# ANNEXOS

TREBALL DE FINAL DE GRAU -

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Publicitat i Relacions Públiques

Facultat de Turisme



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### 1. ANNEX 1: Anàlisis de les 25 TED Talks amb més visualitzacions

Taula 1. Anàlisi completa de la TED Talk 1. Do schools kill creativity? Sir Ken Robinson

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
II·lustradors:	*1 Indicació del número 3 amb els dits: 0'24" Assenyalar el terra amb el dit per indicar aquest any: 1'58" Moure la mà d'esquerra a dreta per indicar l'abast: 2'39" Representació com anaven vestits tres nens: 4'51" Representació amb les mans de creixement: 6'07" Moure la mà de dreta a esquerra per indicar una transició: 6'22" Obrir i tancar mans per indicar interacció: 13'04"; 13'23" Representació d'una barra: 13'28" *2 Representació de gruix: 13'32" Representació de pintar: 13'57"
Reguladors:	Moviment d'obertura amb la mà: 0'34" Assenyalar el cap amb les mans per representar la zona: 10'04" Representació de sang caient per la cara: 1'25"  *3 Assenyalar-se a si mateix: 0'53"; 2'42"; 9'02"; 10'09"; 12'23"; 15'12"  *4 Alçar el dit índex per fer èmfasis: 0'57"; 1'34"; 8'21"; 15'56"; 14'44' Assenyalar amb la mà una zona: 8'31"; 14'02" Pujar les mans cap amunt: 9'12" Moure la mà cap a l'esquerra: 9'14"; 10'06" Moure la mà cap a la dreta: 9'38" Moure mans endavant per mostrar continuïtat: 12'40" Moure la mà en cercles: 13'56" Moure mà cap avall: 14'25"; 14'53" Mans obertes cap amunt: 15'52" Braç estirat amb el palmell de la mà mirant cap avall: 17'23"
Adaptadors:	Mirada al terra: 0'20" Fregar-se els dits: 0'57"; 1'01"; 12'28"; 13'40"; 14'17"; 15'29"; 15'44"; 15'53"; 17'26" Tocar-se bé la roba: 1'06"; 2'35"; 4'06"; 6'27"; 9'44"; 10'23"; 14'38"; 15'16"  *5 Pujar i baixar les mans amb els palmells mirant endins: 0'27"; 1'48"; 2'23"; 2'55"; 3'35"; 8'42"; 9'17"; 9'32"; 9'39"; 11'49"; 13'00"; 16'10"; 16'54" Pujar i baixar les mans amb el palmell mirant cap amunt: 2'32"; 8'47"; 10'58"; 13'20"; 13'45"; 17'14"; 18'42"; 18'56" Pujar i baixar les mans amb el palmell mirant cap avall: 14'06"; 4'41"; 14'11"; 17'52" Obrir les mans amb els palmells mirant amunt: 12'14"; 14'28"; 15'35"; 16'03"; 17'10"; 18'36"  *6 Dit amunt i avall per indicar èmfasi: 2'15"; 5'29"; 5'44"; 5'48"; 6'17"; 7'28"; 8'24"; 9'06"; 9'56"; 10'29"; 12'30"; 13'52"; 15'19"; 17'20"; 18'01" Tocar-se la cara: 2'52"; 4'38"; 7'00"; 7'26"; 9'57"; 10'53"; 13'38"; 16'08" Mà oberta a l'alçada del pit per indicar concreció: 3'19"; 4'18"; 9'24"; 10'55"; 11'40"; 13'40"; 15'04" Moure mans en cercles: 14'23" Puny tancat per indicar èmfasi: 5'43"; 16'22"

En global transmet seriositat i concentració. Postura més aviat tancada i predominança de moviment amb els les celles i els ulls per remarcar moments d'èmfasi. Ex. 6'16"



Hi ha moments en els quals l'expressió facial acompanya el contingut. En moments en els quals el públic riu, tendeix a fer un somriure nerviós. Ex. 0'18":

# Expressions d'afecte:



19'00": Al final es mostra tímid i agraït envers l'ovació rebuda pel públic



#### **PROXÈMICA**

(ús de l'espai)

Postura:	Lleugerament encorbada, degut a les dificultats que presenta a l'hora de moure's.
Moviment:	Només es presencia moviment en entrar a l'escenari i en finalitzar la presentació. Durant la TED Talk, el ponent no es desplaça del punt d'inici.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"ah": 0'20"; 0'27"; 0'29"; 0'40"; 0'45"; 1'43"; 1'46"; 2'50"; 2'52"; 4'29"; 6'15"; 7'30" "mmm": 12'31"; 15'49"

#### **CARACTERÍSTIQUES FÍSIQUES**

(\*7

Sexe:	Home
Edat:	55 - 60 anys
Alçada:	1'75 - 1'80 m
Forma física:	Dificultats per caminar ocasionades per la poliomielitis que va patir als 4 anys.
Color de pell:	Blanca
Cabell:	Ros / blanc i curt
	ARTEFACTES
Vestuari:	Vestit negre, camisa gris clar, samarreta interior gris fosc i mocassins marró fosc.
Maquillatge:	No.
Complements:	Ulleres negres rectangulars, cinturó marró fosc, aliança i micròfon.
	ENTORN I MEDI (*8, *9)
Espai:	Sala àmplia amb un escenari ocupat pel ponent. Pantalla al centre per anunciar la TED Talk i escenari decorat amb diversos elements com un volant, una camisa, un piano, etc.
Audiència:	Distribuïda en forma de semicercle davant de l'escenari.
II·luminació:	Focus distribuïts pels voltants i el sostre de la sala centrant l'atenció en l'escenari i el ponent.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.

#### **COMPORTAMENTS TÀCTILS**

19'11": encaixada de mans amb Chris Anderson, fundador de TED.

Font: Elaboració pròpia amb dades i imatges analitzades de Robinson (TED 2006, febrer 2006)

\*1







\*3







\*5



\*6



\*7







Taula 2. Anàlisi resumida de la TED Talk 1. Do schools kill creativity? Sir Ken Robinson (TED 2006, febrer 2006)

Cinèsica	Durant la conferència manté una <b>expressió molt neutra</b> , tanmateix, fa un gran ús d'adaptadors, reguladors i il·lustradors. És el segon ponent que més <b>il·lustradors</b> fa servir.
Proxèmica	Postura estàtica i lleugerament encorbada degut a la seva condició de
	salut . Es manté estàtic durant tota la intervenció.
Parallenguatge	
Característiques	Home blanc, 56 anys, 1'75-1'80m, cabell blanc i curt. Presenta
físiques	dificultats a l'hora de caminar ocasionades per la poliomielitis que va
	patir als 4 anys.
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. L'escenari destaca per les decoracions laterals i compta
	amb una bona il·luminació centrada en el ponent. Audiència distribuïda
	en forma de semicercle davant de l'escenari.
Comportaments	Encaixada de mans al final de la conferència.
tàctils	

Font: Elaboració pròpia amb dades analitzades de Robinson (TED 2006, febrer 2006)

Taula 3. Anàlisi completa de la TED Talk 2. Your body Language may shape who you are. Amy Cuddy (TEDGlobal 2012, juny 2012)

<b>CINÈSICA</b> (classificació d'Ekman i Friesen)	
Emblemes:	-
Il·lustradors:	*1 Braços i mans obertes per representar extensió: 0'37"; 4'03"; 5'30"; 5'40" Estirar els braços cap amunt en forma de V per representar victòria: 4'44" Abraçar-se a si mateixa representant com actuem quan ens sentim sense poder, petits: 4'54"; 5'14" Obrir els braços com si abracés alguna cosa gran per representar sentir-se poderós: 5'12"; 6'44"; 7'45" Braç esquerra enlaire i braç dret a la cintura per representar el comportament d'estudiant de MBA: 5'43"; 6'45" Acció d'aixecar la mà per representar el comportament d'estudiants de MBA: 5'56"; 6'07" Mossegar-se el dit índex per representar sostenir un bolígraf entre les dents: 7'29" *2 Representació d'altura elevada amb la mà: 9'49" Dit polze i índex junts per representar quelcom molt petit: 10'05" Mans a la cintura per representar poder: 10'12" Representació de mirar el mòbil: 13'40"; 13'45"
Reguladors:	*3 Assenyalar-se a si mateixa: 0'26"; 1'46"; 1'55"; 2'07"; 3'26"; 7'23": 9'55"; 13'34"; 15'52"  *4 Assenyalar el amb el dit: 0'38"; 0'59"; 1'53"; 2'16"; 4'19"; 13'35"; 14'14"; 14'48"; 15'49"; 19'20"  Moure mans endavant i enrere per indicar concreció: 2'44"; 15'25"; 18'00"  Moure els braços cap un costat i l'altre per indicar bàndols: 6'34"  Mà a l'alçada de la cara per fer èmfasi: 9'18"; 9'42"; 14'46"  Moure les mans ens cercles per indicar continuïtat: 17'56"; 18'57"; 20'26"  Moure mà cap als costats per indicar un conjunt: 14'52"  Pujar i baixar les mans per indicar canvi: 10'02"  Abraçar-se a si mateixa: 12'16"  Pujar la mà amb el palmell amunt: 14'27"  Alçar la mà per sobre del cap per indicar una posició: 14'54"
Adaptadors:	Obrir braços cap als costats amb els palmells cap avall per fer èmfasi: 0'17"; 2'40"; 5'19"; 8'44"; 13'29"; 13'42"; 14'40"; 19'40"  Obrir braços cap als costats amb els punys tancats: 1'49"  *5 Obrir les mans endavant per indicar concreció: 1'57"; 2'24"; 2'32"; 4'18"; 5'59"; 6'10"; 6'36"; 7'24"; 8'55"; 9'22"; 14'34"; 17'39"  Moure mans en cercles: 0'22"; 0'49"; 3'02"; 5'37"; 6'41"; 7'03"; 15'43"  *6 Mans juntes: 0'06"; 0'10"; 0'56"; 2'26"; 2'53"; 3'32"; 3'48"; 4'39"; 5'18"; 5'20"; 6'04"; 6'13"; 6'27"; 6'37"; 7'56"; 8'52"; 8'57"; 9'29"; 9'34"; 10'20"; 14'01"; 14'26"; 14'32"; 15'33"; 18'03"; 19'29"; 20'27"  Pujar i baixar les mans amb el palmells mirant amunt: 1'43"; 2'00"; 2'12"; 2'17": 3'29"; 6'38"; 7'52"; 9'12"; 20'33"  Pujar i baixar les mans amb els palmells mirant endins: 3'41"  Pujar i baixar les mans amb els dits polze i índex tocant-se: 0'14"; 1'49"; 2'56; 3'44"; 6'23"; 8'07";

9'03"; 14'58"; 15'55"; 18'07"; 20'20"

Baixar les mans amb els palmells mirant amunt per fer èmfasi: 5'36"; 5'48"; 6'50"; 7'26"; 8'10";

12'19"; 13'16"; 14'24"; 18'12"; 19'38"

Tocar-se la cara: 0'52"; 3'31"; 4'57"; 5'17"; 7'50"; 9'31"; 12'46"; 13'19"; 13'55"; 15'27"; 18'24";

18'54"; 20'38"

Mà a la cintura: 10'17"

En global transmet obertura. Mirada clara que transmet determinació, confiança i interès.

Hi ha moments en els quals l'expressió facial acompanya el contingut.

15'42": Expressió de descontent i desaprovació en explicar que no se sent ella mateixa actuant d'una determinada manera:



16'49": En explicar l'accident de cotxe en el qual va estar a punt de morir les conseqüències que va comportar, presenta els ulls vidriosos i la veu i els llavis tremolosos. Expressió d'emocionar-se i estar a punt de plorar, tot i que aconsegueix contenir les llàgrimes.



17'24": Celles aixecades i barbeta avall per expressar desafiament i desaprovació en explicar com la seva professora es va negar a que Cuddy deixés Princeton.

# Expressions d'afecte:



18'20": S'emociona en repetir les paraules que li va dir una alumna amb la qual es va sentir molt identificada. Somriure tendre i sincer, ulls plorosos i veu i llavis tremolosos.



18'44": Expressió d'empoderament en explicar com va intentar motivar a la seva alumna. Ulls mig tancats, celles frunzides i gran efusió.



19'04": Expressió de sorpresa i incredulitat en representar com els seus alumnes van reaccionar en escoltat el discurs de la seva alumna. Ulls molt oberts, celles alçades i boca oberta.



#### **PROXÈMICA**

(ús de l'espai)

Postura:	Recta i una mica rígida.
Moviment:	A l'inici, desplaçament fins al cercle vermell marcat a l'escenari. Durant la intervenció, desplaçaments dins del cercle vermell, predominant els desplaçaments laterals. Al final, desplaçament des del centre del cercle vermell fins a fora de l'escenari.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"mmm": 0'07"; 0'11"; 0'27"; 0'40"; 1'04"; 1'32"; 2'46"; 2'50"; 5'23"; 5'42"; 5'45"; 6'09"; 7'36"; 7'44"; 15'32"; 16'27"; 19'18" "ah": 0'35"; 0'54"; 1'07"; 1'14"; 5'27"; 6'14"; 8'31"; 8'54"; 18'05"

### **CARACTERÍSTIQUES FÍSIQUES**

(\*7)

Sexe:	Dona
Edat:	40 anys
Alçada:	1'65 - 1'70 m
Forma física:	Prima i cuidada.
Color de pell:	Blanca

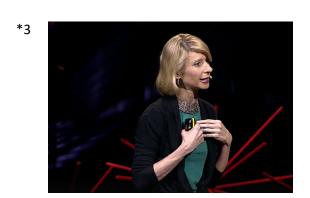
Cabell:	Ros, mitja melena i llis amb alguna ondulació		
	ARTEFACTES		
Vestuari:	Samarreta blau turquesa, rebeca llarga negra, faldilla curta negra, mitges negres i talons negres.		
Maquillatge:	Pintallavis gloss color rosa/morat, ombra d'ulls clara, línia d'ulls, màscara de pestanyes i coloret rosa.		
Complements:	Arracades daurades rodones, collaret daurat gran, comandament per passar les diapositives i micròfon.		
ENTORN I MEDI (*8, *9)			
Espai:	Sala àmplia. Escenari amb un cercle vermell al centre per ocupat del ponent i una pantalla per projectar la presentació. Figures vermelles decorant la paret de l'escenari juntament amb el logotip de TED.		
Audiència:	Distribuïda en forma de semi cercle davant de l'escenari.		
II·luminació:	Focus distribuïts pels sostre de la sala i a l'escenari enfocant a la ponent, mentre que l'audiència queda il·luminada amb llums blaves i vermelles tènues.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		
COMPORTAMENTS TÀCTILS			

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Cuddy (TEDGlobal 2012, juny 2012)



















Taula 4. Anàlisi resumida de la TED Talk 2. Your body Language may shape who you are. Amy Cuddy (TEDGlobal 2012, juny 2012)

Cinèsica	És <b>molt expressiva</b> i fa un gran ús de la comunicació no verbal. Utilitza molts il·lustradors, reguladors i adaptadors. És la ponent que més <b>il·lustradors</b> fa servir.
Proxèmica	Manté una postura recta i només es desplaça pel cercle vermell.
	Predominança de desplaçaments laterals.
Parallenguatge	
Característiques	Dona blanca, 40 anys, 1'65-1'70m, físic normatiu i cabell ros, mitja
físiques	melena.
Artefactes	Vestiments formal i acolorida.
Entorn i medi	Sala àmplia. L'escenari de
	staca per les decoracions vermelles situades a la paret, juntament amb
	el logotip de TED i la pantalla. Il·luminació centrada en la ponent.
	Audiència distribuïda en forma de semicercle davant de l'escenari.
Comportaments	No es produeix cap contacte físic amb l'audiència.
tàctils	

Font: Elaboració pròpia amb dades analitzades de Cuddy (TEDGlobal 2012, juny 2012)

Taula 5. Anàlisi completa de la TED Talk 3. Inside the mind of a master procrastinator. Tim Urban (TED 2016, febrer 2016)

<b>CINÈSICA</b> (classificació d'Ekman i Friesen)	
Emblemes:	*1 Salutació i agraïment amb el cos i el cap: 13'46"
Il·lustradors:	*2 Moviment amb la mà de pujar escales: 1'12"  *3 Moviment de baixar per una pàgina web amb el ratolí: 8'37"
Reguladors:	*4 Indicació cap a la pantalla amb el dit o la mà oberta: 0'30"; 0'38"; 0'53"; 0'59"; 1'35"; 3'34"; 10'26"; 13'17"; 13'34"  Moure braços cap a un costat: 0'23"; 2'00"; 5'03"; 7'00"; 8'05"; 9'22"; 1'0'9"  Pujar les mans amb el palmell obert: 1'07"; 6'07"; 13'44"  *5 Assenyalar a l'audiència: 2'41"; 3'49"; 4'57"; 6'20"; 6'40"; 9'21"; 12'40"; 13'32"  Assenyalar el cap: 3'08"  Braç estirat amb palmell de la mà obert endavant: 3'31"  Obrir el braç cap a fora: 4'31"; 9'42"; 10'05"; 11'21"; 11'50"; 13'22"; 13'43"  Ajuntar dit polze i índex: 7'48"; 8'34"; 12'33"; 12'55"  Indicar números amb el dit: 8'55"; 12'57"  Assenyalar la cara: 9'03"  Assenyalar-se a si mateix: 9'36"  Traçar un cercle amb la mà: 11'39"
Adaptadors:	Obertura de braços: 0'27"; 0'32"; 0'51"; 0'54"; 1'32"; 2'05"; 2'43"; 2'52"; 2'59"; 3'29"; 3'53"; 5'52"; 6'58"; 7'47"; 7'50"; 8'01"; 8'18"; 8'40"; 9'33"; 11'12"; 11'51"; 12'44"  *6 Baixar les mans per indicar concreció amb palmells amunt o avall: 0'07"; 0'36"; 0'44"; 0'50"; 0'57"; 2'43"; 3'22"; 4'01"; 4'33"; 5'25"; 5'30"; 5'37"; 5'40"; 6'15"; 7'17"; 8'22", 9'25"; 9'40"; 9'52"; 10'21"; 10'29"; 10'55"; 11'24"; 11'47"; 11'55"; 12'01"; 12'22"; 13'24"; 13'38"  *7 Baixar les mans amb el puny tancat per indicar èmfasi: 0'47"; 1'15"; 1'50"; 2'03"; 2'56"; 3'01"; 3'19"; 4'12"; 4'22"; 5'01"; 6'05"; 6'18"; 6'22"; 7'32"; 7'43"; 9'58"; 10'42"; 12'16"; 12'28"; 12'36"; 12'53"; 13'20"; 13'25"  Moure mans en cercle amb el palmell amunt per indicar èmfasi: 0'14"; 3'05"; 5'05"; 6'55"; 7'07"; 8'03"; 8'25"; 9'38"; 9'45"; 11'18"; 11'58"  Mans juntes: 1'26"; 2'27"; 2'53"; 7'18"; 10'59"; 13'41"; 13'46"  Pujar les mans a l'alçada del cap: 4'20"; 4'23"; 5'56"; 8'20"; 8'29"; 12'31"
Expressions d'afecte:	En global mostra una postura oberta; espatlles obertes, esquena recta i mirada clara. Tendeix a aixecar les celles per emfatitzar el que està explicant.  Ex. 7'38"  a career disseler or some other scay consequence.

Hi ha moments en els quals l'expressió facial acompanya el contingut.

0'36": Expressió de confusió en explicar com, tot i intentar-ho, no era capaç d'actuar com l'altra gent. Cap baixat amb mirada al terra i celles frunzides.



0'48"; 1'11"; 1'24"; 1'34"; 1'57"; 8'58"; 10'15": Expressió de sorpresa i incredulitat en explicar com va actuar. Celles alçades i ulls oberts.



2'15": Cara de preocupació en rebre la trucada de la Universitat. Ulls tancats, celles alçades i frunzides i boca tancada.



2'43": Expressió d'admiració en representar el que li agradaria que pensés el públic.



#### **PROXÈMICA**

(ús de l'espai)

Postura:	Relaxada i informal. Espatlles obertes.
Moviment:	Durant la intervenció, desplaçaments per l'interior del cercle vermell marcat a l'escenari.  Predominança dels desplaçaments laterals. Al final, desplaçament des del cercle vermell fins a fora de l'escenari.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

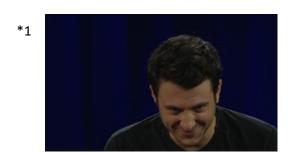
"ah": 0'32"		
	CARACTERÍSTIQUES FÍSIQUES  (*8)	
Sexe:	Home	
Edat:	34 anys	
Alçada:	1'72 - 1'78 m	
Forma física:	Normativa	
Color de pell:	Blanca	
Cabell:	Marró fosc i curt amb tupè	
	ARTEFACTES	
Vestuari:	Samarreta negra, texans i botes marrons	
Maquillatge:	No	
Complements:	Comandament per passar les diapositives i micròfon.	
	ENTORN I MEDI (*9, *10)	
Espai:	Sala àmplia. Escenari amb un cercle vermell al centre per ocupat del ponent. Darrera hi ha les sigles TED i una pantalla que ocupa la llargada de l'escenari amb espai per projectar la presentació al centre i retransmetre el ponent als extrems.	
Audiència:	Distribuïda en forma de semi cercle davant de l'escenari.	

Il·luminació:	Focus distribuïts pels sostre de la sala i a l'escenari. Il·luminació centrada en el ponent.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.

#### **COMPORTAMENTS TÀCTILS**

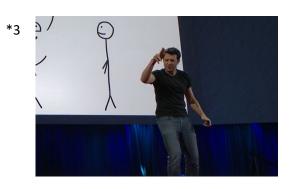
No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Urban (TED 2016, febrer 2016)



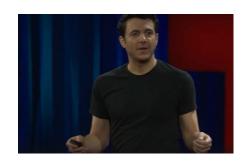












Taula 6. Anàlisi resumida de la TED Talk 3. Inside the mind of a master procrastinator. Tim Urban (TED 2016, febrer 2016)

Cinèsica	Predominança de reguladors i adaptadors. A través de les expressions d'afecte emfatitza el contingut verbal.
Proxèmica	Manté una postura recta i es desplaça pel cercle vermell. Predominança
	de desplaçaments laterals.
Parallenguatge	
Característiques	Home blanc, 34 anys, 1'72-1'78m, cabell fosc, curt i amb tupè.
físiques	
Artefactes	Vestimenta informal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell al centre per ocupat del
	ponent. Darrera hi ha les sigles TED i una pantalla que projecta la
	presentació al centre i retransmet el ponent als extrems. Il·luminació
	centrada en el ponent. Audiència distribuïda en forma de semicercle
	davant de l'escenari.
Comportaments	No es produeix cap contacte físic amb l'audiència.
tàctils	

Font: Elaboració pròpia amb dades analitzades de Urban (TED 2016, febrer 2016)

# Taula 7. Anàlisi completa de la TED Talk 4. How great leaders inspire action. Simon Sinek (TEDxPuget, setembre 2009)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
Il·lustradors:	Girar mà amunt i avall per indicar canvi: 4'21" Dibuixar un cercle amb el dit: 12'59"  *1 Representar pujada i baixada amb la mà: 14'10" Representar pics amb la mà: 14'15"  *2 Representar el número 0 amb la mà: 16'15"
Reguladors:	Dit índex alçat per fer èmfasis: 2'56", 3'54"; 4'26"; 5'42"; 5'47"; 6'57"; 9'23"; 10'26"; 11'26"; 12'13"; 16'57"  Girar la mà cap als costats per indicar una aproximació; 1'12"  *3 Assenyalar-se a si mateix: 1'22"; 1'46"; 5'28"; 8'21"; 12'52"; 13'17"; 13'54"; 15'54"; 15'58"; 16'17"; 16'26"; 16'55"; 17'18"  *4 Assenyalar la pissarra: 2'14"; 2'18"; 2'27"; 2'50"; 3'04"; 3'18"; 3'34"; 3'40"; 3'57"; 4'33"; 4'51", 5'00"; 5'16"; 5'31"; 5'55"; 6'14"; 6'30"; 6'47"; 7'02"; 7'15"; 7'32"; 7'48"; 9'10"; 9'34"; 9'45"; 10'44"; 11'17"; 12'11"; 12'27"; 12'40"; 13'13"; 13'57"; 14'22"; 14'33"; 15'00"; 15'38"; 15'42"; 16'23"; 16'49"; 16'58"; 17'36"  Assenyalar a l'audiència: 8'28"; 10'35"; 14'29"; 14'43"  Mà a l'alçada del cap: 2'49"; 5'51"; 12'38"  Moure mà cap a dins: 8'11"; 11'59"; 12'37"  Dit polze amunt: 8'36"  Representació de cometes amb els dits: 8'44"; 11'53"; 11'56"; 16'33"  Indicar números amb els dits: 1'01"; 10'41"; 12'55"; 14'54"  Mà cap a dins senyalant atracció: 10'49"  Assenyalar el terra: 13'43"  Traçar línia horitzontal amb la mà: 13'48"; 14'13"  Mà alçada per sobre el cap per indicar alçada: 16'37"; 16'44"  Alçar la mà amb el palmell endavant: 14'40"
Adaptadors:	*5 Obrir la mà cap al costat: 0'23"; 0'43"; 0'50"; 1'15"; 2'17"; 3'00", 3'28"; 4'45"; 8'14"; 8'26"; 8'56"; 9'15"; 9'21"; 10'04"; 10'23"; 10'52"; 12'50"; 13'15"; 15'56"; 16'01"; 16'30"; 17'40"  *6 Posar-se bé les ulleres: 0'04"; 0'38"; 0'51"; 1'04"; 1'25"; 2'10"; 2'47"; 3'10"; 3'31"; 5'50"; 6'28"; 7'52"; 8'07"; 8'37"; 9'32"; 11'27"; 12'02"; 13'37"; 14'00"; 14'41"; 15'28"; 17'09"; 17'35"  Moure mà endavant en cercles per indicar concreció: 0'07"; 0'28"; 1'08"; 1'17"; 1'30"; 2'08"; 3'38"; 3'45"; 6'10"; 7'30"; 8'18"; 8'52"; 11'58"; 13'36"; 15'38"  Baixar la mà amb el palmell obert per fer èmfasi: 0'56"; 1'03"; 2'25"; 3'33"; 4'57"; 5'27"; 6'19"; 7'11"; 7'26"; 8'06"; 8'48"; 10'08"; 12'22"; 15'31"  Ajuntar dit polze i índex: 1'10"; 1'27"; 1'37"; 2'31"; 6'42"; 8'23"; 8'40"; 8'59"; 13'40"; 14'02"; 14'58"; 15'39"; 15'46"; 17'13"; 17'22"  Baixar la mà amb el puny tancat per indicar èmfasi: 3'15"; 7'47"; 7'59"; 9'39"; 10'38"; 13'02"; 13'46"; 14'18"; 16'20"; 16'39"; 17'17"; 17'39"  Tocar-se la cara: 5'21"; 6'45"  Pujar la mà: 11'45"; 17'06"



En global mostra una postura oberta; esquena recta, espatlles obertes i mirada clara i decidida.



Hi ha moments en els quals l'expressió acompanya el contingut.

0'10": Expressió de clarificació en canviar l'enfocament de la pregunta que planteja al públic. Celles alçades, front frunzit i mirada al terra.



# Expressions d'afecte:

4'17"; 14'52": Expressió de satisfacció en demostrar com canviant la manera d'explicar les coses es produeix una efecte totalment diferent . Cap lleugerament inclinat cap avall, celles lleugerament alçades i lleuger somriure



14'12": Expressió de desconfiança en explicar que no creu que TiVo's mai arribés a tenir èxit. Alçar una cella i un costat de la boca.



#### **PROXÈMICA**

(ús de l'espai)

Postura:	Recta i rígida	
Moviment:	Desplaçaments laterals i dins d'un espai d'aproximadament 3 metres. Desplaçament cap a darrera per acostar-se a la pissarra.	

DADALIENGUATOE		
PARALLENGUATGE (qualitats veu i vocalitzacions)		
-		
	CARACTERÍSTIQUES FÍSIQUES  (*7)	
Sexe:	Home	
Edat:	36 anys	
Alçada:	1'75 - 1'80 m	
Forma física:	Normativa	
Color de pell:	Blanca	
Cabell:	Marró clar, curt amb tupè i entrades	
	ARTEFACTES	
Vestuari:	Camisa salmó / beix, texans i botes marró	
Maquillatge:	No	
Complements:	Ulleres marró clar i fosc, cinturó marró i taronja, rellotge platejat, micròfon de mà, retolador, i pissarra	
	ENTORN I MEDI  (*8)	
Espai:	Escenari ocupat pel ponent i decorat amb làmpades de colors penjant del sostre. A part esquerra hi ha una pissarra amb la qual interactua el ponent i a la dreta hi ha una pantalla per anunciar la TED Talk.	

Audiència:	Distribuïda en fileres davant de l'escenari.
Il·luminació:	Focalitzada en el ponent i a la zona de la pissarra.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.

#### **COMPORTAMENTS TÀCTILS**

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Sinek (TEDxPuget, setembre 2009)















\*8



Taula 8. Anàlisi resumida de la TED Talk 4. How great leaders inspire action. Simon Sinek (TEDxPuget, setembre 2009)

Cinèsica	Poques expressions d'afecte. Només en moments puntuals per
	emfatitzar el contingut verbal.
Proxèmica	Postura recta i desplaçaments laterals dins d'un espai
	d'aproximadament 3 metres. Desplaçament cap a darrera per acostar-
	se a la pissarra. Ús d'il·lustradors, adaptadors i, sobretot, reguladors.
Parallenguatge	
Característiques	Home blanc, 36 anys, 1'70-1'80m, cabell clar, curt i amb tupè.
físiques	
Artefactes	Vestimenta formal i colorida
Entorn i medi	Escenari ocupat pel ponent i decorat amb làmpades de colors penjant del sostre. A part esquerra hi ha una pissarra amb la qual interactua el ponent i a la dreta hi ha una pantalla per anunciar la TED Talk.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Sinek (TEDxPuget, setembre 2009)

Taula 9. Anàlisi completa de la TED Talk 5. The power of vulnerability. Brené Brown (TEDxHuston 2010, juny 2010)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
II·lustradors:	*1 Representació d'escriure amb bolígraf: 8'05"; 8'29"
Reguladors:	Fer cometes amb els dits: 0'50"; 3'45"; 3'51"; 14'14"  *2 Mà alçada i amb el palmell mirant endavant: 0'54"; 3'38"; 6'33"; 7'37"; 8'10"; 8'31"; 19'31"  Passar diapositiva: 1'40"; 2'43"; 5'53"; 9'43"; 11'05"; 15'23"  *3 Alçar dit índex per fer èmfasi: 5'59"; 7'13"; 11'29"; 11'57"; 12'40"; 18'12"  Tocar-se el pit: 10'42"  Indicar una mida amb el dit polze i índex: 10'52"  Alçar puny enlaire: 11'50"
Adaptadors:	Obrir mans amb palmell cap avall: 0'07"; 6'35"; 6'41"; 8'22"; 11'48"; 13'42" Obrir braç cap a fora: 0'09"; 2'33"; 4'22"; 7'18"  *4 Obrir mans i braços: 1'01"; 1'19"; 1'26"; 2'28"; 3'00"; 3'13"; 3'30"; 5'05"; 7'51"; 10'17"; 12'06"; 12'17"; 12'52"; 13'35"; 14'49"; 14'56"; 15'01"; 17'50"; 18'17"; 19'55" Moure mans endavant: 0'10"; 9'15"; 9'20"; 10'47"; 11'55"; 13'48"; 16'03" Moure braços cap al costat: 2'38"; 9'58"; 10'24"; 16'19"; 17'12" Tocar-se el cabell: 0'13"; 5'47"; 13'04"; 13'36" Tocar-se la cara: 6'37"  *5 Pujar i baixar mans amb palmells mirant cap a dins: 0'16"; 1'13"; 2'41"; 2'52"; 3'34"; 3'59"; 4'14"; 6'31"; 6'54"; 8'51"; 10'14"; 10'30"; 10'56"; 12'03"; 12'14"; 13'01"; 13'57"; 15'21"; 16'42"; 17'22"; 18'38" Pujar i baixar mans amb palmell mirant cap amunt: 0'18"; 0'28"; 0'34"; 0'58"; 1'24"; 1'30"; 2'14"; 3'17"; 5'38"; 7'21"; 12'37"; 14'18"; 15'11"; 18'08"; 19'53" Pujar i baixar mans amb palmell mirant cap avall: 6'37"; 6'57"; 8'20"; 9'34"; 12'26"; 12'54"; 13'31"; 14'44"; 15'49"; 16'08" Ajuntar mans: 1'37"; 3'27"; 3'31"; 9'13"; 9'16"; 11'45"; 13'07" Pujar i baixar mans amb punys tancats: 5'44" Fer cercles amb la mà: 6'21"; 7'56"; 8'08"; 14'09"; 14'47"; 16'36" Moure canell de dreta a esquerra: 12'30"
Expressions d'afecte:	En global mostra postura d'obertura. Esquena recta i espatlles obertes, mirada penetrant mostrant determinació i passió. Transmet confiança i seguretat envers el tema sobre el qual parla. Ex. 9'57"

Hi ha moments en els quals l'expressió acompanya el contingut.

0'09"; 16'12": Expressió de content en explicar una situació que li va passar fa uns anys. Somriure natural i ulls una mica tancats.



0'22"; 14'18": Expressió de preocupació i incertesa en explicar una situació del passat que no entenia.. Celles baixades i frunzides, boca tensa i pòmuls alçats cap amunt.



0'47": Expressió de sorpresa i incredulitat en sentir que volien definir-la com "story-teller". Celles alçades, ulls oberts i boca avall i oberta.



1'16"; 13'06": Expressió de riure per en recordar una situació del passat. Celles alçades, ulls tancats, pòmuls alçats i boca oberta ensenyant les dents.



5'44": Expressió d'emoció en explicar les ganes que tenia de començar el procés de desconstrucció. Celles alçades, ulls tancats, cap lleugerament inclinat cap amunt, pòmuls alçats i somriure pronunciat.



11'38": Expressió que els amics de Brown van fer en pensar que ells no voldrien ser la terapeuta. Compassió per la terapeuta que hagués de tractar a Brown. Celles frunzides, llavis junts i sortint enfora.



12'54": Expressió d'avís en explicar a la terapeuta que l'únic problema el tenia amb la vulnerabilitat; cap problema familiar ni traumes infantils.



13'22": Expressió de circumstància per representar la cara que va fer la terapeuta per respondre si es tractava d'alguna cosa greu. Celles alçades, ulls tancats, boca avall amb els llavis lleugerament tensos creant un petit somriure.



19'59": Expressió de satisfacció en acabar la conferència. Cara relaxada amb somriure tímid i sincer.



### PROXÈMICA

(ús de l'espai)

Postura:	Relaxada
Moviment:	Durant la intervenció es manté majoritàriament estàtica, exceptuant moments puntual en el quals es mou lleugerament enrere per comprovar el canvi de diapositiva. Al final, desplaçament cap a fora de l'escenari.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"ah": 0'52"; 1'40"; 2'24"; 6'38"; 11'44"; 11'52"; 13'12"; 13'33"; 13'39"

CARACTERÍSTIQUES FÍSIQUES  (*6)			
Sexe:	Dona		
Edat:	45 anys		
Alçada:	1'70 - 1'75 m		
Forma física:	Normativa		
Color de pell:	Blanca		
Cabell:	Ros, curt i amb alguna ondulació		
	ARTEFACTES		
Vestuari:	Camisa i pantalons negres		
Maquillatge:	Pintallavis marró, coloret rosa, màscara de pestanyes, línia d'ulls i ombra d'ulls.		
Complements:	Anells, rellotge, arracades d'anella grans, pinta ungles vermell, collarets, micròfon de corbata i comandament per passar diapositives.		
ENTORN I MEDI (*7)			
Espai:	Sala àmplia. Escenari ocupat pel ponent. Taula amb mantell vermell i gerro negre amb flors al centre de la taula. Pantalla per projectar la presentació a la paret de l'escenari.		
Audiència:	Ubicada davant de l'escenari.		
II·luminació:	Centrada en la ponent.		

#### So/Acústica:

Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.

#### **COMPORTAMENTS TÀCTILS**

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Brown (TEDxHuston 2010, juny 2010)













\*7



Taula 10. Anàlisi resumida de la TED Talk 5. The power of vulnerability. Brené Brown (TEDxHuston 2010, juny 2010)

Cinèsica	Recorre molt a les expressions d'afecte per acompanyar el discurs. Predominança de reguladors i adaptadors.
Proxèmica	Postura relaxada i majoritàriament estàtica, a excepció de moments puntuals que es mou lleugerament enrere per comprovar el canvi de diapositiva.
Parallenguatge	
Característiques	Dona blanca, 45 anys, 1'70-75m, cabell ros i curt.
físiques	
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia amb escenari ocupat pel ponent. Taula amb mantell vermell i gerro negre amb flors al centre de la taula. Pantalla per projectar la presentació a la paret de l'escenari. Il·luminació centrada en el ponent. Audiència distribuïda davant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Brown (TEDxHuston 2010, juny 2010)

Taula 11. Anàlisi completa de la TED Talk 6. How to speak so that people want to listen. Julian Treasure (TEDGlobal 2013, juny 2013)

CINÈSICA (classificació d'Ekman i Friesen)		
Emblemes:	*1 Pujar les mans amb els braços oberts i els palmells mirant cap amunt per indicar que l'audiència s'aixequi: 7'43"  *2 Aplaudir: 8'48"	
Il·lustradors:	*3 Aixecar els braços enlaire i baixar-los: 7'55"; 8'02"  *4 Repetir el so "bo" amb els llavis per escalfar-los: 8'08" Repetir el so "brbr" amb els llavis per escalfar-los: 8'14" Repetir el so "la" amb els llavis per escalfar-los: 8'22" Repetir el so "rrr" amb els llavis per escalfar-los: 8'29" Repetir el so "we-oh" amb els llavis per escalfar-los: 8'29"	
Reguladors:	*5 Obrir mans cap endavant: 0'49"; 0'52"; 1'52": 2'27"; 2'51"; 3'57"; 5'04"; 6'08"; 6'46"; 8'49"  Assenyalar la pantalla: 1'43"; 9'01"  Assenyalar-se a si mateix: 1'50"; 5'03"  Moure mans cap a un costat: 2'21"; 4'12"; 6'22"  Obrir i tancar mans representant un conjunt: 2'25"  Assenyalar el cap: 3'00"  Assenyalar el terra: 3'27"; 7'19"  Assenyalar endavant: 3'50"; 4'23"  Representar un cercle amb les mans: 3'56"; 7'32"  Assenyalar la gola: 4'18"; 4'47"  Pujar i baixar mans paral·lelament per representar un interval: 4'39"  *6 Pujar i baixar la mà/mans per mostrar una zona: 4'43"; 5'27"; 8'48"  Alçar dit índex per fer èmfasi: 4'52"  Assenyalar la caixa toràcica: 4'54"  Fer cercles amb la mà per representar reiteració: 6'07"  Pujar la mà a l'alçada del cap: 6'44"  Assenyalar a l'audiència: 8'53"  Pujar i baixar mans amb palmell mirant avall: 7'29"	
Adaptadors:	Mans amunt i avall amb palmells mirant cap endins: 0'28"; 1'21"; 2'05"; 3'47"; 3'59"; 4'41"; 5'38"; 6'09"; 7'34"; 9'30"  *7 Obrir les mans cap enfora: 0'30"; 0'44"; 1'05"; 1'31"; 1'38"; 1'42"; 1'49"; 2'00"; 2'07"; 2'14"; 3'04"; 4'16"; 4'20"; 4'34"; 5'23"; 5'50"; 6'11'; 6'27"; 6'31"; 7'02"; 7'20"; 9'21"  *8 Ajuntar les mans: 0'33"; 1'24"; 1'33"; 1'39"; 1'43"; 1'53"; 2'13"; 2'16"; 2'31"; 3'01"; 3'29"; 4'06"; 5'05"; 5'30"; 5'40"; 6'10"; 6'12"; 6'24"; 6'28"; 6'47"; 7'21"; 7'30"; 7'34"; 8'05"; 8'50"  Puny tancat: 2'30"; 4'25"; 5'36"; 6'15"; 6'53"; 7'12"  Ajuntar dit polze i índex: 3'51"; 5'51"; 6'16"; 6'42"; 6'54"; 7'17"; 8'07"; 8'13"; 8'22"; 8'28"; 8'30"; 8'38"	
Expressions d'afecte:	En global mostra una postura oberta. Esquena recta, espatlles obertes i mirada clara i penetrant. Ex. 0'49"	



Hi ha moments en els quals l'expressió acompanya el contingut.

3'50": Expressió de desacord en explicar que hi ha determinats comentaris que poden no resultar els més adequats. Celles frunzides i ulls tancats amb força, nas i boca alçats i llavis pressionats i endins.



PROXÈMICA (ús de l'espai)		
Postura:	Recta i rígida	
Moviment:	Durant la intervenció es manté estàtic dins del cercle vermell marcat a l'escenari.	
PARALLENGUATGE (qualitats veu i vocalitzacions)		
"mmm": 3'50"		
CARACTERÍSTIQUES FÍSIQUES  (*9)		
Sexe:	Home	
Edat:	55 anys	
Alçada:	1'75 - 1'80 m	

Forma física:	Normativa		
Color de pell:	Blanca		
Cabell:	Calb		
	ARTEFACTES		
Vestuari:	Camisa blau fosc amb decoracions blanques, americana beix, texans i sabates marrons.		
Maquillatge:	No		
Complements:	Mocador blau fosc, cinturó marró, micròfon i comandament per passar diapositives.		
	ENTORN I MEDI (*10, *11)		
Espai:	Sala àmplia. Escenari amb un cercle vermell ocupat pel ponent i decorat amb línies de colors i les sigles TED. Pantalla per mostrar les diapositives de la presentació a la part superior de la paret de l'escenari.		
Audiència:	Distribuïda en forma de semi cercle davant de l'escenari.		
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		
COMPORTAMENTS TÀCTILS			
No es produeix cap contacte físic amb l'audiència.			

Font: Elaboració pròpia amb dades i imatges analitzades de Treasure (TEDGlobal 2013, juny 2013)





















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Taula 12. Anàlisi resumida de la TED Talk 6. How to speak so that people want to listen. Julian Treasure (TEDGlobal 2013, juny 2013)

Cinèsica	Poques expressions d'afectes. Ús d'emblemes, il·lustradors, adaptadors
	i, sobretot, reguladors.
Proxèmica	Postura recta i oberta. Es manté estàtic dins del cercle vermell.
Parallenguatge	
Característiques	Home blanc, 55 anys, 1'75-1'80m, calb.
físiques	
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent i decorat amb línies de colors i les sigles TED. Pantalla la part superior de la paret de l'escenari. Il·luminació centrada en el ponent. Audiència distribuïda davant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Treasure (TEDGlobal 2013, juny 2013)

Taula 13. Anàlisi completa de la TED Talk 7. The next outbreak? We're not ready. Bill Gates (TED 2015, març 2015)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
Il·lustradors:	-
Reguladors:	Assenyalar barril: 0'17"; 0'27"  *1 Moure les mans d'un costat a l'altre: 1'19"; 2'31"; 4'20"; 5'09"; 5'13"; 5'55"; 6'33"; 6'55"  Assenyalar un costat: 2'37"; 2'41"  *2 Mans obertes amb el palmell endavant: 2'55"; 6'05"; 7'15"; 7'57"; 8'07"  Obrir mà cap un costat: 3'51"  Assenyalar-se a si mateix: 3'53"; 4'17"  Alçar dit índex per fer èmfasi: 8'14"
Adaptadors:	3* Obrir mans amb els palmells mirant amunt: 0'09"; 0'14"; 0'23"; 0'30"; 0'42"; 0'47"; 1'21"; 1'34"; 1'49"; 1'56"; 2'11"; 2'14"; 2'22"; 2'30"; 2'35"; 2'47"; 3'00"; 3'36"; 3'55"; 3'59"; 4'24"; 5'02"; 5'07"; 5'32"; 5'44"; 5'58"; 6'07"; 6'14"; 6'30"; 6'45"; 7'24"; 7'26"; 7'39"; 7'47"; 8'00"; 8'10"  Obrir mans amb els palmells mirant cap avall: 0'53"; 0'58"; 1'40"; 2'06"; 2'58"; 3'11"; 4'08"; 5'28"; 6'04"; 6'49"; 7'18"  Ajuntar dit polze i índex: 0'12"  4* Ajuntar mans: 0'13"; 0'27"; 0'31"; 0'44"; 1'06"; 1'38"; 1'42"; 1'52"; 2'04"; 2'07"; 2'13"; 2'28"; 2'31"; 2'34"; 2'44"; 2'55"; 2'56"; 3'01"; 3'14"; 3'48"; 3'57"; 4'31"; 4'55"; 5'30"; 5'42"; 6'00"; 6'13"; 6'29"; 7'09"; 7'25"; 7'27"; 8'01"; 8'05"  Pujar i baixar les mans amb els palmells mirant cap amunt: 0'49"; 1'00"; 1'26"; 1'31"; 1'35"; 2'54"; 3'41"; 4'05"; 5'15"; 5'40"; 5'59"; 7'12"; 7'20"; 7'30"; 7'33"; 7'36"; 7'59"; 8'13"; 8'15"  Pujar i baixar mans amb els palmells mirant cap avall: 3'47"; 7'15"  Pujar i baixar mans amb els palmells mirant endins: 6'53"; 8'05"  Moure mans endavant: 5'18"; 5'22"; 5'45"; 7'08"; 7'11"
Expressions d'afecte:	En global mostra un postura lleugerament corbada i relaxada. Mirada clara. Ex. 2'25":  Hi ha moment ens els quals l'expressió acompanya al contingut.  8'19: Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats i somriure pronunciat.



	If we start row, we can be ready for the next epidemic.	
PROXÈMICA (ús de l'espai)		
Postura:	Relaxada	
Moviment:	A l'inici, desplaçament fins al cercle vermell marcat a l'escenari. Durant la intervenció es manté pràcticament estàtic, exceptuant algun desplaçament puntual cap als laterals.	
PARALLENGUATGE (qualitats veu i vocalitzacions)		
- CARACTERÍSTIQUES FÍSIQUES		
	(*5)	
Sexe:	Home	
Edat:	60 anys	
Alçada:	1'72 - 1'77 m	
Forma física:	Normativa	
Color de pell:	Blanca	
Cabell:	Gris / blanc i curt	
ARTEFACTES		

Vestuari:	Camisa blanca, jersei rosa, pantalons negres i mocassins marrons.		
Maquillatge:	No		
Complements:	Carretó amb un bidó, ulleres negres i micròfon.		
	ENTORN I MEDI (*6, *7)		
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla llarga com l'escenari amb retransmissió en directe del ponent als extrems i la presentació al centre. Sigles TED al fons a l'esquerra de l'escenari.		
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari		
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		

# **COMPORTAMENTS TÀCTILS**

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Gates (TED 2015, març 2015)









\*4







Taula 14. Anàlisi resumida de la TED Talk 7. The next outbreak? We're not ready. Bill Gates (TED 2015, març 2015)

Cinèsica	Poques expressions d'afectes. Ús de reguladors i adaptadors
Proxèmica	Postura recta i oberta. Es manté estàtic dins del cercle vermell,
	exceptuant alguns desplaçament laterals puntuals.
Parallenguatge	
Característiques	Home blanc, 60 anys, 1'72-1'77m, cabell gris i curt.
físiques	
Artefactes	Vestimenta informal i acolorida.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla
	llarga com l'escenari amb retransmissió en directe del ponent als
	extrems i la presentació al centre. Sigles TED al fons a l'esquerra de
	l'escenari. Il·luminació centrada en el ponent. Audiència distribuïda
	davant de l'escenari.
Comportaments	No es produeix cap contacte físic amb l'audiència.
tàctils	

Font: Elaboració pròpia amb dades analitzades de Gates (TED 2015, març 2015)

Taula 15. Anàlisi completa de la TED Talk 8. My philosophy for a happy life. Sam Berns (TEDxMidAtlantic 2013, octubre 2013)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Baixar el cap en senyal d'agraïment: 12'28"
Il·lustradors:	-
Reguladors:	*2 Passar la diapositiva: 4'17"; 7'24"  *3 Moure mà endavant com a agraïment: 2'32"; 6'59"; 11'02"; 12'26"
Adaptadors:	*4 Baixar mà cap a fora per indicar concreció: 0'33"; 0'44"; 0'53"; 0'56"; 1'03"; 1'14"; 1'25"; 1'49"; 1'54"; 1'58"; 2'01"; 2'28"; 2'37"; 2'42"; 2'46"; 3'32"; 3'37"; 3'42"; 5'17"; 6'01"; 6'35"; 7'14"; 7'40"; 7'48"; 7'59"; 8'08"; 9'03"; 9'21"; 9'46"; 11'23"  Moure mà en cercles per indicar concreció: 0'38"; 8'19"  Baixar la mà amb el palmell mirant amunt per indicar èmfasi: 1'19"; 1'38"; 3'47"; 7'05"; 8'13"; 8'22"; 8'35"; 8'40"; 9'57"; 11'55"  Baixar mà amb puny tancat: 1'52"  Pujar i baixar la mà repetidament per fer èmfasi amb el comandament agafat: 2'24"; 2'57"; 4'03"; 5'20"; 6'13"; 6'22"; 6'45"; 7'00"; 7'57"; 8'28"; 10'07"; 11'31"; 11'47"; 12'06"; 12'24"  Obrir braços enfora: 6'16"; 8'50"; 8'57"  Posar-se bé les ulleres: 6'18"  Tocar-se la cara: 6'33"; 6'39"; 6'55"  Tocar-se les mans: 6'53"  Obrir i tancar el canell amb el braç i la mà quieta i recolzada sobre la cama: 3'26"; 4'21"; 7'59"; 9'55"; 11'07; 11'20"  *5 Mirar el guió: 2'49"; 3'28"; 3'50"; 4'02"; 4'16"; 5'24; 6'02"; 6'24"; 6'33"; 6'44"; 6'53"; 7'10"; 7'50"; 8'02"; 8'07"; 8'31"; 8'52"; 9'11"; 9'29"; 9'50"; 10'01"; 10'04"; 11'01"; 11'36"; 11'51"; 11'53"; 11'57"; 12'02"; 12'05"; 12'12"
Expressions d'afecte:	En global, tenint en compte la seva condició física, mostra una postura oberta amb el cap alçat i la mirada endavant transmetent determinació.  Ex. 1'29"  No obstant, mira el guió en reiterades ocasions el que transmet una mica d'inseguretat i nervis. Ex. 7'11"



Hi ha moments en els quals l'expressió acompanya el contingut.

5'15": Expressió de content en veure el vídeo de quan va tocar amb la banda de música de l'institut. Ulls lleugerament tancats, pòmuls alçats i llavis tensats creant un somriure.



12'24": Expressió d'emoció en anunciar que l'endemà de la conferència té el ball de benvinguda de l'institut i que hi assistirà. Pòmuls alçats i somriure molt pronunciat.



# **PROXÈMICA**

(ús de l'espai)

Postura:  Moviment:	Encorbada degut a la seva condició física i de salut.  Es manté estàtic a la cadira on es troba assegut. Només hi ha moviment de mans i braços.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"ah": 1'38"; 5'16"; 6'13" "mmm": 1'53";

## **CARACTERÍSTIQUES FÍSIQUES**

(\*6

Sexe: Home

Edat:	17 anys
Alçada:	1'49 m
Forma física:	Condició física afectada per una malaltia anomenada Progèria.
Color de pell:	Blanca
Cabell:	Calb
	ARTEFACTES
Vestuari:	Camisa blava, pantalons marró clar i sabates negres.
Maquillatge:	No
Complements:	Ulleres, micròfon, cadira i aigua
	ENTORN I MEDI (*7, *8)
Espai:	Sala àmplia. Escenari amb rectangle vermell ocupat pel ponent. Pantalla per mostrar les diapositives de la presentació a la part superior de la paret de l'escenari. Sigles TEDxMidAtlantic al fons de l'escenari sota la pantalla.
Audiència:	Distribuïda en grades davant de l'escenari.
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del rectangle vermell.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.
COMPORTAMENTS TÀCTILS	

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Berns (TEDxMidAtlantic 2013, octubre 2013)

















Taula 16. Anàlisi resumida de la TED Talk 8. My philosophy for a happy life. Sam Berns (TEDxMidAtlantic 2013, octubre 2013)

Cinèsica	Les expressions d'afecte acompanyen el contingut verbal. Especial ús
	d'adaptadors, tot i que també s'identifiquen emblemes i reguladors.
Proxèmica	Postura encorbada degut condició física causada per la Progèria. Es
	manté estàtic assegut a una cadira durant tota la intervenció.
Parallenguatge	
Característiques	Home blanc, 17 anys, 1'47m, calb.
físiques	
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb rectangle vermell ocupat pel ponent. Pantalla
	a la part superior de la paret de l'escenari. Sigles TEDxMidAtlantic al
	fons de l'escenari sota la pantalla. Il·luminació centrada en el ponent.
	Audiència distribuïda en grades davant de l'escenari.
Comportaments	No es produeix cap contacte físic amb l'audiència.
tàctils	

Font: Elaboració pròpia amb dades analitzades de Berns (TEDxMidAtlantic 2013, octubre 2013)

Taula 17. Anàlisi completa de la TED Talk 9. What makes a good life? Lessons from the longest study on happiness. Robert Waldinger (TEDxBeaconStreet, novembre 2015)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Baixar el cap amb les mans juntes en motiu d'agraïment i comiat: 12'33''
Il·lustradors:	-
Reguladors:	*2 Passar diapositiva: 0'33"; 0'49"; 1'18"; 3'25"; 5'16"; 9'04"; 12'01" Indicar números amb els dits: 3'12"; 6'17"; 6'35"; 6'52" *3 Pujar i baixar mà amb dit índex per fer èmfasi: 0'12"; 7'52"; 8'05"; 8'23"; 8'38"; 8'48"; 9'22"; 10'14"; 10'37"; 10'46"
Adaptadors:	Mans juntes: 0'01"  *4 Obrir braços: 0'09"; 1'07"; 1'23"; 2'22"; 2'34"; 4'57"; 5'44"; 5'53"; 7'13"; 7'59"; 8'10"; 8'32"; 8'44"; 9'36"; 9'55"; 10'02"; 10'08"; 10'20"; 10'27"; 11'14"; 11'20"; 11'25"; 11'36"  Moure mà cap als costats per indicar concreció: 0'15"; 0'23"; 1'00"; 1'42"; 2'12"; 2'36"; 3'21"; 3'56"; 4'20"; 5'28"; 10'41"; 11'32"  *5 Pujar i baixar mà amb dit polze i índex junts: 0'29"; 0'36"; 0'55"; 1'06"; 1'10"; 1'32"; 1'49"; 2'45"; 3'19"; 3'41"; 4'24"; 4'49"; 5'30"; 6'04"; 6'20"; 7'06"; 7'30"; 7'48"; 9'46"; 10'00"; 10'18"  Moure mans en cercle per indicar èmfasi: 2'07"; 5'50"; 8'54"; 9'10"  Moure mans endavant i enrere: 9'42"; 11'17"
Expressions d'afecte:	En global mostra una postura oberta i relaxada amb l'esquena recta. Mirada càlida i lleuger somriure al llarg de la conferència. Transmet tendresa.  Ex.1'29"  Hi ha moment ens els quals l'expressió acompanya al contingut.  5'08": Expressió de riure en explicar com els participants de l'estudi que eren estudiants de Harvard mai van qüestionar si eren subjectes interessants per estudiar. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat.  6'24": Expressió de seriositat en explicar que l'estudi a demostrat que la soledat influeix en una mort més primerenca. Celles baixades i frunzides i boca tancada amb llavis tensos.



