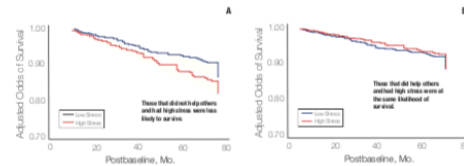


FIGURE 1 Numbers of stressful events in the past year for those who (a) did not help close others and (b) did help close others.

Those that think stress is harmful have a 43% increased risk of dying.

THE GOOD NEWS

However, those that were interviewed in this same study that experienced a lot of stress but did not think stress was harmful were not only less likely to die but also had the lowest risk of dying of anyone in the study. Therefore, it is possible to make yourself healthier by changing how you think about stress; because when you change your mind about stress you can change your body's response to stress.



HOW TO DO IT

Kelly shows that how to hone in the power of stress through the study conducted by Harvard University. They intentionally stress out the participants in the control group; they then taught the treatment group how to rethink their stress responses. They taught them to think about breathing faster is just getting more oxygen to the brain, that their heart rate going up is preparing them for action and in effect helping their blood vessels to relax instead of constrict.

THE GOOD SIDE-EFFECT

One of the biggest, most under-appreciated aspects of stress response is that stress makes you social. This is due to the neuro-hormone, oxytocin. Oxytocin is released in the stress response and motivates you to seek support. This biological response is nudging you to tell someone how you feel instead of bottling it up. Therefore, when your life is difficult, your stress response wants you to surround yourself with people you care.

A LITTLE MORE BAD NEWS, THEN SOME GOOD

In this last study, they looked at if helping others can reduce your chances of dying from stress. The bad news is that major stressful life events, increased the risk of dying by 30 percent. However, and here is the good news, people who spend time caring for others showed absolutely no stress-related increase in dying. This leads to Kelly McGonigal's conclusion that stress gives us access to our hearts and when you choose to view stress in that way you can trust yourself to handle life's challenges.

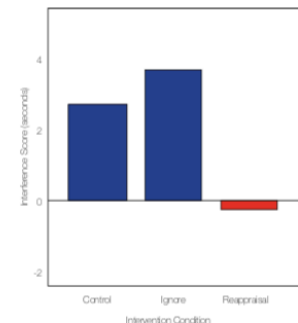


Figure 2. Inference scores as a function of intervention condition. Higher values indicate greater attentional bias for emotionally-negative information. Error bars represent ± 1 standard error of the mean.

How to Make Stress your Friend

Kelly McGonigal
Health Psychologist



Service and Stress

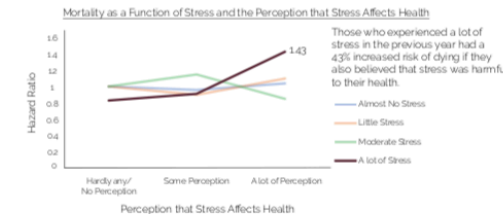
Kelly McGonigal explains that Oxytocin is a neuro-hormone that is released in stressful situations. That same hormone increases your empathy and willingness to serve. It moves you to seek support and support others in return in times of high stress. A study done evaluated the relationship between helping others and its effect on the association of stress and mortality¹. A Cox regression found that when coupled with service, stressful events predicted decreased mortality as opposed to stressful events alone.

"Stress gives us access to our hearts... when you chose to view stress in this way...you're saying that you can trust yourself to handle life's challenges."

-Kelly McGonigal

Perception and Mortality

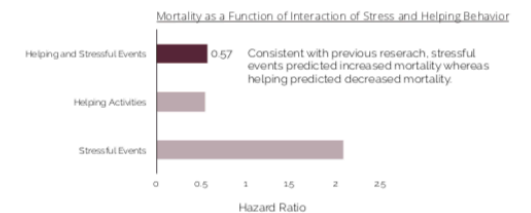
According to a study conducted at the University of Wisconsin, the combination of higher stress levels and the perception that stress affects health increases the likelihood of worse physical and mental health conditions and even premature deaths¹.



After determining that the perception of stress affects your health, the question now posed is, can changing your perception of stress increase your health? The answer is YES!

Mind Over Matter

A study conducted by two Harvard University professors and one University of California, San Francisco, proved that the way you perceive stress has physical health ramifications². This study utilized the Trier Social Stress Test (TSST) and had subjects participate in a series of stressful situations to invoke the body's natural response to stress (i.e. increased heart rate, increased breathing, sweating, etc.) Prior to the test, the manipulated participants were informed of the functionality of stress signals which resulted in lower stress levels and higher confidence during the TSST. In terms of physical benefits, those in the control group showed constricting blood vessels in stressful situations while the blood vessels of those who were informed stayed relaxed.



Overall, the perception of stress can transform the way your body naturally responds and the overall experience you undergo.

Citations

¹ Abiola Keller et al., "Does the perception that stress affects health matter? The association with health and mortality", Health Psychology, September 2012

² Jeremy P. Jamieson et al., "Mind over matter: Reappraising arousal improves cardiovascular and cognitive responses to stress", Journal of Experimental Psychology, August 2012

³ Michael J. Poulin et al., "Giving to others and the association between stress and mortality", American Journal of Public Health, September 2013



**CHANGE HOW YOU
THINK ABOUT
STRESS.**

CHANGE YOUR LIFE.

MYTH: STRESS IS TERRIBLE FOR YOUR HEALTH.

Most students deal with stress on a daily basis. Papers need to be turned in, deadlines loom like a cloud of darkness, and finals week is often approached with complete despair. In response, students become stressed and anxious. Their hearts race, palms sweat, and their stomachs become ill. Most view these symptoms as a bad thing and poor for their health. However, researchers have recently found that stress actually isn't as bad for someone's health as previously thought

FACT: STRESS IS NOT BAD FOR YOUR HEALTH IF YOU CHOOSE TO BELIEVE IT ISNT.

Next time, you feel your heart start to race or feel that dreaded stomach drop when anxiety hits, think of it as your body rising to the challenge to help you overcome your obstacle. One study has shown that when you consciously frame stress in a favorable light, your body will react positively and you won't experience negative health effects that may increase your mortality risk. From another study, researchers found that helping others when stressed also reduced the chance of premature death. Stress did not predict a risk of premature death among individuals who provided help to others in the past year, but stress did predict an increased risk of premature death among those who did not provide help to others. So cheer up, frame stress positively, and help others to live a healthier and happier life.

SOURCES: Michael J. Poulin et al., "Giving to Others and the Association Between Stress and Mortality," American Journal of Public Health 103, no. 9 (September 2013): 1649–55, doi:10.2105/ajph.2012.300876. Abiola Keller et al., "Does the Perception That Stress Affects Health Matter? The Association with Health and Mortality," Health Psychology 31, no. 5 (2012): 677–84, doi:10.1037/a0026743. IMAGE: Photo by Tim Gouw on Unsplash

STRESS BY THE NUMBERS

**OUT OF
180 MILLION
AMERICAN ADULTS,
33%
SAY STRESS AFFECTS
THEIR HEALTH &
67%
SAY IT HAS NO
EFFECT ON THEIR HEALTH.**

**OF THOSE WHO SAID YES
43%
EXPERIENCED AN
INCREASE OF PREMATURE DEATH.**

**OF THOSE WHO SAID NO
0%
EXPERIENCED AN
INCREASE OF PREMATURE DEATH**

**A STRESSFUL EVENT PREDICTS A
30%
INCREASE OF PREMATURE DEATH
AMONG THOSE WHO DID NOT
HELP OTHERS.**



Kelly McGonigal How To Make Stress Your Friend

How stress encourages both courage and connection



Courage

- Stress increases blood flow and the amount of oxygen that reaches the brain, energizing the body and preparing it to face challenges.
- Those who believe that stress is helping them to be courageous experience the benefits of stress without the same health consequences

48%

Of those who believed stress was bad for their health died

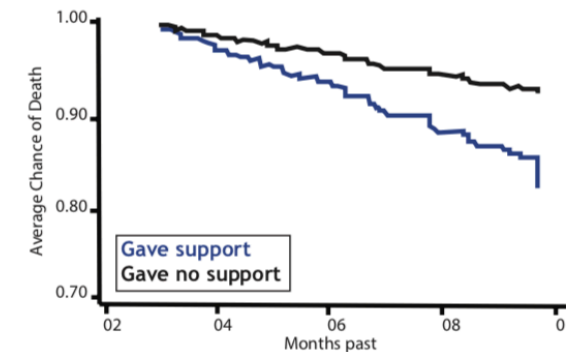
5x

Less likely to have stress related health problems if you have positive beliefs about stress



Connection

- Stress releases oxytocin, oxytocin encourages connection, and connection negates many of the negative effects of stress.
- Likelihood of death increases 30% for those who experience major stressful events. Those who spent time giving support to others did not experience the same negative effects.