9'40": Expressió de disconformitat en explicar que una relació no té perquè ser perfecte sempre i quan hi hagi el sentiment de connexió entre la parella i que poden comptar l'un en l'altre. Celles frunzides, nas arronsat i llavis tensos.



12'32": Expressió de content en acabar la conferència. Ulls tancats i tímid somriure amb els llavis.



## **PROXÈMICA**

(ús de l'espai)

(as ac i espai)	
Postura:	Relaxada
Moviment:	Durant la intervenció es manté estàtic en el punt d'inici amb girs dels cos cap a l'esquerra i la dreta per dirigir-se a tot el públic. Al final, desplaçament cap a fora de l'escenari.
PARALLENGUATGE (qualitats veu i vocalitzacions)	
-	
CARACTERÍSTIQUES FÍSIQUES  (*6)	
Sexe:	Home

Edat:	64 anys
Alçada:	1'70 - 1'75
Forma física:	Normativa
Color de pell:	Blanca
Cabell:	Gris i curt
	ARTEFACTES
Vestuari:	Camisa blau clar, pantalons grisos i mocassins marrons.
Maquillatge:	No
Complements:	Micròfon, rellotge, cinturó marró i comandament per passar diapositives.
	ENTORN I MEDI (*7, *8)
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Al centre, pantalla amb la presentació. Sigles TEDxBeaconStreet al fons de l'escenari sota la pantalla. Caixes petites de color vermell, blanc i negre com a decoració al fons de l'escenari.
Audiència:	Distribuïda en fileres davant de l'escenari
Il·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.
COMPORTAMENTS TÀCTILS	

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Waldinger (TEDxBeaconStreet, novembre 2015)

















Taula 18. Anàlisi resumida de la TED Talk 9. What makes a good life? Lessons from the longest study on happiness. Robert Waldinger (TEDxBeaconStreet, novembre 2015)

Cinèsica	Ús frequent d'expressions d'afecte per emfatitzar el contingut verbal. S'identifiquen emblemes, reguladors i adaptadors.
Proxèmica	Postura recta i relaxada. Durant la conferència es manté estàtic amb girs del cos cap als costats.
Parallenguatge	
Característiques físiques	Home blanc, 64 anys, 1'70-1'75m, cabell gris i curt.
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Al centre, pantalla amb la presentació. Sigles TEDxBeaconStreet al fons de l'escenari sota la pantalla. Caixes petites de color vermell, blanc i negre com a decoració al fons de l'escenari. Il·luminació centrada en el ponent. Audiència distribuïda en fileres davant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Waldinger (TEDxBeaconStreet, novembre 2015)

Taula 19. Anàlisi completa de la TED Talk 10. Looks aren't everything. Believe me, I'm a model. Cameron Russell (TEDxMidAtlantic, octubre 2012)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Acomiadar-se amb la mà: 9'19"
Il·lustradors:	-
Reguladors:	*2 Obrir braç per passar diapositiva: 0'09"; 0'12"; 0'14"; 1'18"; 2'31"; 3'39"; 3'57"; 4'09"; 4'18"; 5'38"; 6'13"; 6'58"; 7'15"; 8'06"  *3 Assenyalar-se a si mateixa: 0'23"; 2'09"; 2'57"; 3'06"; 3'24"; 3'45"; 3'50"; 6'50"; 7'55"; 8'45"  Assenyalar la pantalla: 5'39"  Pujar mà amb el palmell recte: 1'50"  Alçar dit polze per fer èmfasi: 2'07"; 3'55"; 4'13"  Fer cometes amb els dits: 2'24"  Ajuntar i separar mans per representar un conjunt: 4'36"  Assenyalar zones amb les mans: 4'40"; 4'42"; 4'46"; 6'11"  Ajuntar els dits per representar quelcom petit: 5'25"  Alçar la mà amb el palmell endavant: 5'35"  Representar números amb els dits: 6'06"; 7'44"; 8'14"; 9'03"  Tocar-se els dits: 7'36"
Adaptadors:	Baixar les mans amb el palmell mirant avall: 0'27"; 2'22"; 8'50" Braç obert cap al costat: 1'34"; 6'39"; 6'45"; 6'53"; 7'50" Pujar i baixar mans amb palmells mirant cap a dins: 1'47"; 4'28" Tocar-se el cabell: 1'51"; 3'32"; 5'21"  *4 Pujar i baixar mans amb palmell perpendicular al terra: 2'29"; 2'54; 3'27"; 3'52"; 4'19"; 6'25"; 7'13"; 7'31"; 7'52"; 8'02"; 8'40"; 8'53"; 9'10" Ajuntar mans: 3'11"; 3'21"; 3'41"; 4'29"; 6'16"; 6'36"; 6'46"; 7'40"; 9'18"  *5 Obrir les mans cap a fora: 3'18"; 3'30"; 3'30"; 3'41"; 4'06"; 5'11"; 5'22"; 6'09"; 6'14"; 7'38" Tocar-se la cara: 4'47" Moure les mans en cercles: 5'09"; 6'34" Pujar i baixar mans amb dits polze, índex i dit del mig junts: 8'18" Creuar els braços: 8'23" Obrir mà endavant per indicar èmfasi: 8'30"
Expressions d'afecte:	En global mostra una postura oberta. Esquena recta i espatlles obertes. Mirada recta i decidida. Ex.3'55"  Hi ha moments ens els quals l'expressió acompanya al contingut.

3'21"; 8'50": Expressió de riure nerviós. Pòmuls alçats i somriure pronunciat amb la boca oberta.



9'19": Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats, pòmuls alçats i somriure tímid i tendre.



#### **PROXÈMICA**

(ús de l'espai)

Postura:	Recta
Moviment:	A l'inici: desplaçament fins al rectangle vermell marcat a l'escenari. Durant la intervenció, desplaçament fins al tamboret per canviar-se de roba i, posteriorment, retorn al centre del rectangle vermell. Predominança de desplaçaments laterals.  Al final, desplaçament cap al tamboret per recollir la roba.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"mmm": 0'08"; 0'10"; 0'17"; 0'29"; 0'36"; 0'46"; 0'52"; 1'20"; 1'35"; 1'46"; 1'54"; 2'00"; 2'11"; 2'29"; 2'52"; 3'48"; 4'03"; 4'17"; 6'14"; 8'04"; 8'20"; 8'47";

## **CARACTERÍSTIQUES FÍSIQUES**

(\*6)

Sexe:	Dona
Edat:	25 anys
Alçada:	1'75 - 1'77 m

Forma física:	Normativa
Color de pell:	Blanca
Cabell:	Castany, llarg i escalat
	ARTEFACTES
Vestuari:	A l'inici: vestit negre i talons morat / Després: faldilla floral blava i blanca, jersei blau fosc i sabates negres.
Maquillatge:	No
Complements:	Polsera, micròfon, roba de recanvi, tamboret
	ENTORN I MEDI (*7, *8)
Espai:	Sala àmplia. Escenari amb rectangle vermell ocupat per la ponent i un tamboret. Al centre, pantalla amb la presentació. Sigles TEDx MidAtlantic al fons de l'escenari sota la pantalla.
Audiència:	Distribuïda en fileres davant de l'escenari.
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del rectangle vermell.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.
COMPORTAMENTS TÀCTILS	
No es produeix cap contacte físic amb l'audiència.	

Font: Elaboració pròpia amb dades i imatges analitzades de Russell (TEDxMidAtlantic, octubre 2012)

















Taula 20. Anàlisi resumida de la TED Talk 10. Looks aren't everything. Believe me, I'm a model. Cameron Russell (TEDxMidAtlantic, octubre 2012)

Cinèsica	S'identifiquen poques expressions d'afecte. Gran ús de reguladors i adaptadors. S'identifica un emblema al final de la conferència.
Proxèmica	Al començament, desplaçament fins al tamboret per canviar-se de roba. Durant la resta de la conferència, predominança de desplaçaments laterals.
Parallenguatge	
Característiques	Dona blanca, 25 anys, 1'75-1'80m, cabell castany i llarg.
físiques	
Artefactes	Vestimenta informal i neutra.
Entorn i medi	Sala àmplia. Escenari amb rectangle vermell ocupat per la ponent i un tamboret. Al centre, pantalla amb la presentació. Sigles TEDx MidAtlantic al fons de l'escenari sota la pantalla. Il·luminació centrada en la ponent. Audiència distribuïda en fileres davant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Russell (TEDxMidAtlantic, octubre 2012)

Taula 21. Anàlisi completa de la TED Talk 11. 10 things you didn't know about orgasm. Mary Roach (TED 2009, febrer 2009)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
Il·lustradors:	*1 Representació de rentar-se les dents: 1'56"; 2'16"
Reguladors:	*2 Assenyalar una zona del cos: 1'32"; 2'10"; 3'40"; 4'24"; 12'17" Indicar un número amb els dits: 3'08"; 9'24" Creuar braços sobre el pit com si fos una mòmia: 4'27" *3 Alçar el dit índex per indicar èmfasi: 6'03"; 9'21"; 10'27"; 10'33"; 12'13"; 12'57"; 13'47"; 15'16"; 15'58" Representar el moviment de baixada: 7'34" Representar el moviment de pujada: 9'10" Moure en zig-zag el dit índex a l'aire: 9'34" Moure braç endavant i enrere: 9'56"; 14'25" Assenyalar-se a si mateixa: 10'59"; 13'21"; 13'35" Assenyalar la pantalla: 12'27"; 13'11"; 13'44" Assenyalar una zona amb el dit índex: 14'22"
Adaptadors:	*4 Moure la mà en cercles amb el dit índex alçat per indicar èmfasi: 0'22"; 1'05"; 2'03"; 3'28"; 3'47"; 4'37"; 4'44"; 7'38"; 8'04"; 8'47"; 9'50"; 10'07"; 10'40"; 12'18"; 12'29"; 13'01"; 15'25" Moure la mà en cercles per indicar concreció: 0'58"; 1'45"; 3'14"; 6'23"; 6'54"; 7'15" Obrir mà/mans cap a fora: 2'44"; 3'20"; 4'25"; 4'39"; 8'28"; 9'45"; 11'04"; 12'54"; 13'57"; 14'27"; 14'32"; 14'49"; 15'08" *5 Moure mà d'un costat a l'altre amb el dit índex alçat per indicar concreció: 4'14"; 8'41"; 14'01"; 14'54"; 15'13"; 15'52"; 16'05" Posar la mà a la cintura: 0'56"; 3'54"; 4'40"; 6'46"; 7'09"; 9'48"; 9'58"; 15'26"
Expressions d'afecte:	En global mostra una postura d'obertura. Esquena recta i mirada clara i decidida.  Ex. 1'03":  Hi ha moments ens els quals l'expressió acompanya al contingut.  0'32"; 1'49"; 2'26"; 3'02"; 3'16"; 3'30"; 4'34"; 5'07"; 5'26"; 6'12"; 6'48"; 6'56"; 7'02"; 7'31"; 7'55"; 10'18"; 11'07"; 12'22"; 12'49"; 15'43": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



2'36": Expressió de tristesa en explicar com una de les noies de l'estudi creia que estava posseïda pel diable i va deixar de rentar-se les dents amb el raspall per no tenir orgasmes. Celles avall i frunzides. Llavis lleugerament frunzits i llavis inferior més enfora.



16'17": Expressió de riure en acabar la conferència. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



#### **PROXÈMICA**

(ús de l'espai)

Postura:	Recta i oberta.
Moviment:	A l'inici, desplaçament fins al centre de l'escenari.  Durant la intervenció, desplaçaments per l'escenari dins d'una zona d'aproximadament 6 metres quadrats.  Al final, desplaçament cap a fora de l'escenari.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"ah": 0'13"; 1'17"; 1'31"; 1'36"; 1'42"; 2'10"; 2'28"; 2'38"; 3'10"; 6'50"; 7'12"; 7'32"; 9'45"; 9'59"; 10'11"; 13'19"; 13'41"; 14'59"; 15'15"

"mmm": 0'16"; 7'50"; 8'12"; 8'27"; 10'32"; 12'52"; 14'29"; 14'42"; 15'49"

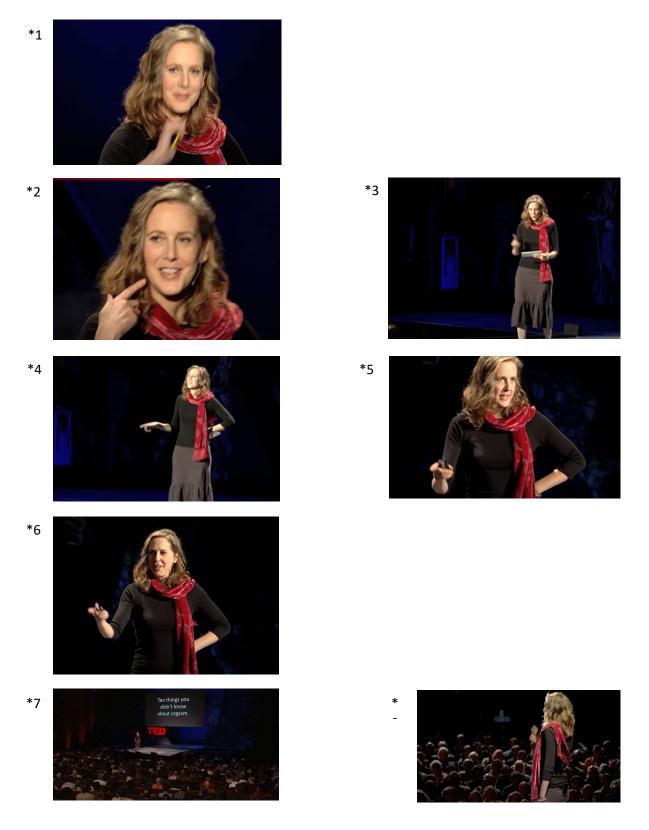
#### **CARACTERÍSTIQUES FÍSIQUES**

(\*6)

Sexe: Dona

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Roach (TED 2009, febrer 2009)



Taula 22. Anàlisi resumida de la TED Talk 11. 10 things you didn't know about orgasm. Mary Roach (TED 2009, febrer 2009)

Cinèsica	Les expressions d'afecte complementen el contingut verbal. Ús d'il·lustradors, adaptadors i, sobretot, reguladors.
Proxèmica	Postura recta i oberta. Durant la conferència es desplaça per l'escenari dins d'una zona d'uns 6m².
Parallenguatge	
Característiques físiques	Dona blanca, 50 anys, 1'68-1'72m, cabell castany clar i per sota les espatlles.
Artefactes	Vestimenta informal i neutra.
Entorn i medi	Sala àmplia. Escenari ocupat per la ponent. Pantalla llarga com l'escenari amb retransmissió en directe del ponent als extrems i la presentació al centre. Sigles TED al fons a l'esquerra de l'escenari. Il·luminació centrada en la ponent. Audiència distribuïda al voltant de l'escenari adoptant la seva forma.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Roach (TED 2009, febrer 2009)

Taula 23. Anàlisi completa de la TED Talk 12. Why people believe they can't draw. Graham Shaw (TEDxHull, febrer 2015)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Inclinar el cap endavant en motiu d'agraïment i comiat: 15'01''
Il·lustradors:	-
Reguladors:	*2 Alçar dit índex per indicar èmfasi: 1'01''; 5'25''; 7'25'', 7'30''; 9'53''; 11'31'': 11'37'' Indicar números amb els dits: 1'14'' Pujar la mà amb el palmell mirant amunt: 2'04'' Alçar la mà: 3'05'' Baixar mà amb palmell mirant avall per indicar alçada: 8'53'' Assenyalar la butxaca dels pantalons: 9'11'' *3 Alçar les mans amb els palmells mirant cap endins: 9'48''; 14'40'' Tocar-se el cap: 10'33'' Assenyalar-se a si mateix: 13'07''
Adaptadors:	*4 Obrir els braços amb els palmells de la mà mirant amunt: 0'16"; 0'46"; 0'54"; 1'17"; 2'05"; 3'09"; 5'29"; 6'45"; 8'22"; 9'19"; 9'43"'; 10'20"; 10'44"; 11'19"; 12'32"; 13'09"; 14'59"  Obrir els braços amb els palmells de la mà mirant avall: 9'16"; 13'28"  Pujar i baixar les mans amb els palmell mirant amunt: 0'20"; 0'33"; 0'41"; 4'27"; 8'39"; 8'50"; 8'59"; 9'27"; 11'10"; 14'31"; 14'46"  *5 Pujar i baixar les mans amb els palmells mirant endins: 1'20"; 2'02"; 3'21"; 3'30"; 5'37"; 7'00"; 8'25"; 8'31"; 9'07"; 9'56"; 10'10"; 10'41"; 10'49"; 10'55"; 11'00", 12'02"; 12'23"; 14'17"  Moure mans endavant: 0'59"; 1'42"; 4'25"; 9'59"; 10'34"  Pujar i baixar els mans amb el puny tancat: 1'16"; 1'23"; 3'28"; 8'42"; 9'30"; 10'37"; 10'52"; 10'57"; 11'06"; 11'43"; 12'56"; 14'26"  Ajuntar mans: 5'37"; 8'23"; 8'30"; 8'36"; 8'57"; 9'00"; 10'07"; 10'19"; 10'25"; 11'29"; 13'15"  Baixar les mans amb el palmell mirant avall: 6'54"  Pujar mà en diagonal amb el palmell mirant avall: 8'53"  Moure mans cap al costat: 10'26"; 12'20"; 13'10"  Baixar les mans amb els dits índex alçats: 11'57"; 12'27"
Expressions d'afecte:	En global mostra una postura d'obertura. Esquena recta i espatlles obertes. Cap una mica alçat i mirada clara i decidida. Transmet tendresa i calidesa. Ex. 0'43'':  Ex. 0'43'':  Sol aixecar les celler per emfatitzar el que està dient. Ex. 13'10''



Hi ha moments ens els quals l'expressió acompanya al contingut.

1'18": Expressió d'expectació en preguntar al públic si estan disposats a tenir la ment oberta. Celles alçades, pòmuls alçats i llavis junts.



3'10"; 4'23"; 6'47"; 6'53"; 6'58"; 14'13": Expressió de riure: Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



## **PROXÈMICA**

(ús de l'espai)

Postura:	Recta
Moviment:	Es manté estàtic en el punt d'inici, exceptuant els desplaçaments que realitza fins a la pissarra per dibuixar.
PARALLENGUATGE	

(qualitats veu i vocalitzacions)

"ah": 0'30"; 0'33"; 0'37"; 11'19"

## **CARACTERÍSTIQUES FÍSIQUES**

Sexe:	Home
Edat:	55 - 60 anys

Alçada:	1'82 - 1'87m
Forma física:	Normativa
Color de pell:	Blanca
Cabell:	Gris amb presència d'alopècia.
ARTEFACTES	
Vestuari:	Camisa blau marí, pantalons negres i mocassins negres.
Maquillatge:	No
Complements:	Cinturó negre, ulleres, micròfon, pissarra, retolador.
	ENTORN I MEDI (*7, *8)
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Al centre, pantalla amb la presentació. Cartell anunciant TEDxHull a la dreta de l'escenari i caixes blanques al fons com a decoració.
Audiència:	Distribuïda en grades i en forma de semi cercle al voltant de l'escenari.
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.
COMPORTAMENTS TÀCTILS	
No es produeix cap contacte físic amb l'audiència.	





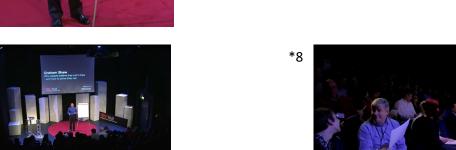








\*7



Taula 24. Anàlisi resumida de la TED Talk 12. Why people believe they can't draw. Graham Shaw (TEDxHull, febrer 2015)

Cinèsica	Les expressions d'afecte complementen el contingut verbal. Ús d'il·lustradors, reguladors i, sobretot, adaptadors.
Proxèmica	Postura recta i oberta. Es manté estàtic, a excepció de quan s'ha de desplaçar fins la pissarra.
Parallenguatge	
Característiques físiques	Home blanc, 55-60 anys, 1'82-1'87m, calb.
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Al centre, pantalla amb la presentació. Cartell anunciant TEDxHull a la dreta de l'escenari i caixes blanques al fons com a decoració. Il·luminació centrada en el ponent. Audiència distribuïda en grades i en forma de semicercle al voltant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Shaw (TEDxHull, febrer 2015)

Taula 25. Anàlisi completa de la TED Talk 13. The orchestra in my mouth. Tom Thum (TEDxSydney, maig 2013)

,	(TEDXSyuffey, maig 2015)	
<b>CINÈSICA</b> (classificació d'Ekman i Friesen)		
Emblemes:	*1 Salutació creuant i flexionant les cames i alçant una mica la camisa cap als costats com a mostra d'agraïment i comiat: 11'24"  *2 Salutació inclinant el tronc i el cap endavant: 11'27"	
II-lustradors:	*3 Representació de tocar una trompeta: 1'26''; 6'48''; 9'46''; 10'21''; 11'01'' Representació de tocar la bateria: 10'10'' *4 Representació de tocar un trombó: 10'41''	
Reguladors:	*5 Moure mans per marcar i acompanyar els sons que emet amb la boca: 0'45"; 0'47"; 1'22"; 1'39"; 1'52"; 2'15"; 2'25"; 2'48"; 3'34"; 4'51"; 4'56"; 5'12"; 5'31"; 5'51"; 5'54"; 6'00"; 8'35"; 8'49"; 9'02"; 9'12"; 9'19": 9'28"; 10'06"; 10'36"  Tapar-se la boca per marcar i acompanyar els sons que emet amb la boca: 1'28"; 2'31"  Colpejar-se el nas per marcar i acompanyar els sons que emet amb la boca: 1'49"; 3'29"  Colpejar-se el nas per marcar i acompanyar els sons que emet amb la boca: 5'46"  Mà alçada amb el palmell amunt com si sostingués una copa: 2'22"; 4'41"; 8'10"  Alçar el braç en senyal de victòria: 3'43"  Alçar el puny enlaire: 4'08"  Assenyalar-se a si mateix: 4'35"  Alçar dit índex per fer èmfasi: 4'49"  *6 Assenyalar els Kaoss Pads: 6'30"; 6'39"; 7'07"; 8'00"  Fregar-se les mans per preparar-se: 7'31"	
Adaptadors:	*7 Tocar-se les ulleres: 0'31"; 0'33"; 0'46"; 1'21'; 3'02"; 3'11"; 3'36"; 3'46"; 4'14"; 9'37"  Tocar-se la cara: 0'34"; 5'41"  *8 Tocar micròfon: 2'18"; 3'05"; 3'23"; 3'35"; 3'38"; 3'59"; 4'06"; 4'40"; 4'52"; 5'30"; 5'40"; 5'52"; 5'59"; 6'13": 6'37"; 6'57"; 8'09"; 8'56"; 9'05"  Tocar-se a si mateix: 3'06"  Pujar i baixar mà amb el palmell obert mirant lleugerament cap amunt: 3'14"; 4'03"; 4'07"; 4'21"; 7'03"  Moure la mà en cercles: 4'32"  Obrir la mà cap a fora: 4'46"  Fregar-se les mans amb els pantalons: 8'58"	
Expressions d'afecte:	En global transmet dinamisme i energia. No es pot identificar un patró, ja que està en constant moviment. Tanmateix, en els moments en els quals està quiet parlant, transmet obertura amb l'esquena recta i les espatlles obertes.  Ex. 4'01":  Bocause it is a bit of a niche market.  Hi ha moments ens els quals l'expressió acompanya al contingut.	

3'38"; 3'46"; 4'12"; 7'52": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



11'23": Expressió de satisfacció en acabar la conferència. Ulls oberts, pòmuls alçats i somriure pronunciat amb la boca tancada.



## **PROXÈMICA**

(ús de l'espai)

Postura:	Relaxada
Moviment:	Desplaçament dins d'una zona d'aproximadament 5 metres quadrats. Predominança de moviment corporal per acompanyar els sons que produeix.

## **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"mmm": 0'14"

"ah": 0'19"; 2'24"; 3'17"; 3'57"; 4'15"; 6'30"; 7'01"

## **CARACTERÍSTIQUES FÍSIQUES**

(\*9

Sexe:	Home
Edat:	28 anys
Alçada:	1'72 - 1'77 m
Forma física:	Normativa

Color de pell:	Blanca	
Cabell:	Castany i curt	
ARTEFACTES		
Vestuari:	Camisa blau clar, pantalons negres i sabates negres.	
Maquillatge:	No	
Complements:	Ulleres negres, micròfon de mà	
	ENTORN I MEDI (*10, *11)	
Espai:	Sala àmplia. Escenari amb cercle vermell. Taula de sons i altaveus. Sigles TEDxSydney2013 al fons de l'escenari.	
Audiència:	Distribuïda en fileres davant de l'escenari	
II-luminació:	Focalitzada en el ponent.	
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.	
COMPORTAMENTS TÀCTILS		
No es produeix cap contacte físic amb l'audiència.		

Font: Elaboració pròpia amb dades i imatges analitzades de Thum (TEDxSydney, maig 2013)























Taula 26. Anàlisi resumida de la TED Talk 13. The orchestra in my mouth. Tom Thum (TEDxSydney, maig 2013)

Cinèsica	Ús de poques expressions d'afecte, embles i il·lustradors. Tanmateix, s'identifica un elevat nombre de reguladors i adaptadors.
Proxèmica	Postura relaxada. Desplaçament dins d'una zona d'aproximadament 5 m². Abundants moviments corporals per acompanyar els sons que produeix amb la boca.
Parallenguatge	
Característiques	Home blanc, 28 anys, 1'72-1'77m, cabell castany curt.
físiques	
Artefactes	Vestimenta informal i acolorida.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell. Taula de sons i altaveus. Sigles TEDxSydney2013 al fons de l'escenari. Il·luminació centrada en el ponent. Audiència distribuïda en fileres davant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Thum (TEDxSydney, maig 2013)

Taula 27. Anàlisi completa de la TED Talk 14. How to spot a liar. Pamela Meyer (TEDGlobal 2011, juliol 2011)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
Il·lustradors:	-
Reguladors:	*1 Assenyalar a l'audiència: 0'12"; 0'21"; 1'15"; 18'14"  *2 Alçar dit índex per indicar èmfasi: 1'13"; 18'27"  Moure braços en moviments aleatoris: 14'09"  Ajuntar dit polze i índex per fer èmfasi: 17'52"  Assenyalar-se a si mateixa: 18'13"
Adaptadors:	Obrir les mans amb el palmell mirant cap avall: 0'07"; 9'54"; 10'38"  *3 Obrir i tancar braços amb les mans obertes amb els palmells mirant cap amunt: 0'26"; 0'33"; 0'37"; 0'42"; 1'01"; 1'09"; 1'39"; 2'00"; 2'22"; 2'42"; 3'19"; 3'32"; 3'56"; 4'19"; 5'06"; 5'26"; 7'02"; 7'10"; 8'14"; 8'51"; 9'24"; 10'05"; 10'20"; 11'18"; 13'01"; 13'36"; 14'34"; 14'40"; 16'26"; 16'52"; 17'15"; 17'39"; 18'10"  Pujar i baixar les mans amb els palmells mirant cap amunt: 0'23"; 0'55"; 1'26"; 1'56"; 2'17"; 2'46"; 3'18"; 3'44"; 4'57"; 5'01"; 5'18"; 5'58"; 7'19"; 7'51"; 9'18"; 10'47"; 11'06"; 11'33"; 12'43"; 13'39"; 14'03"; 14'14"; 14'19"; 14'29"; 14'53": 16'55"; 17'28"; 17'59"; 18'24"  *4 Ajuntar mans: 0'25"; 0'27"; 0'36"; 0'38"; 0'56"; 0'58"; 0'59"; 1'28"; 1'57"; 2'32"; 3'46"; 4'07"; 4'23"; 4'58"; 5'02"; 5'52"; 6'02"; 7'05"; 7'15"; 7'20"; 8'45"; 9'19"; 10'06"; 10'34"; 10'46"; 10'48"; 12'53"; 13'12"; 14'05"; 14'18"; 14'36"; 15'20"; 14'55"; 16'36"; 17'17"; 17'32"; 17'50"; 17'56"; 18'26"; 18'28"  Moure braços d'un costat a l'altre: 0'35"; 4'06"; 9'12"; 12'47"; 13'46"  Pujar i baixar mans amb el palmell mirant endins: 0'57"  Moure canell cap als costats: 0'58"  Moure mans en cercles: 8'31"  Obrir el braç cap a un costat: 11'07"; 17'03"; 17'47"  Moure mans endavant i enrere: 14'27"
Expressions d'afecte:	En global mostra una postura oberta. Esquena recta, espatlles obertes i mirada clara que transmet determinació. Ex. 0'27":  Hi ha moments ens els quals l'expressió acompanya al contingut.  3'34": Expressió de d'insatisfacció en explicar que tots evitem dir el que realment volem per vergonya.

Celles frunzides, nas arrufat i boca arronsada.



18'28": Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats, pòmuls alats i somriure pronunciat amb la boca oberta.



#### **PROXÈMICA**

(ús de l'espai)

	·	
Postura:	Recta i relaxada	
Moviment:	Durant la intervenció es manté majoritàriament estàtica en el punt d'inici. Al final, desplaçament cap a fora de l'escenari.	
PARALLENGUATGE (qualitats veu i vocalitzacions)		
-	-	
CARACTERÍSTIQUES FÍSIQUES  (*5)		
Sexe:	Dona	
Edat:	52 - 57 anys	
Alçada:	1'62 - 1'67 m	
Forma física:	Normativa	

Color de pell:	Blanca		
Cabell:	Pèl roig, rissat i per l'altura de les espatlles		
	ARTEFACTES		
Vestuari:	Brusa blanca, jaqueta verda, pantalons negres i sabates de taló negres.		
Maquillatge:	Pintallavis marró, coloret rosa, línia d'ulls, ombra d'ulls i màscara de pestanyes.		
Complements:	Collaret i arracades daurades, micròfon i comandament per passar les diapositives.		
	ENTORN I MEDI (*6, *7)		
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Escenari amb decoració floral i pantalla amb la presentació al centre. Sigles TED al fons a l'esquerra de l'escenari sota la pantalla.		
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari.		
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		
COMPORTAMENTS TÀCTILS			

Font: Elaboració pròpia amb dades i imatges analitzades de Meyer (TEDGlobal 2011, juliol 2011)



No es produeix cap contacte físic amb l'audiència.













Taula 28. Anàlisi resumida de la TED Talk 14. How to spot a liar. Pamela Meyer (TEDGlobal 2011, juliol 2011)

Cinèsica	Expressió bastant i transmetent determinació. Ús de reguladors i abundants adaptadors.
Proxèmica	Postura recta i estàtics durant tota la intervenció.
Parallenguatge	
Característiques	Dona blanca, 52-57 any, 1'62-1'67m, cabell pèl roig i per les espatlles.
físiques	
Artefactes	Vestimenta formal i acolorida.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent, decoració floral i pantalla amb la presentació al centre. Sigles TED al fons a l'esquerra de l'escenari sota la pantalla. Il·luminació centrada en la ponent. Audiència distribuïda en forma de semicercle al voltant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Meyer (TEDGlobal 2011, juliol 2011)

Taula 29. Anàlisi completa de la TED Talk 15. The art of misdirection. Apollo Robbins (TEDGlobal 2013, juny 2013)

<b>CINÈSICA</b> (classificació d'Ekman i Friesen)	
Emblemes:	*1 Baixar el cap i el tronc com a mostra d'agraïment i comiat: 8'27"
Il·lustradors:	-
Reguladors:	Alçar 3 dits per indicar èmfasi: 0'09'' Alçar les mans: 0'29''; 3'09'' Assenyalar una zona: 0'33''; 1'32''  *2 Assenyalar a l'audiència: 0'45''; 1'00''; 3'41''  *3 Assenyalar el cap: 0'56''; 2'08''; 3'05''; 3'29'' Alçar el braç enlaire: 1'07''; 1'49'' Baixar la ma per representar un tancament: 1'12'' Assenyalar-se a si mateix: 2'10'' Passar diapositiva: 2'11'' Moure braç cap al costat: 2'29''; 2'42'' Assenyalar la pantalla: 3'03'' Assenyalar enrere: 3'12'' Assenyalar el terra: 3'38''
Adaptadors:	Assenyalar endavant: 0'18"; 0'35"; 0'38"; 1'34"; 8'00"; 8'22"  *4 Obrir les mans cap a fora: 0'21"; 0'39"; 1'29"; 1'33"; 1'37"; 1'47"; 1'54"; 2'14"; 2'38"; 3'03"; 3'32"  *5 Ajuntar mans: 0'22"; 0'36"; 1'05"; 1'30"; 1'35"; 1'40"; 1'46"; 1'48"; 1'50"; 1'55"; 2'33"; 2'44"; 3'28"; 3'31"; 3'35"; 3'39"; 8'20"  Colpejar-se la mà amb el comandament: 1'02"  Moure les mans en cercles: 1'23"; 2'05"; 3'30"  Pujar i baixar mà amb dit polze i índex junts per indicar èmfasi: 1'43"; 2'34"; 2'50"  Pujar i baixar la mà tancada: 1'56"; 8'17"  Moure mans d'un costat a l'altre: 2'32"; 8'02"  Moure mans endavant i enrere: 2'40"  Fregar-se les mans: 4'00"; 5'17"; 7'57"; 8'05"  Tocar-se el front: 8'26"  Picar de mans: 8'26"
Expressions d'afecte:	En global mostra una postura oberta. Esquena recta i espatlles obertes. Mirada clara i endavant. Tendeix a alçar les celles per emfatitzar el contingut verbal. Ex. 3'40":

Hi ha moments ens els quals l'expressió acompanya al contingut.

0'09": Expressió d'incertesa, expectació en preguntar si creuen que és possible controlar l'atenció d'algú. Celles alçades, front frunzit, nas obert, boca avall amb llavis tancats i pressionats.



0'14": Expressió de dubte en preguntar si creuen possible controlar el comportament humà. Celles frunzides i boca tancada amb els llavis junts i sobresortint tensats cap a un costat.



0'18"; 0'30"; 5'28"; 6'36"; 7'39": Expressió de riure. Pòmuls alçats i somriure pronunciat amb la boca oberta.



0'42"; 0'56"; 3'19": Expressió de dubte en fer una pregunta. Celles baixades i frunzides, ulls lleugerament tancats i llavis tensats.



8'06": Expressió d'expectació i picardia en saber que a continuació hi haurà una sorpresa. Celles lleugerament alçades i lleuger somriure amb la boca tancada.



8'28": Expressió de satisfacció en acabar la conferència. Ulls oberts, pòmuls alçats i somriure pronunciat amb la boca tancada.



PROXÈMICA			
	(ús de l'espai)		
Postura:	Relaxada		
Moviment:	Desplaçaments dins la zona del cercle vermell marcat a l'escenari. Durant la intervenció es desplaça per la sala per interactuar amb l'audiència i escollir un oient per portar a l'escenari.  Al final, desplaçament cap a fora de l'escenari.		
	PARALLENGUATGE (qualitats veu i vocalitzacions)		
"ah": 2'07"; 4'52	"; 5'00"		
CARACTERÍSTIQUES FÍSIQUES  (*6)			
Sexe:	Home		
Edat:	39 anys		
Alçada:	1'68 - 1'73 m		
Forma física:	Normativa		
Color de pell:	Blanca		
Cabell:	Curt i gris		
ARTEFACTES			
Vestuari:	Camisa morada, armilla i americana blau fosc, pantalons marrons i sabates gris clar. / Camisa de quadres grisa i blanca.		
Maquillatge:	No		

Complements:	Micròfon, arracada, mocador de quadres blanc i negre i corbata de ratlles.		
	ENTORN I MEDI (*7, *8)		
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla amb retransmissió en directe del ponent i la presentació al centre. Sigles TED a sota la pantalla. Decoració abstracta amb tons blau, verd i lila.		
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari		
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		

#### **COMPORTAMENTS TÀCTILS**

- 3' 50": El ponent sosté i recorre la mà d'una espectadora.
- 3' 56": Carícia amistosa a l'espatlla en motiu d'agraïment.
- 4' 06": El ponent estableix contacte amb un espectador i revisa l'interior de la seva americana.
- 4' 09": Revisa les butxaques dels pantalons de l'espectador
- 4' 10": Carícia amistosa al braç esquerra en motiu d'agraïment
- 4' 11": Colpejar suaument el pit de l'espectador per acomiadar-se
- 4' 15": Encaixada de mans amb un espectador
- 4' 21": Colpejar suaument l'espatlla esquerra de l'espectador en motiu de confort
- 4' 47": Colpejar suaument l'espectador per guiar-lo
- 4' 48" 7' 50": Interacció amb l'espectador per realitzar un truc

Font: Elaboració pròpia amb dades i imatges analitzades de Robbins (TEDGlobal 2013, juny 2013)





\* 2



\*3













Taula 30. Anàlisi resumida de la TED Talk 15. The art of misdirection. Apollo Robbins (TEDGlobal 2013, juny 2013)

Cinèsica	Gran ús d'expressions d'afecte, reguladors i adaptadors. També
	s'identifica un emblema al final de la conferència.
Proxèmica	Postura recta i relaxada. Es mostra molt dinàmic. Durant la intervenció
	es desplaça per la sala per interactuar amb l'audiència i escollir un oient
	per portar a l'escenari.
Parallenguatge	
Característiques	Home blanc, 39 any, 1'68-1'73m, cabell gris i curt.
físiques	
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla
	amb retransmissió en directe del ponent i la presentació al centre.
	Sigles TED a sota la pantalla. Decoració abstracta amb tons blau, verd i
	lila. Il·luminació centrada en el ponent. Audiència distribuïda en forma
	de semicercle al voltant de l'escenari.
Comportaments	Es produeix contacte amb diverses persones del públic, especialment
tàctils	amb un voluntari que puja a l'escenari. Interactua amb ell per tal de fer
	una demostració de les seves habilitats.

Font: Elaboració pròpia amb dades analitzades de Robbins (TEDGlobal 2013, juny 2013)

Taula 31. Anàlisi completa de la TED Talk 16. The power of introverts. Susan Cain (TED 2012, febrer 2012)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Inclinar el cap en motiu d'agraïment i comiat: 18'38"
Il·lustradors:	-
Reguladors:	Aixecar la mà a l'alçada del pit: 0'21"; 0'38"; 8'43"  *2 Assenyalar-se a si mateixa: 0'23"; 2'56"; 4'33; 5'02"; 11'32" Assenyalar a l'audiència: 3'38"; 18'46" Alçar dit índex per indicar èmfasi: 1'02"; 18'10" Moure braços endavant i enrere amb els punys tancats: 1'04" Moure braços endavant i enrere per representar un intercanvi: 16'58"  *3 Mans alçades i obertes amb els palmells mirant endavant: 1'10"; 5'54"; 6'57"; 9'14"; 10'45"; 11'39"; 15'29"; 16'48"; 18'15" Alçar els braços amb les mans obertes: 2'16"; 16'39" Separar i ajuntar els braços amb les mans semi tancades: 5'14"; 8'04" Pujar les mans amb els palmells mirant cap amunt: 6'38"; 13'50" Tocar-se els dits per representar una enumeració: 6'48"; 15'32"; 16'36" Representar cometes amb els dits: 7'42"; 11'20" Tocar-se el pit: 12'52"; 18'39" Obrir i tancar els braços amb els palmells de la mà mirant avall: 14'10"; 15'59" Tocar-se el cap: 17'39" Indicar números amb els dits: 17'45"
Adaptadors:	Obrir i tancar els braços amb els palmells de la mà mirant amunt: 0'54"; 5'48"; 6'15"; 9'19"; 13'01"; 16'59" Obrir les mans amb els palmells mirant cap amunt: 1'41"; 2'28"; 4'03"; 4'32"; 7'48"; 7'59"; 8'51"; 11'14"; 12'41"; 14'13"; 15'36"; 17'54" Moure mans en cercles: 0'57"; 3'43"; 4'35"; 5'18"; 6'30"; 10'23"; 10'51"; 12'14"; 12'56"; 16'20" Pujar i baixar les mans amb els puny tancats: 0'59"; 1'58" Pujar i baixar les mans amb els palmells mirant amunt: 1'15"; 1'34"; 1'53"; 2'35"; 3'34"; 3'51"; 4'07"; 4'22"; 4'44"; 5'26"; 5'43"; 6'03"; 6'12"; 7'21"; 7'26"; 7'31"; 8'13"; 8'30"; 9'32"; 10'03"; 11'05"; 11'43"; 11'50"; 12'26"; 12'49"; 13'56"; 14'24"; 15'11"; 15'20"; 15'56"; 17'16"; 18'03" Pujar i baixar les mans amb els palmells mirant avall: 6'23"; 9'52"; 11'54"  *4 Ajuntar les mans: 1'27"; 1'35"; 1'43"; 1'48"; 1'54"; 2'24"; 2'53"; 3'11"; 3'35"; 3'39"; 4'00"; 4'23"; 4'47"; 5'03"; 5'35"; 5'46"; 5'52"; 5'55"; 6'46"; 7'14"; 7'22"; 7'27"; 8'24"; 8'55"; 9'30"; 9'34"; 10'35"; 10'42"; 10'55"; 11'08"; 11'23"; 11'44"; 11'51"; 12'36"; 13'03"; 13'12"; 14'03"; 14'37"; 15'14"; 15'23"; 15'37"; 16'11"; 16'30"; 17'23"; 17'37"; 17'55"  *5 Pujar i baixar mans amb els dits polze i índex junts: 3'04"; 3'22"; 4'15"; 4'39"; 4'55"; 6'06"; 7'02"; 8'01"; 8'06"; 8'21"; 9'26"; 10'15"; 10'47"; 11'32"; 13'05"; 14'19"; 16'09"; 16'18"; 16'26"; 16'50"; 17'04"; 18'18"  Moure braços d'un costat a l'altre: 1'46"; 5'06"; 9'55'; 10'39"; 12'01"; 12'06"  Tocar-se la cara: 5'36"; 9'09"; 9'58"; 14'27"

Posar-se la mà a la cintura: 9'09" Arremangar-se les mànigues: 10'30"

En global transmet una postura d'obertura. Esquena recta, espatlles obertes i mirada al front i clara. Ex. 3'12":



Hi ha moments ens els quals l'expressió acompanya al contingut.

1'31"; 5'15"; 5'51"; 6'18"; 7'12"; 7'25"; 10'34"; 13'27"; 15'50": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



### Expressions d'afecte:

2'55": Expressió de concreció i justificació en explicar perquè va escollir estudiar dret. Celles frunzides i ulls significativament tancats, nas arrufat i llavis tensos.



4'23": Expressió de resignació i disconformitat en explicar que determinades coses tot i no ser absolutes, passen en la majoria d'ocasions.



18'41": Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats, pòmuls alçats, i somriure tímid amb la boca oberta.



## **PROXÈMICA** (ús de l'espai)

Postura:	Recta i relaxada	
Moviment:	Durant la intervenció, desplaçaments dins del cercle vermell marcat a l'escenari.	
	PARALLENGUATGE (qualitats veu i vocalitzacions)	
"mmm": 6'00"; 6'	"mmm": 6'00"; 6'17"	
CARACTERÍSTIQUES FÍSIQUES  (*6)		
Sexe:	Dona	
Edat:	44 anys	
Alçada:	1'61 - 1'65 m	
Forma física:	Normativa	
Color de pell:	Blanca	
Cabell:	Castany fosc, llis, per l'alçada de les espatlles i serrell.	
ARTEFACTES		
Vestuari:	Vestit i botes negres	
Maquillatge:	Pintallavis marró, ombra d'ulls, línia dels ulls, màscara de pestanyes i coloret marró.	
Complements:	Bossa negre, collaret i arracades daurades, micròfon, taula	

ENTORN I MEDI (*7, *8)	
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat per la ponent. Sigles TED al fons de l'escenari.
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari.
II·luminació:	Focalitzada en la ponent, fent èmfasi a la zona del cercle vermell.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.

#### **COMPORTAMENTS TÀCTILS**

No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Cain (TED 2012, febrer 2012)











\*6



\*7



\*8



Taula 32. Anàlisi resumida de la TED Talk 16. The power of introverts. Susan Cain (TED 2012, febrer 2012)

Cinèsica	Gran ús d'expressions d'afecte, reguladors i adaptadors. També s'identifica un emblema al final de la conferència.
Proxèmica	Postura recta i oberta i desplaçaments dins del centre vermell.
Parallenguatge	
Característiques	Dona blanca, 44 anys, 1'61-1'66m, cabell castany fosc i a l'alçada de les
físiques	espatlles.
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat per la ponent. Sigles TED al fons de l'escenari. Il·luminació centrada en la ponent. Audiència distribuïda en forma de semicercle al voltant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Cain (TED 2012, febrer 2012)

Taula 33. Anàlisi completa de la TED Talk 17. The danger of a single story. Chimamanda Ngozi Adichie (TEDGlobal 2009, juliol 2009)

# CINÈSICA (classificació d'Ekman i Friesen) **Emblemes:** Il·lustradors: Reguladors: Tocar-se la roba: 0'06"; 0'34"; 0'43"; 2'01"; 5'54" \*1 Recolzar les mans una sobre de l'altre en el faristol: 2'04"; 3'41"; 4'09; 5'58"; 7'28"; 8'21"; 10'47"; 13'28"; 15'28"; 17'50" Adaptadors: Recolzar mans sobre el faristol: 0'13"; 10'33" \*2 Tocar el guió: 3'31"; 4'07"; 7'25"; 8'15"; 10'25"; 10'45"; 14'17" Tocar-se les mans: 13'23"; 14'28"; 17'40" En global mostra una postura oberta. Esquena recta i espatlles obertes. Mirada endavant i clara. Transmet determinació i sentiment. Hi ha moments ens els quals l'expressió acompanya al contingut. 0'58"; 1'30"; 4'37"; 11'02"; 11'14"; 15'06": Expressió de riure. Celles alçades, ulls oberts, pòmuls alcats i somriure pronunciat amb la boca oberta. **Expressions** d'afecte: 0'51"; 1'10"; 15'02": Expressió de seriositat. Celles baixades i frunzides, nas obert i boca tancada amb els llavis junts i pressionats. 3'28": Expressió d'enuig en reproduir les paraules que li havia dit la seva mare en renyar-la. Celles

frunzides, ulls lleugerament tancats, nas obert i llavis tensos. 18'24": Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats, i somriure tímid amb la boca tancada. **PROXÈMICA** (ús de l'espai) Postura: Recta i rígida Durant la intervenció es manté estàtica darrera el faristol. **Moviment:** Al final, desplaçament cap a fora de l'escenari. **PARALLENGUATGE** (qualitats veu i vocalitzacions) **CARACTERÍSTIQUES FÍSIQUES** (\*3) Sexe: Dona Edat: 32 anys Alçada: 1'71 - 1'76 m

Forma física:

Normativa

Color de pell:	Negra		
Cabell:	No es pot apreciar, ja que es troba cobert per un mocador.		
	ARTEFACTES		
Vestuari:	Samarreta interior blava, brusa de tirants beix, pantalons negres i sabates negres		
Maquillatge:	Línia d'ulls, ombra d'ulls, gloss i màscara de pestanyes		
Complements:	Mocador pel cabell vermell amb cercles beix i negres, arracades daurades i micròfon.		
	ENTORN I MEDI (*4, *5)		
Espai:	Sala àmplia. Escenari amb un faristol ocupat per la ponent. Pantalla llarga amb la retransmissió en directe de la ponent al centre de l'escenari i instruments musicals a la dreta com a decoració. Sigles TED al fons a l'esquerra de l'escenari.		
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari.		
Il·luminació:	Focalitzada en la ponent.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		
COMPORTAMENTS TÀCTILS			
No es produeix cap contacte físic amb l'audiència.			

Font: Elaboració pròpia amb dades i imatges analitzades de Ngozi Adichie (TEDGlobal 2009, juliol 2009)





\*3









Taula 34. Anàlisi resumida de la TED Talk 17. The danger of a single story. Chimamanda Ngozi Adichie (TEDGlobal 2009, juliol 2009)

Cinèsica	Ús d'expressions d'afecte per emfatitzar el contingut verbal. Només s'identifiquen adaptadors.
Proxèmica	Postura recta i tensa. Durant la intervenció es manté estàtica darrera el faristol.
Parallenguatge	
Característiques físiques	Dona negra, 32 anys, 1'71-1'76m, cabell cobert per un mocador.
Artefactes	Vestimenta formal i acolorida.
Entorn i medi	Sala àmplia. Escenari amb un faristol ocupat per la ponent. Pantalla llarga amb la retransmissió en directe de la ponent al centre de l'escenari i instruments musicals a la dreta com a decoració. Sigles TED al fons a l'esquerra de l'escenari. Il·luminació centrada en la ponent. Audiència distribuïda en forma de semicercle al voltant de l'escenari.
Comportaments tàctils	No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades analitzades de Ngozi Adichie (TEDGlobal 2009, juliol 2009)

Taula 35. Anàlisi completa de la TED Talk 18. How I held my breath for 17 minutes. David Blaine (TEDMED 2009, octubre 2009)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
Il·lustradors:	*1 Representació d'escriure per mòbil: 12'40''
Reguladors:	*2 Baixar la mà per representar un descens: 2'22"; 6'12"; 6'57"; 11'25"; 13'53" Pujar la mà per representar un ascens: 15'43" Dibuixar un quadrat per representar un tanc d'aigua: 3'24" Assenyalar-se a si mateix: 3'34"; 4'22"; 8'55"; 16'56"  *3 Assenyalar parts del cos: 12'10"; 16'40"; 16'49"; 16'58"; 17'00"; 17'10"; 17'49"; 18'51" Baixar els braços assenyalant el cos amb les mans: 6'29"; 6'40" Moure dits amunt i avall amb els palmells mirant amunt: 14'42" Obrir i tancar el braç a l'alçada del cap per representar el soroll d'un monitor: 14'59" Tocar-se els dits per indicar una successió: 17'41"; 19'41"
Adaptadors:	Moure mans en cercles: 0'15"; 0'33"; 2'47"; 3'15"; 3'27"; 6'09"; 6'54"; 9'02"; 12'00"; 12'07"; 14'18"  *4 Pujar i baixar mà amb el comandament agafat: 1'38"; 2'02"; 3'00"; 3'52"; 4'11"; 5'19"; 5'43"; 7'14"; 7'59"; 8'36"; 9'05"; 9'12"; 9'46"; 11'12"; 12'31"; 13'23"; 14'47"; 15'32"; 15'58"; 17'49"; 18'57"  Pujar i baixar mans amb els palmells mirant amunt: 4'58"; 6'16"  Pujar i baixar mans amb palmells mirant endins: 7'32"; 8'04"; 8'29"; 9'34"; 9'42"; 11'15"; 14'11"; 17'04"  Mà a la butxaca: 1'38"  Obrir mans amb els palmells mirant cap endins: 3'20"; 6'04"; 11'46"; 12'38"; 16'09"; 18'53"; 19'51"  *5 Obrir les mans amb els palmells mirant amunt: 4'03"; 4'53"; 5'30"; 5'47"; 6'45"; 12'20"; 12'58"; 13'03"; 14'20"; 15'50"; 16'59"; 18'59"; 19'35"  Obrir les mans amb els palmells mirant avall: 7'11"; 8'58"; 11'56"; 18'46"  Moure mà endavant: 19'14"  Beure aigua: 3'47"; 15'22"  Tocar-se els dits: 17'07"  Tocar-se la cara: 17'35"
Expressions d'afecte:	En global transmet timidesa. Esquena recta i mirada dispersa que transmet nerviosisme.  Ex. 4'54":  Hi ha moments ens els quals l'expressió acompanya al contingut.

3'46"; 16'50": Expressió de desconfort. Celles frunzides, ulls tancats, nas arrufat i llavis junts pressionats.



4'04"; 4'43"; 5'32"; 11'04"; 12'50"; 16'16"; 16'24"; 17'27"; 19'20": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



19'11": Expressió d'estranyament en sentir que un noi el cridava pel carrer. Celles frunzides, ulls lleugerament tancats, pòmuls alçats i llavis tensats.



19'42": Expressió d'emoció en recordar lo difícil que va ser l'experiència. Cap lleugerament inclinat cap al costat, celles frunzides, ulls tancats, nas frunzit, pòmuls alçats i llavis tremolosos.