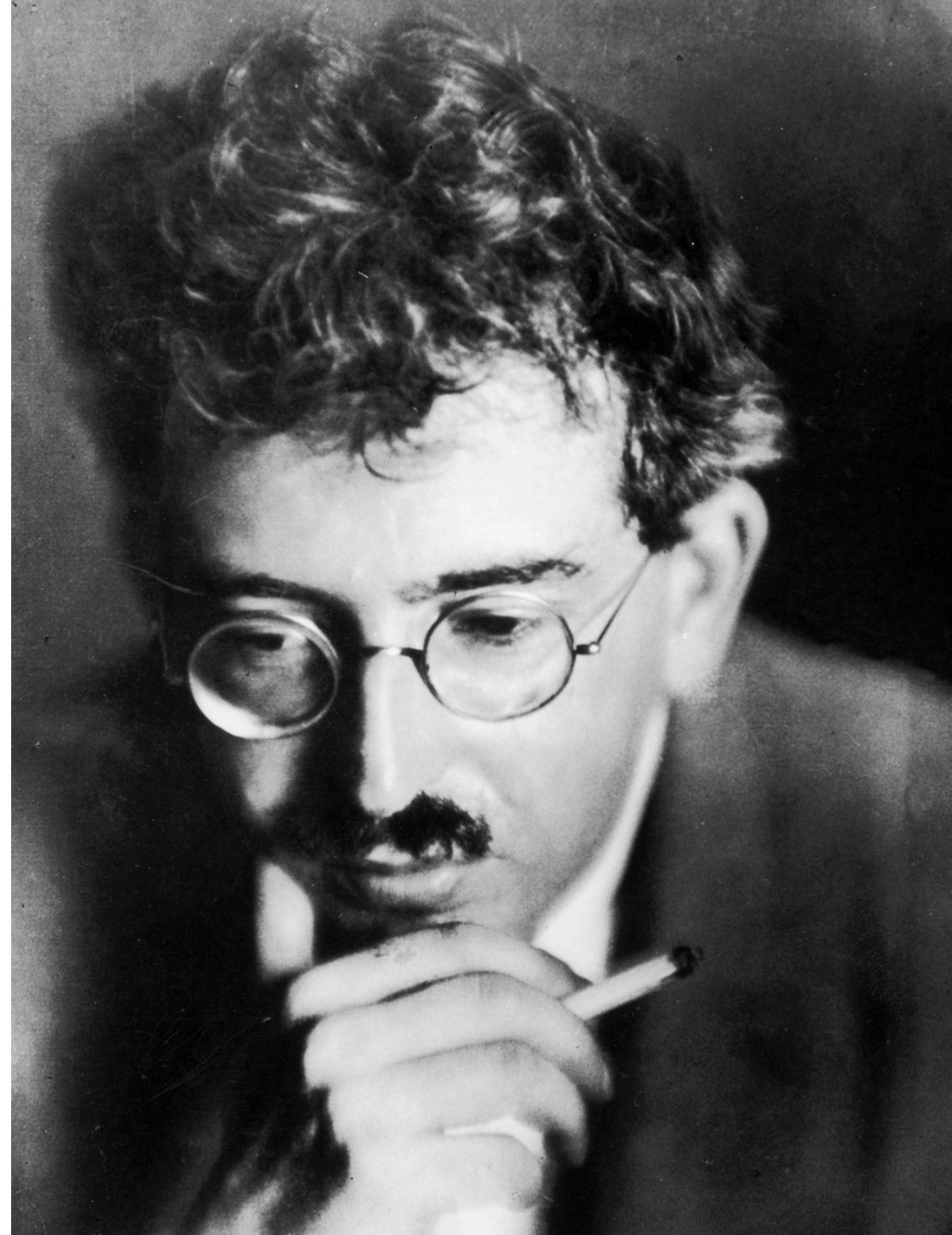


Translation

Translation

“...the task of the translator consists in finding that intended effect upon the language into which he is translating which produces in it the echo of the original”

Walter Benjamin, *The Task of the Translator*



Clément Marot (1537)

Douglas Hofstadter

1. It is made up of 28 lines.
2. Each line has 3 syllables.
3. The stress falls on the last of these syllables.
4. It is a series of rhyming couplets (AA BB CC DD...)
5. After line 14 the formal "vous" is replaced by the more colloquial "tu".
6. The last line echoes the first.
7. The poet slips his own name into the poem.



A une Damoyelle Malade

Ma mignonne,
Je vous donne
Le bon jour;
Le séjour
C'est prison.
Guérison
Recouvrez,
Puis ouvrez
Votre porte
Et qu'on sorte
Vitement,
Car Clément
Le vous mande.
Va, friande
De ta bouche,
Qui se couche
En danger
Pour manger
Confitures;
Si tu dures
Trop malade,
Couleur fade
Tu prendras,
Et perdras
L'embonpoint.
Dieu te doint
Santé bonne,
Ma mignonne.

To a Sick Damsel

My sweet
I bid you
A good day;
The stay
Is prison.
Health
Recover,
Then open
Your door,
And go out
Quickly,
For Clément
Tells you to.
Go, indulge
Of thy mouth,
Lying abed
In danger,
Off to eat
Fruit preserves;
If thou stay'st
Too sick,
Pale shade
Thou wilt acquire,
And wilt lose
Thy plump form.
God grant thee
Good health,
My sweet.

Fairest Friend

Fairest friend,
Let me send
My embrace.
Quit this place,
Its dark halls
And dank walls.
In soft stealth,
Regain health:
Dress and flee
off with me,
Clément, who
Calls for you.
Fine gourmet,
Hid from day,
Danger's past,
So at last
Let 's be gone,
To dine on
Honeyed ham
And sweet jam.
If you're still
Wan and ill,
You will cede
Pounds you need.
May God's wealth
Bless your health
Till the end,
Fairest friend.

My Sweet Dear

My sweet dear,
I send cheer—
All the best!
Your forced rest
Is like jail.
So don't ail
Very long.
Just get strong—
Go outside,
Take a ride!
Do it quick,
Stay not sick—
Ban your ache,
For my sake!
Buttered bread
While in bed
Makes a mess,
So unless
You would choose
That bad news,
I suggest
That you'd best
Soon arise,
So your eyes
Will not glaze.
Douglas prays
Health be near,
My sweet dear.

[Prose version]

My small princess, I
send you a warm hello.
Your long stay in bed
has been like a term in
prison. Uncle Clement
urges you to
recuperate, and to get
out of there soon.
You've always loved
sweets, so don't let
being bed-ridden stop
you from indulging—
have some jam! And
don't stay sick too long,
because you'll get
ghostly pale and start
looking like skin and
bones. God will surely
bring you back to good
health, my small
princess.

Literalist

Functionalist

Conceptual

Clément Marot (1537)

Douglas Hofstadter

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- 5.After line 14 the formal "vous" is replaced by the more colloquial "tu".
- 6.The last line echoes the first.
- 7.The poet slips his own name into the poem.

My dear friend,
Here I send
You my best.
This ain't rest,
It's a trap;
Grab your cap.
Feel alive,
Flee the hive,
Through the door.
Go explore.
As Clement
Said he'd want.
Go indulge,
Feed the bulge,
All tucked up
there to sup
Jellied fruits.
Listen, toots,
Get well soon
Or new moon
Turns your twin;
Pale and thin.
From on high,
The big guy
Hopes you mend,
My dear friend.