#### **PROXÈMICA**

(ús de l'espai)

Postura:	Relaxada
Moviment:	Predominança de moviments laterals a la zona del voltant del faristol.

#### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"mmm": 9'00"; 15'09"; 15'49"

CARACTERÍSTIQUES FÍSIQUES  (*6)	
Sexe:	Home
Edat:	36 anys
Alçada:	1'78 - 1'83 m
Forma física:	Normativa
Color de pell:	Blanca
Cabell:	Marró fosc i rapat
	ARTEFACTES
Vestuari:	Samarreta blau fosc, jaqueta negra, texans i sabates grises.
Maquillatge:	No
Complements:	Micròfon i comandament per passar les diapositives.
	ENTORN I MEDI (*7, *8)
Espai:	Sala àmplia. Escenari ocupat pel ponent amb un faristol al centre. Pantalla a la part superior de l'escenari amb la presentació. Sigles TEDMED a sota la pantalla. Cadires vermelles a la part esquerra de l'escenari.
Audiència:	Distribuïda en fileres davant de l'escenari.
Il·luminació:	Focalitzada en el ponent.

#### So/Acústica:

Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.

#### **COMPORTAMENTS TÀCTILS**

20'09": Pressionada de braç per part d'un oient que estava assegut a l'escenari en motiu de confort.

Font: Elaboració pròpia amb dades i imatges analitzades de Blaine (TEDMED 2009, octubre 2009)









\*4



\*3



\*5



\*6



\*7





Taula 36. Anàlisi resumida de la TED Talk 18. How I held my breath for 17 minutes. David Blaine (TEDMED 2009, octubre 2009)

Cinèsica	Ús elevat d'expressions d'afecte, reguladors i adaptadors. També
	s'identifica un il·lustrador.
Proxèmica	Postura recta i moviments laterals al voltant del faristol.
Parallenguatge	
Característiques	Home blanc, 36 anys, 1'78-1'83m, cabell marró fosc i rapat.
físiques	
Artefactes	Vestimenta informal i neutra.
Entorn i medi	Sala àmplia. Escenari ocupat pel ponent amb un faristol al centre.
	Pantalla a la part superior de l'escenari amb la presentació. Sigles
	TEDMED a sota la pantalla. Cadires vermelles a la part esquerra de
	l'escenari. Il·luminació centrada en el ponent. Audiència distribuïda en
	fileres davant de l'escenari.
Comportaments	Al final de la conferència una persona del públic li pressiona el braç en
tàctils	motiu de confort.

Font: Elaboració pròpia amb dades analitzades de Blaine (TEDMED 2009, octubre 2009)

Taula 37. Anàlisi completa de la TED Talk 19. How to stop screwing yourself over. Mel Robbins (TEDxSF, juny 2011)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Flexionar les cames creuades mentre es sosté el vestit en motiu d'agraïment i comiat: 21'29''
Il·lustradors:	-
Reguladors:	Mà enlaire per protegir-se els ulls de la llum: 0'16"; 0'20" <sup>12</sup> Assenyalar a l'audiència. 0'36"; 1'55"; 6'04"; 7'09"; 7'41"; 7'49"; 10'36"; 16'10"; 16'12"; 16'15"; 18'04"; 18'15"; 20'05"; 20'21"; 21'26" Assenyalar enrere: 2'11"; 11'42"; 11'47" Assenyalar al terra: 2'12"; 3'43"; 14'39" Assenyalar el cap: 2'49"; 3'22"; 20'19" <sup>13</sup> Assenyalar la pantalla: 3'14"; 4'41"; 5'41"; 6'02"; 6'11"; 8'31"; 9'18"; 9'43"; 10'23"; 13'20"; 18'45"; 18'57" Assenyalar-se a si mateixa: 0'48"; 0'57"; 6'16"; 9'06"; 16'11"; 16'14"; 20'03" Indicar números amb els dits: 0'43"; 10'05"; 10'59"; 17'55"; 19'00"  Tancar els braços amb els palmells de les mans mirant endins: 1'36"; 20'55" Alçar les mans amb els palmells mirant endavant: 2'51"; 5'29"; 6'39"; 10'45"; 21'19" Alçar dit índex per fer èmfasi: 6'20"; 6'58"; 10'48"; 13'56"; 14'19"; 19'39"; 19'58"; 20'52" Pujar el braç amb el puny tancat: 14'24"; 14'44"; 18'28"; 19'37" Baixar la mà amb el palmell mirant avall: 6'32"; 13'16"; 13'44"; 14'15" Pujar mans amb els palmells mirant cap amunt: 9'07"; 10'54"; 18'07" Pujar i baixar la mà mentre fa espetegar els dits: 9'11"; 18'43"; 20'35" Moure els braços alactoriament: 9'15" Portar els braços amb els punys tancats a prop del pit: 9'38" Estirar el braç cap al costat amb la mà mirant endavant: 17'10" Estirar el braç cap endavant amb la mà mirant endavant: 18'25" Assenyalar endavant: 18'36"; 18'40"; 19'35" Moure el dit índex d'esquerra a dreta per indicar que no: 19'57" Assenyalar al costat: 20'33"; 20'37" Tocar-se els dits per indicar un seguit de números: 20'57"
Adaptadors:	*4 Obrir mans enfora amb els palmells mirant amunt: 0'21"; 0'26"; 0'34"; 0'40"; 0'47"; 0'56"; 1'03"; 1'21"; 1'39"; 2'22"; 2'47"; 3'33"; 3'45"; 3'58"; 4'45"; 4'56"; 5'19"; 5'45"; 6'44'; 7'26"; 9'00"; 9'33"; 9'52"; 10'03"; 10'19"; 11'24"; 11'33"; 12'01"; 12'56"; 13'11"; 14'27"; 14'32"; 14'35"; 14'41"; 15'08"; 15'14"; 15'26"; 17'30"; 18'06"; 19'18"; 20'09"; 20'40"  Obrir mans enfora amb els palmells mirant avall: 0'29"; 0'51"; 3'19"; 5'37"; 6'40"; 6'48"; 7'07"; 16'29"; 19'42"; 20'25"; 21'12"  Pujar i baixar mans amb els palmells mirant amunt: 1'06"; 1'26"; 1'49"; 3'00"; 4'04"; 4'23"; 4'47"; 5'50"; 20'13"  Pujar i baixar mans amb les puntes dels dits juntes: 1'58"; 2'37"; 2'56"; 5'34"; 9'54"; 10'00"; 11'10"; 12'13"; 13'01"; 14'58"; 17'35"; 18'22"; 19'07"; 19'45"; 20'32"; 21'22"  *5 Pujar i baixar les mans amb els palmells mirant endins: 2'53"; 3'56"; 9'58"; 10'35"; 11'38"; 12'58";

13'09"; 14'18"; 15'11"; 15'43"

Pujar i baixar la mà amb els dits polze i índex junts: 8'42"; 11'06"; 16'21"; 16'31"

Moure mans endavant: 1'52"

Moure mans en cercles: 4'10"; 4'26"; 7'32"; 15'22"

Moure el braç cap al costat: 2'33"; 3'35"; 5'58"; 8'45"; 10'52"; 12'22"; 17'38"

Tocar-se el cabell: 0'37"; 1'01"; 3'30"; 4'32"; 5'30"; 6'53"; 8'26"; 8'55"; 9'03"; 9'49"; 10'44";

11'56"; 12'55"; 13'38"; 14'53"; 18'58"; 20'23"; 20'53"

Tocar-se el cap: 6'37"; 6'56"; 13'37"; 14'35"

Tocar-se la cara: 7'39"

Tancar el puny: 1'34"; 13'49"; 21'14" Arremangar-se les mànigues: 2'15"

Posar-se la mà a la cintura: 3'15"; 9'20"; 12'05" Colpejar la mà amb el comandament: 10'38"

En global mostra una postura d'obertura. Esquena recta i espatlles obertes amb mirada clara i que transmet determinació i seguretat. Tendeix a frunzir el front amb les celles alçades per emfatitzar el contingut verbal.

Ex. 2'00":



Hi ha moments ens els quals l'expressió acompanya al contingut.

0'16"; 0'20": Expressió de molèstia en quedar-se enlluernada per un focus. Celles baixades i frunzides, ulls quasi tancats, nas arrufat i llavis tensats amb la boca oberta.



### Expressions d'afecte:

0'35": Expressió d'orgull en explicar que ajuda a la gent a aconseguir tot allò que volen. Celles alçades, ulls oberts, pòmuls alçats i llavis junts i tensats.



1'15";5'25"; 5'53"; 11'25": Expressió d'incredulitat. Celles frunzides i nas arrufat.



2'13"; 3'28"; 3'42"; 5'46"; 9'05"; 11'41"; 13'05"; 15'20"; 17'14"; 20'17": Expressió de seriositat. Celles baixades i frunzides, nas obert.



6'41"; 6'48"; 14'48": Expressió de resignació. Celles lleugerament alçades, nas arrufat i llavi superior arronsat cap amunt.



21'26": Expressió de satisfacció en acabar la conferència. Front frunzit amb les celles lleugerament alçades, nas obert i somriure pronunciat amb la boca oberta.



#### **PROXÈMICA**

(ús de l'espai)

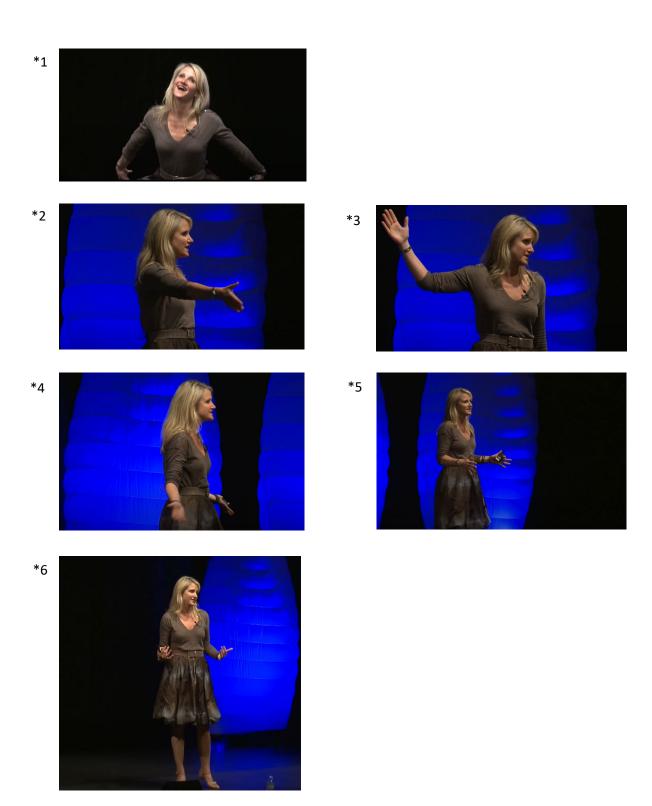
Postura:	Relaxada		
Moviment:	A l'inici, desplaçament fins al centre de l'escenari. Durant la intervenció predominança de desplaçaments laterals al llarg de l'escenari. A la meitat de la conferència baixa de l'escenari i es desplaça per la sala per interactuar amb el públic.		
	PARALLENGUATGE		
(qualitats veu i vocalitzacions)			
_			
CARACTERÍSTIQUES FÍSIQUES  (*6)			
Sexe:	Dona		

Edat:	43 anys		
Alçada:	1'65 - 1'70 m		
Forma física:	Normativa		
Color de pell:	Blanca		
Cabell:	Ros, Ilis, mitja melena.		
	ARTEFACTES		
Vestuari:	Vestit marró i sabates de taló.		
Maquillatge:	Pintallavis rosa fosc amb gloss, coloret rosa, ombra d'ulls, línia d'ulls i màscara de pestanyes.		
Complements:	Cinturó marró, rellotge, polseres negres, arracades daurades, micròfon, comandament per passar diapositives i ampolla d'aigua.		
	ENTORN I MEDI (*7, *8)		
Espai:	Sala àmplia. Escenari amb ocupat per la ponent. Pantalla per projectar la presentació a la part superior central de l'escenari. Cartell amb TEDxSF a sota la pantalla i cartell amb TEDxSanFrancisco a la dreta. Decoracions amb forma d'hèlices als extrems de l'escenari.		
Audiència:	Distribuïda en fileres davant de l'escenari.		
Il·luminació:	Focalitzada en la ponent.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		
COMPORTAMENTS TÀCTILS			

7'48": Girar a una persona del públic

7'52": Tocar l'espatlla de la persona del públic

Font: Elaboració pròpia amb dades i imatges analitzades de Robbins (TEDxSF, juny 2011)







Taula 38. Anàlisi resumida de la TED Talk 19. How to stop screwing yourself over. Mel Robbins (TEDxSF, juny 2011)

Cinèsica	Gran presència d'expressions d'afecte. Destaquen especialment l'ús de reguladors i adaptadors. També s'identifica un emblema al final de la conferència.
Proxèmica	Postura oberta i relaxada. Durant tota la intervenció es mostra molt dinàmica amb predominança de desplaçaments laterals. A la meitat de la conferència baixa de l'escenari i es desplaça per la sala per interactuar amb el públic.
Parallenguatge	
Característiques	Dona blanca, 43 anys, 1'65-1'70m, cabell ros i mitja melena.
físiques	
Artefactes	Vestimenta informal i neutra.
Entorn i medi	Sala àmplia. Escenari amb ocupat per la ponent. Pantalla a la part superior central de l'escenari. Cartell amb TEDxSF a sota la pantalla i cartell amb TEDxSanFrancisco a la dreta. Decoracions amb forma d'hèlices als extrems de l'escenari. Il·luminació centrada en la ponent. Audiència distribuïda en fileres davant de l'escenari.
Comportaments tàctils	S'estableix contacte amb una persona del públic.

Font: Elaboració pròpia amb dades analitzades de Robbins (TEDxSF, juny 2011)

Taula 39. Anàlisi completa de la TED Talk 20. How to make stress your friend. Kelly McGonigal (TEDGlobal 2013, juny 2013)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Tocar-se els avantbraços amb els braços creuats per indicar que parin: 4'39"
Il·lustradors:	*2 Representació d'eixugar-se una gota de suor: 4'55"  *3 Representació d'una abraçada: 7'56" Representació d'esnifar: 8'30"
Reguladors:	Assenyalar a l'audiència: 0'11"; 3'18"; 3'36"; 4'21"; 4'42" Assenyalar cap: 3'10"; 8'05"; 9'32" Assenyalar a la càmera: 3'42" Assenyalar la pantalla: 6'30" Assenyalar-se a si mateixa: 7'18" Assenyalar el cor: 12'37" Sacsejar el canell amb el palmell de la mà oberta mirant endavant: 0'18" Acostar dits polze i índex per indicar quelcom de dimensió petita: 0'21"  *4 Alçar la mà enlaire i oberta amb el palmell mirant endavant: 0'23"; 0'30"; 1'46"; 3'40"; 6'57": 7'57"; 9'27"  *5 Alçar dit índex per fer èmfasi: 3'28"; 3'45"; 7'02"; 7'30"; 10'46" Baixar els braç assenyalar tot el cos amb la mà: 3'13"; 7'10"; 9'34" Moure mans enrere per representar un moviment: 3'27" Creuar els braços: 3'54" Moure el dit índex en cercles per indicar un conjunt: 4'14" Indicar números amb els dits: 4'27" Moure la mà endavant i enrere sobre el pit per representar el batec del cor: 4'53"; 5'25"; 5'51"; 12'46" Tancar els braços amb els palmells de les mans mirant amunt per representar atracció: 8'11"
Adaptadors:	Ajuntar mans: 0'08"; 4'04"; 4'07"; 8'34"; 11'00"; 10'03"; 13'08"  Obrir mans amb els palmells mirant cap amunt: 0'40"; 0'53"; 1'26"; 2'03"; 2'50"; 4'06"; 4'43"; 4'58"; 6'38"; 11'07"; 11'28"; 11'36"; 12'49"  Obrir mans amb els palmells mirant cap avall: 1'16"; 1'44"; 2'08"; 2'37"; 9'48"; 11'39"  *6 Pujar i baixar mà amb les puntes dels dits juntes: 0'17"; 0'19"; 0'36"; 1'20"; 1'57"; 2'18"; 2'33"; 3'16"; 5'06"; 6'43"; 7'16"; 8'03"; 9'36"; 10'33"; 11'23"; 11'41"; 12'19"  *7 Pujar i baixar mans amb els palmells mirant cap amunt: 0'42"; 1'02"; 1'39"; 2'56"; 5'03"; 6'40"; 8'22"; 9'30"; 9'40"; 10'02"; 11'01"; 12'41"  Pujar i baixar mans amb els palmells mirant cap avall: 4'16"; 7'25"; 10'38"  Pujar i baixar mans amb els punys tancats: 0'45"; 1'32"; 8'01": 8'18": 8'59"; 10'40"  Moure mans endavant: 4'02"  Posar-se la mà a la cintura: 4'45"  Tocar-se els pantalons: 13'34"
Expressions d'afecte:	En global mostra una postura oberta. Esquena recta i espatlles obertes, mirada clara i endavant. Tendeix a tancar lleugerament els ulls per emfatitzar el contingut verbal Ex. 0'40'':



Hi ha moments ens els quals l'expressió acompanya al contingut.

0'56": Expressió d'enuig en dir als seus pacients que l'estrès fa emmalaltir. Celles baixades i frunzides, nas arrufat i llavis una mica enfora.



1'42"; 3'40"; 4'19"; 11'22": Expressió de riure. Celles lleugerament alçades, pòmuls alçats i somriure amb la boca oberta.



2'01": Cara de circumstància en explicar que una determinada l'increment del risc a morir per culpa de l'estrès només era complia en aquelles persones que creien que l'estrès era perjudicial. Celles alçades i front frunzit, nas obert, mirada al costat i boca avall amb llavis junts.



3'55"; 4'47": Expressió de desaprovació en imitar les expressions que realitzaven els jutges de l'estudi. Cap lleugerament inclinat cap avall, celles frunzides, boca tancada i avall amb llavis junts. // 3'57": Transició a celles alçades i ulls i boca oberts.



//



6'52": Expressió de determinació en afirmar que vol aconseguir que el públic millori la seva gestió de l'estrès. Celles frunzides, nas arrufat, pòmuls alçats i llavis sobresortint.



9'26": Expressió de dubte en preguntar al públic com convertir una determinada informació en quelcom beneficiós per la salut. Celles frunzides, ulls lleugerament tancats, pòmuls alçats i boca oberta.



13'14": Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats, pòmuls alçats i somriure tímid amb la boca tancada.



#### **PROXÈMICA**

(ús de l'espai)

	(45 45 : 55   54	
Postura:	Recta	
Moviment:	Durant la intervenció, desplaçaments dins del cercle vermell marcat a l'escenari. Al final, desplaçament cap a fora de l'escenari.	
PARALLENGUATGE (qualitats veu i vocalitzacions)		
-		
CARACTERÍSTIQUES FÍSIQUES  (*8)		
Sexe:	Dona	
Edat:	36 anys	

Alçada:	1'64 - 1'69 m
Forma física:	Normativa
Color de pell:	Blanca
Cabell:	Pèl roig, ondulat i per les espatlles.
	ARTEFACTES
Vestuari:	Samarreta beix, americana blau fosc, pantalons vermells i sabates de taló marrons.
Maquillatge:	Pintallavis rosa amb gloss, coloret rosa, ombra d'ulls, línia d'ulls i màscara de pestanyes.
Complements:	Polsera vermella, collaret daurat, arracades daurades, micròfon i comandament per passar les diapositives.
	ENTORN I MEDI (*9, *10)
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla a la part superior esquerra de l'escenari amb la retransmissió en directe de la ponent i la presentació. Sigles TED a sota la pantalla. Figures daurades com a decoració als extrems de l'escenari.
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari.
II·luminació:	Focalitzada en la ponent, fent èmfasi a la zona del cercle vermell.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.
COMPORTAMENTS TÀCTILS	
14'16": Encaixada de mans amb Chris Anderson (fundador TED).	

Font: Elaboració pròpia amb dades i imatges analitzades de McGonigal (TEDGlobal 2013, juny 2013)



Taula 40. Anàlisi resumida de la TED Talk 20. How to make stress your friend. Kelly McGonigal (TEDGlobal 2013, juny 2013)

Cinèsica	S'identifica un nombre molt elevat d'expressions d'afecte, així com reguladors i adaptadors. També s'observa la presència d'il·lustradors i un emblema.
Proxèmica	Postura recta i oberta. Durant la intervenció es desplaça per dins del cercle vermell.
Parallenguatge	
Característiques físiques	Dona blanca, 36 anys, 1'64-1'69m, cabell pèl roig i per les espatlles.
Artefactes	Vestimenta formal i acolorida.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla a la part superior esquerra de l'escenari amb la retransmissió en directe de la ponent i la presentació. Sigles TED a sota la pantalla. Figures daurades com a decoració als extrems de l'escenari. Il·luminació centrada en la ponent. Audiència distribuïda en forma de semicercle al voltant de l'escenari.
Comportaments	Al final de la conferència es produeix una encaixada de mans amb Chris
tàctils	Anderson.

Font: Elaboració pròpia amb dades analitzades de McGonigal (TEDGlobal 2013, juny 2013)

Taula 41. Anàlisi completa de la TED Talk 21. The future we're Building – and boring. Elon Musk (TED 2017, abril 2017)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	*1 Alçar la mà amb el palmell mirant endavant en motiu d'agraïment i comiat: 40'38''
Il·lustradors:	*2 Representació de conduir: 21'43"
Reguladors:	*3 Moure canell d'esquerra a dreta per representar una aproximació: 2'05"; 7'56"; 13'33"; 15'30"; 25'06"  *4 Alçar els dits índex i dit del mig per indicar èmfasi: 2'21"; 5'20" Indicar un número amb els dits: 3'43"; 24'41" Moure el dit índex en cercles: 4'38": 21'39" Moure mans en cercles: 6'28" Moure el braç cap endins amb la mà oberta i el palmell mirant endins: 8'11"; 27'29" Pujar la mà amb el palmell mirant avall: 16'35" Traçar una "V" invertida per representar una muntanya: 21'17" Traçar un recorregut amb el dit índex: 21'58" Baixar el braç amb el palmell de la mà en forma còncava mirant amunt: 23'27" Assenyalar la pantalla: 30'44"; 31'09"; 32'40" Baixar el braç amb la mà en diagonal per representar un descens: 37'59"
Adaptadors:	Obrir les mans amb els palmells mirant amunt: 0'41"; 0'47"; 1'00"; 2'46"; 4'15"; 6'05"; 10'29"; 10'56"; 12'01"; 18'14"; 18'52"; 19'08"; 19'25"; 20'16"; 20'31"; 21'25"; 29'42"; 30'00"; 30'09"; 31'38"; 35'01"; 38'26"  *5 Obrir les mans amb els palmells mirant avall: 1'11"; 1'15"; 2'49"; 3'23"; 3'57"; 5'04"; 7'31"; 8'08"; 9'22"; 9'27"; 9'42"; 12'00"; 12'50"; 13'10": 14'43"; 17'15"; 17'47"; 19'00": 20'05"; 20'26": 21'42"; 23'10"; 23'30"; 24'21"; 24'56"; 26'02": 34'32"; 36'03"; 36'24"  Obrir les mans amb els palmells mirant endins: 6'26"; 7'15"; 7'26"; 8'29"; 11'01"; 11'26"; 11'47"; 11'50"; 13'15"; 17'12"; 19'02"; 24'09"; 29'27"; 29'48"; 29'54"; 36'37"  Pujar i baixar la mà amb el palmell mirant avall: 1'58"; 2'56"; 3'06"; 13'34"; 24'16"  Pujar i baixar la mà amb el palmell mirant amunt: 6'07"; 8'49"; 11'54": 18'17"; 20'20": 21'22"; 24'27"; 37'42"; 38'20"  *6 Pujar i baixar la mà amb el dit polze i índex tocant-se: 2'24"; 3'32"; 3'49"; 4'02"; 5'13"; 5'27"; 6'14"; 6'33"; 7'50"; 9'53"; 10'16"; 15'07"; 15'38"; 16'21"; 17'25"; 18'02"; 18'27": 20'35"; 22'57"; 23'15"; 23'33": 23'48"; 25'27"; 26'55": 33'03"; 33'32"; 36'06"; 36'21"; 36'31"; 37'52"; 38'06"  Pujar i baixar mà amb el palmell mirant endins: 3'56"; 4'20"; 427"; 4'42"; 4'49"; 5'47"; 6'11"; 6'45"; 8'32"; 9'29'; 9'49"; 10'07"; 10'49"; 15'34"; 16'14"; 17'21"; 17'42": 19'13": 20'45": 21'20": 21'35"; 24'23"; 25'53"; 27'24"; 31'31"; 35'18"; 37'15"; 37'29"; 39'54"  Pujar i baixar les mans amb les puntes dels dits creant un rombe: 6'25"; 8'23"; 8'39"; 9'30"; 10'08"; 11'31"; 11'43"; 11'48"; 16'12"; 17'03"; 18'08": 21'12"; 24'07"; 25'11"; 29'44"; 29'49"; 31'40"; 35'59"; 36'48"; 37'17"  Pujar i baixar les mans amb les dits polze i índex arronsats creant una "U": 7'47"; 8'03"; 9'40"  Tocar-se les mans: 4'25"; 8'33"; 9'28"; 11'57"; 25'10"; 29'55"; 36'12"; 36'22"; 38'23"; 38'29"  Tocar-se les mans: 4'25"; 8'33"; 9'28"; 11'57"; 25'10"; 29'55"; 36'12"; 36'22"; 38'23"; 38'29"

Tocar-se la cama: 0'32"; 0'56": 1'10"; 3'02"; 6'02"; 7'35"; 8'14"; 10'38"; 11'03"; 12'04"; 13'06"; 15'56"; 17'59"; 18'57"; 21'51"; 24'15"; 26'35"; 29"04"; 31'11"; 32'09"; 34'02"; 35'52"; 39'38" Tocar-se la cara: 0'33"; 7'08"; 7'36"; 8'47"; 9'14"; 10'55"; 13'20"; 15'01"; 15'10"; 16'00"; 17'01"; 18'54"; 21'04": 21'32": 22'09"; 23'45"; 25'00"; 26'36"; 28'18"; 29'28"; 30'11"; 32'29"; 40'21" Tancar els punys: 19'18"

Beure aigua: 0'15"; 10'31"; 12'18"; 15'46"; 27'51" Moure mans en cercles: 25'20"; 36'45"; 37'09"; 40'28"

En global mostra una postura d'obertura tot i estar assegut. Esquena recta, espatlles obertes i mirada endavant. Transmet seriositat, confiança i determinació Ex. 0'51'':



Hi ha moments ens els quals l'expressió acompanya al contingut.

1'00"; 6'48"; 12'23"; 13'09"; 19'40"; 19'53"; 21'47"; 21'52"; 22'41"; 24'31"; 40'16"; 40'32": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure modest amb la boca oberta.



3'12": Expressió de pensar en intentar recordar una xifra exacte. Celles lleugerament frunzides, ull quasi tancats, nas arrufat i boca lleugerament oberta.

# Expressions d'afecte:



3'59"; 10'19"; 17'27"; 25'06"; 27'48": Expressió de càlcul i concreció. Celles frunzides, un ull quasi tancat i l'altre tancat, nas arrufat i boca lleugerament alçada cap a un costat.



9'06"; 11'58"; 12'37"; 16'02"; 39'47": Expressió de concentració. Celles significativament frunzides, ulls lleugerament tancats, nas arrufat i llavis una mica sobresortint.



30'06": Expressió de consideració en explicar que ha utilitzat les reunions per defensar la immigració i el canvi climàtic. Celles alçades, ulls oberts, i comissures del llavis tensats cap avall.



### **PROXÈMICA**

(ús de l'espai)

Postura:	Relaxada
Moviment:	A l'inici, desplaçament fins a la butaca dreta situada al centre de l'escenari dins del cercle vermell.  Durant la intervenció es manté assegut a la butaca.  Al final, desplaçament cap a fora de l'escenari.

### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"mmm": 0'38"; 0'41"; 0'59"; 1'02"; 1'27"; 1'52"; 1'54"; 2'04"; 2'08"; 2'46"; 3'14"; 3'32"; 3'59"; 4'23"; 4'30"; 4'54"; 5'19"; 6'28"; 6'38"; 6'45"; 7'16"; 7'20": 7'30"; 7'40"; 7'49"; 7'56"; 8'14"; 8'35"; 8'45"; 5'53"; 9'18"; 9'32"; 9'52"; 10'05"; 11'05"; 11'47"; 12'05"; 12'41"; 12'56"; 13'14"; 13'26"; 14'22"; 14'30"; 15'13"; 16'11"; 16'35"; 17'23"; 18'29"; 19'14"; 19'26"; 19'58"; 20'22"; 20'49"; 21'25"; 23'00"; 23'25"; 23'56"; 24'09"; 25'01"; 25'22"; 26'05"; 26'48"; 27'06"; 28'48"; 29'45"; 29'48"; 30'00"; 30'13"; 31'39"; 31'54"; 32'08"; 32'48"; 33'02"; 32'16"; 33'45"; 34'29"; 34'41"; 34'59"; 35'26"; 36'19"; 36'30"; 36'44"; 37'04"; 37'26"; 37'54"; 39'49"

### **CARACTERÍSTIQUES FÍSIQUES**

(\*7

Sexe:	Home
Edat:	46 anys
Alçada:	1'85 - 1'90 m
Forma física:	Normativa
Color de pell:	Blanca

Cabell:	Castany, curt i amb tupè		
	ARTEFACTES		
Vestuari:	Samarreta marró, americana negra, pantalons negres i botes negres.		
Maquillatge:	No		
Complements:	Got d'aigua i micròfon.		
ENTORN I MEDI (*8, *9)			
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla llarga com l'escenari amb retransmissió en directe del ponent als extrems i la presentació del ponent al centre. Sigles TED a sota la pantalla.  2 butaques al centre del cercle vermell amb una tauleta i 2 gots amb aigua.		
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari		
II·luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		

### **COMPORTAMENTS TÀCTILS**

0'5": Encaixada de mans de benvinguda amb Chris Anderson (fundador TED). 40'33": Encaixada de mans de comiat amb Chris Anderson (fundador TED).

Font: Elaboració pròpia amb dades i imatges analitzades de Musk (TED 2017, abril 2017)



\*5



\*7





Taula 42. Anàlisi resumida de la TED Talk 21. The future we're Building – and boring. Elon Musk (TED 2017, abril 2017)

Cinèsica	S'observen expressions d'afecte per acompanyar el contingut verbal. S'identifiquen emblemes, il·lustradors, reguladors i un ús molt elevat d'adaptadors.
Proxèmica	Postura recta i relaxada. Es manté assegut durant tota la intervenció.
Parallenguatge	
Característiques físiques	Home blanc, 46 anys, 1'85-1'90m, cabell castany i curt.
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla llarga com l'escenari amb retransmissió en directe del ponent als extrems i la presentació del ponent al centre. Sigles TED a sota la pantalla.  2 butaques al centre del cercle vermell amb una tauleta i 2 gots amb aigua. Il·luminació centrada en el ponent. Audiència distribuïda en forma de semicercle al voltant de l'escenari.
Comportaments	S'identifica una encaixada de mans amb Chris Anderson a l'inici i al final
tàctils	de la intervenció.

Font: Elaboració pròpia amb dades analitzades de Musk (TED 2017, abril 2017)

# Taula 43. Anàlisi completa de la TED Talk 22. My stroke of insight. Jill Bolte Taylor (TED 2008, febrer 2008)

2008, febrer 2008)	
<b>CINÈSICA</b> (classificació d'Ekman i Friesen)	
Emblemes:	*1 Alçar la mà en motiu d'agraïment: 18'06"
II·lustradors:	*2 Acció d'agafar coses: 5'11"  *3 Agafar-se el braç i fer acció de clicar números de telèfon: 12'27"
Reguladors:	Obrir i tancar els braços alçats per sobre el cap: 0'19"; 4'14"; 14'20"  '* Assenyalar parts del cos: 0'29"; 3'49"; 3'52"; 4'30"; 7'29"; 7'44"; 7'50"; 8'09"; 11'04"; 11'56"; 14'40"; 17'04" Assenyalar endavant i enrere per representar el passat i el futur: 5'03"; 5'23" Assenyalar enlaire: 5'08"; 5'37"; 6'10"; 8'47"; 8'57"; 9'19"; 14'29"; 17'21" Assenyalar al costat: 9'44" Assenyalar-se a si mateixa: 16'59"; 17'52" Assenyalar a l'audiència: 17'23" Dibuixar un cercle amb les mans per indicar una zona: 0'33" Moure braços d'un costat a l'altre: 1'15"; 13'21" Moure braços endavant amb els palmells mirant endavant: 6'06" Moure braços per sobre el cap en forma de "V": 3'58"; 4'24"; 7'40"; 9'00"; 16'42"; 17'00"; 17'07"  '5 Moure braç cap un costat: 4'56"; 9'31"; 9'36"; 9'58"; 10'18"; 10'29"; 10'52"; 12'15" Obrir i tancar el canell amb la mà a l'alçada del cap: 5'49"; 6'22"; 7'10" Tancar el puny: 6'24"; 6'34" Pujar i baixar els braços aleatòriament per representar desequilibri: 7'58" Moure ens en cercles per representar moviment: 8'15" Moure mans en cercles per representar energia: 8'21" Pujar els braços amb els palmells de les mans mirant amunt: 8'55"; 13'36"; 14'44"; 15'23" Pujar i baixar els braços amb els palmells de les mans mirant amunt: 14'48"; 15'47" Tocar el palmell de la mà amb l'altre mà perpendicular: 9'05"; 10'08" Entrellaçar els digits d'una targeta: 11'28"; 12'08" Pujar el braç fent un semi-cercle per representar una onada: 11'38" Obiri i tancar el braç amb el puny tancat per representar una targeta: 11'44" Acostar dit polze i índex per indicar una mida: 11'50" Mà oberta amb el palmell mirant amunt per representar una targeta: 12'04" Representació de sostenir el telèfon: 12'38" Acostar mans fins a tocar-se per representar un globus desinflant-se: 13'33"
Adaptadors:	Obrir braços amb els punys tancats: 0'24"  *6 Obrir mans amb els palmells mirant amunt: 3'39"; 4'35": 5'54"; 6'46"; 9'26"; 9'40"; 9'54"; 10'03"; 12'36"; 12'52"; 13'06"; 14'09"; 17'28"; 17'59"  Obrir mans amb els palmells mirant avall: 3'46"; 8'31"; 10'59"  *7 Pujar i baixar mans amb els palmells mirant endins: 0'58"; 5'33"; 5'45"; 6'40"; 8'26"; 10'15"; 12'00": 12'30"

Pujar i baixar mans amb els palmells mirant amunt: 1'19"; 9'08"; 10'45"; 17'15"

Pujar i baixar mans amb els palmells mirant avall: 1'28"; 3'42"

Pujar i baixar mans amb els punys tancats: 1'59"; 6'27": 12'18"; 12'58"; 16'48" Pujar i baixar mans amb les puntes dels dits tocant-se: 6'03"; 8'06"; 13'09"

Ajuntar mans: 1'42"; 13'24"

Tocar-se el cap: 10'00"; 11'18"; 14'14"; 14'26"

En global mostra una postura d'obertura. Esquena recta, espatlles obertes i mirada dispersa, ja que és molt dinàmica.

Ex. 0'18":



Hi ha moments ens els quals l'expressió acompanya al contingut.

3'28": Expressió de desconcert en no trobar la persona a qui li havia de tornar el cervell. Cap girat cap a un costat, celles alçades i ulls oberts.



6'30"; 6'36"; 14'34"; 15'07": Expressió de dolor en recordar la sensació que va sentir el dia de l'ictus. Celles frunzides, ulls tancats, nas arrufat i boca tancada amb els llavis pressionats.

## Expressions d'afecte:



7'04"; 8'22"; 8'36"; 12'50"; 14'30": Expressió de desconcert en explicar com va sentir les fases de l'ictus. Celles frunzides, ulls tancats i llavis sobresortint format una "o".



8'48"; 8'56"; 9'17"; 9'51": Expressió de meravellar-se per tot el que estava passant i com ho estava sentint. Cap alçat cap amunt, mirada enlaire amb els ulls lleugerament tancats i boca oberta.



10'44": Expressió de sorpresa i fascinació en descobrir que estava tenint un ictus. Celles lleugerament

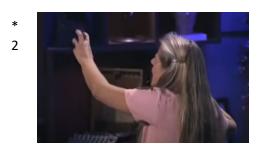
alçades, ulla molt oberts i boca oberta. 10'47": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta. 13'50"; 15'22"; 15'57": Expressió d'emoció en recordar l'experiència. Celles lleugerament frunzides, ulls plorosos i llavis tremolosos. **PROXÈMICA** (ús de l'espai) Relaxada Postura: **Moviment:** 

# PROXÈMICA (ús de l'espai) Postura: Relaxada Moviment: Desplaçaments dins del cercle vermell marcat a l'escenari. En els moviments intervé tot el cos. PARALLENGUATGE (qualitats veu i vocalitzacions) - CARACTERÍSTIQUES FÍSIQUES Edat: 49 anys

	,		
Alçada:	1'65 - 1'70 m		
Forma física:	Normativa		
Color de pell:	Blanca		
Cabell:	Gris, Ilis i llarg		
	ARTEFACTES		
Vestuari:	Polo rosa, pantalons negres i sabates negres.		
Maquillatge:	Pintallavis rosa, ombra d'ulls i coloret rosa.		
Complements:	Arracades daurades amb una perla penjant, guants de làtex, cervell, micròfon i comandament per passar les diapositives.		
	ENTORN I MEDI (*9, *10)		
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat per la ponent. Pantalla a la dreta de l'escenari per projectar la presentació. Sigles TED sota la pantalla. Decoració a la part esquerra ambientada en una habitació.		
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari.		
II-luminació:	Focalitzada en la ponent, fent èmfasi a la zona del cercle vermell.		
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.		
COMPORTAMENTS TÀCTILS			
18'37": Abraçada amb Crhis Anderson (fundador TED).			

Font: Elaboració pròpia amb dades i imatges analitzades de Bolte Taylor (TED 2008, febrer 2008)





















Taula 44. Anàlisi resumida de la TED Talk 22. My stroke of insight. Jill Bolte Taylor (TED 2008, febrer 2008)

Cinèsica	Ús molt elevat d'expressions d'afecte i reguladors. També s'identifiquen
	adaptadors, il·lustradors i un emblema al final de la conferència.
Proxèmica	Postura recta i relaxada. Es desplaça dins del cercle vermell i es mostra
	molt dinàmica. En els moviments hi intervé tot el cos.
Parallenguatge	
Característiques	Dona blanca, 49 anys, 1'65-1'70m, cabell gris i llarg.
físiques	
Artefactes	Vestimenta formal i acolorida.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat per la ponent. Pantalla a la dreta de l'escenari. Sigles TED sota la pantalla. Decoració a la part esquerra ambientada en una habitació. Il·luminació centrada en la ponent. Audiència distribuïda en forma de semicercle al voltant de l'escenari.
Comportaments	Al final de la conferència es produeix una abraçada amb Chris
tàctils	Anderson.

Font: Elaboració pròpia amb dades analitzades de Bolte Taylor (TED 2008, febrer 2008)

# Taula 45. Anàlisi completa de la TED Talk 23. The puzzle of motivation. Dan Pink (TEDGlobal 2009, juliol 2009)

CINÈSICA (classificació d'Ekman i Friesen)	
Emblemes:	-
II·lustradors:	
Reguladors:	Pujar mà amb el palmell mirant amunt per indicar ascens: 0'56"  *¹ Pujar mà amb el palmell mirant avall per indicar posició: 3'24"; 9'21"; 10'05"; 10'09"; 15'45" Assenyalar-se a si mateix: 1'58"; 8'36" Assenyalar endavant: 2'08"; 2'22" Assenyalar al costat: 3'27"; 6'00"; 10'49" Assenyalar enrere: 4'15"; 4'29"; 5'52"; 10'42"  *² Alçar dit índex per fer èmfasi: 2'06"; 4'27"; 4'41"; 4'58"; 5'45"; 6'57"; 8'49"; 12'11"; 12'52"; 13'36"; 14'25"; 16'05"; 16'36"; 17'20" Moure la mà en zig-zag per representar l'acció de pelar: 2'28" Moure braç endavant per representar moviment: 6'28" Tocar repetidament el dit índex amb el polze per representar l'acció de clicar: 3'07" Indicar números amb els dits: 4'07"; 12'29"; 17'31" Mans obertes i paral·leles a l'alçada de la cara: 6'48"; 6'54" Tocar-se els dits per indicar successió: 10'38"
Adaptadors:	Moure mans en cercles: 0'20"; 3'06"; 4'32"; 7'56"; 9'10"; 12'13"; 14'01"; 14'09"; 14'46"; 16'17"  *3 Pujar i baixar mans amb palmells mirant cap endins: 0'22"; 0'32"; 1'07"; 3'14"; 3'33"; 3'41"; 4'37"; 5'17"; 5'30"; 6'32"; 7'20"; 7'40"; 8'00"; 8'42"; 9'14"; 9'59"; 11'01"; 11'38"; 12'01"; 12'40"; 13'10"; 13'30"; 15'07"; 15'19"; 16'03"; 16'50"; 17'11"; 17'54"  Pujar i baixar mans amb dits polze i índex junts: 2'55"; 4'50"; 6'23"; 7'05"; 13'35"; 14'34"; 16'11"; 17'14"; 17'19"; 17'28"; 17'32"; 17'36"  Pujar i baixar mans amb palmells mirant avall: 4'00"; 4'22"; 5'26"; 5'48"; 10'57"  Pujar i baixar mans amb palmells mirant amunt: 6'08"; 7'31"; 8'19"; 12'20"; 15'51"; 16'47"  Ajuntar mans amb puntes dels dits tocant-se creant un triangle: 0'30"; 0'35"  Obrir mans amb els palmells mirant amunt: 0'52": 2'34"; 3'37"; 8'27"; 9'24"; 10'31"; 11'27"; 12'58"; 15'33"; 17'09"  *4 Obrir mans amb els palmells mirant avall: 1'33"; 2'18"; 2'32"; 3'29"; 3'55"; 4'20"; 5'06"; 5'23"; 6'43"; 6'51"; 9'02"; 9'51"; 10'06"; 10'53"; 13'26"; 13'31"; 13'59"; 14'05"; 14'36"; 14'53"; 15'41"; 17'35"; 17'45"  Obrir braç cap al costat: 3'36"; 7'22"; 7'27"; 8'37"; 11'55"; 12'06"; 13'55"; 16'23"; 17'06"  Moure braços d'un costat a l'altre: 0'41"; 3'09"; 5'28"; 9'53"; 13'03"; 13'34"  Fregar-se les mans: 0'05"; 1'02"  Posar-se mans a les butxaques: 0'13"
Expressions d'afecte:	En global presenta una postura oberta. Esquena recta, espatlles obertes i mirada clara que transmet determinació. Tendeix a alçar les celles i frunzir el front per emfatitzar el contingut verbal. Ex. 5'25":



Hi ha moments ens els quals l'expressió acompanya al contingut.

0'46": Expressió de vergonya en reconèixer que no li va anar gaire bé a la universitat. Celles alçades, front frunzit, ulls oberts i boca tancada amb llavis pressionats.



1'17": Expressió d'inseguretat en explicar que anirà en contra del consell de la seva dona. Una cella frunzida i l'altra alçada, nas arrufat i llavis tensos.



6'41": Expressió de concentració en explicar com només els subjectes de l'estudi només es fixen en l'objectiu final. Celles frunzides, ulls lleugerament tancats, nas arrufat i llavis sobresortint.



8'27": Expressió de desesperació en explicar com un determinat sistema de recompensa no funciona. Celles alçades, front frunzit, ulls oberts, boca avall i oberta.



# **PROXÈMICA** (ús de l'espai)

Postura:	Recta
Moviment:	Durant la intervenció, predominança de moviments laterals dins del rectangle vermell marcat a l'escenari.  Al final, desplaçament cap a fora de l'escenari.

# **PARALLENGUATGE** (qualitats veu i vocalitzacions) "ah": 0'09"; 0'24"; 0'37"; 1'09"; 13'51" 14'18"; 14'39" **CARACTERÍSTIQUES FÍSIQUES** Sexe: Home Edat: 45 anys Alçada: 1'80 - 1'85 m Forma física: Normativa Color de pell: Blanca Cabell: Marró, curt i amb tupè. **ARTEFACTES** Vestuari: Camisa lila, americana blau fosc, texans i sabates negres. Maquillatge: No **Complements:** Anell, micròfon i comandament per passar les diapositives. **ENTORN I MEDI** (\*6, \*7) Sala àmplia. Escenari amb rectangle vermell ocupat pel ponent. Pantalla al centre de l'escenari amb Espai: retransmissió en directe del ponent i la presentació. Sigles TED sota la pantalla. Decoració ambientada en una habitació.

Audiència:	Distribuïda en fileres davant de l'escenari.
II-luminació:	Focalitzada en el ponent, fent èmfasi a la zona del rectangle vermell.
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.

### **COMPORTAMENTS TÀCTILS**

18'31": Encaixada de mans amb un oient.

Font: Elaboració pròpia amb dades i imatges analitzades de Pink (TEDGlobal 2009, juliol 2009)

\*1



\*3



\*5



\*6



\*2



4



\*7



Taula 46. Anàlisi resumida de la TED Talk 23. The puzzle of motivation. Dan Pink (TEDGlobal 2009, juliol 2009)

Cinèsica	Ús d'expressions d'afecte per complementar el contingut verbal i ús significatiu de reguladors i adaptadors.
Proxèmica	Postura recta i oberta. Predominança de desplaçaments laterals per
	dins del rectangle vermell.
Parallenguatge	
Característiques	Home blanc, 45 anys, 1'80-1'85m, cabell marró i curt.
físiques	
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb rectangle vermell ocupat pel ponent. Pantalla
	al centre de l'escenari amb retransmissió en directe del ponent i la
	presentació. Sigles TED sota la pantalla. Decoració ambientada en una
	habitació. Il·luminació centrada en el ponent. Audiència distribuïda en
	fileres davant de l'escenari.
Comportaments	Al final de la conferència es produeix una encaixada de mans.
tàctils	

Font: Elaboració pròpia amb dades analitzades de Pink (TEDGlobal 2009, juliol 2009)

Taula 47. Anàlisi completa de la TED Talk 24. Strange answer to the psychopath test. Jon Ronson (TED 2012, març 2012)

<b>CINÈSICA</b> (classificació d'Ekman i Friesen)	
Emblemes:	*1 Alçar la mà amb el palmell mirant endavant en motiu de comiat: 17'45"
Il·lustradors:	*2 Representació d'escriure en una llibreta: 6'18" Acció de tatxar punts d'una llista: 12'50" Acció d'esmicolar quelcom: 14'12" *3 Acció de marcar com a fets els punts d'una llista: 14'36"
Reguladors:	Obrir braços amb els palmells de les mans mirant endavant: 3'22" Assenyalar endavant: 3'33"; 3'58" Assenyalar el cap: 7'42" Assenyalar a l'audiència: 8'53"  *4 Assenyalar al costat: 10'50"; 10'57"; 11'00"; 14'09" Ajuntar les mans davant de la boca: 3'45"; 12'02"; 12'07" Alçar dit índex per fer èmfasi: 5'02"; 7'00"; 9'49"  *5 Alçar mà amb el palmell mirant endavant: 6'44"; 6'48"; 12'26" Tocar el palmell de la mà amb el dit índex: 7'52"; 9'23" Baixar les mans des del cap creant un triangle: 9'40" Representació de treure una llista de la butxaca: 12'11" Obrir braç cap al costat: 12'33" Ajuntar mans per representar l'acció de posar quelcom dins d'una caixa: 13'48" Dibuixar un rectangle per representar una delimitació: 13'52"Acció d'esmicolar quelcom: 14'12"
Adaptadors:	Pujar i baixar mans amb els palmells mirant amunt: 0'25"; 0'48"; 1'36"; 2'06"; 2'41"; 2'53"; 4'03"; 4'51"; 6'51"; 11'26"; 13'19"; 14'18"  Pujar i baixar mans amb els palmells mirant endins: 1'32"; 2'44"; 4'18"; 4'33"; 5'24"; 5'38"; 7'29"; 7'36"; 8'23"; 11'56"; 13'14"; 13'29"; 15'01"  Pujar i baixar mans amb els palmells mirant avall: 10'47"; 10'59"  *6 Obrir mans amb palmells mirant amunt: 0'43'; 1'07"; 1'11"; 1'29"; 1'33"; 2'02"; 3'25"; 3'47"; 4'35"; 6'27"; 7'06"; 8'14"; 8'21"; 8'59"; 9'07"; 9'44"; 10'00"; 10'20"; 10'38"; 13'12"; 15'55"; 16'19"  Obrir mans amb palmells mirant avall: 2'38"; 7'50"; 8'47"; 10'05"  *7 Ajuntar mans: 0'40"; 1'08"; 1'12"; 1'30"; 1'40"; 2'03"; 2'08"; 2'57"; 3'46"; 3'48"; 4'53"; 7'32"; 8'15"; 9'00"; 9'13"; 9'57"; 10'02"; 10'06"; 10'22"; 10'40"; 12'12"; 12'28"; 12'36": 14'39"; 15'09"; 15'57"; 16'22"  Moure mà endavant: 0'08"  Creuar braços: 0'10"; 4'21"; 5'33"; 6'38"; 9'30"; 11'06"; 13'41"; 13'53": 14'19"  Tocar-se la cara: 11'54"
Expressions d'afecte:	En global mostra una postura lleugerament tancada transmetent timidesa acompanyada per una mirada dispersa. Tanmateix, transmet seguretat. Tendeix a alçar les celles per emfatitzar el contingut verbal.  Ex. 1'30":



Hi ha moments ens els quals l'expressió acompanya al contingut.

0'24": Expressió de concentració en explicar lo llarg que és el manual dels desordres mentals. Celles frunzides, ulls lleugerament tancats i nas arrufat.



3'46": Expressió de xiuxiueig en reproduir les paraules del seu company Brian. Celles baixades i frunzides, ulls lleugerament tancats, nas arrufat i boca significativament tancada.



3'51": Expressió de dubte en explicar que ell opina que és una bona idea que es mediqui a les persones internades al centre. Front frunzit, celles lleugerament alçades, nas obert i boca tancada amb el llavi inferior sobresortint.



4'55"; 5'30": Expressió de seriositat en reproduir les paraules d'en Tony. Celles frunzides, ulls lleugerament tancats i nas arrufat.



9'12"; 10'40"; 15'59": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



12'03": Expressió d'enuig i desconcert en reproduir l'expressió feta per Al Dunlap en dir-li que podria

ser un psicòpata. Celles significativament frunzides, ulls tancats, nas arrufat i boca tancada amb llavis enfora creant una "o".



17'38": Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats, pòmuls alçats i somriure modest amb la boca tancada.



### **PROXÈMICA**

(ús de l'espai)

Postura:	Relaxada
Moviment:	Durant la intervenció es manté majoritàriament estàtic en el punt d'inici. Al final, desplaçament cap a fora de l'escenari.

### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

"mmm": 2'00"; 10'07"; 10'15"; 10'25"; 10'40"; 12'46"

### **CARACTERÍSTIQUES FÍSIQUES**

(\*8)

Sexe:	Home
Edat:	45 anys
Alçada:	1'72 - 1'77 m
Forma física:	Normativa

Color de pell:	Blanca	
Cabell:	Castany, curt i amb tupè.	
	ARTEFACTES	
Vestuari:	Samarreta gris fosc, camisa descordada blau fosc, texans i sabates negres.	
Maquillatge:	No	
Complements:	Ulleres i micròfon.	
	ENTORN I MEDI (*9, *10)	
Espai:	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla ocupant tota la paret de l'escenari amb la projecció d'animacions controlades per dues persones presents al fons de l'escenari. Sigles TED al fons a la dreta de l'escenari.	
Audiència:	Distribuïda en forma de semi cercle al voltant de l'escenari.	
II-luminació:	Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.	
So/Acústica:	Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.	
COMPORTAMENTS TÀCTILS		
17'49": Abraçada amb els dos ajudants en motiu d'agraïment i afecte.		

Font: Elaboració pròpia amb dades i imatges analitzades de Ronson (TED 2012, març 2012)





















Taula 48. Anàlisi resumida de la TED Talk 24. Strange answer to the psychopath test. Jon Ronson (TED 2012, març 2012)

Cinèsica	Ús elevat d'expressions d'afecte, reguladors i adaptadors. També s'observen il·lustradors i un emblema al final de la conferència.
Proxèmica	Postura recta. Durant la intervenció es manté majoritàriament estàtic.
Parallenguatge	
Característiques	Home blanc, 45 anys, 1'72-1'77m, cabell castany i curt.
físiques	
Artefactes	Vestimenta informal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla ocupant tota la paret de l'escenari amb la projecció d'animacions controlades per dues persones presents al fons de l'escenari. Sigles TED al fons a la dreta de l'escenari. Il·luminació centrada en el ponent. Audiència distribuïda en forma de semicercle al voltant de l'escenari.
Comportaments	Al final de la conferència es produeix una abraçada entre Ronson i els
tàctils	seus dos ajudants.

Font: Elaboració pròpia amb dades analitzades de Ronson (TED 2012, març 2012)

Taula 49. Anàlisi completa de la TED Talk 25. 10 ways to have a better conversation. Celeste Headlee (TEDxCreativeCoast, maig 2015)

<b>CINÈSICA</b> (classificació d'Ekman i Friesen)	
Emblemes:	*1 Baixar el cap en motiu d'agraïment i comiat: 11'16"
Il·lustradors:	-
Reguladors:	Tocar els dits amb la mà per enumerar: 1'15"; 3'00"; 3'47"  Assenyalar a l'audiència: 1'31"  Moure mà endavant i enrere: 1'46"; 8'56"  Treure guió: 2'00"  Guardar guió: 2'29"  Pujar i baixar mans amb el palmell mirant endavant: 3'52"  *² Indicar números amb els dits: 4'21"; 4'44"; 5'06"; 5'10"  Assenyalar cap avall: 4'30"  Alçar mà a l'alçada del cap: 5'40"; 8'50"  Alçar dit polze per indicar èmfasi: 6'17"; 6'58"; 8'06"  *³ Alçar dit índex per indicar èmfasi: 6'30"; 6'35"; 7'08"; 7'14"; 8'54"  Assenyalar el cap: 6'38"  Alçar la mà amb el puny tancat a l'alçada del cap: 7'01"  Alçar dos dit per indicar èmfasi: 7'42"  Alçar mà amb el palmell mirant endavant: 9'16"  Assenyalar-se a si mateixa: 9'36"; 9'47"  Obrir i tancar braços: 10'03"
Adaptadors:	*4 Obrir mans cap a fora amb palmell cap amunt: 0'06"; 0'27"; 1'28"; 2'31"; 2'40"; 4'16"; 4'38"; 4'49"; 5'13"; 5'20"; 5'27"; 6'02"; 6'19; 7'30"; 8'09"; 8'11"; 8'55"; 9'27"; 9'34"; 9'41"; 10'28"; 10'36"; 10'49"  Obrir mans cap a fora amb palmell cap avall: 0'50"; 0'57"; 1'21"; 2'58"; 3'16"; 4'13"; 5'12"; 6'50"; 7'38"; 9'00"  *5 Ajuntar mans: 0'26"; 0'30"; 0'46"; 0'59"; 1'40"; 2'30"; 2'46"; 3'30"; 8'29"; 8'56"; 9'03"; 9'18"; 9'32"  Pujar i baixa mans amb palmell mirant cap amunt: 0'44"; 1'53"; 2'39"; 3'22"; 3'42"; 3'54"; 5'16"; 6'31"; 6'44"; 9'02"; 11'04"  Pujar i baixar mans amb palmell mirant cap avall: 2'52"; 6'28"; 6'55"; 11'10"  Pujar i baixar mans d'un costat a l'altre: 0'54"; 1'25"; 3'34"; 4'42"; 6'15"  Pujar i baixar mans amb puny tancat: 1'01"; 1'18"; 2'09"; 2'15"; 5'34"; 7'03"; 7'21"; 7'57"; 10'23"  Obrir mà endavant: 4'55"  Moure dit índex en cercles: 9'51"
Expressions d'afecte:	En global mostra una postura oberta. Esquena recta i espatlles obertes, mirada clara i decidida. Tendeix a alçar les celles i frunzir el front per emfatitzar el contingut verbal. Ex. 2'43":



Hi ha moments ens els quals l'expressió acompanya al contingut.

0'30": Expressió de dubte i perplexitat envers una afirmació que anteriorment es podia aplicar però actualment no serveix. Celles frunzides, pòmuls alçats, nas arrufat i boca arronsada.



1'30": Expressió de concentració en assenyalar els telèfons mòbils dels oients. Ulls lleugerament tancats, nas arrufat i pòmuls alçats.



2'01"; 3'40"; 5'30"; 6'30"; 10'10": Expressió de riure. Ulls lleugerament tancats, pòmuls alçats i somriure pronunciat amb la boca oberta.



3'07"; 6'17"; 6'56": Expressió de seriositat. Celles frunzides, nas arrufat i llavis sobresortint.



7'53": Expressió de desaprovació i rebuig en explicar que si algú t'explica un problema que està tenint a la feina no has d'explicar com odies la teva feina, ja que no és el mateix. Una cella alçada i l'altra frunzida, nas arrufat i pòmuls alçats.



11'17": Expressió de satisfacció en acabar la conferència. Ulls lleugerament tancats, pòmuls alçats i somriure tímid amb la boca tancada.



### **PROXÈMICA** (ús de l'espai)

Postura:	Recta i rígida
Moviment:	Durant la intervenció, desplaçaments dins del cercle vermell marcat a l'escenari. Al final, desplaçament fora de l'escenari.

### **PARALLENGUATGE**

(qualitats veu i vocalitzacions)

# CARACTERÍSTIQUES FÍSIQUES (\*6)

Sexe:	Dona
Edat:	46 anys
Alçada:	1'67 - 1'72 m
Forma física:	Grassa (fora del que la societat defineix com a normativa)
Color de pell:	Blanca
Cabell:	Castany fosc, llis, amb molt volum i per sobre les espatlles.
ARTEFACTES	

Camisa blanca, americana negra, faldilla morada i sabates de taló.	
Pintallavis rosat, coloret marró, ombra d'ulls, línia d'ulls i màscara de pestanyes	
Guió, micròfon i comandament per passar les diapositives.	
ENTORN I MEDI (*7,*8)	
Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla ocupant la major part de la paret de l'escenari per projectar la presentació. Sigles TEDx al fons a la dreta de l'escenari. Decoració ambientada com una sala d'estar amb sofà, butaques, làmpada i una taula.	
Distribuïda en fileres davant de l'escenari.	
Focalitzada en el ponent, fent èmfasi a la zona del cercle vermell.	
Bona acústica. Veu del ponent retransmesa a través d'un micròfon i d'altaveus distribuïts per la sala.	

### **COMPORTAMENTS TÀCTILS**

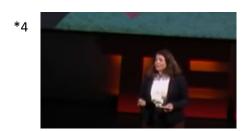
No es produeix cap contacte físic amb l'audiència.

Font: Elaboració pròpia amb dades i imatges analitzades de Headlee (TEDxCreativeCoast, maig 2015)

















Taula 50. Anàlisi resumida de la TED Talk 25. 10 ways to have a better conversation. Celeste Headlee (TEDxCreativeCoast, maig 2015)

Cinèsica	Ús elevat d'expressions d'afecte i reguladors. També s'observen adaptadors i un emblema al final de la conferència.
Proxèmica	Postura recta i oberta. Durant la intervenció es desplaça per dins del cercle vermell.
Parallenguatge	
Característiques	Dona blanca, 46 anys, 1'67-'172m, cabell castany fosc i per sobre les
físiques	espatlles.
Artefactes	Vestimenta formal i neutra.
Entorn i medi	Sala àmplia. Escenari amb cercle vermell ocupat pel ponent. Pantalla
	ocupant la major part de la paret de l'escenari. Sigles TEDx al fons a la
	dreta de l'escenari. Decoració ambientada com una sala d'estar amb
	sofà, butaques, làmpada i una taula. Il·luminació centrada en la ponent.
	Audiència distribuïda en fileres davant de l'escenari.
Comportaments	No es produeix cap contacte físic amb l'audiència.
tàctils	

Font: Elaboració pròpia amb dades analitzades de Headlee (TEDxCreativeCoast, maig 2015)

### 2. ANNEX 2: Transcripcions de les 25 TED Talks amb més visualitzacions

Extret de TED Conferences (2022), ja referenciada a la bibliografia del treball.

### TED Talk 1. Do schools kill creativity? Sir Ken Robinson (TED 2006, febrer 2006)

Good morning. How are you?

(Audience) Good.

It's been great, hasn't it? I've been blown away by the whole thing. In fact, I'm leaving.

(Laughter)

There have been three themes running through the conference, which are relevant to what I want to talk about. One is the extraordinary evidence of human creativity in all of the presentations that we've had and in all of the people here; just the variety of it and the range of it. The second is that it's put us in a place where we have no idea what's going to happen in terms of the future. No idea how this may play out.

I have an interest in education. Actually, what I find is, everybody has an interest in education. Don't you? I find this very interesting. If you're at a dinner party, and you say you work in education -- actually, you're not often at dinner parties, frankly.

(Laughter)

If you work in education, you're not asked.

(Laughter)

And you're never asked back, curiously. That's strange to me. But if you are, and you say to somebody, you know, they say, "What do you do?" and you say you work in education, you can see the blood run from their face. They're like, "Oh my God. Why me?"

(Laughter)

"My one night out all week."

(Laughter)

But if you ask about their education, they pin you to the wall, because it's one of those things that goes deep with people, am I right? Like religion and money and other things. So I have a big interest in education, and I think we all do. We have a huge vested interest in it, partly because it's education that's meant to take us into this future that we can't grasp. If you think of it, children starting school this year will be retiring in 2065. Nobody has a clue, despite all the expertise that's been on parade for the past four days, what the world will look like in five years' time. And yet, we're meant to be educating them for it. So the unpredictability, I think, is extraordinary.

And the third part of this is that we've all agreed, nonetheless, on the really extraordinary capacities that children have -- their capacities for innovation. I mean, Sirena last night was a marvel, wasn't she? Just seeing what she could do. And she's exceptional, but I think she's not, so to speak, exceptional in the whole of childhood. What you have there is a person of extraordinary dedication who found a talent. And my contention is, all kids have tremendous talents, and we squander them, pretty ruthlessly.

So I want to talk about education, and I want to talk about creativity. My contention is that creativity now is as important in education as literacy, and we should treat it with the same status.

(Applause)

Thank you.

(Applause)

That was it, by the way. Thank you very much.

(Laughter)

So, 15 minutes left.

(Laughter)

"Well, I was born ... "

(Laughter)

I heard a great story recently -- I love telling it -- of a little girl who was in a drawing lesson. She was six, and she was at the back, drawing, and the teacher said this girl hardly ever paid attention, and in this drawing lesson, she did. The teacher was fascinated. She went over to her, and she said, "What are you drawing?" And the girl said, "I'm drawing a picture of God." And the teacher said, "But nobody knows what God looks like." And the girl said, "They will in a minute."

(Laughter)

When my son was four in England -- actually, he was four everywhere, to be honest.

(Laughter)

If we're being strict about it, wherever he went, he was four that year. He was in the Nativity play. Do you remember the story?

(Laughter)

No, it was big, it was a big story. Mel Gibson did the sequel, you may have seen it.

(Laughter)

"Nativity II." But James got the part of Joseph, which we were thrilled about. We considered this to be one of the lead parts. We had the place crammed full of agents in T-shirts: "James Robinson IS Joseph!" (Laughter) He didn't have to speak, but you know the bit where the three kings come in? They come in bearing gifts, gold, frankincense and myrrh. This really happened. We were sitting there, and I think they just went out of sequence, because we talked to the little boy afterward and said, "You OK with that?" They said, "Yeah, why? Was that wrong?" They just switched. The three boys came in, four-year-olds with tea towels on their heads. They put these boxes down, and the first boy said, "I bring you gold." And the second boy said, "I bring you myrrh." And the third boy said, "Frank sent this."

(Laughter)

What these things have in common is that kids will take a chance. If they don't know, they'll have a go. Am I right? They're not frightened of being wrong. I don't mean to say that being wrong is the same thing as being creative. What we do know is, if you're not prepared to be wrong, you'll never come up with anything original -- if you're not prepared to be wrong. And

by the time they get to be adults, most kids have lost that capacity. They have become frightened of being wrong. And we run our companies like this. We stigmatize mistakes. And we're now running national education systems where mistakes are the worst thing you can make. And the result is that we are educating people out of their creative capacities.

Picasso once said this, he said that all children are born artists. The problem is to remain an artist as we grow up. I believe this passionately, that we don't grow into creativity, we grow out of it. Or rather, we get educated out of it. So why is this?

I lived in Stratford-on-Avon until about five years ago. In fact, we moved from Stratford to Los Angeles. So you can imagine what a seamless transition this was.

(Laughter)

Actually, we lived in a place called Snitterfield, just outside Stratford, which is where Shakespeare's father was born. Are you struck by a new thought? I was. You don't think of Shakespeare having a father, do you? Do you? Because you don't think of Shakespeare being a child, do you? Shakespeare being seven? I never thought of it. I mean, he was seven at some point. He was in somebody's English class, wasn't he?

(Laughter)

How annoying would that be?

(Laughter)

"Must try harder."

(Laughter)

Being sent to bed by his dad, to Shakespeare, "Go to bed, now!" To William Shakespeare. "And put the pencil down!"

(Laughter)

"And stop speaking like that."

(Laughter)

"It's confusing everybody."

(Laughter)

Anyway, we moved from Stratford to Los Angeles, and I just want to say a word about the transition. Actually, my son didn't want to come. I've got two kids; he's 21 now, my daughter's 16. He didn't want to come to Los Angeles. He loved it, but he had a girlfriend in England. This was the love of his life, Sarah. He'd known her for a month.

(Laughter)

Mind you, they'd had their fourth anniversary, because it's a long time when you're 16. He was really upset on the plane. He said, "I'll never find another girl like Sarah." And we were rather pleased about that, frankly --

(Laughter)

because she was the main reason we were leaving the country.

(Laughter)

But something strikes you when you move to America and travel around the world: every education system on earth has the same hierarchy of subjects. Every one. Doesn't matter where you go. You'd think it would be otherwise, but it isn't. At the top are mathematics and languages, then the humanities. At the bottom are the arts. Everywhere on earth. And in pretty much every system, too, there's a hierarchy within the arts. Art and music are normally given a higher status in schools than drama and dance. There isn't an education system on the planet that teaches dance every day to children the way we teach them mathematics. Why? Why not? I think this is rather important. I think math is very important, but so is dance. Children dance all the time if they're allowed to, we all do. We all have bodies, don't we? Did I miss a meeting?

### (Laughter)

Truthfully, what happens is, as children grow up, we start to educate them progressively from the waist up. And then we focus on their heads. And slightly to one side.

If you were to visit education as an alien and say "What's it for, public education?" I think you'd have to conclude, if you look at the output, who really succeeds by this, who does everything they should, who gets all the brownie points, who are the winners -- I think you'd have to conclude the whole purpose of public education throughout the world is to produce university professors. Isn't it? They're the people who come out the top. And I used to be one, so there.

### (Laughter)

And I like university professors, but, you know, we shouldn't hold them up as the high-water mark of all human achievement. They're just a form of life. Another form of life. But they're rather curious. And I say this out of affection for them: there's something curious about professors. In my experience -- not all of them, but typically -- they live in their heads. They live up there and slightly to one side. They're disembodied, you know, in a kind of literal way. They look upon their body as a form of transport for their heads.

### (Laughter)

Don't they? It's a way of getting their head to meetings.

### (Laughter)

If you want real evidence of out-of-body experiences, by the way, get yourself along to a residential conference of senior academics and pop into the discotheque on the final night.

### (Laughter)

And there, you will see it. Grown men and women writhing uncontrollably, off the beat.

### (Laughter)

Waiting until it ends, so they can go home and write a paper about it.

### (Laughter)

Our education system is predicated on the idea of academic ability. And there's a reason. Around the world, there were no public systems of education, really, before the 19th century. They all came into being to meet the needs of industrialism. So the hierarchy is rooted on two ideas.

Number one, that the most useful subjects for work are at the top. So you were probably steered benignly away from things at school when you were a kid, things you liked, on the grounds you would never get a job doing that. Is that right? "Don't do music, you're not going

to be a musician; don't do art, you won't be an artist." Benign advice -- now, profoundly mistaken. The whole world is engulfed in a revolution.

And the second is academic ability, which has really come to dominate our view of intelligence, because the universities design the system in their image. If you think of it, the whole system of public education around the world is a protracted process of university entrance. And the consequence is that many highly talented, brilliant, creative people think they're not, because the thing they were good at at school wasn't valued, or was actually stigmatized. And I think we can't afford to go on that way.

In the next 30 years, according to UNESCO, more people worldwide will be graduating through education than since the beginning of history. More people. And it's the combination of all the things we've talked about: technology and its transformational effect on work, and demography and the huge explosion in population.

Suddenly, degrees aren't worth anything. Isn't that true? When I was a student, if you had a degree, you had a job. If you didn't have a job, it's because you didn't want one. And I didn't want one, frankly.

### (Laughter)

But now kids with degrees are often heading home to carry on playing video games, because you need an MA where the previous job required a BA, and now you need a PhD for the other. It's a process of academic inflation. And it indicates the whole structure of education is shifting beneath our feet. We need to radically rethink our view of intelligence.

We know three things about intelligence. One, it's diverse. We think about the world in all the ways that we experience it. We think visually, we think in sound, we think kinesthetically. We think in abstract terms, we think in movement. Secondly, intelligence is dynamic. If you look at the interactions of a human brain, as we heard yesterday from a number of presentations, intelligence is wonderfully interactive. The brain isn't divided into compartments. In fact, creativity -- which I define as the process of having original ideas that have value -- more often than not comes about through the interaction of different disciplinary ways of seeing things.

By the way, there's a shaft of nerves that joins the two halves of the brain, called the corpus callosum. It's thicker in women. Following off from Helen yesterday, this is probably why women are better at multitasking. Because you are, aren't you? There's a raft of research, but I know it from my personal life. If my wife is cooking a meal at home, which is not often ... thankfully.

### (Laughter)

No, she's good at some things. But if she's cooking, she's dealing with people on the phone, she's talking to the kids, she's painting the ceiling --

### (Laughter)

she's doing open-heart surgery over here. If I'm cooking, the door is shut, the kids are out, the phone's on the hook, if she comes in, I get annoyed. I say, "Terry, please, I'm trying to fry an egg in here."

(Laughter)

"Give me a break."

(Laughter)

Actually, do you know that old philosophical thing, "If a tree falls in a forest, and nobody hears it, did it happen?" Remember that old chestnut? I saw a great T-shirt recently, which said, "If a man speaks his mind in a forest, and no woman hears him, is he still wrong?"

### (Laughter)

And the third thing about intelligence is, it's distinct. I'm doing a new book at the moment called "Epiphany," which is based on a series of interviews with people about how they discovered their talent. I'm fascinated by how people got to be there. It's really prompted by a conversation I had with a wonderful woman who maybe most people have never heard of, Gillian Lynne. Have you heard of her? Some have. She's a choreographer, and everybody knows her work. She did "Cats" and "Phantom of the Opera." She's wonderful. I used to be on the board of The Royal Ballet, as you can see.

### (Laughter)

Gillian and I had lunch one day. I said, "How did you get to be a dancer?" It was interesting. When she was at school, she was really hopeless. And the school, in the '30s, wrote to her parents and said, "We think Gillian has a learning disorder." She couldn't concentrate; she was fidgeting. I think now they'd say she had ADHD. Wouldn't you? But this was the 1930s, and ADHD hadn't been invented at this point. It wasn't an available condition.

### (Laughter)

People weren't aware they could have that.

### (Laughter)

Anyway, she went to see this specialist. So, this oak-paneled room, and she was there with her mother, and she was led and sat on this chair at the end, and she sat on her hands for 20 minutes, while this man talked to her mother about all the problems Gillian was having at school, because she was disturbing people, her homework was always late, and so on. Little kid of eight. In the end, the doctor went and sat next to Gillian and said, "I've listened to all these things your mother's told me. I need to speak to her privately. Wait here. We'll be back. We won't be very long," and they went and left her.

But as they went out of the room, he turned on the radio that was sitting on his desk. And when they got out of the room, he said to her mother, "Just stand and watch her." And the minute they left the room, she was on her feet, moving to the music. And they watched for a few minutes, and he turned to her mother and said, "Mrs. Lynne, Gillian isn't sick. She's a dancer. Take her to a dance school."

I said, "What happened?" She said, "She did. I can't tell you how wonderful it was. We walked in this room, and it was full of people like me -- people who couldn't sit still, people who had to move to think." Who had to move to think. They did ballet, they did tap, jazz; they did modern; they did contemporary. She was eventually auditioned for the Royal Ballet School. She became a soloist; she had a wonderful career at the Royal Ballet. She eventually graduated from the Royal Ballet School, founded the Gillian Lynne Dance Company, met Andrew Lloyd Webber. She's been responsible for some of the most successful musical theater productions in history, she's given pleasure to millions, and she's a multimillionaire. Somebody else might have put her on medication and told her to calm down.

### (Applause)

What I think it comes to is this: Al Gore spoke the other night about ecology and the revolution that was triggered by Rachel Carson. I believe our only hope for the future is to adopt a new

conception of human ecology, one in which we start to reconstitute our conception of the richness of human capacity. Our education system has mined our minds in the way that we strip-mine the earth for a particular commodity. And for the future, it won't serve us. We have to rethink the fundamental principles on which we're educating our children.

There was a wonderful quote by Jonas Salk, who said, "If all the insects were to disappear from the Earth, within 50 years, all life on Earth would end. If all human beings disappeared from the Earth, within 50 years, all forms of life would flourish." And he's right.

What TED celebrates is the gift of the human imagination. We have to be careful now that we use this gift wisely, and that we avert some of the scenarios that we've talked about. And the only way we'll do it is by seeing our creative capacities for the richness they are and seeing our children for the hope that they are. And our task is to educate their whole being, so they can face this future. By the way -- we may not see this future, but they will. And our job is to help them make something of it.

Thank you very much.

(Applause)

# TED Talk 2. Your body Language may shape who you are. Amy Cuddy (TEDGlobal 2012, juny 2012)

So I want to start by offering you a free no-tech life hack, and all it requires of you is this: that you change your posture for two minutes. But before I give it away, I want to ask you to right now do a little audit of your body and what you're doing with your body. So how many of you are sort of making yourselves smaller? Maybe you're hunching, crossing your legs, maybe wrapping your ankles. Sometimes we hold onto our arms like this. Sometimes we spread out. (Laughter) I see you. So I want you to pay attention to what you're doing right now. We're going to come back to that in a few minutes, and I'm hoping that if you learn to tweak this a little bit, it could significantly change the way your life unfolds.

So, we're really fascinated with body language, and we're particularly interested in other people's body language. You know, we're interested in, like, you know — (Laughter) — an awkward interaction, or a smile, or a contemptuous glance, or maybe a very awkward wink, or maybe even something like a handshake.

Narrator: Here they are arriving at Number 10. This lucky policeman gets to shake hands with the President of the United States. Here comes the Prime Minister -- No. (Laughter) (Applause)

(Laughter) (Applause)

Amy Cuddy: So a handshake, or the lack of a handshake, can have us talking for weeks and weeks and weeks. Even the BBC and The New York Times. So obviously when we think about nonverbal behavior, or body language -- but we call it nonverbals as social scientists -- it's language, so we think about communication. When we think about communication, we think about interactions. So what is your body language communicating to me? What's mine communicating to you?

And there's a lot of reason to believe that this is a valid way to look at this. So social scientists have spent a lot of time looking at the effects of our body language, or other people's body language, on judgments. And we make sweeping judgments and inferences from body language. And those judgments can predict really meaningful life outcomes like who we hire or promote, who we ask out on a date. For example, Nalini Ambady, a researcher at Tufts University, shows that when people watch 30-second soundless clips of real physician-patient interactions, their judgments of the physician's niceness predict whether or not that physician will be sued. So it doesn't have to do so much with whether or not that physician was incompetent, but do we like that person and how they interacted? Even more dramatic, Alex Todorov at Princeton has shown us that judgments of political candidates' faces in just one second predict 70 percent of U.S. Senate and gubernatorial race outcomes, and even, let's go digital, emoticons used well in online negotiations can lead you to claim more value from that negotiation. If you use them poorly, bad idea. Right?

So when we think of nonverbals, we think of how we judge others, how they judge us and what the outcomes are. We tend to forget, though, the other audience that's influenced by our nonverbals, and that's ourselves. We are also influenced by our nonverbals, our thoughts and our feelings and our physiology.

So what nonverbals am I talking about? I'm a social psychologist. I study prejudice, and I teach at a competitive business school, so it was inevitable that I would become interested in power dynamics. I became especially interested in nonverbal expressions of power and dominance.

And what are nonverbal expressions of power and dominance? Well, this is what they are. So in the animal kingdom, they are about expanding. So you make yourself big, you stretch out, you take up space, you're basically opening up. It's about opening up. And this is true across the animal kingdom. It's not just limited to primates. And humans do the same thing.

(Laughter) So they do this both when they have power sort of chronically, and also when they're feeling powerful in the moment. And this one is especially interesting because it really shows us how universal and old these expressions of power are. This expression, which is known as pride, Jessica Tracy has studied. She shows that people who are born with sight and people who are congenitally blind do this when they win at a physical competition. So when they cross the finish line and they've won, it doesn't matter if they've never seen anyone do it. They do this. So the arms up in the V, the chin is slightly lifted.

What do we do when we feel powerless? We do exactly the opposite. We close up. We wrap ourselves up. We make ourselves small. We don't want to bump into the person next to us. So again, both animals and humans do the same thing. And this is what happens when you put together high and low power. So what we tend to do when it comes to power is that we complement the other's nonverbals. So if someone is being really powerful with us, we tend to make ourselves smaller. We don't mirror them. We do the opposite of them.

So I'm watching this behavior in the classroom, and what do I notice? I notice that MBA students really exhibit the full range of power nonverbals. So you have people who are like caricatures of alphas, really coming into the room, they get right into the middle of the room before class even starts, like they really want to occupy space. When they sit down, they're sort of spread out. They raise their hands like this. You have other people who are virtually collapsing when they come in. As soon they come in, you see it. You see it on their faces and their bodies, and they sit in their chair and they make themselves tiny, and they go like this when they raise their hand.

I notice a couple of things about this. One, you're not going to be surprised. It seems to be related to gender. So women are much more likely to do this kind of thing than men. Women feel chronically less powerful than men, so this is not surprising.

But the other thing I noticed is that it also seemed to be related to the extent to which the students were participating, and how well they were participating. And this is really important in the MBA classroom, because participation counts for half the grade.

So business schools have been struggling with this gender grade gap. You get these equally qualified women and men coming in and then you get these differences in grades, and it seems to be partly attributable to participation. So I started to wonder, you know, okay, so you have these people coming in like this, and they're participating. Is it possible that we could get people to fake it and would it lead them to participate more?

So my main collaborator Dana Carney, who's at Berkeley, and I really wanted to know, can you fake it till you make it? Like, can you do this just for a little while and actually experience a behavioral outcome that makes you seem more powerful? So we know that our nonverbals govern how other people think and feel about us. There's a lot of evidence. But our question really was, do our nonverbals govern how we think and feel about ourselves?

There's some evidence that they do. So, for example, we smile when we feel happy, but also, when we're forced to smile by holding a pen in our teeth like this, it makes us feel happy. So it goes both ways. When it comes to power, it also goes both ways. So when you feel powerful, you're more likely to do this, but it's also possible that when you pretend to be powerful, you are more likely to actually feel powerful.

So the second question really was, you know, so we know that our minds change our bodies, but is it also true that our bodies change our minds? And when I say minds, in the case of the powerful, what am I talking about? So I'm talking about thoughts and feelings and the sort of physiological things that make up our thoughts and feelings, and in my case, that's hormones. I look at hormones. So what do the minds of the powerful versus the powerless

look like? So powerful people tend to be, not surprisingly, more assertive and more confident, more optimistic. They actually feel they're going to win even at games of chance. They also tend to be able to think more abstractly. So there are a lot of differences. They take more risks. There are a lot of differences between powerful and powerless people. Physiologically, there also are differences on two key hormones: testosterone, which is the dominance hormone, and cortisol, which is the stress hormone.

So what we find is that high-power alpha males in primate hierarchies have high testosterone and low cortisol, and powerful and effective leaders also have high testosterone and low cortisol. So what does that mean? When you think about power, people tended to think only about testosterone, because that was about dominance. But really, power is also about how you react to stress. So do you want the high-power leader that's dominant, high on testosterone, but really stress reactive? Probably not, right? You want the person who's powerful and assertive and dominant, but not very stress reactive, the person who's laid back.

So we know that in primate hierarchies, if an alpha needs to take over, if an individual needs to take over an alpha role sort of suddenly, within a few days, that individual's testosterone has gone up significantly and his cortisol has dropped significantly. So we have this evidence, both that the body can shape the mind, at least at the facial level, and also that role changes can shape the mind. So what happens, okay, you take a role change, what happens if you do that at a really minimal level, like this tiny manipulation, this tiny intervention? "For two minutes," you say, "I want you to stand like this, and it's going to make you feel more powerful."

So this is what we did. We decided to bring people into the lab and run a little experiment, and these people adopted, for two minutes, either high-power poses or low-power poses, and I'm just going to show you five of the poses, although they took on only two. So here's one. A couple more. This one has been dubbed the "Wonder Woman" by the media. Here are a couple more. So you can be standing or you can be sitting. And here are the low-power poses. So you're folding up, you're making yourself small. This one is very low-power. When you're touching your neck, you're really protecting yourself.

So this is what happens. They come in, they spit into a vial, for two minutes, we say, "You need to do this or this." They don't look at pictures of the poses. We don't want to prime them with a concept of power. We want them to be feeling power. So two minutes they do this. We then ask them, "How powerful do you feel?" on a series of items, and then we give them an opportunity to gamble, and then we take another saliva sample. That's it. That's the whole experiment.

So this is what we find. Risk tolerance, which is the gambling, we find that when you are in the high-power pose condition, 86 percent of you will gamble. When you're in the low-power pose condition, only 60 percent, and that's a whopping significant difference.

Here's what we find on testosterone. From their baseline when they come in, high-power people experience about a 20-percent increase, and low-power people experience about a 10-percent decrease. So again, two minutes, and you get these changes. Here's what you get on cortisol. High-power people experience about a 25-percent decrease, and the low-power people experience about a 15-percent increase. So two minutes lead to these hormonal changes that configure your brain to basically be either assertive, confident and comfortable, or really stress-reactive, and feeling sort of shut down. And we've all had the feeling, right? So it seems that our nonverbals do govern how we think and feel about ourselves, so it's not just others, but it's also ourselves. Also, our bodies change our minds.

But the next question, of course, is, can power posing for a few minutes really change your life in meaningful ways? This is in the lab, it's this little task, it's just a couple of minutes. Where

can you actually apply this? Which we cared about, of course. And so we think where you want to use this is evaluative situations, like social threat situations. Where are you being evaluated, either by your friends? For teenagers, it's at the lunchroom table. For some people it's speaking at a school board meeting. It might be giving a pitch or giving a talk like this or doing a job interview. We decided that the one that most people could relate to because most people had been through, was the job interview.

So we published these findings, and the media are all over it, and they say, Okay, so this is what you do when you go in for the job interview, right?

### (Laughter)

You know, so we were of course horrified, and said, Oh my God, no, that's not what we meant at all. For numerous reasons, no, don't do that. Again, this is not about you talking to other people. It's you talking to yourself. What do you do before you go into a job interview? You do this. You're sitting down. You're looking at your iPhone -- or your Android, not trying to leave anyone out. You're looking at your notes, you're hunching up, making yourself small, when really what you should be doing maybe is this, like, in the bathroom, right? Do that. Find two minutes. So that's what we want to test. Okay? So we bring people into a lab, and they do either high- or low-power poses again, they go through a very stressful job interview. It's five minutes long. They are being recorded. They're being judged also, and the judges are trained to give no nonverbal feedback, so they look like this. Imagine this is the person interviewing you. So for five minutes, nothing, and this is worse than being heckled. People hate this. It's what Marianne LaFrance calls "standing in social quicksand." So this really spikes your cortisol. So this is the job interview we put them through, because we really wanted to see what happened. We then have these coders look at these tapes, four of them. They're blind to the hypothesis. They're blind to the conditions. They have no idea who's been posing in what pose, and they end up looking at these sets of tapes, and they say, "We want to hire these people," all the high-power posers. "We don't want to hire these people. We also evaluate these people much more positively overall." But what's driving it? It's not about the content of the speech. It's about the presence that they're bringing to the speech. Because we rate them on all these variables related to competence, like, how well-structured is the speech? How good is it? What are their qualifications? No effect on those things. This is what's affected. These kinds of things. People are bringing their true selves, basically. They're bringing themselves. They bring their ideas, but as themselves, with no, you know, residue over them. So this is what's driving the effect, or mediating the effect.

So when I tell people about this, that our bodies change our minds and our minds can change our behavior, and our behavior can change our outcomes, they say to me, "It feels fake." Right? So I said, fake it till you make it. It's not me. I don't want to get there and then still feel like a fraud. I don't want to feel like an impostor. I don't want to get there only to feel like I'm not supposed to be here. And that really resonated with me, because I want to tell you a little story about being an impostor and feeling like I'm not supposed to be here.

When I was 19, I was in a really bad car accident. I was thrown out of a car, rolled several times. I was thrown from the car. And I woke up in a head injury rehab ward, and I had been withdrawn from college, and I learned that my IQ had dropped by two standard deviations, which was very traumatic. I knew my IQ because I had identified with being smart, and I had been called gifted as a child. So I'm taken out of college, I keep trying to go back. They say, "You're not going to finish college. Just, you know, there are other things for you to do, but that's not going to work out for you."

So I really struggled with this, and I have to say, having your identity taken from you, your core identity, and for me it was being smart, having that taken from you, there's nothing that leaves

you feeling more powerless than that. So I felt entirely powerless. I worked and worked, and I got lucky, and worked, and got lucky, and worked.

Eventually I graduated from college. It took me four years longer than my peers, and I convinced someone, my angel advisor, Susan Fiske, to take me on, and so I ended up at Princeton, and I was like, I am not supposed to be here. I am an impostor. And the night before my first-year talk, and the first-year talk at Princeton is a 20-minute talk to 20 people. That's it. I was so afraid of being found out the next day that I called her and said, "I'm quitting." She was like, "You are not quitting, because I took a gamble on you, and you're staying. You're going to stay, and this is what you're going to do. You are going to fake it. You're going to do every talk that you ever get asked to do. You're just going to do it and do it and do it, even if you're terrified and just paralyzed and having an out-of-body experience, until you have this moment where you say, 'Oh my gosh, I'm doing it. Like, I have become this. I am actually doing this." So that's what I did. Five years in grad school, a few years, you know, I'm at Northwestern, I moved to Harvard, I'm at Harvard, I'm not really thinking about it anymore, but for a long time I had been thinking, "Not supposed to be here."

So at the end of my first year at Harvard, a student who had not talked in class the entire semester, who I had said, "Look, you've gotta participate or else you're going to fail," came into my office. I really didn't know her at all. She came in totally defeated, and she said, "I'm not supposed to be here." And that was the moment for me. Because two things happened. One was that I realized, oh my gosh, I don't feel like that anymore. I don't feel that anymore, but she does, and I get that feeling. And the second was, she is supposed to be here! Like, she can fake it, she can become it.

So I was like, "Yes, you are! You are supposed to be here! And tomorrow you're going to fake it, you're going to make yourself powerful, and, you know --

# (Applause)

And you're going to go into the classroom, and you are going to give the best comment ever." You know? And she gave the best comment ever, and people turned around and were like, oh my God, I didn't even notice her sitting there. (Laughter)

She comes back to me months later, and I realized that she had not just faked it till she made it, she had actually faked it till she became it. So she had changed. And so I want to say to you, don't fake it till you make it. Fake it till you become it. Do it enough until you actually become it and internalize.

The last thing I'm going to leave you with is this. Tiny tweaks can lead to big changes. So, this is two minutes. Two minutes, two minutes, two minutes. Before you go into the next stressful evaluative situation, for two minutes, try doing this, in the elevator, in a bathroom stall, at your desk behind closed doors. That's what you want to do. Configure your brain to cope the best in that situation. Get your testosterone up. Get your cortisol down. Don't leave that situation feeling like, oh, I didn't show them who I am. Leave that situation feeling like, I really feel like I got to say who I am and show who I am.

So I want to ask you first, you know, both to try power posing, and also I want to ask you to share the science, because this is simple. I don't have ego involved in this. (Laughter) Give it away. Share it with people, because the people who can use it the most are the ones with no resources and no technology and no status and no power. Give it to them because they can do it in private. They need their bodies, privacy and two minutes, and it can significantly change the outcomes of their life.

Thank you. (Applause)

#### TED Talk 3. Inside the mind of a master procrastinator. Tim Urban (TED 2016, febrer 2016)

So in college, I was a government major, which means I had to write a lot of papers. Now, when a normal student writes a paper, they might spread the work out a little like this. So, you know --

(Laughter)

you get started maybe a little slowly, but you get enough done in the first week that, with some heavier days later on, everything gets done, things stay civil.

(Laughter)

And I would want to do that like that. That would be the plan. I would have it all ready to go, but then, actually, the paper would come along, and then I would kind of do this.

(Laughter)

And that would happen every single paper.

But then came my 90-page senior thesis, a paper you're supposed to spend a year on. And I knew for a paper like that, my normal work flow was not an option. It was way too big a project. So I planned things out, and I decided I kind of had to go something like this. This is how the year would go. So I'd start off light, and I'd bump it up in the middle months, and then at the end, I would kick it up into high gear just like a little staircase. How hard could it be to walk up the stairs? No big deal, right?

But then, the funniest thing happened. Those first few months? They came and went, and I couldn't quite do stuff. So we had an awesome new revised plan.

(Laughter)

And then --

(Laughter)

But then those middle months actually went by, and I didn't really write words, and so we were here. And then two months turned into one month, which turned into two weeks. And one day I woke up with three days until the deadline, still not having written a word, and so I did the only thing I could: I wrote 90 pages over 72 hours, pulling not one but two all-nighters - humans are not supposed to pull two all-nighters -- sprinted across campus, dove in slow motion, and got it in just at the deadline.

I thought that was the end of everything. But a week later I get a call, and it's the school. And they say, "Is this Tim Urban?" And I say, "Yeah." And they say, "We need to talk about your thesis." And I say, "OK." And they say, "It's the best one we've ever seen."

(Laughter)

(Applause)

That did not happen.

(Laughter)

It was a very, very bad thesis.

(Laughter)

I just wanted to enjoy that one moment when all of you thought, "This guy is amazing!"

#### (Laughter)

No, no, it was very, very bad. Anyway, today I'm a writer-blogger guy. I write the blog Wait But Why. And a couple of years ago, I decided to write about procrastination. My behavior has always perplexed the non-procrastinators around me, and I wanted to explain to the non-procrastinators of the world what goes on in the heads of procrastinators, and why we are the way we are. Now, I had a hypothesis that the brains of procrastinators were actually different than the brains of other people. And to test this, I found an MRI lab that actually let me scan both my brain and the brain of a proven non-procrastinator, so I could compare them. I actually brought them here to show you today. I want you to take a look carefully to see if you can notice a difference. I know that if you're not a trained brain expert, it's not that obvious, but just take a look, OK? So here's the brain of a non-procrastinator.

(Laughter)

Now ... here's my brain.

(Laughter)

There is a difference. Both brains have a Rational Decision-Maker in them, but the procrastinator's brain also has an Instant Gratification Monkey. Now, what does this mean for the procrastinator? Well, it means everything's fine until this happens.

[This is a perfect time to get some work done.] [Nope!]

So the Rational Decision-Maker will make the rational decision to do something productive, but the Monkey doesn't like that plan, so he actually takes the wheel, and he says, "Actually, let's read the entire Wikipedia page of the Nancy Kerrigan/ Tonya Harding scandal, because I just remembered that that happened.

(Laughter)

Then --

(Laughter)

Then we're going to go over to the fridge, to see if there's anything new in there since 10 minutes ago. After that, we're going to go on a YouTube spiral that starts with videos of Richard Feynman talking about magnets and ends much, much later with us watching interviews with Justin Bieber's mom.

(Laughter)

"All of that's going to take a while, so we're not going to really have room on the schedule for any work today. Sorry!"

(Sigh)

Now, what is going on here? The Instant Gratification Monkey does not seem like a guy you want behind the wheel. He lives entirely in the present moment. He has no memory of the past, no knowledge of the future, and he only cares about two things: easy and fun.

Now, in the animal world, that works fine. If you're a dog and you spend your whole life doing nothing other than easy and fun things, you're a huge success!

(Laughter)

And to the Monkey, humans are just another animal species. You have to keep well-slept, well-fed and propagating into the next generation, which in tribal times might have worked

OK. But, if you haven't noticed, now we're not in tribal times. We're in an advanced civilization, and the Monkey does not know what that is. Which is why we have another guy in our brain, the Rational Decision-Maker, who gives us the ability to do things no other animal can do. We can visualize the future. We can see the big picture. We can make long-term plans. And he wants to take all of that into account. And he wants to just have us do whatever makes sense to be doing right now. Now, sometimes it makes sense to be doing things that are easy and fun, like when you're having dinner or going to bed or enjoying well-earned leisure time. That's why there's an overlap. Sometimes they agree. But other times, it makes much more sense to be doing things that are harder and less pleasant, for the sake of the big picture. And that's when we have a conflict. And for the procrastinator, that conflict tends to end a certain way every time, leaving him spending a lot of time in this orange zone, an easy and fun place that's entirely out of the Makes Sense circle. I call it the Dark Playground.

# (Laughter)

Now, the Dark Playground is a place that all of you procrastinators out there know very well. It's where leisure activities happen at times when leisure activities are not supposed to be happening. The fun you have in the Dark Playground isn't actually fun, because it's completely unearned, and the air is filled with guilt, dread, anxiety, self-hatred -- all of those good procrastinator feelings. And the question is, in this situation, with the Monkey behind the wheel, how does the procrastinator ever get himself over here to this blue zone, a less pleasant place, but where really important things happen?

Well, turns out the procrastinator has a guardian angel, someone who's always looking down on him and watching over him in his darkest moments -- someone called the Panic Monster.

#### (Laughter)

Now, the Panic Monster is dormant most of the time, but he suddenly wakes up anytime a deadline gets too close or there's danger of public embarrassment, a career disaster or some other scary consequence. And importantly, he's the only thing the Monkey is terrified of. Now, he became very relevant in my life pretty recently, because the people of TED reached out to me about six months ago and invited me to do a TED Talk.

# (Laughter)

Now, of course, I said yes. It's always been a dream of mine to have done a TED Talk in the past.

## (Laughter)

(Applause) But in the middle of all this excitement, the Rational Decision-Maker seemed to have something else on his mind. He was saying, "Are we clear on what we just accepted? Do we get what's going to be now happening one day in the future? We need to sit down and work on this right now." And the Monkey said, "Totally agree, but let's just open Google Earth and zoom in to the bottom of India, like 200 feet above the ground, and scroll up for two and a half hours til we get to the top of the country, so we can get a better feel for India."

#### (Laughter)

So that's what we did that day.

# (Laughter)

As six months turned into four and then two and then one, the people of TED decided to release the speakers. And I opened up the website, and there was my face staring right back at me. And guess who woke up?

#### (Laughter)

So the Panic Monster starts losing his mind, and a few seconds later, the whole system's in mayhem.

#### (Laughter)

And the Monkey -- remember, he's terrified of the Panic Monster -- boom, he's up the tree! And finally, finally, the Rational Decision-Maker can take the wheel and I can start working on the talk.

Now, the Panic Monster explains all kinds of pretty insane procrastinator behavior, like how someone like me could spend two weeks unable to start the opening sentence of a paper, and then miraculously find the unbelievable work ethic to stay up all night and write eight pages. And this entire situation, with the three characters -- this is the procrastinator's system. It's not pretty, but in the end, it works. This is what I decided to write about on the blog a couple of years ago.

When I did, I was amazed by the response. Literally thousands of emails came in, from all different kinds of people from all over the world, doing all different kinds of things. These are people who were nurses, bankers, painters, engineers and lots and lots of PhD students.

#### (Laughter)

And they were all writing, saying the same thing: "I have this problem too." But what struck me was the contrast between the light tone of the post and the heaviness of these emails. These people were writing with intense frustration about what procrastination had done to their lives, about what this Monkey had done to them. And I thought about this, and I said, well, if the procrastinator's system works, then what's going on? Why are all of these people in such a dark place?

Well, it turns out that there's two kinds of procrastination. Everything I've talked about today, the examples I've given, they all have deadlines. And when there's deadlines, the effects of procrastination are contained to the short term because the Panic Monster gets involved. But there's a second kind of procrastination that happens in situations when there is no deadline. So if you wanted a career where you're a self-starter -- something in the arts, something entrepreneurial -- there's no deadlines on those things at first, because nothing's happening, not until you've gone out and done the hard work to get momentum, get things going. There's also all kinds of important things outside of your career that don't involve any deadlines, like seeing your family or exercising and taking care of your health, working on your relationship or getting out of a relationship that isn't working.

Now if the procrastinator's only mechanism of doing these hard things is the Panic Monster, that's a problem, because in all of these non-deadline situations, the Panic Monster doesn't show up. He has nothing to wake up for, so the effects of procrastination, they're not contained; they just extend outward forever. And it's this long-term kind of procrastination that's much less visible and much less talked about than the funnier, short-term deadline-based kind. It's usually suffered quietly and privately. And it can be the source of a huge amount of long-term unhappiness, and regrets. And I thought, that's why those people are emailing, and that's why they're in such a bad place. It's not that they're cramming for some project. It's that long-term procrastination has made them feel like a spectator, at times, in their own lives. The frustration is not that they couldn't achieve their dreams; it's that they weren't even able to start chasing them.

So I read these emails and I had a little bit of an epiphany -- that I don't think non-procrastinators exist. That's right -- I think all of you are procrastinators. Now, you might not all be a mess, like some of us,

# (Laughter)

and some of you may have a healthy relationship with deadlines, but remember: the Monkey's sneakiest trick is when the deadlines aren't there.

Now, I want to show you one last thing. I call this a Life Calendar. That's one box for every week of a 90-year life. That's not that many boxes, especially since we've already used a bunch of those. So I think we need to all take a long, hard look at that calendar. We need to think about what we're really procrastinating on, because everyone is procrastinating on something in life. We need to stay aware of the Instant Gratification Monkey. That's a job for all of us. And because there's not that many boxes on there, it's a job that should probably start today.

Well, maybe not today, but ...

(Laughter)

You know. Sometime soon.

Thank you.

(Applause)

## TED Talk 4. How great leaders inspire action. Simon Sinek (TEDxPuget, setembre 2009)

How do you explain when things don't go as we assume? Or better, how do you explain when others are able to achieve things that seem to defy all of the assumptions? For example: Why is Apple so innovative? Year after year, after year, they're more innovative than all their competition. And yet, they're just a computer company. They're just like everyone else. They have the same access to the same talent, the same agencies, the same consultants, the same media. Then why is it that they seem to have something different? Why is it that Martin Luther King led the Civil Rights Movement? He wasn't the only man who suffered in pre-civil rights America, and he certainly wasn't the only great orator of the day. Why him? And why is it that the Wright brothers were able to figure out controlled, powered man flight when there were certainly other teams who were better qualified, better funded -- and they didn't achieve powered man flight, and the Wright brothers beat them to it. There's something else at play here.

About three and a half years ago, I made a discovery. And this discovery profoundly changed my view on how I thought the world worked, and it even profoundly changed the way in which I operate in it. As it turns out, there's a pattern. As it turns out, all the great inspiring leaders and organizations in the world, whether it's Apple or Martin Luther King or the Wright brothers, they all think, act and communicate the exact same way. And it's the complete opposite to everyone else. All I did was codify it, and it's probably the world's simplest idea. I call it the golden circle.

Why? How? What? This little idea explains why some organizations and some leaders are able to inspire where others aren't. Let me define the terms really quickly. Every single person, every single organization on the planet knows what they do, 100 percent. Some know how they do it, whether you call it your differentiated value proposition or your proprietary process or your USP. But very, very few people or organizations know why they do what they do. And by "why" I don't mean "to make a profit." That's a result. It's always a result. By "why," I mean: What's your purpose? What's your cause? What's your belief? Why does your organization exist? Why do you get out of bed in the morning? And why should anyone care? As a result, the way we think, we act, the way we communicate is from the outside in, it's obvious. We go from the clearest thing to the fuzziest thing. But the inspired leaders and the inspired organizations -- regardless of their size, regardless of their industry -- all think, act and communicate from the inside out.

Let me give you an example. I use Apple because they're easy to understand and everybody gets it. If Apple were like everyone else, a marketing message from them might sound like this: "We make great computers. They're beautifully designed, simple to use and user friendly. Want to buy one?" "Meh." That's how most of us communicate. That's how most marketing and sales are done, that's how we communicate interpersonally. We say what we do, we say how we're different or better and we expect some sort of a behavior, a purchase, a vote, something like that. Here's our new law firm: We have the best lawyers with the biggest clients, we always perform for our clients. Here's our new car: It gets great gas mileage, it has leather seats. Buy our car. But it's uninspiring.

Here's how Apple actually communicates. "Everything we do, we believe in challenging the status quo. We believe in thinking differently. The way we challenge the status quo is by making our products beautifully designed, simple to use and user friendly. We just happen to make great computers. Want to buy one?" Totally different, right? You're ready to buy a computer from me. I just reversed the order of the information. What it proves to us is that people don't buy what you do; people buy why you do it.

This explains why every single person in this room is perfectly comfortable buying a computer from Apple. But we're also perfectly comfortable buying an MP3 player from Apple, or a phone

from Apple, or a DVR from Apple. As I said before, Apple's just a computer company. Nothing distinguishes them structurally from any of their competitors. Their competitors are equally qualified to make all of these products. In fact, they tried. A few years ago, Gateway came out with flat-screen TVs. They're eminently qualified to make flat-screen TVs. They've been making flat-screen monitors for years. Nobody bought one. Dell came out with MP3 players and PDAs, and they make great quality products, and they can make perfectly well-designed products -- and nobody bought one. In fact, talking about it now, we can't even imagine buying an MP3 player from Dell. Why would you buy one from a computer company? But we do it every day. People don't buy what you do; they buy why you do it. The goal is not to do business with everybody who needs what you have. The goal is to do business with people who believe what you believe.

Here's the best part: None of what I'm telling you is my opinion. It's all grounded in the tenets of biology. Not psychology, biology. If you look at a cross-section of the human brain, from the top down, the human brain is actually broken into three major components that correlate perfectly with the golden circle. Our newest brain, our Homo sapien brain, our neocortex, corresponds with the "what" level. The neocortex is responsible for all of our rational and analytical thought and language. The middle two sections make up our limbic brains, and our limbic brains are responsible for all of our feelings, like trust and loyalty. It's also responsible for all human behavior, all decision-making, and it has no capacity for language.

In other words, when we communicate from the outside in, yes, people can understand vast amounts of complicated information like features and benefits and facts and figures. It just doesn't drive behavior. When we can communicate from the inside out, we're talking directly to the part of the brain that controls behavior, and then we allow people to rationalize it with the tangible things we say and do. This is where gut decisions come from. Sometimes you can give somebody all the facts and figures, and they say, "I know what all the facts and details say, but it just doesn't feel right." Why would we use that verb, it doesn't "feel" right? Because the part of the brain that controls decision-making doesn't control language. The best we can muster up is, "I don't know. It just doesn't feel right." Or sometimes you say you're leading with your heart or soul. I hate to break it to you, those aren't other body parts controlling your behavior. It's all happening here in your limbic brain, the part of the brain that controls decision-making and not language.

But if you don't know why you do what you do, and people respond to why you do what you do, then how will you ever get people to vote for you, or buy something from you, or, more importantly, be loyal and want to be a part of what it is that you do. The goal is not just to sell to people who need what you have; the goal is to sell to people who believe what you believe. The goal is not just to hire people who need a job; it's to hire people who believe what you believe. I always say that, you know, if you hire people just because they can do a job, they'll work for your money, but if they believe what you believe, they'll work for you with blood and sweat and tears. Nowhere else is there a better example than with the Wright brothers.

Most people don't know about Samuel Pierpont Langley. And back in the early 20th century, the pursuit of powered man flight was like the dot com of the day. Everybody was trying it. And Samuel Pierpont Langley had, what we assume, to be the recipe for success. Even now, you ask people, "Why did your product or why did your company fail?" and people always give you the same permutation of the same three things: under-capitalized, the wrong people, bad market conditions. It's always the same three things, so let's explore that. Samuel Pierpont Langley was given 50,000 dollars by the War Department to figure out this flying machine. Money was no problem. He held a seat at Harvard and worked at the Smithsonian

and was extremely well-connected; he knew all the big minds of the day. He hired the best minds money could find and the market conditions were fantastic. The New York Times followed him around everywhere, and everyone was rooting for Langley. Then how come we've never heard of Samuel Pierpont Langley?

A few hundred miles away in Dayton, Ohio, Orville and Wilbur Wright, they had none of what we consider to be the recipe for success. They had no money; they paid for their dream with the proceeds from their bicycle shop. Not a single person on the Wright brothers' team had a college education, not even Orville or Wilbur. And The New York Times followed them around nowhere.

The difference was, Orville and Wilbur were driven by a cause, by a purpose, by a belief. They believed that if they could figure out this flying machine, it'll change the course of the world. Samuel Pierpont Langley was different. He wanted to be rich, and he wanted to be famous. He was in pursuit of the result. He was in pursuit of the riches. And lo and behold, look what happened. The people who believed in the Wright brothers' dream worked with them with blood and sweat and tears. The others just worked for the paycheck. They tell stories of how every time the Wright brothers went out, they would have to take five sets of parts, because that's how many times they would crash before supper.

And, eventually, on December 17th, 1903, the Wright brothers took flight, and no one was there to even experience it. We found out about it a few days later. And further proof that Langley was motivated by the wrong thing: the day the Wright brothers took flight, he quit. He could have said, "That's an amazing discovery, guys, and I will improve upon your technology," but he didn't. He wasn't first, he didn't get rich, he didn't get famous, so he quit.

People don't buy what you do; they buy why you do it. If you talk about what you believe, you will attract those who believe what you believe.

But why is it important to attract those who believe what you believe? Something called the law of diffusion of innovation, if you don't know the law, you know the terminology. The first 2.5% of our population are our innovators. The next 13.5% of our population are our early adopters. The next 34% are your early majority, your late majority and your laggards. The only reason these people buy touch-tone phones is because you can't buy rotary phones anymore.

## (Laughter)

We all sit at various places at various times on this scale, but what the law of diffusion of innovation tells us is that if you want mass-market success or mass-market acceptance of an idea, you cannot have it until you achieve this tipping point between 15 and 18 percent market penetration, and then the system tips. I love asking businesses, "What's your conversion on new business?" They love to tell you, "It's about 10 percent," proudly. Well, you can trip over 10% of the customers. We all have about 10% who just "get it." That's how we describe them, right? That's like that gut feeling, "Oh, they just get it."