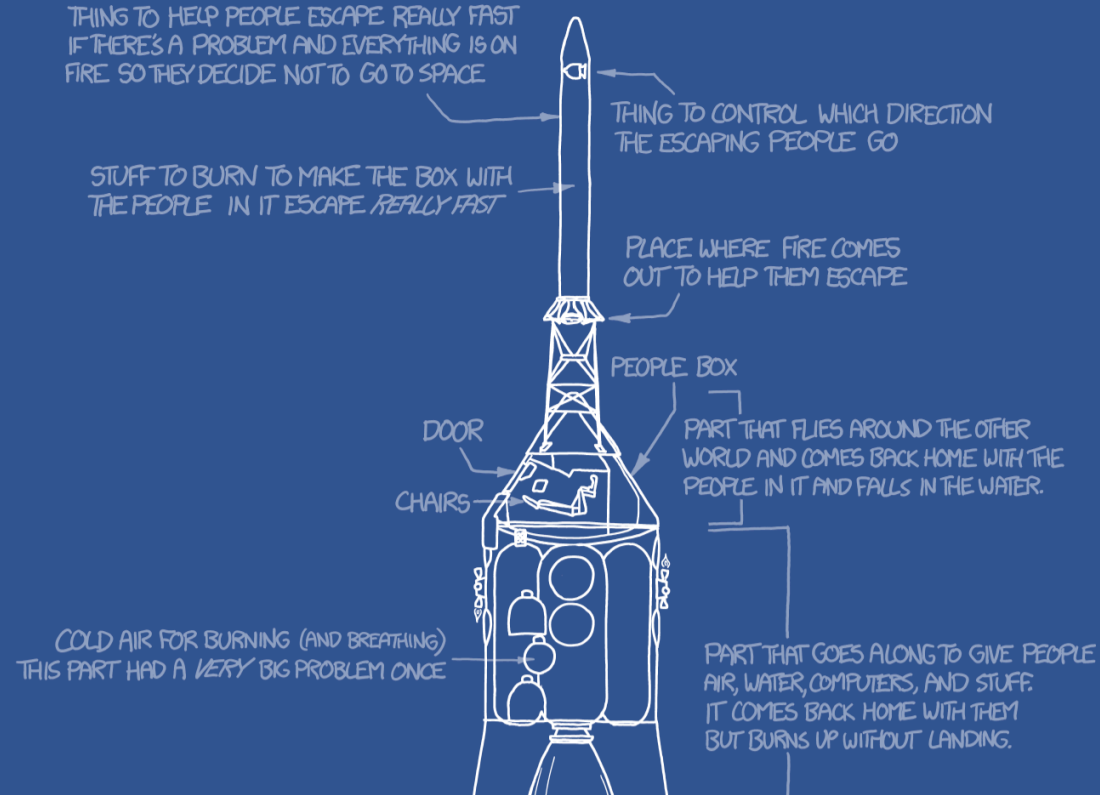
My sweet girl
please unfurl,
it is day.
Join the fray,
blow the pen
o'bedridden!
Salve with haste,
leave this place!
End those snores
Out the door!
Quick my sprout,
go get out!
It's Matt's rule.
Stop your drool
and fill up!
Mouth to cup!
Although bed
and warm bread
sound real nice,
do think twice.
You'll get white,
thin and slight!
Please bestow
your warm glow
Upon us here
amongst your peers.
Heal young pearl.
My sweet girl.

Sweetie Pie,
First off: Hi.
(Hashtag hug.)
Why not shrug
Off the sheet
And retreat
From the bed?
Clear your head—
You'll feel swell-
What the hell!
Out we'll go,
Catch a show
Hit the zoo
Go canoe,
Grab a beer
Far from here.
Come on, please:
Herbal teas
And some toast
Are a most
Awful snack.
Don't lie back
And just snore:
What a bore!
Rise and shine
Darling mine,
Len says try,
Sweetie Pie.

US SPACE TEAM'S UP GOER FIVE

THE ONLY FLYING SPACE CAR THAT'S
TAKEN ANYONE TO ANOTHER WORLD

(EXPLAINED USING ONLY THE TEN HUNDRED
WORDS PEOPLE USE THE MOST OFTEN)



<http://splasho.com/upgoer5/>

STAR moments
and wonder

Creating wonder

Memorable dramatization

Props, demos

Repeatable sound bites

Rhetoric

Evocative visuals

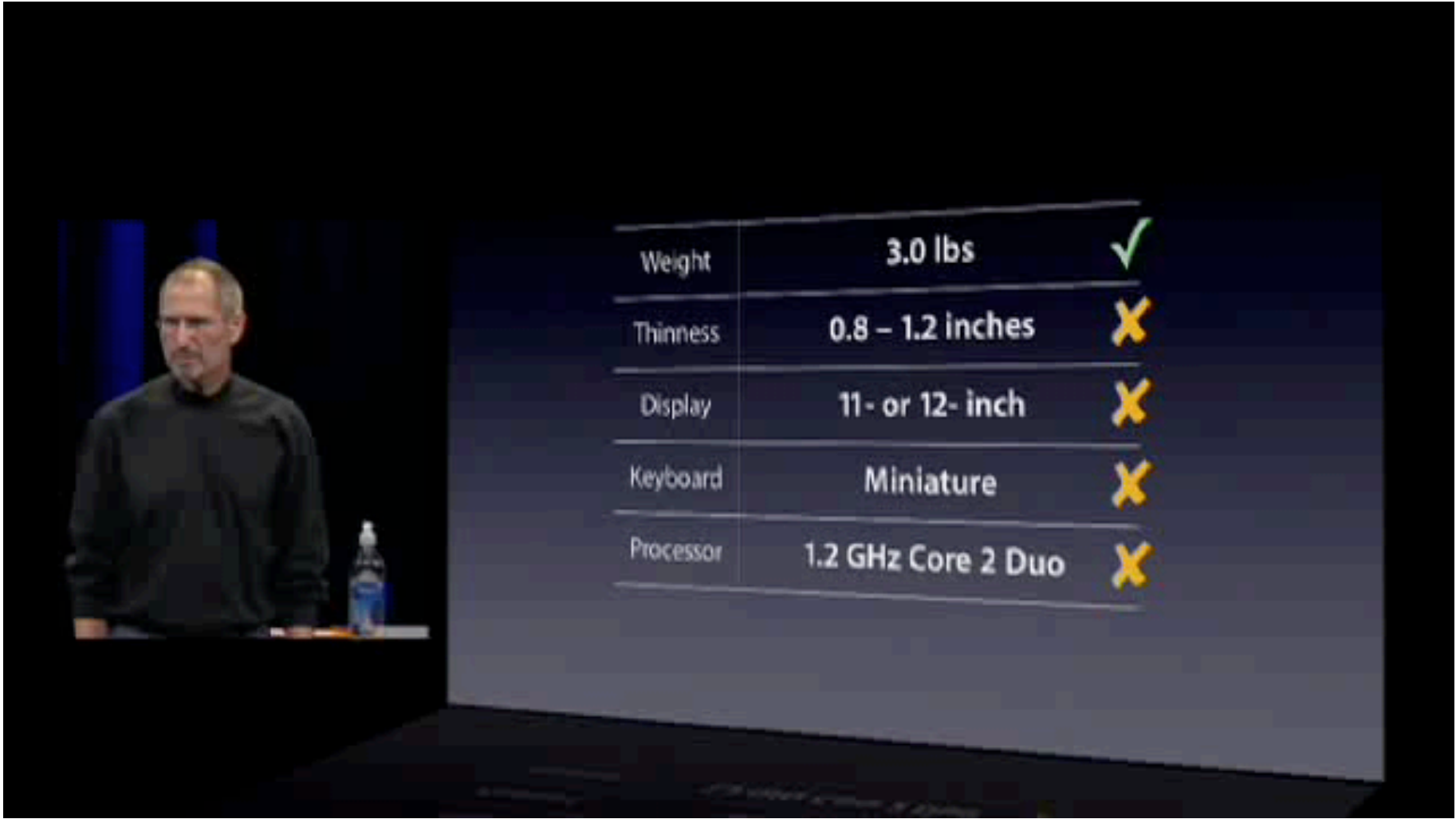
Images

Emotive storytelling

Stories

Shocking statistics

Numbers



Steve Jobs, Macworld 2008

Steve Jobs

Memorable dramatization

Props, demos

Repeatable sound bites

Rhetoric

Evocative visuals

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Bill Gates, "Mosquitos, malaria, and education," TED2009

Bill Gates

Memorable dramatization

Props, demos

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Emotive storytelling

Stories

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Chieko N. Okazaki, "Baskets and Bottles," April 1996

Cheiko Okazaki

Memorable dramatization

Props, demos

Repeatable sound bites

Rhetoric

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Emotive storytelling

Stories

Shocking statistics

Numbers



Jeffrey R. Holland, "Safety for the Soul," October 2009

Jeffrey R. Holland

Memorable dramatization

Props, demos

Repeatable sound bites

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Emotive storytelling

Stories

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Repeatable sound bites

Yes We Can

Tender mercies

That's one small step for man,
one giant leap for mankind

...and that government of the people, by
the people, and for the people shall not
perish from the earth