The problem is: How do you find the ones that get it before doing business versus the ones who don't get it? So it's this here, this little gap that you have to close, as Jeffrey Moore calls it, "Crossing the Chasm" -- because, you see, the early majority will not try something until someone else has tried it first. And these guys, the innovators and the early adopters, they're comfortable making those gut decisions. They're more comfortable making those intuitive decisions that are driven by what they believe about the world and not just what product is available. These are the people who stood in line for six hours to buy an iPhone when they first came out, when you could have bought one off the shelf the next week. These are the people who spent 40,000 dollars on flat-screen TVs when they first came out, even though the technology was substandard. And, by the way, they didn't do it because the technology was so

great; they did it for themselves. It's because they wanted to be first. People don't buy what you do; they buy why you do it and what you do simply proves what you believe. In fact, people will do the things that prove what they believe. The reason that person bought the iPhone in the first six hours, stood in line for six hours, was because of what they believed about the world, and how they wanted everybody to see them: they were first. People don't buy what you do; they buy why you do it.

So let me give you a famous example, a famous failure and a famous success of the law of diffusion of innovation. First, the famous failure. It's a commercial example. As we said before, the recipe for success is money and the right people and the right market conditions. You should have success then. Look at TiVo. From the time TiVo came out about eight or nine years ago to this current day, they are the single highest-quality product on the market, hands down, there is no dispute. They were extremely well-funded. Market conditions were fantastic. I mean, we use TiVo as verb. I TiVo stuff on my piece-of-junk Time Warner DVR all the time.

#### (Laughter)

But TiVo's a commercial failure. They've never made money. And when they went IPO, their stock was at about 30 or 40 dollars and then plummeted, and it's never traded above 10. In fact, I don't think it's even traded above six, except for a couple of little spikes.

Because you see, when TiVo launched their product, they told us all what they had. They said, "We have a product that pauses live TV, skips commercials, rewinds live TV and memorizes your viewing habits without you even asking." And the cynical majority said, "We don't believe you. We don't need it. We don't like it. You're scaring us."

What if they had said, "If you're the kind of person who likes to have total control over every aspect of your life, boy, do we have a product for you. It pauses live TV, skips commercials, memorizes your viewing habits, etc., etc." People don't buy what you do; they buy why you do it, and what you do simply serves as the proof of what you believe.

Now let me give you a successful example of the law of diffusion of innovation. In the summer of 1963, 250,000 people showed up on the mall in Washington to hear Dr. King speak. They sent out no invitations, and there was no website to check the date. How do you do that? Well, Dr. King wasn't the only man in America who was a great orator. He wasn't the only man in America who suffered in a pre-civil rights America. In fact, some of his ideas were bad. But he had a gift. He didn't go around telling people what needed to change in America. He went around and told people what he believed. "I believe, I believe, I believe," he told people. And people who believed what he believed took his cause, and they made it their own, and they told people. And some of those people created structures to get the word out to even more people. And lo and behold, 250,000 people showed up on the right day at the right time to hear him speak.

How many of them showed up for him? Zero. They showed up for themselves. It's what they believed about America that got them to travel in a bus for eight hours to stand in the sun in Washington in the middle of August. It's what they believed, and it wasn't about black versus white: 25% of the audience was white.

Dr. King believed that there are two types of laws in this world: those that are made by a higher authority and those that are made by men. And not until all the laws that are made by men are consistent with the laws made by the higher authority will we live in a just world. It just so happened that the Civil Rights Movement was the perfect thing to help him bring his cause to life. We followed, not for him, but for ourselves. By the way, he gave the "I have a dream" speech, not the "I have a plan" speech.

# (Laughter)

Listen to politicians now, with their comprehensive 12-point plans. They're not inspiring anybody. Because there are leaders and there are those who lead. Leaders hold a position of power or authority, but those who lead inspire us. Whether they're individuals or organizations, we follow those who lead, not because we have to, but because we want to. We follow those who lead, not for them, but for ourselves. And it's those who start with "why" that have the ability to inspire those around them or find others who inspire them.

Thank you very much.

(Applause)

## TED Talk 5. The power of vulnerability. Brené Brown (TEDxHuston 2010, juny 2010)

So, I'll start with this: a couple years ago, an event planner called me because I was going to do a speaking event. And she called, and she said, "I'm really struggling with how to write about you on the little flyer." And I thought, "Well, what's the struggle?" And she said, "Well, I saw you speak, and I'm going to call you a researcher, I think, but I'm afraid if I call you a researcher, no one will come, because they'll think you're boring and irrelevant."

#### (Laughter)

And I was like, "Okay." And she said, "But the thing I liked about your talk is you're a storyteller. So I think what I'll do is just call you a storyteller." And of course, the academic, insecure part of me was like, "You're going to call me a what?" And she said, "I'm going to call you a storyteller." And I was like, "Why not 'magic pixie'?"

### (Laughter)

I was like, "Let me think about this for a second." I tried to call deep on my courage. And I thought, you know, I am a storyteller. I'm a qualitative researcher. I collect stories; that's what I do. And maybe stories are just data with a soul. And maybe I'm just a storyteller. And so I said, "You know what? Why don't you just say I'm a researcher-storyteller." And she went, "Ha ha. There's no such thing."

#### (Laughter)

So I'm a researcher-storyteller, and I'm going to talk to you today -- we're talking about expanding perception -- and so I want to talk to you and tell some stories about a piece of my research that fundamentally expanded my perception and really actually changed the way that I live and love and work and parent.

And this is where my story starts. When I was a young researcher, doctoral student, my first year, I had a research professor who said to us, "Here's the thing, if you cannot measure it, it does not exist." And I thought he was just sweet-talking me. I was like, "Really?" and he was like, "Absolutely." And so you have to understand that I have a bachelor's and a master's in social work, and I was getting my Ph.D. in social work, so my entire academic career was surrounded by people who kind of believed in the "life's messy, love it." And I'm more of the, "life's messy, clean it up, organize it and put it into a bento box."

### (Laughter)

And so to think that I had found my way, to found a career that takes me -- really, one of the big sayings in social work is, "Lean into the discomfort of the work." And I'm like, knock discomfort upside the head and move it over and get all A's. That was my mantra. So I was very excited about this. And so I thought, you know what, this is the career for me, because I am interested in some messy topics. But I want to be able to make them not messy. I want to understand them. I want to hack into these things that I know are important and lay the code out for everyone to see.

So where I started was with connection. Because, by the time you're a social worker for 10 years, what you realize is that connection is why we're here. It's what gives purpose and meaning to our lives. This is what it's all about. It doesn't matter whether you talk to people who work in social justice, mental health and abuse and neglect, what we know is that connection, the ability to feel connected, is -- neurobiologically that's how we're wired -- it's why we're here.

So I thought, you know what, I'm going to start with connection. Well, you know that situation where you get an evaluation from your boss, and she tells you 37 things that you do really awesome, and one "opportunity for growth?"

# (Laughter)

And all you can think about is that opportunity for growth, right? Well, apparently this is the way my work went as well, because, when you ask people about love, they tell you about heartbreak. When you ask people about belonging, they'll tell you their most excruciating experiences of being excluded. And when you ask people about connection, the stories they told me were about disconnection.

So very quickly -- really about six weeks into this research -- I ran into this unnamed thing that absolutely unraveled connection in a way that I didn't understand or had never seen. And so I pulled back out of the research and thought, I need to figure out what this is. And it turned out to be shame. And shame is really easily understood as the fear of disconnection: Is there something about me that, if other people know it or see it, that I won't be worthy of connection?

The things I can tell you about it: It's universal; we all have it. The only people who don't experience shame have no capacity for human empathy or connection. No one wants to talk about it, and the less you talk about it, the more you have it. What underpinned this shame, this "I'm not good enough," -- which, we all know that feeling: "I'm not blank enough. I'm not thin enough, rich enough, beautiful enough, smart enough, promoted enough." The thing that underpinned this was excruciating vulnerability. This idea of, in order for connection to happen, we have to allow ourselves to be seen, really seen.

And you know how I feel about vulnerability. I hate vulnerability. And so I thought, this is my chance to beat it back with my measuring stick. I'm going in, I'm going to figure this stuff out, I'm going to spend a year, I'm going to totally deconstruct shame, I'm going to understand how vulnerability works, and I'm going to outsmart it. So I was ready, and I was really excited. As you know, it's not going to turn out well.

# (Laughter)

You know this. So, I could tell you a lot about shame, but I'd have to borrow everyone else's time. But here's what I can tell you that it boils down to -- and this may be one of the most important things that I've ever learned in the decade of doing this research.

My one year turned into six years: Thousands of stories, hundreds of long interviews, focus groups. At one point, people were sending me journal pages and sending me their stories -- thousands of pieces of data in six years. And I kind of got a handle on it. I kind of understood, this is what shame is, this is how it works. I wrote a book, I published a theory, but something was not okay -- and what it was is that, if I roughly took the people I interviewed and divided them into people who really have a sense of worthiness -- that's what this comes down to, a sense of worthiness -- they have a strong sense of love and belonging -- and folks who struggle for it, and folks who are always wondering if they're good enough.

There was only one variable that separated the people who have a strong sense of love and belonging and the people who really struggle for it. And that was, the people who have a strong sense of love and belonging believe they're worthy of love and belonging. That's it. They believe they're worthy. And to me, the hard part of the one thing that keeps us out of connection is our fear that we're not worthy of connection, was something that, personally and professionally, I felt like I needed to understand better. So what I did is I took all of the

interviews where I saw worthiness, where I saw people living that way, and just looked at those.

What do these people have in common? I have a slight office supply addiction, but that's another talk. So I had a manila folder, and I had a Sharpie, and I was like, what am I going to call this research? And the first words that came to my mind were "whole-hearted." These are whole-hearted people, living from this deep sense of worthiness. So I wrote at the top of the manila folder, and I started looking at the data. In fact, I did it first in a four-day, very intensive data analysis, where I went back, pulled the interviews, the stories, pulled the incidents. What's the theme? What's the pattern? My husband left town with the kids because I always go into this Jackson Pollock crazy thing, where I'm just writing and in my researcher mode.

And so here's what I found. What they had in common was a sense of courage. And I want to separate courage and bravery for you for a minute. Courage, the original definition of courage, when it first came into the English language -- it's from the Latin word "cor," meaning "heart" -- and the original definition was to tell the story of who you are with your whole heart. And so these folks had, very simply, the courage to be imperfect. They had the compassion to be kind to themselves first and then to others, because, as it turns out, we can't practice compassion with other people if we can't treat ourselves kindly. And the last was they had connection, and -- this was the hard part -- as a result of authenticity, they were willing to let go of who they thought they should be in order to be who they were, which you have to absolutely do that for connection.

The other thing that they had in common was this: They fully embraced vulnerability. They believed that what made them vulnerable made them beautiful. They didn't talk about vulnerability being comfortable, nor did they really talk about it being excruciating -- as I had heard it earlier in the shame interviewing. They just talked about it being necessary. They talked about the willingness to say, "I love you" first ... the willingness to do something where there are no guarantees ... the willingness to breathe through waiting for the doctor to call after your mammogram. They're willing to invest in a relationship that may or may not work out. They thought this was fundamental.

I personally thought it was betrayal. I could not believe I had pledged allegiance to research, where our job -- you know, the definition of research is to control and predict, to study phenomena for the explicit reason to control and predict. And now my mission to control and predict had turned up the answer that the way to live is with vulnerability and to stop controlling and predicting. This led to a little breakdown --

(Laughter)

-- which actually looked more like this.

(Laughter)

And it did.

I call it a breakdown; my therapist calls it a spiritual awakening.

(Laughter)

A spiritual awakening sounds better than breakdown, but I assure you, it was a breakdown. And I had to put my data away and go find a therapist. Let me tell you something: you know who you are when you call your friends and say, "I think I need to see somebody. Do you have any recommendations?" Because about five of my friends were like, "Wooo, I wouldn't want to be your therapist."

## (Laughter)

I was like, "What does that mean?" And they're like, "I'm just saying, you know. Don't bring your measuring stick."

(Laughter)

I was like, "Okay." So I found a therapist. My first meeting with her, Diana -- I brought in my list of the way the whole-hearted live, and I sat down. And she said, "How are you?" And I said, "I'm great. I'm okay." She said, "What's going on?" And this is a therapist who sees therapists, because we have to go to those, because their B.S. meters are good.

(Laughter)

And so I said, "Here's the thing, I'm struggling." And she said, "What's the struggle?" And I said, "Well, I have a vulnerability issue. And I know that vulnerability is the core of shame and fear and our struggle for worthiness, but it appears that it's also the birthplace of joy, of creativity, of belonging, of love. And I think I have a problem, and I need some help." And I said, "But here's the thing: no family stuff, no childhood shit."

(Laughter)

"I just need some strategies."

(Laughter)

(Applause)

Thank you. So she goes like this.

(Laughter)

And then I said, "It's bad, right?" And she said, "It's neither good nor bad."

(Laughter)

"It just is what it is." And I said, "Oh my God, this is going to suck."

(Laughter)

And it did, and it didn't. And it took about a year. And you know how there are people that, when they realize that vulnerability and tenderness are important, that they surrender and walk into it. A: that's not me, and B: I don't even hang out with people like that.

(Laughter)

For me, it was a yearlong street fight. It was a slugfest. Vulnerability pushed, I pushed back. I lost the fight, but probably won my life back.

And so then I went back into the research and spent the next couple of years really trying to understand what they, the whole-hearted, what choices they were making, and what we are doing with vulnerability. Why do we struggle with it so much? Am I alone in struggling with vulnerability? No.

So this is what I learned. We numb vulnerability -- when we're waiting for the call. It was funny, I sent something out on Twitter and on Facebook that says, "How would you define vulnerability? What makes you feel vulnerable?" And within an hour and a half, I had 150 responses. Because I wanted to know what's out there. Having to ask my husband for help because I'm sick, and we're newly married; initiating sex with my husband; initiating sex with my wife; being turned down; asking someone out; waiting for the doctor to call back; getting

laid off; laying off people. This is the world we live in. We live in a vulnerable world. And one of the ways we deal with it is we numb vulnerability.

And I think there's evidence -- and it's not the only reason this evidence exists, but I think it's a huge cause -- We are the most in-debt ... obese ... addicted and medicated adult cohort in U.S. history. The problem is -- and I learned this from the research -- that you cannot selectively numb emotion. You can't say, here's the bad stuff. Here's vulnerability, here's grief, here's shame, here's fear, here's disappointment. I don't want to feel these. I'm going to have a couple of beers and a banana nut muffin.

#### (Laughter)

I don't want to feel these. And I know that's knowing laughter. I hack into your lives for a living. God.

# (Laughter)

You can't numb those hard feelings without numbing the other affects, our emotions. You cannot selectively numb. So when we numb those, we numb joy, we numb gratitude, we numb happiness. And then, we are miserable, and we are looking for purpose and meaning, and then we feel vulnerable, so then we have a couple of beers and a banana nut muffin. And it becomes this dangerous cycle.

One of the things that I think we need to think about is why and how we numb. And it doesn't just have to be addiction. The other thing we do is we make everything that's uncertain certain. Religion has gone from a belief in faith and mystery to certainty. "I'm right, you're wrong. Shut up." That's it. Just certain. The more afraid we are, the more vulnerable we are, the more afraid we are. This is what politics looks like today. There's no discourse anymore. There's no conversation. There's just blame. You know how blame is described in the research? A way to discharge pain and discomfort. We perfect. If there's anyone who wants their life to look like this, it would be me, but it doesn't work. Because what we do is we take fat from our butts and put it in our cheeks.

# (Laughter)

Which just, I hope in 100 years, people will look back and go, "Wow."

#### (Laughter)

And we perfect, most dangerously, our children. Let me tell you what we think about children. They're hardwired for struggle when they get here. And when you hold those perfect little babies in your hand, our job is not to say, "Look at her, she's perfect. My job is just to keep her perfect -- make sure she makes the tennis team by fifth grade and Yale by seventh." That's not our job. Our job is to look and say, "You know what? You're imperfect, and you're wired for struggle, but you are worthy of love and belonging." That's our job. Show me a generation of kids raised like that, and we'll end the problems, I think, that we see today. We pretend that what we do doesn't have an effect on people. We do that in our personal lives. We do that corporate -- whether it's a bailout, an oil spill ... a recall. We pretend like what we're doing doesn't have a huge impact on other people. I would say to companies, this is not our first rodeo, people. We just need you to be authentic and real and say ... "We're sorry. We'll fix it."

But there's another way, and I'll leave you with this. This is what I have found: To let ourselves be seen, deeply seen, vulnerably seen ... to love with our whole hearts, even though there's no guarantee -- and that's really hard, and I can tell you as a parent, that's excruciatingly difficult - to practice gratitude and joy in those moments of terror, when we're wondering, "Can I love

you this much? Can I believe in this this passionately? Can I be this fierce about this?" just to be able to stop and, instead of catastrophizing what might happen, to say, "I'm just so grateful, because to feel this vulnerable means I'm alive." And the last, which I think is probably the most important, is to believe that we're enough. Because when we work from a place, I believe, that says, "I'm enough" ... then we stop screaming and start listening, we're kinder and gentler to the people around us, and we're kinder and gentler to ourselves.

That's all I have. Thank you.

(Applause)

# TED Talk 6. How to speak so that people want to listen. Julian Treasure (TEDGlobal 2013, juny 2013)

The human voice: It's the instrument we all play. It's the most powerful sound in the world, probably. It's the only one that can start a war or say "I love you." And yet many people have the experience that when they speak, people don't listen to them. And why is that? How can we speak powerfully to make change in the world?

What I'd like to suggest, there are a number of habits that we need to move away from. I've assembled for your pleasure here seven deadly sins of speaking. I'm not pretending this is an exhaustive list, but these seven, I think, are pretty large habits that we can all fall into.

First, gossip. Speaking ill of somebody who's not present. Not a nice habit, and we know perfectly well the person gossiping, five minutes later, will be gossiping about us.

Second, judging. We know people who are like this in conversation, and it's very hard to listen to somebody if you know that you're being judged and found wanting at the same time.

Third, negativity. You can fall into this. My mother, in the last years of her life, became very negative, and it's hard to listen. I remember one day, I said to her, "It's October 1 today," and she said, "I know, isn't it dreadful?"

# (Laughter)

It's hard to listen when somebody's that negative.

## (Laughter)

And another form of negativity, complaining. Well, this is the national art of the U.K. It's our national sport. We complain about the weather, sport, about politics, about everything, but actually, complaining is viral misery. It's not spreading sunshine and lightness in the world.

#### Excuses.

We've all met this guy. Maybe we've all been this guy. Some people have a blamethrower. They just pass it on to everybody else and don't take responsibility for their actions, and again, hard to listen to somebody who is being like that.

Penultimate, the sixth of the seven, embroidery, exaggeration. It demeans our language, actually, sometimes. For example, if I see something that really is awesome, what do I call it?

# (Laughter)

And then, of course, this exaggeration becomes lying, and we don't want to listen to people we know are lying to us.

And finally, dogmatism. The confusion of facts with opinions. When those two things get conflated, you're listening into the wind. You know, somebody is bombarding you with their opinions as if they were true. It's difficult to listen to that.

So here they are, seven deadly sins of speaking. These are things I think we need to avoid. But is there a positive way to think about this? Yes, there is. I'd like to suggest that there are four really powerful cornerstones, foundations, that we can stand on if we want our speech to be powerful and to make change in the world. Fortunately, these things spell a word. The word is "hail," and it has a great definition as well. I'm not talking about the stuff that falls from the sky and hits you on the head. I'm talking about this definition, to greet or acclaim enthusiastically, which is how I think our words will be received if we stand on these four things.

So what do they stand for? See if you can guess. The H, honesty, of course, being true in what you say, being straight and clear. The A is authenticity, just being yourself. A friend of mine described it as standing in your own truth, which I think is a lovely way to put it. The I is integrity, being your word, actually doing what you say, and being somebody people can trust. And the L is love. I don't mean romantic love, but I do mean wishing people well, for two reasons. First of all, I think absolute honesty may not be what we want. I mean, my goodness, you look ugly this morning. Perhaps that's not necessary. Tempered with love, of course, honesty is a great thing. But also, if you're really wishing somebody well, it's very hard to judge them at the same time. I'm not even sure you can do those two things simultaneously. So hail.

Also, now that's what you say, and it's like the old song, it is what you say, it's also the way that you say it. You have an amazing toolbox. This instrument is incredible, and yet this is a toolbox that very few people have ever opened. I'd like to have a little rummage in there with you now and just pull a few tools out that you might like to take away and play with, which will increase the power of your speaking.

Register, for example. Now, falsetto register may not be very useful most of the time, but there's a register in between. I'm not going to get very technical about this for any of you who are voice coaches. You can locate your voice, however. So if I talk up here in my nose, you can hear the difference. If I go down here in my throat, which is where most of us speak from most of the time. But if you want weight, you need to go down here to the chest. You hear the difference? We vote for politicians with lower voices, it's true, because we associate depth with power and with authority. That's register.

Then we have timbre. It's the way your voice feels. Again, the research shows that we prefer voices which are rich, smooth, warm, like hot chocolate. Well if that's not you, that's not the end of the world, because you can train. Go and get a voice coach. And there are amazing things you can do with breathing, with posture, and with exercises to improve the timbre of your voice.

Then prosody. I love prosody. This is the sing-song, the meta-language that we use in order to impart meaning. It's root one for meaning in conversation. People who speak all on one note are really quite hard to listen to if they don't have any prosody at all. That's where the word "monotonic" comes from, or monotonous, monotone. Also, we have repetitive prosody now coming in, where every sentence ends as if it were a question when it's actually not a question, it's a statement?

## (Laughter)

And if you repeat that one, it's actually restricting your ability to communicate through prosody, which I think is a shame, so let's try and break that habit.

#### Pace.

I can get very excited by saying something really quickly, or I can slow right down to emphasize, and at the end of that, of course, is our old friend silence. There's nothing wrong with a bit of silence in a talk, is there? We don't have to fill it with ums and ahs. It can be very powerful.

Of course, pitch often goes along with pace to indicate arousal, but you can do it just with pitch. Where did you leave my keys? (Higher pitch) Where did you leave my keys? So, slightly different meaning in those two deliveries.

And finally, volume. (Loud) I can get really excited by using volume. Sorry about that, if I startled anybody. Or, I can have you really pay attention by getting very quiet. Some people broadcast the whole time. Try not to do that. That's called sodcasting,

## (Laughter)

Imposing your sound on people around you carelessly and inconsiderately. Not nice.

Of course, where this all comes into play most of all is when you've got something really important to do. It might be standing on a stage like this and giving a talk to people. It might be proposing marriage, asking for a raise, a wedding speech. Whatever it is, if it's really important, you owe it to yourself to look at this toolbox and the engine that it's going to work on, and no engine works well without being warmed up. Warm up your voice.

Actually, let me show you how to do that. Would you all like to stand up for a moment? I'm going to show you the six vocal warm-up exercises that I do before every talk I ever do. Any time you're going to talk to anybody important, do these. First, arms up, deep breath in, and sigh out, ahhhhh, like that. One more time. Ahhhh, very good. Now we're going to warm up our lips, and we're going to go Ba, Ba, Ba, Ba, Ba, Ba, Ba, Ba, Ba. Very good. And now, brrrrrrrrrrr, just like when you were a kid. Brrrr. Now your lips should be coming alive. We're going to do the tongue next with exaggerated Ia, Ia, Ia, Ia, Ia, Ia, Ia. Beautiful. You're getting really good at this. And then, roll an R. Rrrrrrr. That's like champagne for the tongue. Finally, and if I can only do one, the pros call this the siren. It's really good. It starts with "we" and goes to "aw." The "we" is high, the "aw" is low. So you go, weeeaawww, weeeaawww.

Fantastic. Give yourselves a round of applause. Take a seat, thank you.

(Applause)

Next time you speak, do those in advance.

Now let me just put this in context to close. This is a serious point here. This is where we are now, right? We speak not very well to people who simply aren't listening in an environment that's all about noise and bad acoustics. I have talked about that on this stage in different phases. What would the world be like if we were speaking powerfully to people who were listening consciously in environments which were actually fit for purpose? Or to make that a bit larger, what would the world be like if we were creating sound consciously and consuming sound consciously and designing all our environments consciously for sound? That would be a world that does sound beautiful, and one where understanding would be the norm, and that is an idea worth spreading.

Thank you.

(Applause)

## TED Talk 7. The next outbreak? We're not ready. Bill Gates (TED 2015, març 2015)

When I was a kid, the disaster we worried about most was a nuclear war. That's why we had a barrel like this down in our basement, filled with cans of food and water. When the nuclear attack came, we were supposed to go downstairs, hunker down, and eat out of that barrel.

Today the greatest risk of global catastrophe doesn't look like this. Instead, it looks like this. If anything kills over 10 million people in the next few decades, it's most likely to be a highly infectious virus rather than a war. Not missiles, but microbes. Now, part of the reason for this is that we've invested a huge amount in nuclear deterrents. But we've actually invested very little in a system to stop an epidemic. We're not ready for the next epidemic.

Let's look at Ebola. I'm sure all of you read about it in the newspaper, lots of tough challenges. I followed it carefully through the case analysis tools we use to track polio eradication. And as you look at what went on, the problem wasn't that there was a system that didn't work well enough, the problem was that we didn't have a system at all. In fact, there's some pretty obvious key missing pieces.

We didn't have a group of epidemiologists ready to go, who would have gone, seen what the disease was, seen how far it had spread. The case reports came in on paper. It was very delayed before they were put online and they were extremely inaccurate. We didn't have a medical team ready to go. We didn't have a way of preparing people. Now, Médecins Sans Frontières did a great job orchestrating volunteers. But even so, we were far slower than we should have been getting the thousands of workers into these countries. And a large epidemic would require us to have hundreds of thousands of workers. There was no one there to look at treatment approaches. No one to look at the diagnostics. No one to figure out what tools should be used. As an example, we could have taken the blood of survivors, processed it, and put that plasma back in people to protect them. But that was never tried.

So there was a lot that was missing. And these things are really a global failure. The WHO is funded to monitor epidemics, but not to do these things I talked about. Now, in the movies it's quite different. There's a group of handsome epidemiologists ready to go, they move in, they save the day, but that's just pure Hollywood.

The failure to prepare could allow the next epidemic to be dramatically more devastating than Ebola Let's look at the progression of Ebola over this year. About 10,000 people died, and nearly all were in the three West African countries. There's three reasons why it didn't spread more. The first is that there was a lot of heroic work by the health workers. They found the people and they prevented more infections. The second is the nature of the virus. Ebola does not spread through the air. And by the time you're contagious, most people are so sick that they're bedridden. Third, it didn't get into many urban areas. And that was just luck. If it had gotten into a lot more urban areas, the case numbers would have been much larger.

So next time, we might not be so lucky. You can have a virus where people feel well enough while they're infectious that they get on a plane or they go to a market. The source of the virus could be a natural epidemic like Ebola, or it could be bioterrorism. So there are things that would literally make things a thousand times worse.

In fact, let's look at a model of a virus spread through the air, like the Spanish Flu back in 1918. So here's what would happen: It would spread throughout the world very, very quickly. And you can see over 30 million people died from that epidemic. So this is a serious problem. We should be concerned.

But in fact, we can build a really good response system. We have the benefits of all the science and technology that we talk about here. We've got cell phones to get information from the public and get information out to them. We have satellite maps where we can see where

people are and where they're moving. We have advances in biology that should dramatically change the turnaround time to look at a pathogen and be able to make drugs and vaccines that fit for that pathogen. So we can have tools, but those tools need to be put into an overall global health system. And we need preparedness.

The best lessons, I think, on how to get prepared are again, what we do for war. For soldiers, we have full-time, waiting to go. We have reserves that can scale us up to large numbers. NATO has a mobile unit that can deploy very rapidly. NATO does a lot of war games to check, are people well trained? Do they understand about fuel and logistics and the same radio frequencies? So they are absolutely ready to go. So those are the kinds of things we need to deal with an epidemic.

What are the key pieces? First, we need strong health systems in poor countries. That's where mothers can give birth safely, kids can get all their vaccines. But, also where we'll see the outbreak very early on. We need a medical reserve corps: lots of people who've got the training and background who are ready to go, with the expertise. And then we need to pair those medical people with the military. taking advantage of the military's ability to move fast, do logistics and secure areas. We need to do simulations, germ games, not war games, so that we see where the holes are. The last time a germ game was done in the United States was back in 2001, and it didn't go so well. So far the score is germs: 1, people: 0. Finally, we need lots of advanced R&D in areas of vaccines and diagnostics. There are some big breakthroughs, like the Adeno-associated virus, that could work very, very quickly.

Now I don't have an exact budget for what this would cost, but I'm quite sure it's very modest compared to the potential harm. The World Bank estimates that if we have a worldwide flu epidemic, global wealth will go down by over three trillion dollars and we'd have millions and millions of deaths. These investments offer significant benefits beyond just being ready for the epidemic. The primary healthcare, the R&D, those things would reduce global health equity and make the world more just as well as more safe.

So I think this should absolutely be a priority. There's no need to panic. We don't have to hoard cans of spaghetti or go down into the basement. But we need to get going, because time is not on our side.

In fact, if there's one positive thing that can come out of the Ebola epidemic, it's that it can serve as an early warning, a wake-up call, to get ready. If we start now, we can be ready for the next epidemic.

Thank you.

(Applause)

## TED Talk 8. My philosophy for a happy life. Sam Berns (TEDxMidAtlantic 2013, octubre 2013)

Hello everyone. I'm Sam, and I just turned 17. A few years ago, before my freshman year in High School, I wanted to play snare drum in the Foxboro High School Marching Band, and it was a dream that I just had to accomplish. But each snare drum and harness weighed about 40 pounds each, and I have a disease called Progeria. So just to give you an idea, I weigh only about 50 pounds. So, logistically, I really couldn't carry a regular sized snare drum, and because of this the band director assigned me to play pit percussion during the halftime show. Now pit percussion was fun. It involved some really cool auxiliary percussion instruments, like the bongos, timpani, and timbales, and cowbell. So it was fun, but it involved no marching, and I was just so devastated. However, nothing was going to stop me from playing snare drum with the marching band in the halftime show. So my family and I worked with an engineer to design a snare drum harness that would be lighter, and easier for me to carry. So after continuous work, we made a snare drum apparatus that weighs only about 6 pounds. (Applause) I just want to give you some more information about Progeria. It affects only about 350 kids today, worldwide. So it's pretty rare, and the effects of Progeria include: tight skin, lack of weight gain, stunted growth, and heart disease. Last year my Mom and her team of scientists published the first successful Progeria Treatment Study, and because of this I was interviewed on NPR, and John Hamilton asked me the question: "What is the most important thing that people should know about you?" And my answer was simply that I have a very happy life. (Applause) So even though there are many obstacles in my life, with a lot of them being created by Progeria, I don't want people to feel bad for me. I don't think about these obstacles all the time, and I'm able to overcome most of them anyway. So I'm here today, to share with you my philosophy for a happy life. So, for me, there are 3 aspects to this philosophy. So this is a quote from the famous Ferris Bueller. The first aspect to my philosophy is that I'm okay with what I ultimately can't do because there is so much I can do. Now people sometimes ask me questions like, "Isn't it hard living with Progeria?" or "What daily challenges of Progeria do you face?" And I'd like to say that, even though I have Progeria, most of my time is spent thinking about things that have nothing to do with Progeria at all. Now this doesn't mean that I ignore the negative aspects of these obstacles. When I can't do something like run a long distance, or go on an intense roller coaster, I know what I'm missing out on. But instead, I choose to focus on the activities that I can do through things that I'm passionate about, like scouting, or music, or comic books, or any of my favorite Boston sports teams. Yeah, so -- (Laughter) However, sometimes I need to find a different way to do something by making adjustments, and I want to put those things in the "can do" category. Kind of like you saw with the drum earlier. So here's a clip with me playing Spider-Man with the Foxboro High School Marching Band at halftime a couple of years ago. (Video) ♪ Spider-Man theme song ♪ (Applause) Thank you. All right, all right, so -- That was pretty cool, and so I was able to accomplish my dream of playing snare drum with the marching band, as I believe I can do for all of my dreams. So hopefully, you can accomplish your dreams as well, with this outlook. The next aspect to my philosophy is that I surround myself with people I want to be with, people of high quality. I'm extremely lucky to have an amazing family, who have always supported me throughout my entire life. And I'm also really fortunate to have a really close group of friends at school. Now we're kind of goofy, a lot of us are band geeks, but we really enjoy each other's company, and we help each other out when we need to. We see each other for who we are on the inside. So this is us goofing off a little bit. So we're juniors in High School now, and we can now mentor younger band members, as a single collective unit. What I love about being in a group like the band, is that the music that we make together, is true, is genuine, and it supersedes Progeria. So I don't have to worry about that when I'm feeling so good about making music. But even having made a documentary, going on TV a couple of times, I feel like I'm at my highest point when I'm with the people that surround me every day. They provide the real positive influences in my life, as I

hope I can provide a positive influence in theirs as well. (Applause) Thank you. So the bottom line here, is that I hope you appreciate and love your family, love your friends, for you guys, love you Bro's and acknowledge your mentors, and your community, because they are a very real aspect of everyday life, they can make a truly significant, positive impact. The third aspect to the philosophy is, Keep moving forward. Here's a quote by a man you may know, named Walt Disney, and it's one of my favorite quotes. I always try to have something to look forward to. Something to strive for to make my life richer. It doesn't have to be big. It could be anything from looking forward to the next comic book to come out, or going on a large family vacation, or hanging out with my friends, to going to the next High School football game. However, all of these things keep me focused, and know that there's a bright future ahead, and may get me through some difficult times that I may be having. Now this mentality includes staying in a forward thinking state of mind. I try hard not to waste energy feeling badly for myself, because when I do, I get stuck in a paradox, where there's no room for any happiness or any other emotion. Now, it's not that I ignore when I'm feeling badly, I kind of accept it, I let it in, so that I can acknowledge it, and do what I need to do to move past it. When I was younger, I wanted to be an engineer. I wanted to be an inventor, who would catapult the world into a better future. Maybe this came from my love of Legos, and the freedom of expression that I felt when I was building with them. And this was also derived from my family and my mentors, who always make me feel whole, and good about myself. Now today my ambitions have changed a little bit, I'd like to go into the field of Biology, maybe cell biology, or genetics, or biochemistry, or really anything. This is a friend of mine, who I look up to, Francis Collins, the director of the NIH, and this is us at TEDMED last year, chatting away. I feel that no matter what I choose to become, I believe that I can change the world. And as I'm striving to change the world, I will be happy. About four years ago, HBO began to film a documentary about my family and me called "Life According to Sam". That was a pretty great experience, but it was also four years ago. And like anyone, my views on many things have changed, and hopefully matured, like my potential career choice. However, some things have stayed the same throughout that time. Like my mentality, and philosophy towards life. So I would like to show you a clip of my younger self from the film, that I feel embodies that philosophy. (Video) I know more about it genetically. So it's less of an embodiment now. It used to be like this thing that prevents me from doing all this stuff, that causes other kids to die, that causes everybody to be stressed, and now it's a protein that is abnormal, that weakens the structure of cells. So, and it takes a burden off of me because now I don't have to think about Progeria as an entity. Okay, pretty good, huh? (Applause) Thank you. So, as you can see I've been thinking this way for many years. But I'd never really had to apply all of these aspects of my philosophy to the test at one time, until last January. I was pretty sick, I had a chest cold, and I was in the hospital for a few days, and I was secluded from all of the aspects of my life that I felt made me, me, that kind of gave me my identity. But knowing that I was going to get better, and looking forward to a time that I would feel good again, helped me to keep moving forward. And sometimes I had to be brave, and it wasn't always easy. Sometimes I faltered, I had bad days, but I realized that being brave isn't supposed to be easy. And for me, I feel it's the key way to keep moving forward. So, all in all, I don't waste energy feeling bad for myself. I surround myself with people that I want to be with, and I keep moving forward. So with this philosophy, I hope that all of you, regardless of your obstacles, can have a very happy life as well. Oh, wait, hang on a second, one more piece of advice -- (Laughter) Never miss a party if you can help it. My school's homecoming dance is tomorrow night, and I will be there. Thank you very much. (Applause)

# TED Talk 9. What makes a good life? Lessons from the longest study on happiness. Robert Waldinger (TEDxBeaconStreet, novembre 2015)

What keeps us healthy and happy as we go through life? If you were going to invest now in your future best self, where would you put your time and your energy? There was a recent survey of millennials asking them what their most important life goals were, and over 80 percent said that a major life goal for them was to get rich. And another 50 percent of those same young adults said that another major life goal was to become famous.

#### (Laughter)

And we're constantly told to lean in to work, to push harder and achieve more. We're given the impression that these are the things that we need to go after in order to have a good life. Pictures of entire lives, of the choices that people make and how those choices work out for them, those pictures are almost impossible to get. Most of what we know about human life we know from asking people to remember the past, and as we know, hindsight is anything but 20/20. We forget vast amounts of what happens to us in life, and sometimes memory is downright creative.

But what if we could watch entire lives as they unfold through time? What if we could study people from the time that they were teenagers all the way into old age to see what really keeps people happy and healthy?

We did that. The Harvard Study of Adult Development may be the longest study of adult life that's ever been done. For 75 years, we've tracked the lives of 724 men, year after year, asking about their work, their home lives, their health, and of course asking all along the way without knowing how their life stories were going to turn out.

Studies like this are exceedingly rare. Almost all projects of this kind fall apart within a decade because too many people drop out of the study, or funding for the research dries up, or the researchers get distracted, or they die, and nobody moves the ball further down the field. But through a combination of luck and the persistence of several generations of researchers, this study has survived. About 60 of our original 724 men are still alive, still participating in the study, most of them in their 90s. And we are now beginning to study the more than 2,000 children of these men. And I'm the fourth director of the study.

Since 1938, we've tracked the lives of two groups of men. The first group started in the study when they were sophomores at Harvard College. They all finished college during World War II, and then most went off to serve in the war. And the second group that we've followed was a group of boys from Boston's poorest neighborhoods, boys who were chosen for the study specifically because they were from some of the most troubled and disadvantaged families in the Boston of the 1930s. Most lived in tenements, many without hot and cold running water.

When they entered the study, all of these teenagers were interviewed. They were given medical exams. We went to their homes and we interviewed their parents. And then these teenagers grew up into adults who entered all walks of life. They became factory workers and lawyers and bricklayers and doctors, one President of the United States. Some developed alcoholism. A few developed schizophrenia. Some climbed the social ladder from the bottom all the way to the very top, and some made that journey in the opposite direction.

The founders of this study would never in their wildest dreams have imagined that I would be standing here today, 75 years later, telling you that the study still continues. Every two years, our patient and dedicated research staff calls up our men and asks them if we can send them yet one more set of questions about their lives.

Many of the inner city Boston men ask us, "Why do you keep wanting to study me? My life just isn't that interesting." The Harvard men never ask that question.

#### (Laughter)

To get the clearest picture of these lives, we don't just send them questionnaires. We interview them in their living rooms. We get their medical records from their doctors. We draw their blood, we scan their brains, we talk to their children. We videotape them talking with their wives about their deepest concerns. And when, about a decade ago, we finally asked the wives if they would join us as members of the study, many of the women said, "You know, it's about time."

# (Laughter)

So what have we learned? What are the lessons that come from the tens of thousands of pages of information that we've generated on these lives? Well, the lessons aren't about wealth or fame or working harder and harder. The clearest message that we get from this 75-year study is this: Good relationships keep us happier and healthier. Period.

We've learned three big lessons about relationships. The first is that social connections are really good for us, and that loneliness kills. It turns out that people who are more socially connected to family, to friends, to community, are happier, they're physically healthier, and they live longer than people who are less well connected. And the experience of loneliness turns out to be toxic. People who are more isolated than they want to be from others find that they are less happy, their health declines earlier in midlife, their brain functioning declines sooner and they live shorter lives than people who are not lonely. And the sad fact is that at any given time, more than one in five Americans will report that they're lonely.

And we know that you can be lonely in a crowd and you can be lonely in a marriage, so the second big lesson that we learned is that it's not just the number of friends you have, and it's not whether or not you're in a committed relationship, but it's the quality of your close relationships that matters. It turns out that living in the midst of conflict is really bad for our health. High-conflict marriages, for example, without much affection, turn out to be very bad for our health, perhaps worse than getting divorced. And living in the midst of good, warm relationships is protective.

Once we had followed our men all the way into their 80s, we wanted to look back at them at midlife and to see if we could predict who was going to grow into a happy, healthy octogenarian and who wasn't. And when we gathered together everything we knew about them at age 50, it wasn't their middle age cholesterol levels that predicted how they were going to grow old. It was how satisfied they were in their relationships. The people who were the most satisfied in their relationships at age 50 were the healthiest at age 80. And good, close relationships seem to buffer us from some of the slings and arrows of getting old. Our most happily partnered men and women reported, in their 80s, that on the days when they had more physical pain, their mood stayed just as happy. But the people who were in unhappy relationships, on the days when they reported more physical pain, it was magnified by more emotional pain.

And the third big lesson that we learned about relationships and our health is that good relationships don't just protect our bodies, they protect our brains. It turns out that being in a securely attached relationship to another person in your 80s is protective, that the people who are in relationships where they really feel they can count on the other person in times of need, those people's memories stay sharper longer. And the people in relationships where they feel they really can't count on the other one, those are the people who experience earlier memory decline. And those good relationships, they don't have to be smooth all the

time. Some of our octogenarian couples could bicker with each other day in and day out, but as long as they felt that they could really count on the other when the going got tough, those arguments didn't take a toll on their memories.

So this message, that good, close relationships are good for our health and well-being, this is wisdom that's as old as the hills. Why is this so hard to get and so easy to ignore? Well, we're human. What we'd really like is a quick fix, something we can get that'll make our lives good and keep them that way. Relationships are messy and they're complicated and the hard work of tending to family and friends, it's not sexy or glamorous. It's also lifelong. It never ends. The people in our 75-year study who were the happiest in retirement were the people who had actively worked to replace workmates with new playmates. Just like the millennials in that recent survey, many of our men when they were starting out as young adults really believed that fame and wealth and high achievement were what they needed to go after to have a good life. But over and over, over these 75 years, our study has shown that the people who fared the best were the people who leaned in to relationships, with family, with friends, with community.

So what about you? Let's say you're 25, or you're 40, or you're 60. What might leaning in to relationships even look like?

Well, the possibilities are practically endless. It might be something as simple as replacing screen time with people time or livening up a stale relationship by doing something new together, long walks or date nights, or reaching out to that family member who you haven't spoken to in years, because those all-too-common family feuds take a terrible toll on the people who hold the grudges.

I'd like to close with a quote from Mark Twain. More than a century ago, he was looking back on his life, and he wrote this: "There isn't time, so brief is life, for bickerings, apologies, heartburnings, callings to account. There is only time for loving, and but an instant, so to speak, for that."

The good life is built with good relationships.

Thank you.

(Applause)

# TED Talk 10. Looks aren't everything. Believe me, I'm a model. Cameron Russell (TEDxMidAtlantic, octubre 2012)

Hi. My name is Cameron Russell, and for the last little while, I've been a model. Actually, for 10 years. And I feel like there's an uncomfortable tension in the room right now because I should not have worn this dress.

(Laughter)

So luckily, I brought an outfit change. This is the first outfit change on the TED stage, so you guys are pretty lucky to witness it, I think. If some of the women were really horrified when I came out, you don't have to tell me now, but I'll find out later on Twitter.

(Laughter)

I'd also note that I'm quite privileged to be able to transform what you think of me in a very brief 10 seconds. Not everybody gets to do that. These heels are very uncomfortable, so good thing I wasn't going to wear them. The worst part is putting this sweater over my head, because that's when you'll all laugh at me, so don't do anything while it's over my head. All right.

So, why did I do that? That was awkward.

(Laughter)

Well --

(Laughter)

Hopefully not as awkward as that picture. Image is powerful, but also, image is superficial. I just totally transformed what you thought of me, in six seconds. And in this picture, I had actually never had a boyfriend in real life. I was totally uncomfortable, and the photographer was telling me to arch my back and put my hand in that guy's hair. And of course, barring surgery, or the fake tan that I got two days ago for work, there's very little that we can do to transform how we look, and how we look, though it is superficial and immutable, has a huge impact on our lives.

So today, for me, being fearless means being honest. And I am on this stage because I am a model. I am on this stage because I am a pretty, white woman, and in my industry, we call that a sexy girl. I'm going to answer the questions that people always ask me, but with an honest twist.

So the first question is, how do you become a model? I always just say, "Oh, I was scouted," but that means nothing. The real way that I became a model is I won a genetic lottery, and I am the recipient of a legacy, and maybe you're wondering what is a legacy. Well, for the past few centuries we have defined beauty not just as health and youth and symmetry that we're biologically programmed to admire, but also as tall, slender figures, and femininity and white skin. And this is a legacy that was built for me, and it's a legacy that I've been cashing out on. And I know there are people in the audience who are skeptical at this point, and maybe there are some fashionistas who are like, "Wait. Naomi. Tyra. Joan Smalls. Liu Wen." And first, I commend you on your model knowledge. Very impressive.

(Laughter)

But unfortunately, I have to inform you that in 2007, a very inspired NYU Ph.D. student counted all the models on the runway, every single one that was hired, and of the 677 models that were hired, only 27, or less than four percent, were non-white.

The next question people always ask is, "Can I be a model when I grow up?" And the first answer is, "I don't know, they don't put me in charge of that." But the second answer, and what I really want to say to these little girls is, "Why? You know? You can be anything. You could be the President of the United States, or the inventor of the next Internet, or a ninja cardiothoracic surgeon poet, which would be awesome, because you'd be the first one."

# (Laughter)

If, after this amazing list, they still are like, "No, no, Cameron, I want to be a model," well, then I say, "Be my boss." Because I'm not in charge of anything, and you could be the editor in chief of American Vogue or the CEO of H&M, or the next Steven Meisel. Saying that you want to be a model when you grow up is akin to saying that you want to win the Powerball when you grow up. It's out of your control, and it's awesome, and it's not a career path.

I will demonstrate for you now 10 years of accumulated model knowledge, because unlike cardiothoracic surgeons, it can just be distilled right now. So, if the photographer is right there, the light is right there, like a nice HMI, and the client says, "We want a walking shot," this leg goes first, nice and long, this arm goes back, this arm goes forward, the head is at three quarters, and you just go back and forth, just do that, and then you look back at your imaginary friends, 300, 400, 500 times.

(Laughter)

It will look something like this.

(Laughter)

Hopefully less awkward than that one in the middle. That was -- I don't know what happened there.

Unfortunately, after you've gone to school, and you have a résumé and you've done a few jobs, you can't say anything anymore, so if you say you want to be the President of the United States, but your résumé reads, "Underwear Model: 10 years," people give you a funny look.

The next question is, "Do they retouch all the photos?" And yeah, they pretty much retouch all the photos, but that is only a small component of what's happening. This picture is the very first picture that I ever took, and it's also the very first time that I had worn a bikini, and I didn't even have my period yet. I know we're getting personal, but I was a young girl. This is what I looked like with my grandma just a few months earlier. Here's me on the same day as this shoot. My friend got to come. Here's me at a slumber party a few days before I shot French Vogue. Here's me on the soccer team and in V Magazine. And here's me today. And I hope what you're seeing is that these pictures are not pictures of me. They are constructions, and they are constructions by a group of professionals, by hairstylists and makeup artists and photographers and stylists and all of their assistants and pre-production and post-production, and they build this. That's not me.

Okay, so the next question people always ask me is, "Do you get free stuff?"

(Laughter)

I do have too many 8-inch heels which I never get to wear, except for earlier, but the free stuff that I get is the free stuff that I get in real life, and that's what we don't like to talk about.

I grew up in Cambridge, and one time I went into a store and I forgot my money and they gave me the dress for free. When I was a teenager, I was driving with my friend who was an awful driver and she ran a red and of course, we got pulled over, and all it took was a "Sorry, officer,"

and we were on our way. And I got these free things because of how I look, not who I am, and there are people paying a cost for how they look and not who they are.

I live in New York, and last year, of the 140,000 teenagers that were stopped and frisked, 86% of them were black and Latino, and most of them were young men. And there are only 177,000 young black and Latino men in New York, so for them, it's not a question of, "Will I get stopped?" but "How many times will I get stopped? When will I get stopped?" When I was researching this talk, I found out that of the 13-year-old girls in the United States, 53% don't like their bodies, and that number goes to 78% by the time that they're 17.

So, the last question people ask me is, "What is it like to be a model?" And I think the answer that they're looking for is, "If you are a little bit skinnier and you have shinier hair, you will be so happy and fabulous." And when we're backstage, we give an answer that maybe makes it seem like that. We say, "It's really amazing to travel, and it's amazing to get to work with creative, inspired, passionate people." And those things are true, but they're only one half of the story, because the thing that we never say on camera, that I have never said on camera, is, "I am insecure." And I'm insecure because I have to think about what I look like every day. And if you ever are wondering, "If I have thinner thighs and shinier hair, will I be happier?" you just need to meet a group of models, because they have the thinnest thighs, the shiniest hair and the coolest clothes, and they're the most physically insecure women probably on the planet.

When I was writing this talk, I found it very difficult to strike an honest balance, because on the one hand, I felt very uncomfortable to come out here and say, "Look I've received all these benefits from a deck stacked in my favor," and it also felt really uncomfortable to follow that up with, "and it doesn't always make me happy." But mostly it was difficult to unpack a legacy of gender and racial oppression when I am one of the biggest beneficiaries.

But I'm also happy and honored to be up here and I think that it's great that I got to come before 10 or 20 or 30 years had passed and I'd had more agency in my career, because maybe then I wouldn't tell the story of how I got my first job, or maybe I wouldn't tell the story of how I paid for college, which seems so important right now.

If there's a takeaway to this talk, I hope it's that we all feel more comfortable acknowledging the power of image in our perceived successes and our perceived failures.

Thank you.

(Applause)

#### TED Talk 11. 10 things you didn't know about orgasm. Mary Roach (TED 2009, febrer 2009)

Alright. I'm going to show you a couple of images from a very diverting paper in The Journal of Ultrasound in Medicine. I'm going to go way out on a limb and say that it is the most diverting paper ever published in The Journal of Ultrasound in Medicine. The title is "Observations of In-Utero Masturbation."

(Laughter)

Okay. Now on the left you can see the hand -- that's the big arrow -- and the penis on the right. The hand hovering. And over here we have, in the words of radiologist Israel Meisner, "The hand grasping the penis in a fashion resembling masturbation movements." Bear in mind this was an ultrasound, so it would have been moving images.

Orgasm is a reflex of the autonomic nervous system. Now, this is the part of the nervous system that deals with the things that we don't consciously control, like digestion, heart rate and sexual arousal. And the orgasm reflex can be triggered by a surprisingly broad range of input. Genital stimulation. Duh. But also, Kinsey interviewed a woman who could be brought to orgasm by having someone stroke her eyebrow. People with spinal cord injuries, like paraplegias, quadriplegias, will often develop a very, very sensitive area right above the level of their injury, wherever that is. There is such a thing as a knee orgasm in the literature.

I think the most curious one that I came across was a case report of a woman who had an orgasm every time she brushed her teeth.

(Laughter)

Something in the complex sensory-motor action of brushing her teeth was triggering orgasm. And she went to a neurologist, who was fascinated. He checked to see if it was something in the toothpaste, but no -- it happened with any brand. They stimulated her gums with a toothpick, to see if that was doing it. No. It was the whole, you know, motion. And the amazing thing to me is that you would think this woman would have excellent oral hygiene.

(Laughter)

Sadly -- this is what it said in the journal paper -- "She believed that she was possessed by demons and switched to mouthwash for her oral care." It's so sad.

(Laughter)

When I was working on the book, I interviewed a woman who can think herself to orgasm. She was part of a study at Rutgers University. You've got to love that. Rutgers. So I interviewed her in Oakland, in a sushi restaurant. And I said, "So, could you do it right here?" And she said, "Yeah, but you know I'd rather finish my meal if you don't mind."

(Laughter)

But afterwards, she was kind enough to demonstrate on a bench outside. It was remarkable. It took about one minute. And I said to her, "Are you just doing this all the time?"

(Laughter)

She said, "No. Honestly, when I get home, I'm usually too tired."

(Laughter)

She said that the last time she had done it was on the Disneyland tram.

(Laughter)

The headquarters for orgasm, along the spinal nerve, is something called the sacral nerve root, which is back here. And if you trigger, if you stimulate with an electrode, the precise spot, you will trigger an orgasm. And it is a fact that you can trigger spinal reflexes in dead people -- a certain kind of dead person, a beating-heart cadaver. Now this is somebody who is braindead, legally dead, definitely checked out, but is being kept alive on a respirator, so that their organs will be oxygenated for transplantation. Now in one of these brain-dead people, if you trigger the right spot, you will see something every now and then. There is a reflex called the Lazarus reflex. And this is -- I'll demonstrate as best I can, not being dead. It's like this. You trigger the spot. The dead guy, or gal, goes... like that. Very unsettling for people working in pathology labs.

#### (Laughter)

Now, if you can trigger the Lazarus reflex in a dead person, why not the orgasm reflex? I asked this question to a brain death expert, Stephanie Mann, who was foolish enough to return my emails.

# (Laughter)

I said, "So, could you conceivably trigger an orgasm in a dead person?" She said, "Yes, if the sacral nerve is being oxygenated, you conceivably could." Obviously it wouldn't be as much fun for the person. But it would be an orgasm --

# (Laughter)

#### nonetheless.

There is a researcher at the University of Alabama who does orgasm research. I said to her, "You should do an experiment. You know? You can get cadavers if you work at a university." I said, "You should actually do this." She said, "You get the human subjects review board approval for this one."

# (Laughter)

According to 1930s marriage manual author, Theodoor van De Velde, a slight seminal odor can be detected on the breath of a woman within about an hour after sexual intercourse. Theodoor van De Velde was something of a semen connoisseur.

# (Laughter)

This is a guy writing a book, "Ideal Marriage," you know. Very heavy hetero guy. But he wrote in this book, "Ideal Marriage" -- he said that he could differentiate between the semen of a young man, which he said had a fresh, exhilarating smell, and the semen of mature men, whose semen smelled, quote, "Remarkably like that of the flowers of the Spanish chestnut. Sometimes quite freshly floral, and then again sometimes extremely pungent."

# (Laughter)

Okay. In 1999, in the state of Israel, a man began hiccupping. And this was one of those cases that went on and on. He tried everything his friends suggested. Nothing seemed to help. Days went by. At a certain point, the man, still hiccupping, had sex with his wife. And lo and behold, the hiccups went away. He told his doctor, who published a case report in a Canadian medical journal under the title, "Sexual Intercourse as a Potential Treatment for Intractable Hiccups." I love this article because at a certain point they suggested that unattached hiccuppers could try masturbation.

#### (Laughter)

I love that because there is like a whole demographic: unattached hiccuppers.

# (Laughter)

Married, single, unattached hiccupper. In the 1900s, early 1900s, a lot of gynecologists believed that when a woman has an orgasm, the contractions serve to suck the semen up through the cervix and sort of deliver it really quickly to the egg, thereby upping the odds of conception. It was called the "upsuck" theory.

#### (Laughter)

If you go all the way back to Hippocrates, physicians believed that orgasm in women was not just helpful for conception, but necessary. Doctors back then were routinely telling men the importance of pleasuring their wives. Marriage-manual author and semen-sniffer Theodoor van De Velde --

# (Laughter)

has a line in his book. I loved this guy. I got a lot of mileage out of Theodoor van De Velde. He had this line in his book that supposedly comes from the Habsburg Monarchy, where there was an empress Maria Theresa, who was having trouble conceiving. And apparently the royal court physician said to her, "I am of the opinion that the vulva of your most sacred majesty be titillated for some time prior to intercourse."

#### (Laughter)

It's apparently, I don't know, on the record somewhere.

Masters and Johnson: now we're moving forward to the 1950s. Masters and Johnson were upsuck skeptics, which is also really fun to say. They didn't buy it. And they decided, being Masters and Johnson, that they would get to the bottom of it. They brought women into the lab -- I think it was five women -- and outfitted them with cervical caps containing artificial semen. And in the artificial semen was a radio-opaque substance, such that it would show up on an X-ray. This is the 1950s. Anyway, these women sat in front of an X-ray device. And they masturbated. And Masters and Johnson looked to see if the semen was being sucked up. Did not find any evidence of upsuck. You may be wondering, "How do you make artificial semen?"

# (Laughter)

I have an answer for you. I have two answers. You can use flour and water, or cornstarch and water. I actually found three separate recipes in the literature.

#### (Laughter)

My favorite being the one that says -- you know, they have the ingredients listed, and then in a recipe it will say, for example, "Yield: two dozen cupcakes." This one said, "Yield: one ejaculate."

# (Laughter)

There's another way that orgasm might boost fertility. This one involves men. Sperm that sit around in the body for a week or more start to develop abnormalities that make them less effective at head-banging their way into the egg. British sexologist Roy Levin has speculated that this is perhaps why men evolved to be such enthusiastic and frequent masturbators. He said, "If I keep tossing myself off I get fresh sperm being made." Which I thought was an interesting idea, theory. So now you have an evolutionary excuse.

#### (Laughter)

Okay.

(Laughter)

All righty. There is considerable evidence for upsuck in the animal kingdom -- pigs, for instance. In Denmark, the Danish National Committee for Pig Production found out that if you sexually stimulate a sow while you artificially inseminate her, you will see a six-percent increase in the farrowing rate, which is the number of piglets produced. So they came up with this five-point stimulation plan for the sows. There is posters they put in the barn, and they have a DVD. And I got a copy of this DVD.

(Laughter)

This is my unveiling, because I am going to show you a clip.

(Laughter)

So, okay. Now, here we go, la la la, off to work. It all looks very innocent. He's going to be doing things with his hands that the boar would use his snout, lacking hands. Okay.

(Laughter)

This is it. The boar has a very odd courtship repertoire.

(Laughter)

This is to mimic the weight of the boar.

(Laughter)

You should know, the clitoris of the pig is inside the vagina. So this may be sort of titillating for her. Here we go.

(Laughter)

And the happy result.

(Applause)

I love this video. There is a point in this video, towards the beginning, where they zoom in for a close up of his hand with his wedding ring, as if to say, "It's okay, it's just his job. He really does like women."

(Laughter)

Okay. When I was in Denmark, my host was named Anne Marie. And I said, "So why don't you just stimulate the clitoris of the pig? Why don't you have the farmers do that? That's not one of your five steps." I have to read you what she said, because I love it. She said, "It was a big hurdle just to get farmers to touch underneath the vulva. So we thought, let's not mention the clitoris right now."

(Laughter)

Shy but ambitious pig farmers, however, can purchase a -- this is true -- a sow vibrator, that hangs on the sperm feeder tube to vibrate. Because, as I mentioned, the clitoris is inside the vagina. So possibly, you know, a little more arousing than it looks. And I also said to her, "Now, these sows. I mean, you may have noticed there. The sow doesn't look to be in the throes of ecstasy." And she said, you can't make that conclusion, because animals don't register pain or pleasure on their faces in the same way that we do. Pigs, for example, are more like dogs. They

use the upper half of the face; the ears are very expressive. So you're not really sure what's going on with the pig.

Primates, on the other hand, we use our mouths more. This is the ejaculation face of the stump-tailed macaque.

(Laughter)

And, interestingly, this has been observed in female macaques, but only when mounting another female.

(Laughter)

Masters and Johnson. In the 1950s, they decided, okay, we're going to figure out the entire human sexual response cycle, from arousal, all the way through orgasm, in men and women -- everything that happens in the human body. Okay, with women, a lot of this is happening inside. This did not stop Masters and Johnson. They developed an artificial coition machine. This is basically a penis camera on a motor. There is a phallus, clear acrylic phallus, with a camera and a light source, attached to a motor that is kind of going like this. And the woman would have sex with it. That is what they would do. Pretty amazing. Sadly, this device has been dismantled. This just kills me, not because I wanted to use it -- I wanted to see it.

(Laughter)

One fine day, Alfred Kinsey decided to calculate the average distance traveled by ejaculated semen. This was not idle curiosity. Doctor Kinsey had heard -- and there was a theory going around at the time, this being the 1940s -- that the force with which semen is thrown against the cervix was a factor in fertility. Kinsey thought it was bunk, so he got to work. He got together in his lab 300 men, a measuring tape, and a movie camera.

(Laughter)

And in fact, he found that in three quarters of the men the stuff just kind of slopped out. It wasn't spurted or thrown or ejected under great force. However, the record holder landed just shy of the eight-foot mark, which is impressive.

(Laughter) (Applause)

Yes. Exactly.

(Laughter)

Sadly, he's anonymous. His name is not mentioned.

(Laughter)

In his write-up of this experiment in his book, Kinsey wrote, "Two sheets were laid down to protect the oriental carpets."

(Laughter)

Which is my second favorite line in the entire oeuvre of Alfred Kinsey. My favorite being, "Cheese crumbs spread before a pair of copulating rats will distract the female, but not the male."

(Laughter)

Thank you very much. (Applause)

Thanks!

# TED Talk 12. Why people believe they can't draw. Graham Shaw (TEDxHull, febrer 2015)

Hi. I've got a question for you: how many people here would say they can draw? (Laughter) I think we've got about one or two percent of the hands going up, and it's interesting, isn't it? It's a little bit like people think of spelling or singing. They think, "You can either do it, or you can't." But I think you can. Because when people say they can't draw, I think it's more to do with beliefs rather than talent and ability. So I think when you say you can't draw, that's just an illusion, and today I'd like to prove that to you. When I say "draw", I'm not saying we're all going to draw like Michelangelo. We are not going to be painting the Sistine Chapel's ceiling. But would you be happy if, by the end of this session, you could draw pictures a little bit like this? (Audience murmuring) Oh, yes! (Laughter) Or even a little bit like this? (Laughter) Actually, there are only two things you need to do to be able to achieve this. One is have an open mind. Are you up for that? (Audience) Yes! And two, just be prepared to have a go. So grab a pen and a piece of paper. OK, so here's how it's going to work: I'll show you the first cartoon we're going to do, so just watch to begin with. Here we go. Just watching. That's going to be our first cartoon. It's a character called Spike. I'd like you to draw along with me. I'll draw the first line, you draw, and when you've done that, look up, and I'll know you're ready for the next line. Okay, here we go. Start with the nose. Now the eyes. They're like 66s or speech marks. That's it. Next, the mouth. Nice, big smile. Now, over here, the ear. Next, some spiky hair. Next, put the pen to the left to the mouth, little line like that. Pen under the ear, drop a line like that. Pen to the left of the neck, top of the T-shirt. Line to the left, line to the right. Just hold your drawings up and show everyone. (Laughter) How are we all doing? (Laughter) OK. OK, fantastic. So, it looks like you've just learned to draw one cartoon, but you've actually learned more than that; you've learned a sequence that would enable you to draw hundreds and thousands of different cartoons, because we're just going to little variations on that sequence. Have a go at this. Draw along with me. Nose. Eyes. Smile. That's it. Now some hair. Pen to the left of the mouth, under the hair, little V-shape for the top, line to the left, line to the right. So we've got another character. Let's call her Thelma. (Laughter) So, we've got Spike and Thelma. Let's try another one. Here we go. Another little variation. You're getting the idea. Starting with the nose. But this time we'll change the eyes slightly. Look, two circles together like that. That's it. Then, two little dots in for the eyes. And this time we'll change the mouth slightly. Watch. Little circle colored in there. Have a go at that. Next, the ear. Now, we'll have some fun with the hair, watch. Nice curly hair. Then same thing: pen to the left to the mouth, little line like that. Under the ear, drop a line. Top of the T-shirt. Line to the left, line to the right. I think we'll call him Jeff. (Laughter) We'll do one more. One more go. Here we go. You're getting the idea. (Laughter) So we'll start with a nose again. Notice we're doing little variations. Now we'll change the eyes, so we've got them apart. We'll put some little dots in like that. Next, the mouth slightly different. Let's put a little V-shape like that. Triangle. And a little line across, and we'll just color this a little bit in. Now, watch this bit carefully; some hair, watch. Here we go, little line like that. Next, a bit more there. And watch, a couple of triangles to make a little bow. Triangle at the bottom, rest of the hair. Pen to the left of the mouth again. You get the idea. Drop a line for the neck. Now the V-shape. Line to the left, line to the right. There we go. Let's call her Pam. (Laughter) So you've done... (Laughter) So you've done four cartoons. You can have a little rest now. (Laughter) Take a rest. You're getting the idea. All we're doing is little variations. I'll just demonstrate a couple to you. We could go on all day, couldn't we? You could do someone looking unhappy, a bit like that, or you could experiment with, perhaps, someone who is... just draw a straight line, someone looking a bit fed up. Or perhaps, you could do anything you like, really, just try things out. Look at this. Little squiggle. There we are. So, all sorts of things we could do. Actually, one more I'll let you do, one more idea. This is a great little technique. Have a go at this: people with glasses on. Just draw a nose a bit like Spike's. Next, draw some frames, so two circles like that with a little bit in between. Now, just put some dots inside for the eyes like that. Next, the ear. So it's little bit like we did before, but this time we'll join up the frames. That's it. Watch this bit. (Laughter) And this bit I really like. Watch. (Laughter) And then, little bit there. Pencil under the mustache, line down, top of the shirt, left and right. So there we have it. We could carry on, couldn't we? Hopefully, we've done enough to convince you that in fact we can all draw. And not just people here. I've worked with... I'm going to give you three examples of other people who've learned to draw, and that actually surprised them, too. I'm going to save what I think is my favorite, most surprising example until last. The first example is: I've worked a lot with children and students in schools. Actually the little ones, they just draw fine, but when they get to about 15 or 16, most of them think they can't draw. But I worked with them. I worked this week in a school where I was coaching them on using pictures for memory. A girl was trying to remember what red blood cells do, and she drew this little picture of a red blood cell carrying a handbag with O2 on it to remind her that the red blood cells carry oxygen to all parts of the body. That was a great one. The other people I worked with are many adults in all walks of life, and particularly in business, and they often will want to make presentations memorable. So again, a quick cartoon or sketch could be really good for that. And again, most people think they can't draw, but take this example. Couple of wavy lines, little boat could be a metaphor to represent we're all in this together. So that, if that was just drawn in the presentation, would really stay in the memory, wouldn't it? Yeah. But the third example is you shouldn't have favorites, should you? This is my favorite. Have you ever been at the party when someone asks you what you do? It gets a little bit skeptical when people ask me that. This lady said to me, well - I said, "I do a little bit of training, and I teach people to draw," and she said, "Would you come along and do some for our group?" She said, "I work with some people" - she was a volunteer - a group of people who have suffered strokes. So I said, "Sure, I could spare some time for that." So I said I would, and I booked the time in. Have you ever done that? You get near of that time and you think, "What have I let myself in for here?" "Will I be able to do it?" I thought, "What could I do with them?" you see. "I know. I'll do my cartoon drawing. They'll like that." But then, as I got near of the time, I got more apprehensive, because then I was thinking, "I've worked with children, with all sorts of adults; I've never worked with a group like this." It turns out it was all part of a charity called TALK. This TALK charity is a wonderful charity that helps people who've suffered strokes, but have a particular condition known as aphasia. You might have heard of aphasia, sometimes called dysphasia. The key thing is it affects their ability to communicate. So, for example, they might have trouble reading, writing, speaking, or understanding. It can be quite an isolating condition; it can be very, very frustrating and can lead to a loss of confidence. Anyway, so I prepared all this stuff, what to do for this session - for a couple of hours, tea break in the middle - and I got more apprehensive. But actually, I needn't have worried, because I'm going to show you now the work that they did. It was one of the best things I've ever done. I'm going to show you the first slide. I taught them Spike, just like I did for you, and I want you to see the reaction on their faces when they did this. (Audience) Oh. What you can see here are two of the stroke recoverers on the left and right, and one of the volunteer helpers in the center. Each stroke recoverer, there are about 36 in the room with volunteers as well, there's one-to-one helpers. You can just see the delight on their faces, can't you? Let's look at another picture. This is a gentleman called David, and he's holding up his picture, and you can tell it was the picture of Spike, can't you? In fact, I think he's drawn Spike even better there. But what I didn't realize until even after the session was that the number of the people in this session, including David, were drawing with their wrong hand. David's stroke meant that it affected the right side of his body, and he drew with his left hand, as many did. Nobody mentioned it to me, nobody complained. They just got on with it. It was an inspirational session for me. It was quite a humbling session, one of the best things I felt I've ever done. At the end of it, I had a lovely email from doctor Mike Jordan, and he's the chair of the TALK group; happens to be a medical doctor, but he's the chair of the group. He wrote to me, and I'm quoting, he said, "Our recoverers learned today that they can draw. It's a bit more than

that; this sort of activity really builds their confidence." So I was happy, he was happy, everyone was happy, they've invited me back again, and I go in there now about every three or four months. So it's great. I thought that was a lovely example to share. Fancy one more drawing? (Audience) Yes. Here we go. Grab your pens. Here we go. Right. I'm going to get you to draw someone that you would recognize. So start with a big nose, a bit like Spike's. Next, we'll do some eyes, and you might be thinking, "This is also a bit like Spike." Watch the next bit. You're getting warm. There you go. Little line down there. Down here. Little V-shape, line to the left, line to the right. And you've got Albert Einstein. (Laughter) So you've got the pens with you, you've proved that you can draw. You're very welcome to take the pens with you and have a practice at home, even show somebody else. But actually, I'd like to leave you with a final thought. When you walked in here today, many of you didn't believe you could draw. I've got a question for you about that. How many other beliefs and limiting thoughts do we all carry around with us every day? Beliefs that we could perhaps potentially challenge and think differently about. If we did challenge those beliefs and think differently about them, apart from drawing, what else would be possible for us all? Thank you very much. (Applause)

# TED Talk 13. The orchestra in my mouth. Tom Thum (TEDxSydney, maig 2013)

My name is Tom, and I've come here today to come clean about what I do for money. Basically, I use my mouth in strange ways in exchange for cash. (Laughter) I usually do this kind of thing in seedy downtown bars and on street corners, so this mightn't be the most appropriate setting, but I'd like to give you guys a bit of a demonstration about what I do. (Beatboxing) And now, for my next number, I'd like to return to classics. (Applause) We're going to take it back, way back, back into time. (Beatboxing: "Billie Jean")  $\Pi$  Billie Jean is not my lover  $\Pi$   $\Pi$  She's just a girl who claims that I am the one  $\Pi$   $\Pi$  But the kid is not my son ℷ (Applause) All right. Wassup. Thank you very much, TEDx. If you guys haven't figured it out already, my name's Tom Thum, and I'm a beatboxer, which means all the sounds that you just heard were made entirely using just my voice, and the only thing was my voice. And I can assure you there are absolutely no effects on this microphone whatsoever. And I'm very, very stoked — (Applause) You guys are just applauding for everything. It's great. Look at this, Mom! I made it! I'm very, very stoked to be here today, representing my kinfolk and all those that haven't managed to make a career out of an innate ability for inhuman noisemaking. Because it is a bit of a niche market, and there's not much work going on, especially where I'm from. You know, I'm from Brisbane, which is a great city to live in. Yeah! All right! Most of Brisbane's here. That's good. (Laughter) You know, I'm from Brizzy, which is a great city to live in, but let's be honest -- it's not exactly the cultural hub of the Southern Hemisphere. So I do a lot of my work outside Brisbane and outside Australia, and so the pursuit of this crazy passion of mine has enabled me to see so many amazing places in the world. So I'd like to share with you, if I may, my experiences. So ladies and gentlemen, I would like to take you on a journey throughout the continents and journey throughout sound itself. We start our the central deserts. (Didgeridoo) (Airplane) India. (Beatboxing) (Sitar) China. (Guzheng) (Beatboxing) Germ any. (Beatboxing) Party, party, yeah. (Laughter) And before we reach destination, ladies and gentlemen, I would like to share with you some technology that I brought all the way from the thriving metropolis of Brisbane. These things in front of me here are called Kaoss Pads, and they allow me to do a whole lot of different things with my voice. For example, the one on the left here allows me to add a little bit of reverb to my sound, which gives me that -- (Trumpet) -- flavor. (Laughter) And the other ones here, I can use them in unison to mimic the effect of a drum machine or something like that. I can sample in sounds and 1 can play it back just by hitting my here. (Noises) TEDx. (Music) (Applause) I got way too much time on my hands. And last but not voice. So with all that in mind, ladies and gentlemen, I would like to take you on a journey to a completely separate part of Earth as I transform the Sydney Opera House into a smoky downtown jazz bar. All right boys, take it away. (Music) Ladies and gentlemen, I'd like to introduce you to a very special friend of mine, one of the greatest double bassists I know. Mr. Smokey Jefferson, let's take it for a walk. Come on, baby. (Music) All right, ladies and gentlemen, I'd like to introduce you to the star of the show, one of the greatest jazz legends of our time. Music lovers and jazz lovers alike, please give a warm hand of applause for the one and only Mr. Peeping Tom. Take it away. (Music) (Applause) Thank you. Thank you very much. (Applause)

## TED Talk 14. How to spot a liar. Pamela Meyer (TEDGlobal 2011, juliol 2011)

Okay, now I don't want to alarm anybody in this room, but it's just come to my attention that the person to your right is a liar.

# (Laughter)

Also, the person to your left is a liar. Also the person sitting in your very seats is a liar. We're all liars. What I'm going to do today is I'm going to show you what the research says about why we're all liars, how you can become a liespotter and why you might want to go the extra mile and go from liespotting to truth seeking, and ultimately to trust building.

Now, speaking of trust, ever since I wrote this book, "Liespotting," no one wants to meet me in person anymore, no, no, no, no, no. They say, "It's okay, we'll email you."

# (Laughter)

I can't even get a coffee date at Starbucks. My husband's like, "Honey, deception? Maybe you could have focused on cooking. How about French cooking?"

So before I get started, what I'm going to do is I'm going to clarify my goal for you, which is not to teach a game of Gotcha. Liespotters aren't those nitpicky kids, those kids in the back of the room that are shouting, "Gotcha! Gotcha! Your eyebrow twitched. You flared your nostril. I watch that TV show 'Lie To Me.' I know you're lying." No, liespotters are armed with scientific knowledge of how to spot deception. They use it to get to the truth, and they do what mature leaders do everyday; they have difficult conversations with difficult people, sometimes during very difficult times. And they start up that path by accepting a core proposition, and that proposition is the following: Lying is a cooperative act. Think about it, a lie has no power whatsoever by its mere utterance. Its power emerges when someone else agrees to believe the lie.

So I know it may sound like tough love, but look, if at some point you got lied to, it's because you agreed to get lied to. Truth number one about lying: Lying's a cooperative act. Now not all lies are harmful. Sometimes we're willing participants in deception for the sake of social dignity, maybe to keep a secret that should be kept secret, secret. We say, "Nice song." "Honey, you don't look fat in that, no." Or we say, favorite of the digiratti, "You know, I just fished that email out of my Spam folder. So sorry."

But there are times when we are unwilling participants in deception. And that can have dramatic costs for us. Last year saw 997 billion dollars in corporate fraud alone in the United States. That's an eyelash under a trillion dollars. That's seven percent of revenues. Deception can cost billions. Think Enron, Madoff, the mortgage crisis. Or in the case of double agents and traitors, like Robert Hanssen or Aldrich Ames, lies can betray our country, they can compromise our security, they can undermine democracy, they can cause the deaths of those that defend us.

Deception is actually serious business. This con man, Henry Oberlander, he was such an effective con man, British authorities say he could have undermined the entire banking system of the Western world. And you can't find this guy on Google; you can't find him anywhere. He was interviewed once, and he said the following. He said, "Look, I've got one rule." And this was Henry's rule, he said, "Look, everyone is willing to give you something. They're ready to give you something for whatever it is they're hungry for." And that's the crux of it. If you don't want to be deceived, you have to know, what is it that you're hungry for?

And we all kind of hate to admit it. We wish we were better husbands, better wives, smarter, more powerful, taller, richer -- the list goes on. Lying is an attempt to bridge that gap, to

connect our wishes and our fantasies about who we wish we were, how we wish we could be, with what we're really like. And boy are we willing to fill in those gaps in our lives with lies.

On a given day, studies show that you may be lied to anywhere from 10 to 200 times. Now granted, many of those are white lies. But in another study, it showed that strangers lied three times within the first 10 minutes of meeting each other.

## (Laughter)

Now when we first hear this data, we recoil. We can't believe how prevalent lying is. We're essentially against lying. But if you look more closely, the plot actually thickens. We lie more to strangers than we lie to coworkers. Extroverts lie more than introverts. Men lie eight times more about themselves than they do other people. Women lie more to protect other people. If you're an average married couple, you're going to lie to your spouse in one out of every 10 interactions. Now, you may think that's bad. If you're unmarried, that number drops to three.

Lying's complex. It's woven into the fabric of our daily and our business lives. We're deeply ambivalent about the truth. We parse it out on an as-needed basis, sometimes for very good reasons, other times just because we don't understand the gaps in our lives. That's truth number two about lying. We're against lying, but we're covertly for it in ways that our society has sanctioned for centuries and centuries and centuries. It's as old as breathing. It's part of our culture, it's part of our history. Think Dante, Shakespeare, the Bible, News of the World.

## (Laughter)

Lying has evolutionary value to us as a species. Researchers have long known that the more intelligent the species, the larger the neocortex, the more likely it is to be deceptive. Now you might remember Koko. Does anybody remember Koko the gorilla who was taught sign language? Koko was taught to communicate via sign language. Here's Koko with her kitten. It's her cute little, fluffy pet kitten. Koko once blamed her pet kitten for ripping a sink out of the wall.

## (Laughter)

We're hardwired to become leaders of the pack. It's starts really, really early. How early? Well babies will fake a cry, pause, wait to see who's coming and then go right back to crying. One-year-olds learn concealment.

## (Laughter)

Two-year-olds bluff. Five-year-olds lie outright. They manipulate via flattery. Nine-year-olds, masters of the cover-up. By the time you enter college, you're going to lie to your mom in one out of every five interactions. By the time we enter this work world and we're breadwinners, we enter a world that is just cluttered with Spam, fake digital friends, partisan media, ingenious identity thieves, world-class Ponzi schemers, a deception epidemic -- in short, what one author calls a post-truth society. It's been very confusing for a long time now.

What do you do? Well, there are steps we can take to navigate our way through the morass. Trained liespotters get to the truth 90 percent of the time. The rest of us, we're only 54 percent accurate. Why is it so easy to learn? There are good liars and bad liars. There are no real original liars. We all make the same mistakes. We all use the same techniques. So what I'm going to do is I'm going to show you two patterns of deception. And then we're going to look at the hot spots and see if we can find them ourselves. We're going to start with speech.

(Video) Bill Clinton: I want you to listen to me. I'm going to say this again. I did not have sexual relations with that woman, Miss Lewinsky. I never told anybody to lie, not a single time, never. And these allegations are false. And I need to go back to work for the American people. Thank you.

## (Applause)

Pamela Meyer: Okay, what were the telltale signs? Well first we heard what's known as a non-contracted denial. Studies show that people who are overdetermined in their denial will resort to formal rather than informal language. We also heard distancing language: "that woman." We know that liars will unconsciously distance themselves from their subject, using language as their tool. Now if Bill Clinton had said, "Well, to tell you the truth ..." or Richard Nixon's favorite, "In all candor ..." he would have been a dead giveaway for any liespotter that knows that qualifying language, as it's called, qualifying language like that, further discredits the subject. Now if he had repeated the question in its entirety, or if he had peppered his account with a little too much detail -- and we're all really glad he didn't do that -- he would have further discredited himself.

Freud had it right. Freud said, look, there's much more to it than speech: "No mortal can keep a secret. If his lips are silent, he chatters with his fingertips." And we all do it no matter how powerful you are. We all chatter with our fingertips. I'm going to show you Dominique Strauss-Kahn with Obama who's chattering with his fingertips.

# (Laughter)

Now this brings us to our next pattern, which is body language. With body language, here's what you've got to do. You've really got to just throw your assumptions out the door. Let the science temper your knowledge a little bit. Because we think liars fidget all the time. Well guess what, they're known to freeze their upper bodies when they're lying. We think liars won't look you in the eyes. Well guess what, they look you in the eyes a little too much just to compensate for that myth. We think warmth and smiles convey honesty, sincerity. But a trained liespotter can spot a fake smile a mile away. Can you all spot the fake smile here? You can consciously contract the muscles in your cheeks. But the real smile's in the eyes, the crow's feet of the eyes. They cannot be consciously contracted, especially if you overdid the Botox. Don't overdo the Botox; nobody will think you're honest.

Now we're going to look at the hot spots. Can you tell what's happening in a conversation? Can you start to find the hot spots to see the discrepancies between someone's words and someone's actions? Now, I know it seems really obvious, but when you're having a conversation with someone you suspect of deception, attitude is by far the most overlooked but telling of indicators.

An honest person is going to be cooperative. They're going to show they're on your side. They're going to be enthusiastic. They're going to be willing and helpful to getting you to the truth. They're going to be willing to brainstorm, name suspects, provide details. They're going to say, "Hey, maybe it was those guys in payroll that forged those checks." They're going to be infuriated if they sense they're wrongly accused throughout the entire course of the interview, not just in flashes; they'll be infuriated throughout the entire course of the interview. And if you ask someone honest what should happen to whomever did forge those checks, an honest person is much more likely to recommend strict rather than lenient punishment.

Now let's say you're having that exact same conversation with someone deceptive. That person may be withdrawn, look down, lower their voice, pause, be kind of herky-jerky. Ask a deceptive person to tell their story, they're going to pepper it with way too much detail in all

kinds of irrelevant places. And then they're going to tell their story in strict chronological order. And what a trained interrogator does is they come in and in very subtle ways over the course of several hours, they will ask that person to tell that story backwards, and then they'll watch them squirm, and track which questions produce the highest volume of deceptive tells.

Why do they do that? Well, we all do the same thing. We rehearse our words, but we rarely rehearse our gestures. We say "yes," we shake our heads "no." We tell very convincing stories, we slightly shrug our shoulders. We commit terrible crimes, and we smile at the delight in getting away with it. Now, that smile is known in the trade as "duping delight."

And we're going to see that in several videos moving forward, but we're going to start -- for those of you who don't know him, this is presidential candidate John Edwards who shocked America by fathering a child out of wedlock. We're going to see him talk about getting a paternity test. See now if you can spot him saying, "yes" while shaking his head "no," slightly shrugging his shoulders.

(Video) John Edwards: I'd be happy to participate in one. I know that it's not possible that this child could be mine, because of the timing of events. So I know it's not possible. Happy to take a paternity test, and would love to see it happen.

Interviewer: Are you going to do that soon? Is there somebody --

JE: Well, I'm only one side. I'm only one side of the test. But I'm happy to participate in one.

PM: Okay, those head shakes are much easier to spot once you know to look for them. There are going to be times when someone makes one expression while masking another that just kind of leaks through in a flash. Murderers are known to leak sadness. Your new joint venture partner might shake your hand, celebrate, go out to dinner with you and then leak an expression of anger. And we're not all going to become facial expression experts overnight here, but there's one I can teach you that's very dangerous and it's easy to learn, and that's the expression of contempt. Now with anger, you've got two people on an even playing field. It's still somewhat of a healthy relationship. But when anger turns to contempt, you've been dismissed. It's associated with moral superiority. And for that reason, it's very, very hard to recover from. Here's what it looks like. It's marked by one lip corner pulled up and in. It's the only asymmetrical expression. And in the presence of contempt, whether or not deception follows -- and it doesn't always follow -- look the other way, go the other direction, reconsider the deal, say, "No thank you. I'm not coming up for just one more nightcap. Thank you."

Science has surfaced many, many more indicators. We know, for example, we know liars will shift their blink rate, point their feet towards an exit. They will take barrier objects and put them between themselves and the person that is interviewing them. They'll alter their vocal tone, often making their vocal tone much lower.

Now here's the deal. These behaviors are just behaviors. They're not proof of deception. They're red flags. We're human beings. We make deceptive flailing gestures all over the place all day long. They don't mean anything in and of themselves. But when you see clusters of them, that's your signal. Look, listen, probe, ask some hard questions, get out of that very comfortable mode of knowing, walk into curiosity mode, ask more questions, have a little dignity, treat the person you're talking to with rapport. Don't try to be like those folks on "Law & Don't and those other TV shows that pummel their subjects into submission. Don't be too aggressive, it doesn't work.

Now, we've talked a little bit about how to talk to someone who's lying and how to spot a lie. And as I promised, we're now going to look at what the truth looks like. But I'm going to show you two videos, two mothers -- one is lying, one is telling the truth. And these were

surfaced by researcher David Matsumoto in California. And I think they're an excellent example of what the truth looks like.

This mother, Diane Downs, shot her kids at close range, drove them to the hospital while they bled all over the car, claimed a scraggy-haired stranger did it. And you'll see when you see the video, she can't even pretend to be an agonizing mother. What you want to look for here is an incredible discrepancy between horrific events that she describes and her very, very cool demeanor. And if you look closely, you'll see duping delight throughout this video.

(Video) Diane Downs: At night when I close my eyes, I can see Christie reaching her hand out to me while I'm driving, and the blood just kept coming out of her mouth. And that -- maybe it'll fade too with time -- but I don't think so. That bothers me the most.

PM: Now I'm going to show you a video

of an actual grieving mother, Erin Runnion, confronting her daughter's murderer and torturer in court. Here you're going to see no false emotion, just the authentic expression of a mother's agony.

(Video) Erin Runnion: I wrote this statement on the third anniversary of the night you took my baby, and you hurt her, and you crushed her, you terrified her until her heart stopped. And she fought, and I know she fought you. But I know she looked at you with those amazing brown eyes, and you still wanted to kill her. And I don't understand it, and I never will.

PM: Okay, there's no doubting the veracity of those emotions.

Now the technology around what the truth looks like is progressing on, the science of it. We know, for example, that we now have specialized eye trackers and infrared brain scans, MRI's that can decode the signals that our bodies send out when we're trying to be deceptive. And these technologies are going to be marketed to all of us as panaceas for deceit, and they will prove incredibly useful some day. But you've got to ask yourself in the meantime: Who do you want on your side of the meeting, someone who's trained in getting to the truth or some guy who's going to drag a 400-pound electroencephalogram through the door?

Liespotters rely on human tools. They know, as someone once said, "Character's who you are in the dark." And what's kind of interesting is that today, we have so little darkness. Our world is lit up 24 hours a day. It's transparent with blogs and social networks broadcasting the buzz of a whole new generation of people that have made a choice to live their lives in public. It's a much more noisy world. So one challenge we have is to remember, oversharing, that's not honesty. Our manic tweeting and texting can blind us to the fact that the subtleties of human decency -- character integrity -- that's still what matters, that's always what's going to matter. So in this much noisier world, it might make sense for us to be just a little bit more explicit about our moral code.

When you combine the science of recognizing deception with the art of looking, listening, you exempt yourself from collaborating in a lie. You start up that path of being just a little bit more explicit, because you signal to everyone around you, you say, "Hey, my world, our world, it's going to be an honest one. My world is going to be one where truth is strengthened and falsehood is recognized and marginalized." And when you do that, the ground around you starts to shift just a little bit.

And that's the truth. Thank you.

(Applause)

## TED Talk 15. The art of misdirection. Apollo Robbins (TEDGlobal 2013, juny 2013)

Do you think it's possible to control someone's attention? Even more than that, what about predicting human behavior? I think those are interesting ideas. For me, that would be the perfect superpower, actually kind of an evil way of approaching it. But for myself, in the past, I've spent the last 20 years studying human behavior from a rather unorthodox way: picking pockets. When we think of misdirection, we think of something as looking off to the side, when actually the things right in front of us are often the hardest to see, the things that you look at every day that you're blinded to.

For example, how many of you still have your cell phones on you right now? Great. Double-check. Make sure you still have them. I was doing some shopping before.

# (Laughter)

You've looked at them a few times today, but I'll ask you a question. Without looking at it directly yet, can you remember the icon in the bottom right corner? Bring them out, check and see how accurate you were. How'd you do? Show of hands. Did we get it?

Now that you're done, close them down. Every phone has something in common. No matter how you organize the icons, you still have a clock on the front. So, without looking at your phone, what time was it? You just looked at your clock, right? Interesting idea. Let's take that a step further with a game of trust. Close your eyes. I realize I'm asking you to do that while you just heard there's a pickpocket in the room, but close your eyes.

Now, you've been watching me for about 30 seconds. With your eyes closed, what am I wearing? Make your best guess. What color is my shirt? What color is my tie? Now open your eyes. Show of hands, were you right? Interesting, isn't it?

Some of us are a little bit more perceptive than others, it seems. But I have a different theory about that model of attention. They have fancy models of attention, Posner's trinity model of attention. For me, I like to think of it very simple, like a surveillance system. It's kind of like you have all these fancy sensors, and inside your brain is a little security guard. For me, I like to call him Frank. So Frank is sitting at a desk. He's got lots of cool information in front of him, high-tech equipment, he's got cameras, he's got a little phone that he can pick up, listen to the ears, all these senses, all these perceptions. But attention is what steers your perceptions, it's what controls your reality. It's the gateway to the mind. If you don't attend to something, you can't be aware of it. But ironically, you can attend to something without being aware of it. For example, the cocktail effect: You're in a party, having conversations with someone, and yet you can recognize your name without realizing you were listening to that.

Now, for my job, I have to play with techniques to exploit this, to play with your attention as a limited resource. So if I could control how you spend your attention, if I could maybe steal your attention through a distraction. Now, instead of doing it like misdirection and throwing it off to the side, instead, what I choose to focus on is Frank, to be able to play with the Frank inside your head, your security guard, and get you, instead of focusing on your external senses, just to go internal for a second.

So if I ask you to access a memory, like, what is that? What just happened? Do you have a wallet? Do you have an American Express in your wallet? And when I do that, your Frank turns around. He accesses the file. He has to rewind the tape. What's interesting is, he can't rewind the tape at the same time that he's trying to process new data.

This sounds like a good theory, but I could talk for a long time, tell you lots of things, and a portion of them may be true, but I think it's better if I tried to show that to you here live. If I come down, I'm going to do a bit of shopping. Just hold still where you are.

Hello, how are you? It's lovely to see you. Wonderful job onstage. Lovely watch, it doesn't come off very well. Do you have a ring as well? Good. Just taking inventory. You're like a buffet. Hard to tell where to start, so many great things.

Hi, how are you? Good to see you.

Hi, sir, could you stand up, please? Just right where you are. You're married, you follow directions well. Nice to meet you, sir. You don't have a lot in your pockets. Anything down here? Hopefully so. Have a seat. There you go. You're doing well.

Hi, sir, how are you? Good to see you, sir. You have a ring, a watch. Do you have a wallet on you? Joe: I don't.

AR: Well, we'll find one for you. Come on up this way, Joe. Give Joe a round of applause. Come on up, Joe. Let's play a game.

(Applause)

AR: Pardon me. I don't think I need this clicker anymore. Thank you very much. I appreciate that. Come on up to the stage, Joe. Let's play a little game now. Anything in your front pockets?

J: Money.

AR: Money! All right, let's try that. Can you stand right over this way for me? Turn around and, let's see, if I give you something that belongs to me, this is just something I have, a poker chip. Hold out your hand for me. Watch it closely. This is a task for you to focus on. You have your money in your front pocket?

J: Yup. AR: Good.

I won't put my hand in your pocket. I'm not ready for that kind of commitment. Once a guy had a hole in his pocket, and that was rather traumatizing for me. I wanted his wallet, he gave me his number. Big miscommunication.

(Laughter)

Let's do this simply. Squeeze your hand tight. Do you feel the poker chip in your hand?

J: I do.

AR: Would you be surprised if I took it? Say yes.

J: Very. AR: Good.

Open your hand. Thank you very much. I'll cheat if you give me a chance. Make it harder for me. Just use your hand. Grab my wrist, but squeeze, squeeze firm. Did you see it go? Joe: No.

AR: No, it's not here. Open your hand. While we're focused on the hand, it's sitting on your shoulder. Go ahead and take it off. Now, let's try that again. Hold your hand out flat. Open it up. Put your hand up a little bit higher, but watch it close. If I did it slowly, it'd be on your shoulder.

(Laughter)

Joe, we're going to keep doing this till you catch it. You'll get it eventually. I have faith in you. Squeeze firm. You're human, you're not slow. It's back on your shoulder. You were focused on your hand, distracted. While you were watching, I couldn't get your watch off. Yet you had something inside your pocket. Do you remember what it was?

J: Money.

AR: Check your pocket. Is it still there?

(Laughter)

Oh, there it was. Put it away. We're just shopping. This trick's more about the timing. I'm going to try to push it inside your hand. Put your other hand on top, would you? It's amazingly obvious now, isn't it? Looks a lot like the watch I was wearing, doesn't it?

(Laughter) (Applause)

J: That's pretty good. AR: Oh, thanks.

(Applause)

But it's only a start. Let's try it a little bit differently. Hold your hands together. Your other hand on top. If you're watching this little token, this obviously has become a little target, like a red herring. If we watch this kind of close, it looks like it goes away. It's not back on your shoulder. It falls out of the air, lands right back in the hand. Did you see it go? Yeah, funny. We've got a little guy. He's union, works up there all day. If I do it slowly it goes straight away, it lands by your pocket. Is it in this pocket, sir? Don't reach in your pocket. That's a different show.

(Squeaking)

That's rather strange. They have shots for that. Can I show them? Rather bizarre. Is this yours, sir? I have no idea how that works. We'll send that over there.

I need help with this one. Step over this way for me. Don't run away. You had something down by your pants pocket. I was checking mine. I couldn't find everything, but I noticed you had something here. Can I feel the outside for a moment? Down here I noticed this. Is this something of yours, sir? I have no idea. That's a shrimp.

J: Yeah. I'm saving it for later.

AR: You've entertained all of these people in a wonderful way, better than you know. So we'd love to give you this lovely watch as a gift.

(Laughter)

Hopefully it matches his taste. We have a couple of other things, a little bit of cash. And we have a few other things, these all belong to you, along with a big round of applause from all your friends.

(Applause)

Joe, thank you very much.

(Applause)

(Applause ends)

So, same question I asked you before, but this time you don't have to close your eyes. What am I wearing?

Audience: Oh!

(Laughter)

(Hesitant applause)

(Applause ends)

Attention is a powerful thing. Like I said, it shapes your reality. So, I guess I'd like to pose that question to you. If you could control somebody's attention, what would you do with it?

Thank you.

(Applause)

# TED Talk 16. The power of introverts. Susan Cain (TED 2012, febrer 2012)

When I was nine years old, I went off to summer camp for the first time. And my mother packed me a suitcase full of books, which to me seemed like a perfectly natural thing to do. Because in my family, reading was the primary group activity. And this might sound antisocial to you, but for us it was really just a different way of being social. You have the animal warmth of your family sitting right next to you, but you are also free to go roaming around the adventureland inside your own mind. And I had this idea that camp was going to be just like this, but better.

# (Laughter)

I had a vision of 10 girls sitting in a cabin cozily reading books in their matching nightgowns.

## (Laughter)

Camp was more like a keg party without any alcohol. And on the very first day, our counselor gathered us all together and she taught us a cheer that she said we would be doing every day for the rest of the summer to instill camp spirit. And it went like this: "R-O-W-D-I-E, that's the way we spell rowdie. Rowdie, rowdie, let's get rowdie."

# (Laughter)

Yeah. So I couldn't figure out for the life of me why we were supposed to be so rowdy, or why we had to spell this word incorrectly.

# (Laughter)

But I recited a cheer. I recited a cheer along with everybody else. I did my best. And I just waited for the time that I could go off and read my books.

But the first time that I took my book out of my suitcase, the coolest girl in the bunk came up to me and she asked me, "Why are you being so mellow?" -- mellow, of course, being the exact opposite of R-O-W-D-I-E. And then the second time I tried it, the counselor came up to me with a concerned expression on her face and she repeated the point about camp spirit and said we should all work very hard to be outgoing.

And so I put my books away, back in their suitcase, and I put them under my bed, and there they stayed for the rest of the summer. And I felt kind of guilty about this. I felt as if the books needed me somehow, and they were calling out to me and I was forsaking them. But I did forsake them and I didn't open that suitcase again until I was back home with my family at the end of the summer.

Now, I tell you this story about summer camp. I could have told you 50 others just like it -- all the times that I got the message that somehow my quiet and introverted style of being was not necessarily the right way to go, that I should be trying to pass as more of an extrovert. And I always sensed deep down that this was wrong and that introverts were pretty excellent just as they were. But for years I denied this intuition, and so I became a Wall Street lawyer, of all things, instead of the writer that I had always longed to be -- partly because I needed to prove to myself that I could be bold and assertive too. And I was always going off to crowded bars when I really would have preferred to just have a nice dinner with friends. And I made these self-negating choices so reflexively, that I wasn't even aware that I was making them.

Now this is what many introverts do, and it's our loss for sure, but it is also our colleagues' loss and our communities' loss. And at the risk of sounding grandiose, it is the world's loss. Because when it comes to creativity and to leadership, we need introverts doing what they do best. A third to a half of the population are introverts -- a third to a half. So that's one

out of every two or three people you know. So even if you're an extrovert yourself, I'm talking about your coworkers and your spouses and your children and the person sitting next to you right now -- all of them subject to this bias that is pretty deep and real in our society. We all internalize it from a very early age without even having a language for what we're doing.

Now, to see the bias clearly, you need to understand what introversion is. It's different from being shy. Shyness is about fear of social judgment. Introversion is more about, how do you respond to stimulation, including social stimulation. So extroverts really crave large amounts of stimulation, whereas introverts feel at their most alive and their most switched-on and their most capable when they're in quieter, more low-key environments. Not all the time -- these things aren't absolute -- but a lot of the time. So the key then to maximizing our talents is for us all to put ourselves in the zone of stimulation that is right for us.

But now here's where the bias comes in. Our most important institutions, our schools and our workplaces, they are designed mostly for extroverts and for extroverts' need for lots of stimulation. And also we have this belief system right now that I call the new groupthink, which holds that all creativity and all productivity comes from a very oddly gregarious place.

So if you picture the typical classroom nowadays: When I was going to school, we sat in rows. We sat in rows of desks like this, and we did most of our work pretty autonomously. But nowadays, your typical classroom has pods of desks -- four or five or six or seven kids all facing each other. And kids are working in countless group assignments. Even in subjects like math and creative writing, which you think would depend on solo flights of thought, kids are now expected to act as committee members. And for the kids who prefer to go off by themselves or just to work alone, those kids are seen as outliers often or, worse, as problem cases. And the vast majority of teachers reports believing that the ideal student is an extrovert as opposed to an introvert, even though introverts actually get better grades and are more knowledgeable, according to research.

# (Laughter)

Okay, same thing is true in our workplaces. Now, most of us work in open plan offices, without walls, where we are subject to the constant noise and gaze of our coworkers. And when it comes to leadership, introverts are routinely passed over for leadership positions, even though introverts tend to be very careful, much less likely to take outsize risks -- which is something we might all favor nowadays. And interesting research by Adam Grant at the Wharton School has found that introverted leaders often deliver better outcomes than extroverts do, because when they are managing proactive employees, they're much more likely to let those employees run with their ideas, whereas an extrovert can, quite unwittingly, get so excited about things that they're putting their own stamp on things, and other people's ideas might not as easily then bubble up to the surface.

Now in fact, some of our transformative leaders in history have been introverts. I'll give you some examples. Eleanor Roosevelt, Rosa Parks, Gandhi -- all these people described themselves as quiet and soft-spoken and even shy. And they all took the spotlight, even though every bone in their bodies was telling them not to. And this turns out to have a special power all its own, because people could feel that these leaders were at the helm not because they enjoyed directing others and not out of the pleasure of being looked at; they were there because they had no choice, because they were driven to do what they thought was right.

Now I think at this point it's important for me to say that I actually love extroverts. I always like to say some of my best friends are extroverts, including my beloved husband. And we all fall at different points, of course, along the introvert/extrovert spectrum. Even Carl Jung, the

psychologist who first popularized these terms, said that there's no such thing as a pure introvert or a pure extrovert. He said that such a man would be in a lunatic asylum, if he existed at all. And some people fall smack in the middle of the introvert/extrovert spectrum, and we call these people ambiverts. And I often think that they have the best of all worlds. But many of us do recognize ourselves as one type or the other.

And what I'm saying is that culturally, we need a much better balance. We need more of a yin and yang between these two types. This is especially important when it comes to creativity and to productivity, because when psychologists look at the lives of the most creative people, what they find are people who are very good at exchanging ideas and advancing ideas, but who also have a serious streak of introversion in them.

And this is because solitude is a crucial ingredient often to creativity. So Darwin, he took long walks alone in the woods and emphatically turned down dinner-party invitations. Theodor Geisel, better known as Dr. Seuss, he dreamed up many of his amazing creations in a lonely bell tower office that he had in the back of his house in La Jolla, California. And he was actually afraid to meet the young children who read his books for fear that they were expecting him this kind of jolly Santa Claus-like figure and would be disappointed with his more reserved persona. Steve Wozniak invented the first Apple computer sitting alone in his cubicle in Hewlett-Packard where he was working at the time. And he says that he never would have become such an expert in the first place had he not been too introverted to leave the house when he was growing up.

Now, of course, this does not mean that we should all stop collaborating -- and case in point, is Steve Wozniak famously coming together with Steve Jobs to start Apple Computer -- but it does mean that solitude matters and that for some people it is the air that they breathe. And in fact, we have known for centuries about the transcendent power of solitude. It's only recently that we've strangely begun to forget it. If you look at most of the world's major religions, you will find seekers -- Moses, Jesus, Buddha, Muhammad -- seekers who are going off by themselves alone to the wilderness, where they then have profound epiphanies and revelations that they then bring back to the rest of the community. So, no wilderness, no revelations.

This is no surprise, though, if you look at the insights of contemporary psychology. It turns out that we can't even be in a group of people without instinctively mirroring, mimicking their opinions. Even about seemingly personal and visceral things like who you're attracted to, you will start aping the beliefs of the people around you without even realizing that that's what you're doing.

And groups famously follow the opinions of the most dominant or charismatic person in the room, even though there's zero correlation between being the best talker and having the best ideas -- I mean zero. So --

## (Laughter)

You might be following the person with the best ideas, but you might not. And do you really want to leave it up to chance? Much better for everybody to go off by themselves, generate their own ideas freed from the distortions of group dynamics, and then come together as a team to talk them through in a well-managed environment and take it from there.

Now if all this is true, then why are we getting it so wrong? Why are we setting up our schools this way, and our workplaces? And why are we making these introverts feel so guilty about wanting to just go off by themselves some of the time? One answer lies deep in our cultural history. Western societies, and in particular the U.S., have always favored the man of action over the "man" of contemplation. But in America's early days, we lived in what historians call a

culture of character, where we still, at that point, valued people for their inner selves and their moral rectitude. And if you look at the self-help books from this era, they all had titles with things like "Character, the Grandest Thing in the World." And they featured role models like Abraham Lincoln, who was praised for being modest and unassuming. Ralph Waldo Emerson called him "A man who does not offend by superiority."

But then we hit the 20th century, and we entered a new culture that historians call the culture of personality. What happened is we had evolved an agricultural economy to a world of big business. And so suddenly people are moving from small towns to the cities. And instead of working alongside people they've known all their lives, now they are having to prove themselves in a crowd of strangers. So, quite understandably, qualities like magnetism and charisma suddenly come to seem really important. And sure enough, the self-help books change to meet these new needs and they start to have names like "How to Win Friends and Influence People." And they feature as their role models really great salesmen. So that's the world we're living in today. That's our cultural inheritance.

Now none of this is to say that social skills are unimportant, and I'm also not calling for the abolishing of teamwork at all. The same religions who send their sages off to lonely mountain tops also teach us love and trust. And the problems that we are facing today in fields like science and in economics are so vast and so complex that we are going to need armies of people coming together to solve them working together. But I am saying that the more freedom that we give introverts to be themselves, the more likely that they are to come up with their own unique solutions to these problems.

So now I'd like to share with you what's in my suitcase today. Guess what? Books. I have a suitcase full of books. Here's Margaret Atwood, "Cat's Eye." Here's a novel by Milan Kundera. And here's "The Guide for the Perplexed" by Maimonides. But these are not exactly my books. I brought these books with me because they were written by my grandfather's favorite authors.

My grandfather was a rabbi and he was a widower who lived alone in a small apartment in Brooklyn that was my favorite place in the world when I was growing up, partly because it was filled with his very gentle, very courtly presence and partly because it was filled with books. I mean literally every table, every chair in this apartment had yielded its original function to now serve as a surface for swaying stacks of books. Just like the rest of my family, my grandfather's favorite thing to do in the whole world was to read.

But he also loved his congregation, and you could feel this love in the sermons that he gave every week for the 62 years that he was a rabbi. He would takes the fruits of each week's reading and he would weave these intricate tapestries of ancient and humanist thought. And people would come from all over to hear him speak.

But here's the thing about my grandfather. Underneath this ceremonial role, he was really modest and really introverted -- so much so that when he delivered these sermons, he had trouble making eye contact with the very same congregation that he had been speaking to for 62 years. And even away from the podium, when you called him to say hello, he would often end the conversation prematurely for fear that he was taking up too much of your time. But when he died at the age of 94, the police had to close down the streets of his neighborhood to accommodate the crowd of people who came out to mourn him. And so these days I try to learn from my grandfather's example in my own way.

So I just published a book about introversion, and it took me about seven years to write. And for me, that seven years was like total bliss, because I was reading, I was writing, I was thinking, I was researching. It was my version of my grandfather's hours of the day alone in his

library. But now all of a sudden my job is very different, and my job is to be out here talking about it, talking about introversion.

(Laughter)

And that's a lot harder for me, because as honored as I am to be here with all of you right now, this is not my natural milieu.

So I prepared for moments like these as best I could. I spent the last year practicing public speaking every chance I could get. And I call this my "year of speaking dangerously."

(Laughter)

And that actually helped a lot. But I'll tell you, what helps even more is my sense, my belief, my hope that when it comes to our attitudes to introversion and to quiet and to solitude, we truly are poised on the brink on dramatic change. I mean, we are. And so I am going to leave you now with three calls for action for those who share this vision.

Number one: Stop the madness for constant group work. Just stop it.

(Laughter)

Thank you.

(Applause)

And I want to be clear about what I'm saying, because I deeply believe our offices should be encouraging casual, chatty cafe-style types of interactions -- you know, the kind where people come together and serendipitously have an exchange of ideas. That is great. It's great for introverts and it's great for extroverts. But we need much more privacy and much more freedom and much more autonomy at work. School, same thing. We need to be teaching kids to work together, for sure, but we also need to be teaching them how to work on their own. This is especially important for extroverted children too. They need to work on their own because that is where deep thought comes from in part.

Okay, number two: Go to the wilderness. Be like Buddha, have your own revelations. I'm not saying that we all have to now go off and build our own cabins in the woods and never talk to each other again, but I am saying that we could all stand to unplug and get inside our own heads a little more often.

Number three: Take a good look at what's inside your own suitcase and why you put it there. So extroverts, maybe your suitcases are also full of books. Or maybe they're full of champagne glasses or skydiving equipment. Whatever it is, I hope you take these things out every chance you get and grace us with your energy and your joy. But introverts, you being you, you probably have the impulse to guard very carefully what's inside your own suitcase. And that's okay. But occasionally, just occasionally, I hope you will open up your suitcases for other people to see, because the world needs you and it needs the things you carry.

So I wish you the best of all possible journeys and the courage to speak softly.

Thank you very much.

(Applause)

Thank you. Thank you.

(Applause)

# TED Talk 17. The danger of a single story. Chimamanda Ngozi Adichie (TEDGlobal 2009, juliol 2009)

I'm a storyteller. And I would like to tell you a few personal stories about what I like to call "the danger of the single story." I grew up on a university campus in eastern Nigeria. My mother says that I started reading at the age of two, although I think four is probably close to the truth. So I was an early reader, and what I read were British and American children's books.