Sound pieces



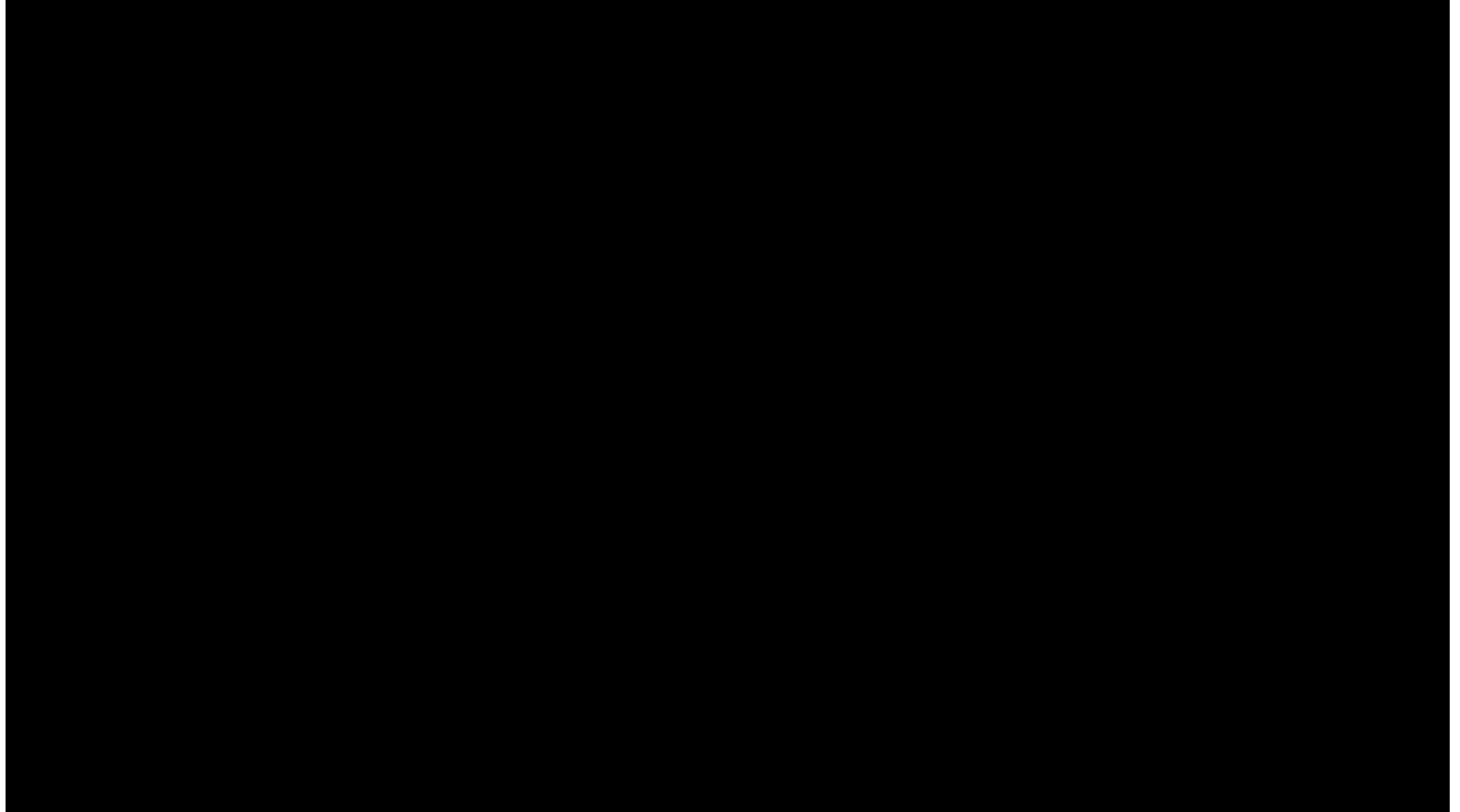
Leslie Odom Jr.

How does a bastard, **orphan**, **son** of a **whore** and a
Scotsman, **dropped in** the **middle** of a
Forgotten spot in the **Caribbean** by **providence**
Impoverished, **in squalor**
Grow up to be a **hero** and a **scholar**?

"Alexander Hamilton" on "Hamilton (Original Broadway Cast Recording)"

Evocative visuals

(be ethical and preserve dignity)



What about the stuff you do?

Memorable dramatization

Props, demos

Repeatable sound bites

Rhetoric

Evocative visuals

Images

Emotive storytelling

Stories

Shocking statistics

Numbers