I was also an early writer, and when I began to write, at about the age of seven, stories in pencil with crayon illustrations that my poor mother was obligated to read, I wrote exactly the kinds of stories I was reading: All my characters were white and blue-eyed, they played in the snow, they ate apples,

## (Laughter)

and they talked a lot about the weather, how lovely it was that the sun had come out.

## (Laughter)

Now, this despite the fact that I lived in Nigeria. I had never been outside Nigeria. We didn't have snow, we ate mangoes, and we never talked about the weather, because there was no need to.

My characters also drank a lot of ginger beer, because the characters in the British books I read drank ginger beer. Never mind that I had no idea what ginger beer was.

#### (Laughter)

And for many years afterwards, I would have a desperate desire to taste ginger beer. But that is another story.

What this demonstrates, I think, is how impressionable and vulnerable we are in the face of a story, particularly as children. Because all I had read were books in which characters were foreign, I had become convinced that books by their very nature had to have foreigners in them and had to be about things with which I could not personally identify. Now, things changed when I discovered African books. There weren't many of them available, and they weren't quite as easy to find as the foreign books.

But because of writers like Chinua Achebe and Camara Laye, I went through a mental shift in my perception of literature. I realized that people like me, girls with skin the color of chocolate, whose kinky hair could not form ponytails, could also exist in literature. I started to write about things I recognized.

Now, I loved those American and British books I read. They stirred my imagination. They opened up new worlds for me. But the unintended consequence was that I did not know that people like me could exist in literature. So what the discovery of African writers did for me was this: It saved me from having a single story of what books are.

I come from a conventional, middle-class Nigerian family. My father was a professor. My mother was an administrator. And so we had, as was the norm, live-in domestic help, who would often come from nearby rural villages. So, the year I turned eight, we got a new house boy. His name was Fide. The only thing my mother told us about him was that his family was very poor. My mother sent yams and rice, and our old clothes, to his family. And when I didn't finish my dinner, my mother would say, "Finish your food! Don't you know? People like Fide's family have nothing." So I felt enormous pity for Fide's family.

Then one Saturday, we went to his village to visit, and his mother showed us a beautifully patterned basket made of dyed raffia that his brother had made. I was startled. It had not

occurred to me that anybody in his family could actually make something. All I had heard about them was how poor they were, so that it had become impossible for me to see them as anything else but poor. Their poverty was my single story of them.

Years later, I thought about this when I left Nigeria to go to university in the United States. I was 19. My American roommate was shocked by me. She asked where I had learned to speak English so well, and was confused when I said that Nigeria happened to have English as its official language. She asked if she could listen to what she called my "tribal music," and was consequently very disappointed when I produced my tape of Mariah Carey.

## (Laughter)

She assumed that I did not know how to use a stove.

What struck me was this: She had felt sorry for me even before she saw me. Her default position toward me, as an African, was a kind of patronizing, well-meaning pity. My roommate had a single story of Africa: a single story of catastrophe. In this single story, there was no possibility of Africans being similar to her in any way, no possibility of feelings more complex than pity, no possibility of a connection as human equals.

I must say that before I went to the U.S., I didn't consciously identify as African. But in the U.S., whenever Africa came up, people turned to me. Never mind that I knew nothing about places like Namibia. But I did come to embrace this new identity, and in many ways I think of myself now as African. Although I still get quite irritable when Africa is referred to as a country, the most recent example being my otherwise wonderful flight from Lagos two days ago, in which there was an announcement on the Virgin flight about the charity work in "India, Africa and other countries."

## (Laughter)

So, after I had spent some years in the U.S. as an African, I began to understand my roommate's response to me. If I had not grown up in Nigeria, and if all I knew about Africa were from popular images, I too would think that Africa was a place of beautiful landscapes, beautiful animals, and incomprehensible people, fighting senseless wars, dying of poverty and AIDS, unable to speak for themselves and waiting to be saved by a kind, white foreigner. I would see Africans in the same way that I, as a child, had seen Fide's family.

This single story of Africa ultimately comes, I think, from Western literature. Now, here is a quote from the writing of a London merchant called John Lok, who sailed to west Africa in 1561 and kept a fascinating account of his voyage. After referring to the black Africans as "beasts who have no houses," he writes, "They are also people without heads, having their mouth and eyes in their breasts."

Now, I've laughed every time I've read this. And one must admire the imagination of John Lok. But what is important about his writing is that it represents the beginning of a tradition of telling African stories in the West: A tradition of Sub-Saharan Africa as a place of negatives, of difference, of darkness, of people who, in the words of the wonderful poet Rudyard Kipling, are "half devil, half child."

And so, I began to realize that my American roommate must have throughout her life seen and heard different versions of this single story, as had a professor, who once told me that my novel was not "authentically African." Now, I was quite willing to contend that there were a number of things wrong with the novel, that it had failed in a number of places, but I had not quite imagined that it had failed at achieving something called African authenticity. In fact, I did not know what African authenticity was. The professor told me that my characters were

too much like him, an educated and middle-class man. My characters drove cars. They were not starving. Therefore they were not authentically African.

But I must quickly add that I too am just as guilty in the question of the single story. A few years ago, I visited Mexico from the U.S. The political climate in the U.S. at the time was tense, and there were debates going on about immigration. And, as often happens in America, immigration became synonymous with Mexicans. There were endless stories of Mexicans as people who were fleecing the healthcare system, sneaking across the border, being arrested at the border, that sort of thing.

I remember walking around on my first day in Guadalajara, watching the people going to work, rolling up tortillas in the marketplace, smoking, laughing. I remember first feeling slight surprise. And then, I was overwhelmed with shame. I realized that I had been so immersed in the media coverage of Mexicans that they had become one thing in my mind, the abject immigrant. I had bought into the single story of Mexicans and I could not have been more ashamed of myself.

So that is how to create a single story, show a people as one thing, as only one thing, over and over again, and that is what they become.

It is impossible to talk about the single story without talking about power. There is a word, an Igbo word, that I think about whenever I think about the power structures of the world, and it is "nkali." It's a noun that loosely translates to "to be greater than another." Like our economic and political worlds, stories too are defined by the principle of nkali: How they are told, who tells them, when they're told, how many stories are told, are really dependent on power.

Power is the ability not just to tell the story of another person, but to make it the definitive story of that person. The Palestinian poet Mourid Barghouti writes that if you want to dispossess a people, the simplest way to do it is to tell their story and to start with, "secondly." Start the story with the arrows of the Native Americans, and not with the arrival of the British, and you have an entirely different story. Start the story with the failure of the African state, and not with the colonial creation of the African state, and you have an entirely different story.

I recently spoke at a university where a student told me that it was such a shame that Nigerian men were physical abusers like the father character in my novel. I told him that I had just read a novel called "American Psycho" --

(Laughter)

-- and that it was such a shame that young Americans were serial murderers.

(Laughter)

(Applause)

Now, obviously I said this in a fit of mild irritation.

(Laughter)

But it would never have occurred to me to think that just because I had read a novel in which a character was a serial killer that he was somehow representative of all Americans. This is not because I am a better person than that student, but because of America's cultural and economic power, I had many stories of America. I had read Tyler and Updike and Steinbeck and Gaitskill. I did not have a single story of America.

When I learned, some years ago, that writers were expected to have had really unhappy childhoods to be successful, I began to think about how I could invent horrible things my parents had done to me.

# (Laughter)

But the truth is that I had a very happy childhood, full of laughter and love, in a very close-knit family.

But I also had grandfathers who died in refugee camps. My cousin Polle died because he could not get adequate healthcare. One of my closest friends, Okoloma, died in a plane crash because our fire trucks did not have water. I grew up under repressive military governments that devalued education, so that sometimes, my parents were not paid their salaries. And so, as a child, I saw jam disappear from the breakfast table, then margarine disappeared, then bread became too expensive, then milk became rationed. And most of all, a kind of normalized political fear invaded our lives.

All of these stories make me who I am. But to insist on only these negative stories is to flatten my experience and to overlook the many other stories that formed me. The single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one story become the only story.

Of course, Africa is a continent full of catastrophes: There are immense ones, such as the horrific rapes in Congo and depressing ones, such as the fact that 5,000 people apply for one job vacancy in Nigeria. But there are other stories that are not about catastrophe, and it is very important, it is just as important, to talk about them.

I've always felt that it is impossible to engage properly with a place or a person without engaging with all of the stories of that place and that person. The consequence of the single story is this: It robs people of dignity. It makes our recognition of our equal humanity difficult. It emphasizes how we are different rather than how we are similar.

So what if before my Mexican trip, I had followed the immigration debate from both sides, the U.S. and the Mexican? What if my mother had told us that Fide's family was poor and hardworking? What if we had an African television network that broadcast diverse African stories all over the world? What the Nigerian writer Chinua Achebe calls "a balance of stories."

What if my roommate knew about my Nigerian publisher, Muhtar Bakare, a remarkable man who left his job in a bank to follow his dream and start a publishing house? Now, the conventional wisdom was that Nigerians don't read literature. He disagreed. He felt that people who could read, would read, if you made literature affordable and available to them.

Shortly after he published my first novel, I went to a TV station in Lagos to do an interview, and a woman who worked there as a messenger came up to me and said, "I really liked your novel. I didn't like the ending. Now, you must write a sequel, and this is what will happen ..."

#### (Laughter)

And she went on to tell me what to write in the sequel. I was not only charmed, I was very moved. Here was a woman, part of the ordinary masses of Nigerians, who were not supposed to be readers. She had not only read the book, but she had taken ownership of it and felt justified in telling me what to write in the sequel.

Now, what if my roommate knew about my friend Funmi Iyanda, a fearless woman who hosts a TV show in Lagos, and is determined to tell the stories that we prefer to forget? What if my roommate knew about the heart procedure that was performed in the Lagos hospital last

week? What if my roommate knew about contemporary Nigerian music, talented people singing in English and Pidgin, and Igbo and Yoruba and Ijo, mixing influences from Jay-Z to Fela to Bob Marley to their grandfathers.

What if my roommate knew about the female lawyer who recently went to court in Nigeria to challenge a ridiculous law that required women to get their husband's consent before renewing their passports? What if my roommate knew about Nollywood, full of innovative people making films despite great technical odds, films so popular that they really are the best example of Nigerians consuming what they produce? What if my roommate knew about my wonderfully ambitious hair braider, who has just started her own business selling hair extensions? Or about the millions of other Nigerians who start businesses and sometimes fail, but continue to nurse ambition?

Every time I am home I am confronted with the usual sources of irritation for most Nigerians: our failed infrastructure, our failed government, but also by the incredible resilience of people who thrive despite the government, rather than because of it. I teach writing workshops in Lagos every summer, and it is amazing to me how many people apply, how many people are eager to write, to tell stories.

My Nigerian publisher and I have just started a non-profit called Farafina Trust, and we have big dreams of building libraries and refurbishing libraries that already exist and providing books for state schools that don't have anything in their libraries, and also of organizing lots and lots of workshops, in reading and writing, for all the people who are eager to tell our many stories.

Stories matter. Many stories matter. Stories have been used to dispossess and to malign, but stories can also be used to empower and to humanize. Stories can break the dignity of a people, but stories can also repair that broken dignity.

The American writer Alice Walker wrote this about her Southern relatives who had moved to the North. She introduced them to a book about the Southern life that they had left behind. "They sat around, reading the book themselves, listening to me read the book, and a kind of paradise was regained."

I would like to end with this thought: That when we reject the single story, when we realize that there is never a single story about any place, we regain a kind of paradise.

Thank you.

(Applause)

# TED Talk 18. How I held my breath for 17 minutes. David Blaine (TEDMED 2009, octubre 2009)

As a magician, I try to create images that make people stop and think. I also try to challenge myself to do things that doctors say are not possible. I was buried alive in New York City in a coffin, buried alive in a coffin in April, 1999, for a week. I lived there with nothing but water. And it ended up being so much fun that I decided I could pursue doing more of these things. The next one is I froze myself in a block of ice for three days and three nights in New York City. That one was way more difficult than I had expected. The one after that, I stood on top of a hundred-foot pillar for 36 hours. I began to hallucinate so hard that the buildings that were behind me started to look like big animal heads.

So, next I went to London. In London I lived in a glass box for 44 days with nothing but water. It was, for me, one of the most difficult things I'd ever done, but it was also the most beautiful. There was so many skeptics, especially the press in London, that they started flying cheeseburgers on helicopters around my box to tempt me.

## (Laughter)

So, I felt very validated when the New England Journal of Medicine actually used the research for science.

My next pursuit was I wanted to see how long I could go without breathing, like how long I could survive with nothing, not even air. I didn't realize that it would become the most amazing journey of my life.

As a young magician, I was obsessed with Houdini and his underwater challenges. So, I began, early on, competing against the other kids, seeing how long I could stay underwater while they went up and down to breathe, you know, five times, while I stayed under on one breath. By the time I was a teenager, I was able to hold my breath for three minutes and 30 seconds. I would later find out that was Houdini's personal record.

In 1987 I heard of a story about a boy that fell through ice and was trapped under a river. He was underneath, not breathing for 45 minutes. When the rescue workers came, they resuscitated him and there was no brain damage. His core temperature had dropped to 77 degrees. As a magician, I think everything is possible. And I think if something is done by one person, it can be done by others. I started to think, if the boy could survive without breathing for that long, there must be a way that I could do it.

So, I met with a top neurosurgeon. And I asked him, how long is it possible to go without breathing, like how long could I go without air? And he said to me that anything over six minutes you have a serious risk of hypoxic brain damage. So, I took that as a challenge, basically.

## (Laughter)

My first try, I figured that I could do something similar, and I created a water tank, and I filled it with ice and freezing cold water. And I stayed inside of that water tank hoping my core temperature would start to drop. And I was shivering. In my first attempt to hold my breath, I couldn't even last a minute. So, I realized that was completely not going to work.

I went to talk to a doctor friend -- and I asked him, "How could I do that?" "I want to hold my breath for a really long time. How could it be done?" And he said, "David, you're a magician, create the illusion of not breathing, it will be much easier."

# (Laughter)

So, he came up with this idea of creating a rebreather, with a CO2 scrubber, which was basically a tube from Home Depot, with a balloon duct-taped to it, that he thought we could put inside of me, and somehow be able to circulate the air and rebreathe with this thing in me. This is a little hard to watch. But this is that attempt. So, that clearly wasn't going to work.

## (Laughter)

Then I actually started thinking about liquid breathing. There is a chemical that's called perflubron. And it's so high in oxygen levels that in theory you could breathe it. So, I got my hands on that chemical, filled the sink up with it, and stuck my face in the sink and tried to breathe that in, which was really impossible. It's basically like trying to breathe, as a doctor said, while having an elephant standing on your chest. So, that idea disappeared.

Then I started thinking, would it be possible to hook up a heart/lung bypass machine and have a surgery where it was a tube going into my artery, and then appear to not breathe while they were oxygenating my blood? Which was another insane idea, obviously.

Then I thought about the craziest idea of all the ideas: to actually do it.

## (Laughter)

To actually try to hold my breath past the point that doctors would consider you brain dead. So, I started researching into pearl divers. You know, because they go down for four minutes on one breath. And when I was researching pearl divers, I found the world of free-diving. It was the most amazing thing that I ever discovered, pretty much. There is many different aspects to free-diving. There is depth records, where people go as deep as they can. And then there is static apnea. That's holding your breath as long as you can in one place without moving. That was the one that I studied.

The first thing that I learned is when you're holding your breath, you should never move at all; that wastes energy. And that depletes oxygen, and it builds up CO2 in your blood. So, I learned never to move. And I learned how to slow my heart rate down. I had to remain perfectly still and just relax and think that I wasn't in my body, and just control that. And then I learned how to purge. Purging is basically hyperventilating. You blow in and out --

# (Breathing loudly)

You do that, you get lightheaded, you get tingling. And you're really ridding your body of CO2. So, when you hold your breath, it's infinitely easier. Then I learned that you have to take a huge breath, and just hold and relax and never let any air out, and just hold and relax through all the pain.

Every morning, this is for months, I would wake up and the first thing that I would do is I would hold my breath for, out of 52 minutes, I would hold my breath for 44 minutes. So, basically what that means is I would purge, I'd breathe really hard for a minute. And I would hold, immediately after, for five and a half minutes. Then I would breathe again for a minute, purging as hard as I can, then immediately after that I would hold again for five and a half minutes. I would repeat this process eight times in a row. Out of 52 minutes, you're only breathing for eight minutes. At the end of that you're completely fried, your brain. You feel like you're walking around in a daze. And you have these awful headaches. Basically, I'm not the best person to talk to when I'm doing that stuff.

I started learning about the world-record holder. His name is Tom Sietas. And this guy is perfectly built for holding his breath. He's six foot four. He's 160 pounds. And his total lung capacity is twice the size of an average person. I'm six foot one, and fat. We'll say big-boned.

## (Laughter)

I had to drop 50 pounds in three months. So, everything that I put into my body, I considered as medicine. Every bit of food was exactly what it was for its nutritional value. I ate really small controlled portions throughout the day. And I started to really adapt my body.

[Individual results may vary]

# (Laughter)

The thinner I was, the longer I was able to hold my breath. And by eating so well and training so hard, my resting heart-rate dropped to 38 beats per minute. Which is lower than most Olympic athletes. In four months of training, I was able to hold my breath for over seven minutes. I wanted to try holding my breath everywhere. I wanted to try it in the most extreme situations to see if I could slow my heart rate down under duress.

# (Laughter)

I decided that I was going to break the world record live on prime-time television. The world record was eight minutes and 58 seconds, held by Tom Sietas, that guy with the whale lungs I told you about. I assumed that I could put a water tank at Lincoln Center and if I stayed there a week not eating, I would get comfortable in that situation and I would slow my metabolism, which I was sure would help me hold my breath longer than I had been able to do it. I was completely wrong.

I entered the sphere a week before the scheduled air date. And I thought everything seemed to be on track. Two days before my big breath-hold attempt, for the record, the producers of my television special thought that just watching somebody holding their breath, and almost drowning, is too boring for television.

#### (Laughter)

So, I had to add handcuffs, while holding my breath, to escape from. This was a critical mistake. Because of the movement, I was wasting oxygen. And by seven minutes I had gone into these awful convulsions. By 7:08, I started to black out. And by seven minutes and 30 seconds, they had to pull my body out and bring me back. I had failed on every level.

## (Laughter)

So, naturally, the only way out of the slump that I could think of was, I decided to call Oprah.

# (Laughter)

I told her that I wanted to up the ante and hold my breath longer than any human being ever had. This was a different record. This was a pure O2 static apnea record that Guinness had set the world record at 13 minutes. So, basically you breathe pure O2 first, oxygenating your body, flushing out CO2, and you are able to hold much longer. I realized that my real competition was the beaver.

# (Laughter)

## (Laughter ends)

In January of '08, Oprah gave me four months to prepare and train. So, I would sleep in a hypoxic tent every night. A hypoxic tent is a tent that simulates altitude at 15,000 feet. So, it's like base camp, Everest. What that does is, you start building up the red bloodcell count in your body, which helps you carry oxygen better. Every morning, again, after getting out of that

tent, your brain is completely wiped out. My first attempt on pure O2, I was able to go up to 15 minutes. So, it was a pretty big success.

The neurosurgeon pulled me out of the water because in his mind, at 15 minutes your brain is done, you're brain dead. So, he pulled me up, and I was fine. There was one person there that was definitely not impressed. It was my ex-girlfriend. While I was breaking the record underwater for the first time, she was sifting through my Blackberry, checking all my messages.

(Laughter)

My brother had a picture of it. It is really --

(Laughter)

(Laughter ends)

I then announced that I was going to go for Sietas' record, publicly. And what he did in response, is he went on Regis and Kelly, and broke his old record. Then his main competitor went out and broke his record. So, he suddenly pushed the record up to 16 minutes and 32 seconds. Which was three minutes longer than I had prepared. It was longer than the record.

I wanted to get the Science Times to document this. I wanted to get them to do a piece on it. So, I did what any person seriously pursuing scientific advancement would do. I walked into the New York Times offices and did card tricks to everybody.

(Laughter)

So, I don't know if it was the magic or the lure of the Cayman Islands, but John Tierney flew down and did a piece on the seriousness of breath-holding.

While he was there, I tried to impress him, of course. And I did a dive down to 160 feet, which is basically the height of a 16 story building, and as I was coming up, I blacked out underwater, which is really dangerous; that's how you drown. Luckily, Kirk had seen me and he swam over and pulled me up.

So, I started full focus. I completely trained to get my breath-hold time up for what I needed to do. But there was no way to prepare for the live television aspect of it, being on Oprah. But in practice, I would do it face down, floating on the pool. But for TV they wanted me to be upright so they could see my face, basically. The other problem was the suit was so buoyant that they had to strap my feet in to keep me from floating up. So, I had to use my legs to hold my feet into the straps that were loose, which was a real problem for me. That made me extremely nervous, raising the heart rate.

Then, what they also did was, which we never did before, is there was a heart-rate monitor. And it was right next to the sphere. So, every time my heart would beat, I'd hear the beep-beep-beep-beep, you know, the ticking, really loud. Which was making me more nervous. And there was no way to slow my heart rate down. Normally, I would start at 38 beats per minute, and while holding my breath, it would drop to 12 beats per minute, which is pretty unusual.

(Laughter)

This time it started at 120 beats, and it never went down. I spent the first five minutes underwater desperately trying to slow my heart rate down. I was just sitting there thinking, "I've got to slow this down. I'm going to fail." And I was getting more nervous. And the heart rate just kept going up and up, all the way up to 150 beats. Basically it's the same

thing that created my downfall at Lincoln Center. It was a waste of O2. When I made it to the halfway mark, at eight minutes, I was 100 percent certain that I was not going to be able to make this. There was no way for me to do it.

I figured, Oprah had dedicated an hour to doing this breath-hold thing, if I had cracked early, it would be a whole show about how depressed I am.

(Laughter)

So, I figured I'm better off just fighting and staying there until I black out, at least then they can pull me out and take care of me and all that.

(Laughter)

I kept pushing to 10 minutes. At 10 minutes you start getting all these really strong tingling sensations in your fingers and toes. And I knew that that was blood shunting, when the blood rushes away from your extremities to provide oxygen to your vital organs. At 11 minutes I started feeling throbbing sensations in my legs, and my lips started to feel really strange.

At minute 12 I started to have ringing in my ears, and I started to feel my arm going numb. And I'm a hypochondriac, and I remember arm numb means heart attack. So, I started to really get really paranoid. Then at 13 minutes, maybe because of the hypochondria, I started feeling pains all over my chest. It was awful.

(Laughter)

At 14 minutes, I had these awful contractions, like this urge to breathe.

(Laughter)

(Laughter ends)

At 15 minutes I was suffering major O2 deprivation to the heart. And I started having ischemia to the heart. My heartbeat would go from 120 to 50, to 150, to 40, to 20, to 150 again. It would skip a beat. It would start. It would stop. And I felt all this. And I was sure that I was going to have a heart attack.

So, at 16 minutes what I did is I slid my feet out because I knew that if I did go out, if I did have a heart attack, they'd have to jump into the binding and take my feet out before pulling me up. I was really nervous. I let my feet out, and I started floating to the top. And I didn't take my head out. But I was just floating there waiting for my heart to stop, just waiting.

They had doctors with the "Pst," you know, sitting there waiting. And then suddenly I hear screaming. And I think that there is some weird thing -- that I had died or something had happened. And then I realized that I had made it to 16:32. So, with the energy of everybody that was there, I decided to keep pushing. And I went to 17 minutes and four seconds.

(Applause)

(Applause ends)

As though that wasn't enough, what I did immediately after is I went to Quest Labs and had them take every blood sample that they could to test for everything and to see where my levels were, so the doctors could use it, once again. I also didn't want anybody to question it. I had the world record and I wanted to make sure it was legitimate.

So, I get to New York City the next day, I'm walking out of the Apple store, and this kid walks up to me he's like, "Yo, D!" I'm like "Yeah?" He said, "If you really held your breath that long, why'd you come out of the water dry?" I was like "What?"

(Laughter)

And that's my life. So --

(Laughter)

As a magician, I try to show things to people that seem impossible. And I think magic, whether I'm holding my breath or shuffling a deck of cards, is pretty simple. It's practice, it's training, and it's -- (Sobs) It's practice, it's training and experimenting,

(Sobs)

while pushing through the pain to be the best that I can be. And that's what magic is to me, so, thank you.

(Applause)

## TED Talk 19. How to stop screwing yourself over. Mel Robbins (TEDxSF, juny 2011)

Bigger welcome! Hello, San Francisco! TEDx – oh my God, blinding light! Hi, everybody! How are you? (Audience cheering) Fine?! Oh my gosh! Okay, so... My name is Mel Robbins, and for the last seventeen years, I have done nothing but help people get everything that they want. Within reason! My husband's here. So, I've done it in the courtroom, in the boardroom, in the bedroom, in people's living room, whatever room you want to be in, if I'm there, I will help you get whatever you want by any means necessary. For the last three years - I host a syndicated radio show. Five days a week, I go live in forty cities and I talk to men and women across America who feel stuck. Do you know that a third of Americans feel dissatisfied with their lives right now? That is a hundred million people! That's insane! And I've come face to face with it in this new show that I'm doing, which is also insane, it's called "In-laws". I move in with families across America - (Laughter) You guessed it! - who are at war with their inlaws. We move them into the same house, I verbally assassinate everybody, we open up Pandora's box, and I get people to stop arguing about the donuts and who is hosting Thanksgiving dinner, and talk about the real stuff. And that's what I want to talk to you about. I'm here for you. I'm going to tell you everything I know in less than eighteen minutes about how to get what you want. So I want you to take a millisecond right now and think about what you want. You! And I want you to be selfish. Screw Simon and the "We" thing. This is about me, right now! (Laughter) (Applause) Sorry, Simon. What do you want? And here's the deal. I don't want it to sound good to other people. Being healthy will not get your ass on a treadmill. Losing your manboobs, so you can hook up with somebody, now that's motivation. (Laughter) So, I want to know: What do you want? Do you want to lose weight? Do you want to triple your income? Do you want to start a nonprofit? Do you want to find love? What is it? Get it, right here. You know what it is, don't analyze it to death, just pick something. That's part of the problem. You won't pick. So, we're going to be talking about how you get what you want. And frankly, getting what you want is simple. But notice I didn't say it was easy. It's very simple. In fact, if you think about it, we live in the most amazing moment in time. So that thing that you have up here, whatever it may be, you want to use healthy eating to cure your diabetes, you want to figure out how to take care of the elders and start a new hospice center, you want to move to Africa and build a school... Guess what? You can walk into a book store - right now! - and buy at least ten books written by credentialed experts on how the hell you do it. You could Google it. And you could probably find at least, I don't know - a thousand blogs documenting the step, by step, by step transformation that somebody else is already doing. You can find anybody online and cyber-stalk them! (Laughter) You can just walk in their footsteps – just use the science of drafting. Follow what everyone else has done, because somebody is already doing it! So why don't you have what you want, when you have all the information that you need, you have the contacts that you need, there are probably free tools online that allow you to start a business, or join a group, or do whatever the heck you want!? It all comes down to one word: F\*©#. Shut the front door, you know what I'm talking about? The f-bomb. It's everywhere! You hear it all the time! I honestly don't understand what the appeal is of the word. I mean, you don't sound smart when you say it. And it's really not expressing how you really feel. It's sort of a cheap shot to take. And of course you know I'm talking about the word "fine". "How you doing?" "Oh, I'm fine." Oh, really? You are? Dragging around those extra forty pounds, you're fine? Feeling like roommates with your spouse, and you're fine? You haven't had sex in four months, you're fine? Really?! I don't think so! But see, here's the deal with saying that you're fine: It's actually genius. Because if you're fine, you don't have to do anything about it. But when you think about this word "fine", it just makes me so angry. Here we are at a conference about being alive and you're going to describe the experience of being alive as "fine"?! What a flimsy and feeble word! If you're crappy, say you're crappy! If you're amazing say you're amazing! Tell the truth! And this not only goes for the social construct: "Oh, I don't want to burden you with the fact that I hate my life", or: "Hey, I'm amazing! But that would make you feel terrible." The

bigger issue – The bigger issue with "fine" is that you say it to yourself. That thing that you want, I guarantee you, you've convinced yourself that you're fine not having it. That's why you're not pushing yourself. It's the areas in your life where you've given up. Where you've said, "Oh, I'm fine. My mom's never going to change, so I just can't have that conversation." "I'm fine. We've got to wait until the kids graduate, before we get divorced, so we'll just sleep in separate bedrooms." "I'm fine. I lost my job, I can barely pay my bills, but whatever - It's hard to get a job." One of the reasons why this word also just annoys me so much is, scientists have calculated - Oh yeah, I'm coming down! (Laughter) Scientists have calculated the odds of you being born. That's right. They've crunched the numbers. I see you up there. They've crunched the numbers on you – Yeah, you guys standing up, you want to sit down for this. They've crunched the numbers on you being born. And they took into account all of the wars, and the natural disasters, and the dinosaurs, and everything else. And do you realize that the odds, the odds of you, yeah, right here, put your computer away, stand up for me, Doug! (Laughter) So the odds of Doug here, turn around, say "hi" to everybody - the odds of Doug being born at the moment in time he was born, to the parents you were born to, with the DNA structure that you have, one in four hundred trillion! Isn't that amazing? Doug: I'm so lucky! Mel: Yes! You're not fine, you're fantastic! You have life-changing ideas for a reason, and it's not to torture yourself. Thank you. Thank you, Doug. (Applause) Christine was right when she said all of you could be on stage. Because all of you - we're all in this category. One in four hundred trillion. All day long you have ideas that could change your life, that could change the world, that could change the way that you feel, and what do you do with them? Nothing! (Grunts) Hopefully I won't moon you. (Laughter) You didn't pay for that. (Laughter) And I want you to just think for a minute, because we all have - I love to use the analogy "the inner snooze button" - you have these amazing ideas that bubble up. You've been watching people all day and I guarantee you, like ping pong balls - bam-bam-bam and everytime you have an idea, what do you do? - Hit the snooze! What's the first decision you made this morning? I bet it was to go back to bed. "Yeah, first decision today, I'm one in four hundred trillion, I'm going to go back to sleep." And I get it! Your bed is comfortable! It's cosy, it's warm! If you're lucky, you've got somebody that you love next to you, or in my case, I've got my husband and my two kids and possibly the dog. And the reason why I'm bringing up this first decision that you made today, and the inner snooze alarm, is because in any area of your life that you want to change, any - there's one fact that you need to know. This one: You are never going to feel like it. Ever. No one's coming, motivation isn't happening, you're never going to feel like it. Scientists call it activation energy. That's what they call the force required to get you to change from what you're doing on autopilot to do something new. So try this test tomorrow. You think you're so fancy, I know, you're attending TED. (Laughter) Try this. Tomorrow morning, set your alarm for thirty minutes earlier. And then when it goes off, take those sheets, throw them off, and stand up and start your day. No snooze, no delay, no, "I'll just wait here for five seconds because Mel's not standing here" - Do it. And the reason why I want you to do it is because you will come face to face with the physical, and I mean physical force that's required to change your behavior. Do you think that somebody who needs to lose weight ever feels like going on a diet? Of course not! You think they ever feel like eating boiled chicken and peas instead of a croissant? I don't think so! The activation energy required to get your ass away from your computer and out the front door, to go on the walk, you said that you were going to go on, is the exact same amount of force that it takes you to push yourself out of a warm bed and into a cold room. What's interesting about being an adult is that when you become eighteen, nobody tells you that it's now going to be your job to parent yourself. And by "parent yourself", I mean it's your job to make yourself do the crap you don't want to do, so you can be everything that you're supposed to be. And you're so damn busy waiting to feel like it. And you're never going to! My son never feels like getting off his DS. That's my job! Get off the damn DS! Kendall, clean up the Barbies! If you're going to have a nude party in my bathroom, at least clean it up! (Laughter) God, chew with your mouth closed!

We're not a barn, for crying out loud! Alright, dinner is coming, get out of the pantry. As parents, and you were a kid, your parents make you do the things you don't feel like doing. Because you won't. Ever. Not now, not then, not ever! And even when you get good at something, you'll figure out something else you don't want to do. And then you'll plateau out, get bored, "I hate this job. Blah blah boring." But will you look for a new one? No! You'll just bitch about that one. It's very, very simple to get what you want. But it's not easy. You have to force yourself. And I mean force. And the reason why I use the word "force" - when Roz was up here and talking about the emotion tracking, and she had the picture of two sides of the brain - I look at the brain the exact same way. Only I describe one side of your brain as autopilot and the other side as emergency brake. That's the only two speeds you get: autopilot, emergency brake. And guess which one your brain likes better: autopilot. You've had the experience where you've driven to work and you get there and you're like, "Oh my God, I don't remember ever driving here." (Laughter) You weren't drunk! That was your brain on autopilot. It was functioning just at this level. And the problem with your mind is that anytime you do anything that's different from your normal routine, guess what your brain does - emergency brake! And it has that reaction for everything. Everything! You walk into the kitchen and see everybody's left their breakfast dishes for you. And you think for the hundredth time, "I'm going to kill them. In fact I'm gonna leave it here and I'm going to make them do it." But that's not your normal routine, is it? So your mind goes: emergency brake! And you go right into autopilot. "I'll just load it, and be pissed, and then not have sex. That's what I'm going to do." (Laughter) (Applause) So, when I say "force", anything that's a break from your routine is going to require force. And if you think about your life, it's kind of funny because we are kids and then we become adults, and we spend so much time trying to push our life into some sort of stable routine, and then we grow bored of it! You wake up at the same time every day, you have largely the same breakfast, you drive to work the same way, show up at work, look busy, avoid making calls, update Facebook, you attend a meeting and doodle the whole time, go back and update Facebook, make plans for the evening, you look busy some more, then drive home the same way, you eat largely the same dinner or a variety of it, you watch the same kind of media, and then you go to bed, and do the same thing all over again! No wonder you're bored out of your mind! It's the routine that's killing you. I have this theory about why people get stuck in life. So, most of you've probably taken your Basic Psych 101 class, and you've bumped into Abraham Maslow's "Hierarchy of Needs"? Well, your body is kinda cool. Because you have these basic needs. And your body is wired to send you signals. If you need food, what do you feel? If you need water, what do you feel? If you need sex, what do you feel? (Laughter) Thank you. I think when you feel stuck or dissatisfied in your life, it's a signal. And it's not a signal that your life is broken. It's a signal that one of your most basic needs are not being met. Your need for exploration. Everything about your life, about your body, grows! Your cells regenerate, your hair, your nails, everything grows for your entire life. And your soul needs exploration and growth. And the only way you'll get it is by forcing yourself to be uncomfortable. Forcing yourself to get outside, out of your head. Thank you. If you're in your head, you're behind enemy lines. That is not God talking, okay? It's not! In fact, if I put a speaker on it and we broadcast what you say to yourself, we would institutionalize you. (Laughter) You would not hang out with people that talk to you the way you talk to yourself. So get out of your head! Your feelings! Your feelings are screwing you! I don't care how you feel! I care about what you want! And if you listen to how you feel, when it comes to what you want - you will not get it. Because you will never feel like it. And you need to get outside your comfort zone. It's not about taking risks, it's about getting outside your comfort zone. Those first three seconds when you push yourself out of bed, they blow. But once you're up, it's great. Those first three seconds when you're sitting here in a stadium like this and somebody says, "Get up and come dance," and you think, "Oh, I should do that," and then you're like, "Uhmm." That experience that you had when you had the impulse to do it and then you didn't do the activation energy required to force yourself, your emergency brake got

pulled - "I'm sitting right here. I'm not going up with those crazy people, I don't like to dance..." What happened for me is I came up, and I bumped into Rachel, and then we started talking, and next thing you know, she's tweeting. And we're friends. And - boom! Get outside. That's where the magic is. That's where the one in four hundred trillion exists. So everything I do – oh, OK, this is the last part. Sorry. So one more thing that you can use, I call it the five-second-rule. Your mind can process a facial expression in 33 milliseconds. It can move pretty damn quick. The other thing that it does very quickly is if you have one of those little impulses that are pulling you, if you don't marry it with an action within five seconds, you pull the emergency brake and kill the idea. Kill it! If you have the impulse to get up and come dance while the band is playing, if you don't stand up in five seconds, you're going to pull the emergency brake. If you have an impulse about, you were inspired by somebody's speech today, and you don't do something within five seconds – write a note, send yourself a text – anything physical to marry it with the idea, you will pull the emergency brake and kill the idea. Your problem isn't ideas. Your problem is you don't act on them. You kill them. It's not my fault. It's not anybody's fault. You're doing it to yourself. Stop it! I'm counting on you. One in four hundred trillion. You got stuff to do! And it's not going to happen in your head. So I want you to practice this today. When we go off to party, thank God it's coming soon, because I think we all could use a cocktail, I want you to practice the five-second-rule. You see somebody and you think you have an impulse, they look interesting? Walk over there! You were inspired by somebody and you have a request? Make it! That's why you're here! Experiment with it, and I think you'll be shocked about what happens. And one more thing, I want you to know that everything that I do, whether it's the radio show, or the television show, or the book that I wrote, or the column, it's for you. And if there is anything that I can do, if I can do anything to make you do the things you don't want to do, so you can have what you want, I will do it. But you need to walk over, you need to open your mouth, and you need to make the request. You got it? Good. Go do it. (Applause) Thank you! Thank you, yes! Stand up! You have the impulse, stand up! Thank you!

# TED Talk 20. How to make stress your friend. Kelly McGonigal (TEDGlobal 2013, juny 2013)

I have a confession to make. But first, I want you to make a little confession to me. In the past year, I want you to just raise your hand if you've experienced relatively little stress. Anyone?

How about a moderate amount of stress?

Who has experienced a lot of stress? Yeah. Me too.

But that is not my confession. My confession is this: I am a health psychologist, and my mission is to help people be happier and healthier. But I fear that something I've been teaching for the last 10 years is doing more harm than good, and it has to do with stress. For years I've been telling people, stress makes you sick. It increases the risk of everything from the common cold to cardiovascular disease. Basically, I've turned stress into the enemy. But I have changed my mind about stress, and today, I want to change yours.

Let me start with the study that made me rethink my whole approach to stress. This study tracked 30,000 adults in the United States for eight years, and they started by asking people, "How much stress have you experienced in the last year?" They also asked, "Do you believe that stress is harmful for your health?" And then they used public death records to find out who died.

# (Laughter)

Okay. Some bad news first. People who experienced a lot of stress in the previous year had a 43 percent increased risk of dying. But that was only true for the people who also believed that stress is harmful for your health.

## (Laughter)

People who experienced a lot of stress but did not view stress as harmful were no more likely to die. In fact, they had the lowest risk of dying of anyone in the study, including people who had relatively little stress.

Now the researchers estimated that over the eight years they were tracking deaths, 182,000 Americans died prematurely, not from stress, but from the belief that stress is bad for you.

# (Laughter)

That is over 20,000 deaths a year. Now, if that estimate is correct, that would make believing stress is bad for you the 15th largest cause of death in the United States last year, killing more people than skin cancer, HIV/AIDS and homicide.

# (Laughter)

You can see why this study freaked me out. Here I've been spending so much energy telling people stress is bad for your health.

So this study got me wondering: Can changing how you think about stress make you healthier? And here the science says yes. When you change your mind about stress, you can change your body's response to stress.

Now to explain how this works, I want you all to pretend that you are participants in a study designed to stress you out. It's called the social stress test. You come into the laboratory, and you're told you have to give a five-minute impromptu speech on your personal weaknesses to a panel of expert evaluators sitting right in front of you, and to make sure you feel the pressure, there are bright lights and a camera in your face, kind of like this.

# (Laughter)

And the evaluators have been trained to give you discouraging, non-verbal feedback, like this.

(Exhales)

(Laughter)

Now that you're sufficiently demoralized, time for part two: a math test. And unbeknownst to you, the experimenter has been trained to harass you during it. Now we're going to all do this together. It's going to be fun. For me.

Okay.

(Laughter)

I want you all to count backwards from 996 in increments of seven. You're going to do this out loud, as fast as you can, starting with 996. Go!

(Audience counting)

Go faster. Faster please. You're going too slow.

(Audience counting)

Stop. Stop, stop, stop. That guy made a mistake. We are going to have to start all over again.

(Laughter)

You're not very good at this, are you? Okay, so you get the idea. If you were actually in this study, you'd probably be a little stressed out. Your heart might be pounding, you might be breathing faster, maybe breaking out into a sweat. And normally, we interpret these physical changes as anxiety or signs that we aren't coping very well with the pressure.

But what if you viewed them instead as signs that your body was energized, was preparing you to meet this challenge? Now that is exactly what participants were told in a study conducted at Harvard University. Before they went through the social stress test, they were taught to rethink their stress response as helpful. That pounding heart is preparing you for action. If you're breathing faster, it's no problem. It's getting more oxygen to your brain. And participants who learned to view the stress response as helpful for their performance, well, they were less stressed out, less anxious, more confident, but the most fascinating finding to me was how their physical stress response changed.

Now, in a typical stress response, your heart rate goes up, and your blood vessels constrict like this. And this is one of the reasons that chronic stress is sometimes associated with cardiovascular disease. It's not really healthy to be in this state all the time. But in the study, when participants viewed their stress response as helpful, their blood vessels stayed relaxed like this. Their heart was still pounding, but this is a much healthier cardiovascular profile. It actually looks a lot like what happens in moments of joy and courage. Over a lifetime of stressful experiences, this one biological change could be the difference between a stress-induced heart attack at age 50 and living well into your 90s. And this is really what the new science of stress reveals, that how you think about stress matters.

So my goal as a health psychologist has changed. I no longer want to get rid of your stress. I want to make you better at stress. And we just did a little intervention. If you raised your hand and said you'd had a lot of stress in the last year, we could have saved your life, because hopefully the next time your heart is pounding from stress, you're going to remember this talk and you're going to think to yourself, this is my body helping me rise to this challenge. And when you view stress in that way, your body believes you, and your stress response becomes healthier.

Now I said I have over a decade of demonizing stress to redeem myself from, so we are going to do one more intervention. I want to tell you about one of the most under-appreciated aspects of the stress response, and the idea is this: Stress makes you social.

To understand this side of stress, we need to talk about a hormone, oxytocin, and I know oxytocin has already gotten as much hype as a hormone can get. It even has its own cute nickname, the cuddle hormone, because it's released when you hug someone. But this is a very small part of what oxytocin is involved in.

Oxytocin is a neuro-hormone. It fine-tunes your brain's social instincts. It primes you to do things that strengthen close relationships. Oxytocin makes you crave physical contact with your friends and family. It enhances your empathy. It even makes you more willing to help and support the people you care about. Some people have even suggested we should snort oxytocin... to become more compassionate and caring. But here's what most people don't understand about oxytocin. It's a stress hormone. Your pituitary gland pumps this stuff out as part of the stress response. It's as much a part of your stress response as the adrenaline that makes your heart pound. And when oxytocin is released in the stress response, it is motivating you to seek support. Your biological stress response is nudging you to tell someone how you feel, instead of bottling it up. Your stress response wants to make sure you notice when someone else in your life is struggling so that you can support each other. When life is difficult, your stress response wants you to be surrounded by people who care about you.

Okay, so how is knowing this side of stress going to make you healthier? Well, oxytocin doesn't only act on your brain. It also acts on your body, and one of its main roles in your body is to protect your cardiovascular system from the effects of stress. It's a natural anti-inflammatory. It also helps your blood vessels stay relaxed during stress. But my favorite effect on the body is actually on the heart. Your heart has receptors for this hormone, and oxytocin helps heart cells regenerate and heal from any stress-induced damage. This stress hormone strengthens your heart.

And the cool thing is that all of these physical benefits of oxytocin are enhanced by social contact and social support. So when you reach out to others under stress, either to seek support or to help someone else, you release more of this hormone, your stress response becomes healthier, and you actually recover faster from stress. I find this amazing, that your stress response has a built-in mechanism for stress resilience, and that mechanism is human connection.

I want to finish by telling you about one more study. And listen up, because this study could also save a life. This study tracked about 1,000 adults in the United States, and they ranged in age from 34 to 93, and they started the study by asking, "How much stress have you experienced in the last year?" They also asked, "How much time have you spent helping out friends, neighbors, people in your community?" And then they used public records for the next five years to find out who died.

Okay, so the bad news first: For every major stressful life experience, like financial difficulties or family crisis, that increased the risk of dying by 30 percent. But -- and I hope you are expecting a "but" by now -- but that wasn't true for everyone. People who spent time caring for others showed absolutely no stress-related increase in dying. Zero. Caring created resilience.

And so we see once again that the harmful effects of stress on your health are not inevitable. How you think and how you act can transform your experience of stress. When you choose to view your stress response as helpful, you create the biology of courage. And when you choose to connect with others under stress, you can create resilience. Now I wouldn't

necessarily ask for more stressful experiences in my life, but this science has given me a whole new appreciation for stress. Stress gives us access to our hearts. The compassionate heart that finds joy and meaning in connecting with others, and yes, your pounding physical heart, working so hard to give you strength and energy. And when you choose to view stress in this way, you're not just getting better at stress, you're actually making a pretty profound statement. You're saying that you can trust yourself to handle life's challenges. And you're remembering that you don't have to face them alone.

Thank you.

(Applause)

Chris Anderson: This is kind of amazing, what you're telling us. It seems amazing to me that a belief about stress can make so much difference to someone's life expectancy. How would that extend to advice, like, if someone is making a lifestyle choice between, say, a stressful job and a non-stressful job, does it matter which way they go? It's equally wise to go for the stressful job so long as you believe that you can handle it, in some sense?

KM: Yeah, and one thing we know for certain is that chasing meaning is better for your health than trying to avoid discomfort. And so I would say that's really the best way to make decisions, is go after what it is that creates meaning in your life and then trust yourself to handle the stress that follows.

CA: Thank you so much, Kelly. It's pretty cool.

(Applause)

#### TED Talk 21. The future we're Building – and boring. Elon Musk (TED 2017, abril 2017)

Chris Anderson: Elon, hey, welcome back to TED. It's great to have you here.

Elon Musk: Thanks for having me.

CA: So, in the next half hour or so, we're going to spend some time exploring your vision for what an exciting future might look like, which I guess makes the first question a little ironic: Why are you boring?

EM: Yeah. I ask myself that frequently. We're trying to dig a hole under LA, and this is to create the beginning of what will hopefully be a 3D network of tunnels to alleviate congestion. So right now, one of the most soul-destroying things is traffic. It affects people in every part of the world. It takes away so much of your life. It's horrible. It's particularly horrible in LA.

(Laughter)

CA: I think you've brought with you the first visualization that's been shown of this. Can I show this?

EM: Yeah, absolutely. So this is the first time -- Just to show what we're talking about. So a couple of key things that are important in having a 3D tunnel network. First of all, you have to be able to integrate the entrance and exit of the tunnel seamlessly into the fabric of the city. So by having an elevator, sort of a car skate, that's on an elevator, you can integrate the entrance and exits to the tunnel network just by using two parking spaces. And then the car gets on a skate. There's no speed limit here, so we're designing this to be able to operate at 200 kilometers an hour.

CA: How much?

EM: 200 kilometers an hour, or about 130 miles per hour. So you should be able to get from, say, Westwood to LAX in six minutes -- five, six minutes.

(Applause)

CA: So possibly, initially done, it's like on a sort of toll road-type basis.

EM: Yeah.

CA: Which, I guess, alleviates some traffic from the surface streets as well.

EM: So, I don't know if people noticed it in the video, but there's no real limit to how many levels of tunnel you can have. You can go much further deep than you can go up. The deepest mines are much deeper than the tallest buildings are tall, so you can alleviate any arbitrary level of urban congestion with a 3D tunnel network. This is a very important point. So a key rebuttal to the tunnels is that if you add one layer of tunnels, that will simply alleviate congestion, it will get used up, and then you'll be back where you started, back with congestion. But you can go to any arbitrary number of tunnels, any number of levels.

CA: But people -- seen traditionally, it's incredibly expensive to dig, and that would block this idea.

EM: Yeah. Well, they're right. To give you an example, the LA subway extension, which is -- I think it's a two-and-a-half mile extension that was just completed for two billion dollars. So it's roughly a billion dollars a mile to do the subway extension in LA. And this is not the highest utility subway in the world. So yeah, it's quite difficult to dig tunnels normally. I think we need to have at least a tenfold improvement in the cost per mile of tunneling.

CA: And how could you achieve that?

EM: Actually, if you just do two things, you can get to approximately an order of magnitude improvement, and I think you can go beyond that. So the first thing to do is to cut the tunnel diameter by a factor of two or more. So a single road lane tunnel according to regulations has to be 26 feet, maybe 28 feet in diameter to allow for crashes and emergency vehicles and sufficient ventilation for combustion engine cars. But if you shrink that diameter to what we're attempting, which is 12 feet, which is plenty to get an electric skate through, you drop the diameter by a factor of two and the cross-sectional area by a factor of four, and the tunneling cost scales with the cross-sectional area. So that's roughly a half-order of magnitude improvement right there. Then tunneling machines currently tunnel for half the time, then they stop, and then the rest of the time is putting in reinforcements for the tunnel wall. So if you design the machine instead to do continuous tunneling and reinforcing, that will give you a factor of two improvement. Combine that and that's a factor of eight. Also these machines are far from being at their power or thermal limits, so you can jack up the power to the machine substantially. I think you can get at least a factor of two, maybe a factor of four or five improvement on top of that. So I think there's a fairly straightforward series of steps to get somewhere in excess of an order of magnitude improvement in the cost per mile, and our target actually is -- we've got a pet snail called Gary, this is from Gary the snail from "South Park," I mean, sorry, "SpongeBob SquarePants."

(Laughter)

So Gary is capable of -- currently he's capable of going 14 times faster than a tunnel-boring machine.

(Laughter)

CA: You want to beat Gary.

EM: We want to beat Gary.

(Laughter)

He's not a patient little fellow, and that will be victory. Victory is beating the snail.

CA: But a lot of people imagining, dreaming about future cities, they imagine that actually the solution is flying cars, drones, etc. You go aboveground. Why isn't that a better solution? You save all that tunneling cost.

EM: Right. I'm in favor of flying things. Obviously, I do rockets, so I like things that fly. This is not some inherent bias against flying things, but there is a challenge with flying cars in that they'll be quite noisy, the wind force generated will be very high. Let's just say that if something's flying over your head, a whole bunch of flying cars going all over the place, that is not an anxiety-reducing situation.

(Laughter)

You don't think to yourself, "Well, I feel better about today." You're thinking, "Did they service their hubcap, or is it going to come off and guillotine me?" Things like that.

CA: So you've got this vision of future cities with these rich, 3D networks of tunnels underneath. Is there a tie-in here with Hyperloop? Could you apply these tunnels to use for this Hyperloop idea you released a few years ago.

EM: Yeah, so we've been sort of puttering around with the Hyperloop stuff for a while. We built a Hyperloop test track adjacent to SpaceX, just for a student competition, to encourage innovative ideas in transport. And it actually ends up being the biggest vacuum chamber in the world after the Large Hadron Collider, by volume. So it was quite fun to do that, but it was kind

of a hobby thing, and then we think we might -- so we've built a little pusher car to push the student pods, but we're going to try seeing how fast we can make the pusher go if it's not pushing something. So we're cautiously optimistic we'll be able to be faster than the world's fastest bullet train even in a .8-mile stretch.

CA: Whoa. Good brakes.

EM: Yeah, I mean, it's -- yeah. It's either going to smash into tiny pieces or go quite fast.

CA: But you can picture, then, a Hyperloop in a tunnel running quite long distances.

EM: Exactly. And looking at tunneling technology, it turns out that in order to make a tunnel, you have to -- In order to seal against the water table, you've got to typically design a tunnel wall to be good to about five or six atmospheres. So to go to vacuum is only one atmosphere, or near-vacuum. So actually, it sort of turns out that automatically, if you build a tunnel that is good enough to resist the water table, it is automatically capable of holding vacuum.

CA: Huh.

EM: So, yeah.

CA: And so you could actually picture, what kind of length tunnel is in Elon's future to running Hyperloop?

EM: I think there's no real length limit. You could dig as much as you want. I think if you were to do something like a DC-to-New York Hyperloop, I think you'd probably want to go underground the entire way because it's a high-density area. You're going under a lot of buildings and houses, and if you go deep enough, you cannot detect the tunnel. Sometimes people think, well, it's going to be pretty annoying to have a tunnel dug under my house. Like, if that tunnel is dug more than about three or four tunnel diameters beneath your house, you will not be able to detect it being dug at all. In fact, if you're able to detect the tunnel being dug, whatever device you are using, you can get a lot of money for that device from the Israeli military, who is trying to detect tunnels from Hamas, and from the US Customs and Border patrol that try and detect drug tunnels. So the reality is that earth is incredibly good at absorbing vibrations, and once the tunnel depth is below a certain level, it is undetectable. Maybe if you have a very sensitive seismic instrument, you might be able to detect it.

CA: So you've started a new company to do this called The Boring Company. Very nice. Very funny.

(Laughter)

EM: What's funny about that?

(Laughter)

CA: How much of your time is this?

EM: It's maybe ... two or three percent.

CA: You've called it a hobby. This is what an Elon Musk hobby looks like.

(Laughter)

EM: I mean, it really is, like -- This is basically interns and people doing it part time. We bought some second-hand machinery. It's kind of puttering along, but it's making good progress, so --

CA: So an even bigger part of your time is being spent on electrifying cars and transport through Tesla. Is one of the motivations for the tunneling project the realization that actually, in a world where cars are electric and where they're self-driving, there may end up being more cars on the roads on any given hour than there are now?

EM: Yeah, exactly. A lot of people think that when you make cars autonomous, they'll be able to go faster and that will alleviate congestion. And to some degree that will be true, but once you have shared autonomy where it's much cheaper to go by car and you can go point to point, the affordability of going in a car will be better than that of a bus. Like, it will cost less than a bus ticket. So the amount of driving that will occur will be much greater with shared autonomy, and actually traffic will get far worse.

CA: You started Tesla with the goal of persuading the world that electrification was the future of cars, and a few years ago, people were laughing at you. Now, not so much.

EM: OK.

(Laughter)

I don't know. I don't know.

CA: But isn't it true that pretty much every auto manufacturer has announced serious electrification plans for the short- to medium-term future?

EM: Yeah. Yeah. I think almost every automaker has some electric vehicle program. They vary in seriousness. Some are very serious about transitioning entirely to electric, and some are just dabbling in it. And some, amazingly, are still pursuing fuel cells, but I think that won't last much longer.

CA: But isn't there a sense, though, Elon, where you can now just declare victory and say, you know, "We did it." Let the world electrify, and you go on and focus on other stuff?

EM: Yeah. I intend to stay with Tesla as far into the future as I can imagine, and there are a lot of exciting things that we have coming. Obviously the Model 3 is coming soon. We'll be unveiling the Tesla Semi truck.

CA: OK, we're going to come to this. So Model 3, it's supposed to be coming in July-ish.

EM: Yeah, it's looking quite good for starting production in July.

CA: Wow. One of the things that people are so excited about is the fact that it's got autopilot. And you put out this video a while back showing what that technology would look like.

EM: Yeah.

CA: There's obviously autopilot in Model S right now. What are we seeing here?

EM: Yeah, so this is using only cameras and GPS. So there's no LIDAR or radar being used here. This is just using passive optical, which is essentially what a person uses. The whole road system is meant to be navigated with passive optical, or cameras, and so once you solve cameras or vision, then autonomy is solved. If you don't solve vision, it's not solved. So that's why our focus is so heavily on having a vision neural net that's very effective for road conditions.

CA: Right. Many other people are going the LIDAR route. You want cameras plus radar is most of it.

EM: You can absolutely be superhuman with just cameras. Like, you can probably do it ten times better than humans would, just cameras.

CA: So the new cars being sold right now have eight cameras in them. They can't yet do what that showed. When will they be able to?

EM: I think we're still on track for being able to go cross-country from LA to New York by the end of the year, fully autonomous.

CA: OK, so by the end of the year, you're saying, someone's going to sit in a Tesla without touching the steering wheel, tap in "New York," off it goes.

EM: Yeah.

CA: Won't ever have to touch the wheel -- by the end of 2017.

EM: Yeah. Essentially, November or December of this year, we should be able to go all the way from a parking lot in California to a parking lot in New York, no controls touched at any point during the entire journey.

(Applause)

CA: Amazing. But part of that is possible because you've already got a fleet of Teslas driving all these roads. You're accumulating a huge amount of data of that national road system.

EM: Yes, but the thing that will be interesting is that I'm actually fairly confident it will be able to do that route even if you change the route dynamically. So, it's fairly easy -- If you say I'm going to be really good at one specific route, that's one thing, but it should be able to go, really be very good, certainly once you enter a highway, to go anywhere on the highway system in a given country. So it's not sort of limited to LA to New York. We could change it and make it Seattle-Florida, that day, in real time. So you were going from LA to New York. Now go from LA to Toronto.

CA: So leaving aside regulation for a second, in terms of the technology alone, the time when someone will be able to buy one of your cars and literally just take the hands off the wheel and go to sleep and wake up and find that they've arrived, how far away is that, to do that safely?

EM: I think that's about two years. So the real trick of it is not how do you make it work say 99.9 percent of the time, because, like, if a car crashes one in a thousand times, then you're probably still not going to be comfortable falling asleep. You shouldn't be, certainly.

(Laughter)

It's never going to be perfect. No system is going to be perfect, but if you say it's perhaps -- the car is unlikely to crash in a hundred lifetimes, or a thousand lifetimes, then people are like, OK, wow, if I were to live a thousand lives, I would still most likely never experience a crash, then that's probably OK.

CA: To sleep. I guess the big concern of yours is that people may actually get seduced too early to think that this is safe, and that you'll have some horrible incident happen that puts things back.

EM: Well, I think that the autonomy system is likely to at least mitigate the crash, except in rare circumstances. The thing to appreciate about vehicle safety is this is probabilistic. I mean, there's some chance that any time a human driver gets in a car, that they will have an accident that is their fault. It's never zero. So really the key threshold for autonomy is how much better does autonomy need to be than a person before you can rely on it?

CA: But once you get literally safe hands-off driving, the power to disrupt the whole industry seems massive, because at that point you've spoken of people being able to buy a car, drops you off at work, and then you let it go and provide a sort of Uber-like service to other people, earn you money, maybe even cover the cost of your lease of that car, so you can kind of get a car for free. Is that really likely?

EM: Yeah. Absolutely this is what will happen. So there will be a shared autonomy fleet where you buy your car and you can choose to use that car exclusively, you could choose to have it be used only by friends and family, only by other drivers who are rated five star, you can choose to share it sometimes but not other times. That's 100 percent what will occur. It's just a question of when.

CA: Wow. So you mentioned the Semi and I think you're planning to announce this in September, but I'm curious whether there's anything you could show us today?

EM: I will show you a teaser shot of the truck.

(Laughter)

It's alive.

CA: OK.

EM: That's definitely a case where we want to be cautious about the autonomy features. Yeah.

(Laughter)

CA: We can't see that much of it, but it doesn't look like just a little friendly neighborhood truck. It looks kind of badass. What sort of semi is this?

EM: So this is a heavy duty, long-range semitruck. So it's the highest weight capability and with long range. So essentially it's meant to alleviate the heavy-duty trucking loads. And this is something which people do not today think is possible. They think the truck doesn't have enough power or it doesn't have enough range, and then with the Tesla Semi we want to show that no, an electric truck actually can out-torque any diesel semi. And if you had a tug-of-war competition, the Tesla Semi will tug the diesel semi uphill.

(Laughter)

(Applause)

CA: That's pretty cool. And short term, these aren't driverless. These are going to be trucks that truck drivers want to drive.

EM: Yes. So what will be really fun about this is you have a flat torque RPM curve with an electric motor, whereas with a diesel motor or any kind of internal combustion engine car, you've got a torque RPM curve that looks like a hill. So this will be a very spry truck. You can drive this around like a sports car. There's no gears. It's, like, single speed.

CA: There's a great movie to be made here somewhere. I don't know what it is and I don't know that it ends well, but it's a great movie.

(Laughter)

EM: It's quite bizarre test-driving. When I was driving the test prototype for the first truck. It's really weird, because you're driving around and you're just so nimble, and you're in this giant truck.

CA: Wait, you've already driven a prototype?

EM: Yeah, I drove it around the parking lot, and I was like, this is crazy.

CA: Wow. This is no vaporware.

EM: It's just like, driving this giant truck and making these mad maneuvers.

CA: This is cool. OK, from a really badass picture to a kind of less badass picture. This is just a cute house from "Desperate Housewives" or something. What on earth is going on here?

EM: Well, this illustrates the picture of the future that I think is how things will evolve. You've got an electric car in the driveway. If you look in between the electric car and the house, there are actually three Powerwalls stacked up against the side of the house, and then that house roof is a solar roof. So that's an actual solar glass roof.

CA: OK.

EM: That's a picture of a real -- well, admittedly, it's a real fake house. That's a real fake house.

(Laughter)

CA: So these roof tiles, some of them have in them basically solar power, the ability to --

EM: Yeah. Solar glass tiles where you can adjust the texture and the color to a very fine-grained level, and then there's sort of microlouvers in the glass, such that when you're looking at the roof from street level or close to street level, all the tiles look the same whether there is a solar cell behind it or not. So you have an even color from the ground level. If you were to look at it from a helicopter, you would be actually able to look through and see that some of the glass tiles have a solar cell behind them and some do not. You can't tell from street level.

CA: You put them in the ones that are likely to see a lot of sun, and that makes these roofs super affordable, right? They're not that much more expensive than just tiling the roof.

EM: Yeah. We're very confident that the cost of the roof plus the cost of electricity -- A solar glass roof will be less than the cost of a normal roof plus the cost of electricity. So in other words, this will be economically a no-brainer, we think it will look great, and it will last -- We thought about having the warranty be infinity, but then people thought, well, that might sound like were just talking rubbish, but actually this is toughened glass. Well after the house has collapsed and there's nothing there, the glass tiles will still be there.

#### (Applause)

CA: I mean, this is cool. So you're rolling this out in a couple week's time, I think, with four different roofing types.

EM: Yeah, we're starting off with two, two initially, and the second two will be introduced early next year.

CA: And what's the scale of ambition here? How many houses do you believe could end up having this type of roofing?

EM: I think eventually almost all houses will have a solar roof. The thing is to consider the time scale here to be probably on the order of 40 or 50 years. So on average, a roof is replaced every 20 to 25 years. But you don't start replacing all roofs immediately. But eventually, if you say were to fast-forward to say 15 years from now, it will be unusual to have a roof that does not have solar.

CA: Is there a mental model thing that people don't get here that because of the shift in the cost, the economics of solar power, most houses actually have enough sunlight on their

roof pretty much to power all of their needs. If you could capture the power, it could pretty much power all their needs. You could go off-grid, kind of.

EM: It depends on where you are and what the house size is relative to the roof area, but it's a fair statement to say that most houses in the US have enough roof area to power all the needs of the house.

CA: So the key to the economics of the cars, the Semi, of these houses is the falling price of lithium-ion batteries, which you've made a huge bet on as Tesla. In many ways, that's almost the core competency. And you've decided that to really, like, own that competency, you just have to build the world's largest manufacturing plant to double the world's supply of lithium-ion batteries, with this guy. What is this?

EM: Yeah, so that's the Gigafactory, progress so far on the Gigafactory. Eventually, you can sort of roughly see that there's sort of a diamond shape overall, and when it's fully done, it'll look like a giant diamond, or that's the idea behind it, and it's aligned on true north. It's a small detail.

CA: And capable of producing, eventually, like a hundred gigawatt hours of batteries a year.

EM: A hundred gigawatt hours. We think probably more, but yeah.

CA: And they're actually being produced right now.

EM: They're in production already. CA: You guys put out this video. I mean, is that speeded up?

EM: That's the slowed down version.

(Laughter)

CA: How fast does it actually go?

EM: Well, when it's running at full speed, you can't actually see the cells without a strobe light. It's just blur.

(Laughter)

CA: One of your core ideas, Elon, about what makes an exciting future is a future where we no longer feel guilty about energy. Help us picture this. How many Gigafactories, if you like, does it take to get us there?

EM: It's about a hundred, roughly. It's not 10, it's not a thousand. Most likely a hundred.

CA: See, I find this amazing. You can picture what it would take to move the world off this vast fossil fuel thing. It's like you're building one, it costs five billion dollars, or whatever, five to 10 billion dollars. Like, it's kind of cool that you can picture that project. And you're planning to do, at Tesla -- announce another two this year.

EM: I think we'll announce locations for somewhere between two and four Gigafactories later this year. Yeah, probably four.

CA: Whoa.

(Applause) No more teasing from you for here? Like -- where, continent? You can say no.

EM: We need to address a global market.

CA: OK.

(Laughter)

This is cool. I think we should talk for -- Actually, global market. I'm going to ask you one question about politics, only one. I'm kind of sick of politics, but I do want to ask you this. You're on a body now giving advice to a guy --

EM: Who?

CA: Who has said he doesn't really believe in climate change, and there's a lot of people out there who think you shouldn't be doing that. They'd like you to walk away from that. What would you say to them?

EM: Well, I think that first of all, I'm just on two advisory councils where the format consists of going around the room and asking people's opinion on things, and so there's like a meeting every month or two. That's the sum total of my contribution. But I think to the degree that there are people in the room who are arguing in favor of doing something about climate change, or social issues, I've used the meetings I've had thus far to argue in favor of immigration and in favor of climate change.

(Applause)

And if I hadn't done that, that wasn't on the agenda before. So maybe nothing will happen, but at least the words were said.

CA: OK.

(Applause)

So let's talk SpaceX and Mars. Last time you were here, you spoke about what seemed like a kind of incredibly ambitious dream to develop rockets that were actually reusable. And you've only gone and done it.

EM: Finally. It took a long time.

CA: Talk us through this. What are we looking at here?

EM: So this is one of our rocket boosters coming back from very high and fast in space. So just delivered the upper stage at high velocity. I think this might have been at sort of Mach 7 or so, delivery of the upper stage.

(Applause)

CA: So that was a sped-up --

EM: That was the slowed down version.

(Laughter)

CA: I thought that was the sped-up version. But I mean, that's amazing, and several of these failed before you finally figured out how to do it, but now you've done this, what, five or six times?

EM: We're at eight or nine.

CA: And for the first time, you've actually reflown one of the rockets that landed.

EM: Yeah, so we landed the rocket booster and then prepped it for flight again and flew it again, so it's the first reflight of an orbital booster where that reflight is relevant. So it's important to appreciate that reusability is only relevant if it is rapid and complete. So like an aircraft or a car, the reusability is rapid and complete. You do not send your aircraft to Boeing in-between flights.

CA: Right. So this is allowing you to dream of this really ambitious idea of sending many, many, many people to Mars in, what, 10 or 20 years time, I guess.

EM: Yeah.

CA: And you've designed this outrageous rocket to do it. Help us understand the scale of this thing.

EM: Well, visually you can see that's a person. Yeah, and that's the vehicle.

(Laughter)

CA: So if that was a skyscraper, that's like, did I read that, a 40-story skyscraper?

EM: Probably a little more, yeah. The thrust level of this is really -- This configuration is about four times the thrust of the Saturn V moon rocket.

CA: Four times the thrust of the biggest rocket humanity ever created before.

EM: Yeah. Yeah.

CA: As one does. EM: Yeah.

(Laughter)

In units of 747, a 747 is only about a quarter of a million pounds of thrust, so for every 10 million pounds of thrust, there's 40 747s. So this would be the thrust equivalent of 120 747s, with all engines blazing.

CA: And so even with a machine designed to escape Earth's gravity, I think you told me last time this thing could actually take a fully loaded 747, people, cargo, everything, into orbit.

EM: Exactly. This can take a fully loaded 747 with maximum fuel, maximum passengers, maximum cargo on the 747 -- this can take it as cargo.

CA: So based on this, you presented recently this Interplanetary Transport System which is visualized this way. This is a scene you picture in, what, 30 years time? 20 years time? People walking into this rocket.

EM: I'm hopeful it's sort of an eight- to 10-year time frame. Aspirationally, that's our target. Our internal targets are more aggressive, but I think --

(Laughter)

CA: OK.

EM: While vehicle seems quite large and is large by comparison with other rockets, I think the future spacecraft will make this look like a rowboat. The future spaceships will be truly enormous.

CA: Why, Elon? Why do we need to build a city on Mars with a million people on it in your lifetime, which I think is kind of what you've said you'd love to do?

EM: I think it's important to have a future that is inspiring and appealing. I just think there have to be reasons that you get up in the morning and you want to live. Like, why do you want to live? What's the point? What inspires you? What do you love about the future? And if we're not out there, if the future does not include being out there among the stars and being a multiplanet species, I find that it's incredibly depressing if that's not the future that we're going to have.

#### (Applause)

CA: People want to position this as an either or, that there are so many desperate things happening on the planet now from climate to poverty to, you know, you pick your issue. And this feels like a distraction. You shouldn't be thinking about this. You should be solving what's here and now. And to be fair, you've done a fair old bit to actually do that with your work on sustainable energy. But why not just do that?

EM: I think there's -- I look at the future from the standpoint of probabilities. It's like a branching stream of probabilities, and there are actions that we can take that affect those probabilities or that accelerate one thing or slow down another thing. I may introduce something new to the probability stream. Sustainable energy will happen no matter what. If there was no Tesla, if Tesla never existed, it would have to happen out of necessity. It's tautological. If you don't have sustainable energy, it means you have unsustainable energy. Eventually you will run out, and the laws of economics will drive civilization towards sustainable energy, inevitably. The fundamental value of a company like Tesla is the degree to which it accelerates the advent of sustainable energy, faster than it would otherwise occur.

So when I think, like, what is the fundamental good of a company like Tesla, I would say, hopefully, if it accelerated that by a decade, potentially more than a decade, that would be quite a good thing to occur. That's what I consider to be the fundamental aspirational good of Tesla.

Then there's becoming a multiplanet species and space-faring civilization. This is not inevitable. It's very important to appreciate this is not inevitable. The sustainable energy future I think is largely inevitable, but being a space-faring civilization is definitely not inevitable. If you look at the progress in space, in 1969 you were able to send somebody to the moon. 1969. Then we had the Space Shuttle. The Space Shuttle could only take people to low Earth orbit. Then the Space Shuttle retired, and the United States could take no one to orbit. So that's the trend. The trend is like down to nothing. People are mistaken when they think that technology just automatically improves. It does not automatically improve. It only improves if a lot of people work very hard to make it better, and actually it will, I think, by itself degrade, actually. You look at great civilizations like Ancient Egypt, and they were able to make the pyramids, and they forgot how to do that. And then the Romans, they built these incredible aqueducts. They forgot how to do it.

CA: Elon, it almost seems, listening to you and looking at the different things you've done, that you've got this unique double motivation on everything that I find so interesting. One is this desire to work for humanity's long-term good. The other is the desire to do something exciting. And often it feels like you feel like you need the one to drive the other. With Tesla, you want to have sustainable energy, so you made these super sexy, exciting cars to do it. Solar energy, we need to get there, so we need to make these beautiful roofs. We haven't even spoken about your newest thing, which we don't have time to do, but you want to save humanity from bad AI, and so you're going to create this really cool brain-machine interface to give us all infinite memory and telepathy and so forth. And on Mars, it feels like what you're saying is, yeah, we need to save humanity and have a backup plan, but also we need to inspire humanity, and this is a way to inspire.

EM: I think the value of beauty and inspiration is very much underrated, no question. But I want to be clear. I'm not trying to be anyone's savior. That is not the -- I'm just trying to think about the future and not be sad.

(Applause)

CA: Beautiful statement. I think everyone here would agree that it is not -- None of this is going to happen inevitably. The fact that in your mind, you dream this stuff, you dream stuff that no one else would dare dream, or no one else would be capable of dreaming at the level of complexity that you do. The fact that you do that, Elon Musk, is a really remarkable thing. Thank you for helping us all to dream a bit bigger.

EM: But you'll tell me if it ever starts getting genuinely insane, right?

(Laughter)

CA: Thank you, Elon Musk. That was really, really fantastic. That was really fantastic.

(Applause)

#### TED Talk 22. My stroke of insight. Jill Bolte Taylor (TED 2008, febrer 2008)

I grew up to study the brain because I have a brother who has been diagnosed with a brain disorder, schizophrenia. And as a sister and later, as a scientist, I wanted to understand, why is it that I can take my dreams, I can connect them to my reality, and I can make my dreams come true? What is it about my brother's brain and his schizophrenia that he cannot connect his dreams to a common and shared reality, so they instead become delusion?

So I dedicated my career to research into the severe mental illnesses. And I moved from my home state of Indiana to Boston, where I was working in the lab of Dr. Francine Benes, in the Harvard Department of Psychiatry. And in the lab, we were asking the question, "What are the biological differences between the brains of individuals who would be diagnosed as normal control, as compared with the brains of individuals diagnosed with schizophrenia, schizoaffective or bipolar disorder?"

So we were essentially mapping the microcircuitry of the brain: which cells are communicating with which cells, with which chemicals, and then in what quantities of those chemicals? So there was a lot of meaning in my life because I was performing this type of research during the day, but then in the evenings and on the weekends, I traveled as an advocate for NAMI, the National Alliance on Mental Illness.

But on the morning of December 10, 1996, I woke up to discover that I had a brain disorder of my own. A blood vessel exploded in the left half of my brain. And in the course of four hours, I watched my brain completely deteriorate in its ability to process all information. On the morning of the hemorrhage, I could not walk, talk, read, write or recall any of my life. I essentially became an infant in a woman's body.

If you've ever seen a human brain, it's obvious that the two hemispheres are completely separate from one another. And I have brought for you a real human brain.

#### (Groaning, laughter)

So this is a real human brain. This is the front of the brain, the back of brain with the spinal cord hanging down, and this is how it would be positioned inside of my head. And when you look at the brain, it's obvious that the two cerebral cortices are completely separate from one another.

For those of you who understand computers, our right hemisphere functions like a parallel processor, while our left hemisphere functions like a serial processor. The two hemispheres do communicate with one another through the corpus callosum, which is made up of some 300 million axonal fibers. But other than that, the two hemispheres are completely separate. Because they process information differently, each of our hemispheres think about different things, they care about different things, and, dare I say, they have very different personalities. Excuse me. Thank you. It's been a joy.

Assistant: It has been.

#### (Laughter)

Our right human hemisphere is all about this present moment. It's all about "right here, right now." Our right hemisphere, it thinks in pictures and it learns kinesthetically through the movement of our bodies. Information, in the form of energy, streams in simultaneously through all of our sensory systems and then it explodes into this enormous collage of what this present moment looks like, what this present moment smells like and tastes like, what it feels like and what it sounds like. I am an energy-being connected to the energy all around me through the consciousness of my right hemisphere. We are energy-beings connected to one another through the consciousness of our right hemispheres as one

human family. And right here, right now, we are brothers and sisters on this planet, here to make the world a better place. And in this moment we are perfect, we are whole and we are beautiful.

My left hemisphere, our left hemisphere, is a very different place. Our left hemisphere thinks linearly and methodically. Our left hemisphere is all about the past and it's all about the future. Our left hemisphere is designed to take that enormous collage of the present moment and start picking out details, and more details about those details. It then categorizes and organizes all that information, associates it with everything in the past we've ever learned, and projects into the future all of our possibilities. And our left hemisphere thinks in language. It's that ongoing brain chatter that connects me and my internal world to my external world. It's that little voice that says to me, "Hey, you've got to remember to pick up bananas on your way home. I need them in the morning." It's that calculating intelligence that reminds me when I have to do my laundry. But perhaps most important, it's that little voice that says to me, "I am. I am."

And as soon as my left hemisphere says to me "I am," I become separate. I become a single solid individual, separate from the energy flow around me and separate from you. And this was the portion of my brain that I lost on the morning of my stroke.

On the morning of the stroke, I woke up to a pounding pain behind my left eye. And it was the kind of caustic pain that you get when you bite into ice cream. And it just gripped me -- and then it released me. And it just gripped me -- and then it released me. And it was very unusual for me to ever experience any kind of pain, so I thought, "OK, I'll just start my normal routine."

So I got up and I jumped onto my cardio glider, which is a full-body, full-exercise machine. And I'm jamming away on this thing, and I'm realizing that my hands look like primitive claws grasping onto the bar. And I thought, "That's very peculiar." And I looked down at my body and I thought, "Whoa, I'm a weird-looking thing." And it was as though my consciousness had shifted away from my normal perception of reality, where I'm the person on the machine having the experience, to some esoteric space where I'm witnessing myself having this experience.

And it was all very peculiar, and my headache was just getting worse. So I get off the machine, and I'm walking across my living room floor, and I realize that everything inside of my body has slowed way down. And every step is very rigid and very deliberate. There's no fluidity to my pace, and there's this constriction in my area of perception, so I'm just focused on internal systems. And I'm standing in my bathroom getting ready to step into the shower, and I could actually hear the dialogue inside of my body. I heard a little voice saying, "OK. You muscles, you've got to contract. You muscles, you relax."

And then I lost my balance, and I'm propped up against the wall. And I look down at my arm and I realize that I can no longer define the boundaries of my body. I can't define where I begin and where I end, because the atoms and the molecules of my arm blended with the atoms and molecules of the wall. And all I could detect was this energy -- energy.

And I'm asking myself, "What is wrong with me? What is going on?" And in that moment, my left hemisphere brain chatter went totally silent. Just like someone took a remote control and pushed the mute button. Total silence. And at first I was shocked to find myself inside of a silent mind. But then I was immediately captivated by the magnificence of the energy around me. And because I could no longer identify the boundaries of my body, I felt enormous and expansive. I felt at one with all the energy that was, and it was beautiful there.

Then all of a sudden my left hemisphere comes back online and it says to me, "Hey! We've got a problem! We've got to get some help." And I'm going, "Ahh! I've got a problem!"

# (Laughter)

So it's like, "OK, I've got a problem." But then I immediately drifted right back out into the consciousness -- and I affectionately refer to this space as La Land. But it was beautiful there. Imagine what it would be like to be totally disconnected from your brain chatter that connects you to the external world.

So here I am in this space, and my job, and any stress related to my job -- it was gone. And I felt lighter in my body. And imagine all of the relationships in the external world and any stressors related to any of those -- they were gone. And I felt this sense of peacefulness. And imagine what it would feel like to lose 37 years of emotional baggage! (Laughter) Oh! I felt euphoria -- euphoria. It was beautiful.

And again, my left hemisphere comes online and it says, "Hey! You've got to pay attention. We've got to get help." And I'm thinking, "I've got to get help. I've got to focus." So I get out of the shower and I mechanically dress and I'm walking around my apartment, and I'm thinking, "I've got to get to work. Can I drive?"

And in that moment, my right arm went totally paralyzed by my side. Then I realized, "Oh my gosh! I'm having a stroke!" And the next thing my brain says to me is, Wow! This is so cool!

#### (Laughter)

This is so cool! How many brain scientists have the opportunity to study their own brain from the inside out?"

# (Laughter)

And then it crosses my mind, "But I'm a very busy woman!"

# (Laughter)

"I don't have time for a stroke!" So I'm like, "OK, I can't stop the stroke from happening, so I'll do this for a week or two, and then I'll get back to my routine. OK. So I've got to call help. I've got to call work." I couldn't remember the number at work, so I remembered, in my office I had a business card with my number. So I go into my business room, I pull out a three-inch stack of business cards. And I'm looking at the card on top and even though I could see clearly in my mind's eye what my business card looked like, I couldn't tell if this was my card or not, because all I could see were pixels. And the pixels of the words blended with the pixels of the background and the pixels of the symbols, and I just couldn't tell. And then I would wait for what I call a wave of clarity. And in that moment, I would be able to reattach to normal reality and I could tell that's not the card... that's not the card. It took me 45 minutes to get one inch down inside of that stack of cards. In the meantime, for 45 minutes, the hemorrhage is getting bigger in my left hemisphere. I do not understand numbers, I do not understand the telephone, but it's the only plan I have.

So I take the phone pad and I put it right here. I take the business card, I put it right here, and I'm matching the shape of the squiggles on the card to the shape of the squiggles on the phone pad. But then I would drift back out into La La Land, and not remember when I came back if I'd already dialed those numbers. So I had to wield my paralyzed arm like a stump and cover the numbers as I went along and pushed them, so that as I would come back to normal reality, I'd be able to tell, "Yes, I've already dialed that number."

Eventually, the whole number gets dialed and I'm listening to the phone, and my colleague picks up the phone and he says to me, "Woo woo woo." (Laughter)

(Laughter)

And I think to myself, "Oh my gosh, he sounds like a Golden Retriever!"

(Laughter)

And so I say to him -- clear in my mind, I say to him: "This is Jill! I need help!" And what comes out of my voice is, "Woo woo woo woo." I'm thinking, "Oh my gosh, I sound like a Golden Retriever." So I couldn't know -- I didn't know that I couldn't speak or understand language until I tried. So he recognizes that I need help and he gets me help.

And a little while later, I am riding in an ambulance from one hospital across Boston to [Massachusetts] General Hospital. And I curl up into a little fetal ball. And just like a balloon with the last bit of air, just right out of the balloon, I just felt my energy lift and just I felt my spirit surrender.

And in that moment, I knew that I was no longer the choreographer of my life. And either the doctors rescue my body and give me a second chance at life, or this was perhaps my moment of transition.

When I woke later that afternoon, I was shocked to discover that I was still alive. When I felt my spirit surrender, I said goodbye to my life. And my mind was now suspended between two very opposite planes of reality. Stimulation coming in through my sensory systems felt like pure pain. Light burned my brain like wildfire, and sounds were so loud and chaotic that I could not pick a voice out from the background noise, and I just wanted to escape. Because I could not identify the position of my body in space, I felt enormous and expansive, like a genie just liberated from her bottle. And my spirit soared free, like a great whale gliding through the sea of silent euphoria. Nirvana. I found Nirvana. And I remember thinking, there's no way I would ever be able to squeeze the enormousness of myself back inside this tiny little body.

But then I realized, "But I'm still alive! I'm still alive, and I have found Nirvana. And if I have found Nirvana and I'm still alive, then everyone who is alive can find Nirvana." And I pictured a world filled with beautiful, peaceful, compassionate, loving people who knew that they could come to this space at any time. And that they could purposely choose to step to the right of their left hemispheres -- and find this peace. And then I realized what a tremendous gift this experience could be, what a stroke of insight this could be to how we live our lives. And it motivated me to recover.

Two and a half weeks after the hemorrhage, the surgeons went in, and they removed a blood clot the size of a golf ball that was pushing on my language centers. Here I am with my mama, who is a true angel in my life. It took me eight years to completely recover.

So who are we? We are the life-force power of the universe, with manual dexterity and two cognitive minds. And we have the power to choose, moment by moment, who and how we want to be in the world. Right here, right now, I can step into the consciousness of my right hemisphere, where we are. I am the life-force power of the universe. I am the life-force power of the 50 trillion beautiful molecular geniuses that make up my form, at one with all that is. Or, I can choose to step into the consciousness of my left hemisphere, where I become a single individual, a solid. Separate from the flow, separate from you. I am Dr. Jill Bolte Taylor: intellectual, neuroanatomist. These are the "we" inside of me. Which would you choose? Which do you choose? And when? I believe that the more time we spend choosing to run the deep inner-peace circuitry of our right hemispheres, the more peace we will project

into the world, and the more peaceful our planet will be. And I thought that was an idea worth spreading.
Thank you.
(Applause)

#### TED Talk 23. The puzzle of motivation. Dan Pink (TEDGlobal 2009, juliol 2009)

I need to make a confession at the outset here. A little over 20 years ago, I did something that I regret, something that I'm not particularly proud of. Something that, in many ways, I wish no one would ever know, but here I feel kind of obliged to reveal.

(Laughter)

In the late 1980s, in a moment of youthful indiscretion, I went to law school.

(Laughter)

In America, law is a professional degree: after your university degree, you go on to law school. When I got to law school, I didn't do very well. To put it mildly, I didn't do very well. I, in fact, graduated in the part of my law school class that made the top 90% possible.

(Laughter)

Thank you. I never practiced law a day in my life; I pretty much wasn't allowed to.

(Laughter)

But today, against my better judgment, against the advice of my own wife, I want to try to dust off some of those legal skills -- what's left of those legal skills. I don't want to tell you a story. I want to make a case. I want to make a hard-headed, evidence-based, dare I say lawyerly case, for rethinking how we run our businesses.

So, ladies and gentlemen of the jury, take a look at this. This is called the candle problem. Some of you might know it. It's created in 1945 by a psychologist named Karl Duncker. He created this experiment that is used in many other experiments in behavioral science. And here's how it works. Suppose I'm the experimenter. I bring you into a room. I give you a candle, some thumbtacks and some matches. And I say to you, "Your job is to attach the candle to the wall so the wax doesn't drip onto the table." Now what would you do?

Many people begin trying to thumbtack the candle to the wall. Doesn't work. I saw somebody kind of make the motion over here -- some people have a great idea where they light the match, melt the side of the candle, try to adhere it to the wall. It's an awesome idea. Doesn't work. And eventually, after five or ten minutes, most people figure out the solution, which you can see here.

The key is to overcome what's called functional fixedness. You look at that box and you see it only as a receptacle for the tacks. But it can also have this other function, as a platform for the candle. The candle problem.

I want to tell you about an experiment using the candle problem, done by a scientist named Sam Glucksberg, who is now at Princeton University, US, This shows the power of incentives.

He gathered his participants and said: "I'm going to time you, how quickly you can solve this problem." To one group he said, "I'm going to time you to establish norms, averages for how long it typically takes someone to solve this sort of problem."

To the second group he offered rewards. He said, "If you're in the top 25% of the fastest times, you get five dollars. If you're the fastest of everyone we're testing here today, you get 20 dollars." Now this is several years ago, adjusted for inflation, it's a decent sum of money for a few minutes of work. It's a nice motivator.

Question: How much faster did this group solve the problem?

Answer: It took them, on average, three and a half minutes longer. 3.5 min longer. This makes no sense, right? I mean, I'm an American. I believe in free markets. That's not how it's supposed to work, right?

# (Laughter)

If you want people to perform better, you reward them. Right? Bonuses, commissions, their own reality show. Incentivize them. That's how business works. But that's not happening here. You've got an incentive designed to sharpen thinking and accelerate creativity, and it does just the opposite. It dulls thinking and blocks creativity.

What's interesting about this experiment is that it's not an aberration. This has been replicated over and over again for nearly 40 years. These contingent motivators -- if you do this, then you get that -- work in some circumstances. But for a lot of tasks, they actually either don't work or, often, they do harm. This is one of the most robust findings in social science, and also one of the most ignored.

I spent the last couple of years looking at the science of human motivation, particularly the dynamics of extrinsic motivators and intrinsic motivators. And I'm telling you, it's not even close. If you look at the science, there is a mismatch between what science knows and what business does.

What's alarming here is that our business operating system -- think of the set of assumptions and protocols beneath our businesses, how we motivate people, how we apply our human resources-- it's built entirely around these extrinsic motivators, around carrots and sticks. That's actually fine for many kinds of 20th century tasks. But for 21st century tasks, that mechanistic, reward-and-punishment approach doesn't work, often doesn't work, and often does harm. Let me show you.

Glucksberg did another similar experiment, he presented the problem in a slightly different way, like this up here. Attach the candle to the wall so the wax doesn't drip onto the table. Same deal. You: we're timing for norms. You: we're incentivizing.

What happened this time? This time, the incentivized group kicked the other group's butt. Why? Because when the tacks are out of the box, it's pretty easy isn't it?

# (Laughter)

If-then rewards work really well for those sorts of tasks, where there is a simple set of rules and a clear destination to go to. Rewards, by their very nature, narrow our focus, concentrate the mind; that's why they work in so many cases. So, for tasks like this, a narrow focus, where you just see the goal right there, zoom straight ahead to it, they work really well.

But for the real candle problem, you don't want to be looking like this. The solution is on the periphery. You want to be looking around. That reward actually narrows our focus and restricts our possibility.

Let me tell you why this is so important. In western Europe, in many parts of Asia, in North America, in Australia, white-collar workers are doing less of this kind of work, and more of this kind of work. That routine, rule-based, left-brain work -- certain kinds of accounting, financial analysis, computer programming -- has become fairly easy to outsource, fairly easy to automate. Software can do it faster. Low-cost providers can do it cheaper. So what really matters are the more right-brained creative, conceptual kinds of abilities.

Think about your own work. Think about your own work. Are the problems that you face, or even the problems we've been talking about here, do they have a clear set of rules, and a

single solution? No. The rules are mystifying. The solution, if it exists at all, is surprising and not obvious. Everybody in this room is dealing with their own version of the candle problem. And for candle problems of any kind, in any field, those if-then rewards, the things around which we've built so many of our businesses, don't work!

It makes me crazy. And here's the thing. This is not a feeling. Okay? I'm a lawyer; I don't believe in feelings. This is not a philosophy. I'm an American; I don't believe in philosophy.

(Laughter)

This is a fact -- or, as we say in my hometown of Washington, D.C., a true fact.

(Laughter)

(Applause)

Let me give you an example. Let me marshal the evidence here. I'm not telling a story, I'm making a case. Ladies and gentlemen of the jury, some evidence: Dan Ariely, one of the great economists of our time, he and three colleagues did a study of some MIT students. They gave these MIT students a bunch of games, games that involved creativity, and motor skills, and concentration. And the offered them, for performance, three levels of rewards: small reward, medium reward, large reward. If you do really well you get the large reward, on down.

What happened? As long as the task involved only mechanical skill bonuses worked as they would be expected: the higher the pay, the better the performance. Okay? But once the task called for even rudimentary cognitive skill, a larger reward led to poorer performance.

Then they said, "Let's see if there's any cultural bias here. Let's go to Madurai, India and test it." Standard of living is lower. In Madurai, a reward that is modest in North American standards, is more meaningful there. Same deal. A bunch of games, three levels of rewards.

What happens? People offered the medium level of rewards did no better than people offered the small rewards. But this time, people offered the highest rewards, they did the worst of all. In eight of the nine tasks we examined across three experiments, higher incentives led to worse performance.

Is this some kind of touchy-feely socialist conspiracy going on here? No, these are economists from MIT, from Carnegie Mellon, from the University of Chicago. Do you know who sponsored this research? The Federal Reserve Bank of the United States. That's the American experience.

Let's go across the pond to the London School of Economics, LSE, London School of Economics, alma mater of eleven Nobel Laureates in economics. Training ground for great economic thinkers like George Soros, and Friedrich Hayek, and Mick Jagger.

(Laughter)

Last month, just last month, economists at LSE looked at 51 studies of pay-for-performance plans, inside of companies. Here's what they said: "We find that financial incentives can result in a negative impact on overall performance."

There is a mismatch between what science knows and what business does. And what worries me, as we stand here in the rubble of the economic collapse, is that too many organizations are making their decisions, their policies about talent and people, based on assumptions that are outdated, unexamined, and rooted more in folklore than in science. And if we really want to get out of this economic mess, if we really want high performance on those definitional tasks of the 21st century, the solution is not to do more of the wrong things, to entice people with a sweeter carrot, or threaten them with a sharper stick. We need a whole new approach.

The good news is that the scientists who've been studying motivation have given us this new approach. It's built much more around intrinsic motivation. Around the desire to do things because they matter, because we like it, they're interesting, or part of something important. And to my mind, that new operating system for our businesses revolves around three elements: autonomy, mastery and purpose. Autonomy: the urge to direct our own lives. Mastery: the desire to get better and better at something that matters. Purpose: the yearning to do what we do in the service of something larger than ourselves. These are the building blocks of an entirely new operating system for our businesses.

I want to talk today only about autonomy. In the 20th century, we came up with this idea of management. Management did not emanate from nature. Management is not a tree, it's a television set. Somebody invented it. It doesn't mean it's going to work forever. Management is great. Traditional notions of management are great if you want compliance. But if you want engagement, self-direction works better.

Some examples of some kind of radical notions of self-direction. You don't see a lot of it, but you see the first stirrings of something really interesting going on, what it means is paying people adequately and fairly, absolutely -- getting the issue of money off the table, and then giving people lots of autonomy.

Some examples. How many of you have heard of the company Atlassian? It looks like less than half.

# (Laughter)

Atlassian is an Australian software company. And they do something incredibly cool. A few times a year they tell their engineers, "Go for the next 24 hours and work on anything you want, as long as it's not part of your regular job. Work on anything you want." Engineers use this time to come up with a cool patch for code, come up with an elegant hack. Then they present all of the stuff that they've developed to their teammates, to the rest of the company, in this wild and woolly all-hands meeting at the end of the day. Being Australians, everybody has a beer.

They call them FedEx Days. Why? Because you have to deliver something overnight. It's pretty; not bad. It's a huge trademark violation, but it's pretty clever.

#### (Laughter)

That one day of intense autonomy has produced a whole array of software fixes that might never have existed.

It's worked so well that Atlassian has taken it to the next level with 20% time -- done, famously, at Google -- where engineers can spend 20% of their time working on anything they want. They have autonomy over their time, their task, their team, their technique. Radical amounts of autonomy. And at Google, as many of you know, about half of the new products in a typical year are birthed during that 20% time: things like Gmail, Orkut, Google News.

Let me give you an even more radical example of it: something called the Results Only Work Environment (the ROWE), created by two American consultants, in place at a dozen companies around North America. In a ROWE people don't have schedules. They show up when they want. They don't have to be in the office at a certain time, or any time. They just have to get their work done. How they do it, when they do it, where they do it, is totally up to them. Meetings in these kinds of environments are optional.

What happens? Almost across the board, productivity goes up, worker engagement goes up, worker satisfaction goes up, turnover goes down. Autonomy, mastery and purpose, the building blocks of a new way of doing things.

Some of you might look at this and say, "Hmm, that sounds nice, but it's Utopian." And I say, "Nope. I have proof." The mid-1990s, Microsoft started an encyclopedia called Encarta. They had deployed all the right incentives, They paid professionals to write and edit thousands of articles. Well-compensated managers oversaw the whole thing to make sure it came in on budget and on time. A few years later, another encyclopedia got started. Different model, right? Do it for fun. No one gets paid a cent, or a euro or a yen. Do it because you like to do it.

Just 10 years ago, if you had gone to an economist, anywhere, "Hey, I've got these two different models for creating an encyclopedia. If they went head to head, who would win?" 10 years ago you could not have found a single sober economist anywhere on planet Earth who would have predicted the Wikipedia model.

This is the titanic battle between these two approaches. This is the Ali-Frazier of motivation, right? This is the Thrilla in Manila. Intrinsic motivators versus extrinsic motivators. Autonomy, mastery and purpose, versus carrot and sticks, and who wins? Intrinsic motivation, autonomy, mastery and purpose, in a knockout.

Let me wrap up. There is a mismatch between what science knows and what business does. Here is what science knows. One: Those 20th century rewards, those motivators we think are a natural part of business, do work, but only in a surprisingly narrow band of circumstances. Two: Those if-then rewards often destroy creativity. Three: The secret to high performance isn't rewards and punishments, but that unseen intrinsic drive-- the drive to do things for their own sake. The drive to do things cause they matter.

And here's the best part. We already know this. The science confirms what we know in our hearts. So, if we repair this mismatch between science and business, if we bring our motivation, notions of motivation into the 21st century, if we get past this lazy, dangerous, ideology of carrots and sticks, we can strengthen our businesses, we can solve a lot of those candle problems, and maybe, maybe -- we can change the world.

I rest my case.

(Applause)

#### TED Talk 24. Strange answer to the psychopath test. Jon Ronson (TED 2012, març 2012)

The story starts: I was at a friend's house, and she had on her shelf a copy of the DSM manual, which is the manual of mental disorders. It lists every known mental disorder. And it used to be, back in the '50s, a very slim pamphlet. And then it got bigger and bigger and bigger, and now it's 886 pages long. And it lists currently 374 mental disorders.

So I was leafing through it, wondering if I had any mental disorders, and it turns out I've got 12.

# (Laughter)

I've got generalized anxiety disorder, which is a given. I've got nightmare disorder, which is categorized if you have recurrent dreams of being pursued or declared a failure, and all my dreams involve people chasing me down the street going, "You're a failure!"

# (Laughter)

I've got parent-child relational problems, which I blame my parents for.

#### (Laughter)

I'm kidding. I'm not kidding. I'm kidding. And I've got malingering. And I think it's actually quite rare to have both malingering and generalized anxiety disorder, because malingering tends to make me feel very anxious.

Anyway, I was looking through this book, wondering if I was much crazier than I thought I was, or maybe it's not a good idea to diagnose yourself with a mental disorder if you're not a trained professional, or maybe the psychiatry profession has a kind of strange desire to label what's essentially normal human behavior as a mental disorder. I didn't know which of these was true, but I thought it was kind of interesting, and I thought maybe I should meet a critic of psychiatry to get their view, which is how I ended up having lunch with the Scientologists.

#### (Laughter)

It was a man called Brian, who runs a crack team of Scientologists who are determined to destroy psychiatry wherever it lies. They're called the CCHR. And I said to him, "Can you prove to me that psychiatry is a pseudo-science that can't be trusted?" And he said, "Yes, we can prove it to you." And I said, "How?" And he said, "We're going to introduce you to Tony." And I said, "Who's Tony?" And he said, "Tony's in Broadmoor." Now, Broadmoor is Broadmoor Hospital. It used to be known as the Broadmoor Asylum for the Criminally Insane. It's where they send the serial killers, and the people who can't help themselves. And I said to Brian, "Well, what did Tony do?" And he said, "Hardly anything. He beat someone up or something, and he decided to fake madness to get out of a prison sentence. But he faked it too well, and now he's stuck in Broadmoor and nobody will believe he's sane. Do you want us to try and get you into Broadmoor to meet Tony?" So I said, "Yes, please."

So I got the train to Broadmoor. I began to yawn uncontrollably around Kempton Park, which apparently is what dogs also do when anxious, they yawn uncontrollably. And we got to Broadmoor. And I got taken through gate after gate after gate after gate into the wellness center, which is where you get to meet the patients. It looks like a giant Hampton Inn. It's all peach and pine and calming colors. And the only bold colors are the reds of the panic buttons. And the patients started drifting in. And they were quite overweight and wearing sweatpants, and quite docile-looking. And Brian the Scientologist whispered to me, "They're medicated," which, to the Scientologists, is like the worst evil in the world, but I'm thinking it's probably a good idea.

# (Laughter)

And then Brian said, "Here's Tony." And a man was walking in. And he wasn't overweight, he was in very good physical shape. And he wasn't wearing sweatpants, he was wearing a pinstripe suit. And he had his arm outstretched like someone out of The Apprentice. He looked like a man who wanted to wear an outfit that would convince me that he was very sane.

And he sat down. And I said, "So is it true that you faked your way in here?" And he said, "Yep. Yep. Absolutely. I beat someone up when I was 17. And I was in prison awaiting trial, and my cellmate said to me, 'You know what you have to do? Fake madness. Tell them you're mad, you'll get sent to some cushy hospital. Nurses will bring you pizzas, you'll have your own PlayStation." I said, "Well, how did you do it?" He said, "Well, I asked to see the prison psychiatrist. And I'd just seen a film called 'Crash,' in which people get sexual pleasure from crashing cars into walls. So I said to the psychiatrist, 'I get sexual pleasure from crashing cars into walls." And I said, "What else?" He said, "Oh, yeah. I told the psychiatrist that I wanted to watch women as they died, because it would make me feel more normal." I said, "Where'd you get that from?" He said, "Oh, from a biography of Ted Bundy that they had at the prison library."

Anyway, he faked madness too well, he said. And they didn't send him to some cushy hospital. They sent him to Broadmoor. And the minute he got there, said he took one look at the place, asked to see the psychiatrist, said, "There's been a terrible misunderstanding. I'm not mentally ill." I said, "How long have you been here for?" He said, "Well, if I'd just done my time in prison for the original crime, I'd have got five years. I've been in Broadmoor for 12 years."

Tony said that it's a lot harder to convince people you're sane than it is to convince them you're crazy. He said, "I thought the best way to seem normal would be to talk to people normally about normal things like football or what's on TV. I subscribe to New Scientist, and recently they had an article about how the U.S. Army was training bumblebees to sniff out explosives. So I said to a nurse, 'Did you know that the U.S. Army is training bumblebees to sniff out explosives?' When I read my medical notes, I saw they'd written: 'Believes bees can sniff out explosives.'"

# (Laughter)

He said, "You know, they're always looking out for nonverbal clues to my mental state. But how do you sit in a sane way? How do you cross your legs in a sane way? It's just impossible." When Tony said that to me, I thought to myself, "Am I sitting like a journalist? Am I crossing my legs like a journalist?"

He said, "You know, I've got the Stockwell Strangler on one side of me, and I've got the 'Tiptoe Through the Tulips' rapist on the other side of me. So I tend to stay in my room a lot because I find them quite frightening. And they take that as a sign of madness. They say it proves that I'm aloof and grandiose." So, only in Broadmoor would not wanting to hang out with serial killers be a sign of madness. Anyway, he seemed completely normal to me, but what did I know?

And when I got home I emailed his clinician, Anthony Maden. I said, "What's the story?" And he said, "Yep. We accept that Tony faked madness to get out of a prison sentence, because his hallucinations -- that had seemed quite cliche to begin with -- just vanished the minute he got to Broadmoor. However, we have assessed him, and we've determined that what he is is a psychopath." And in fact, faking madness is exactly the kind of cunning and manipulative act of a psychopath. It's on the checklist: cunning, manipulative. So, faking your brain going wrong is evidence that your brain has gone wrong. And I spoke to other experts, and they said the pinstripe suit -- classic psychopath -- speaks to items one and two on the checklist: glibness,

superficial charm and grandiose sense of self-worth. And I said, "Well, but why didn't he hang out with the other patients?" Classic psychopath -- it speaks to grandiosity and also lack of empathy. So all the things that had seemed most normal about Tony was evidence, according to his clinician, that he was mad in this new way. He was a psychopath.

And his clinician said to me, "If you want to know more about psychopaths, you can go on a psychopath-spotting course run by Robert Hare, who invented the psychopath checklist." So I did. I went on a psychopath-spotting course, and I am now a certified -- and I have to say, extremely adept -- psychopath spotter.

So, here's the statistics: One in a hundred regular people is a psychopath. So there's 1,500 people in his room. Fifteen of you are psychopaths. Although that figure rises to four percent of CEOs and business leaders, so I think there's a very good chance there's about 30 or 40 psychopaths in this room. It could be carnage by the end of the night.

#### (Laughter)

Hare said the reason why is because capitalism at its most ruthless rewards psychopathic behavior -- the lack of empathy, the glibness, cunning, manipulative. In fact, capitalism, perhaps at its most remorseless, is a physical manifestation of psychopathy. It's like a form of psychopathy that's come down to affect us all. Hare said, "You know what? Forget about some guy at Broadmoor who may or may not have faked madness. Who cares? That's not a big story. The big story," he said, "is corporate psychopathy. You want to go and interview yourself some corporate psychopaths."

So I gave it a try. I wrote to the Enron people. I said, "Could I come and interview you in prison, to find out it you're psychopaths?"

(Laughter)

And they didn't reply.

(Laughter)

So I changed tack. I emailed "Chainsaw Al" Dunlap, the asset stripper from the 1990s. He would come into failing businesses and close down 30 percent of the workforce, just turn American towns into ghost towns. And I emailed him and I said, "I believe you may have a very special brain anomaly that makes you ... special, and interested in the predatory spirit, and fearless. Can I come and interview you about your special brain anomaly?" And he said, "Come on over!"

(Laughter)

So I went to Al Dunlap's grand Florida mansion. It was filled with sculptures of predatory animals. There were lions and tigers -- he was taking me through the garden -- there were falcons and eagles, he was saying, "Over there you've got sharks and --" he was saying this in a less effeminate way -- "You've got more sharks and you've got tigers." It was like Narnia.

(Laughter)

And then we went into his kitchen. Now, Al Dunlap would be brought in to save failing companies, he'd close down 30 percent of the workforce. And he'd quite often fire people with a joke. Like, for instance, one famous story about him, somebody came up to him and said, "I've just bought myself a new car." And he said, "Well, you may have a new car, but I'll tell you what you don't have -- a job."

So in his kitchen -- he was in there with his wife, Judy, and his bodyguard, Sean -- and I said, "You know how I said in my email that you might have a special brain anomaly that makes you special?" He said, "Yeah, it's an amazing theory, it's like Star Trek. You're going where no man has gone before." And I said, "Well --" (Clears throat)

#### (Laughter)

Some psychologists might say that this makes you -- " (Mumbles)

#### (Laughter)

And he said, "What?" And I said, "A psychopath." And I said, "I've got a list of psychopathic traits in my pocket. Can I go through them with you?"

And he looked intrigued despite himself, and he said, "Okay, go on." And I said, "Okay. Grandiose sense of self-worth." Which I have to say, would have been hard for him to deny, because he was standing under a giant oil painting of himself.

# (Laughter)

He said, "Well, you've got to believe in you!" And I said, "Manipulative." He said, "That's leadership."

# (Laughter)

And I said, "Shallow affect, an inability to experience a range of emotions." He said, "Who wants to be weighed down by some nonsense emotions?" So he was going down the psychopath checklist, basically turning it into "Who Moved My Cheese?"

# (Laughter)

But I did notice something happening to me the day I was with Al Dunlap. Whenever he said anything to me that was kind of normal -- like he said "no" to juvenile delinquency, he said he got accepted into West Point, and they don't let delinquents in West Point. He said "no" to many short-term marital relationships. He's only ever been married twice. Admittedly, his first wife cited in her divorce papers that he once threatened her with a knife and said he always wondered what human flesh tasted like, but people say stupid things to each other in bad marriages in the heat of an argument, and his second marriage has lasted 41 years. So whenever he said anything to me that just seemed kind of non-psychopathic, I thought to myself, well I'm not going to put that in my book. And then I realized that becoming a psychopath spotter had kind of turned me a little bit psychopathic. Because I was desperate to shove him in a box marked "Psychopath." I was desperate to define him by his maddest edges.

And I realized, my God -- this is what I've been doing for 20 years. It's what all journalists do. We travel across the world with our notepads in our hands, and we wait for the gems. And the gems are always the outermost aspects of our interviewee's personality. And we stitch them together like medieval monks, and we leave the normal stuff on the floor. And you know, this is a country that over-diagnoses certain mental disorders hugely. Childhood bipolar -- children as young as four are being labeled bipolar because they have temper tantrums, which scores them high on the bipolar checklist.

When I got back to London, Tony phoned me. He said, "Why haven't you been returning my calls?" I said, "Well, they say that you're a psychopath." And he said, "I'm not a psychopath." He said, "You know what? One of the items on the checklist is lack of remorse, but another item on the checklist is cunning, manipulative. So when you say you feel remorse for your crime, they say, 'Typical of the psychopath to cunningly say he feels remorse

when he doesn't.' It's like witchcraft, they turn everything upside-down." He said, "I've got a tribunal coming up. Will you come to it?" So I said okay.

So I went to his tribunal. And after 14 years in Broadmoor, they let him go. They decided that he shouldn't be held indefinitely because he scores high on a checklist that might mean that he would have a greater than average chance of recidivism. So they let him go. And outside in the corridor he said to me, "You know what, Jon? Everyone's a bit psychopathic." He said, "You are, I am. Well, obviously I am." I said, "What are you going to do now?" He said, "I'm going to go to Belgium. There's a woman there that I fancy. But she's married, so I'm going to have to get her split up from her husband."

# (Laughter)

Anyway, that was two years ago, and that's where my book ended. And for the last 20 months, everything was fine. Nothing bad happened. He was living with a girl outside London. He was, according to Brian the Scientologist, making up for lost time, which I know sounds ominous, but isn't necessarily ominous. Unfortunately, after 20 months, he did go back to jail for a month. He got into a "fracas" in a bar, he called it. Ended up going to jail for a month, which I know is bad, but at least a month implies that whatever the fracas was, it wasn't too bad.

And then he phoned me. And you know what, I think it's right that Tony is out. Because you shouldn't define people by their maddest edges. And what Tony is, is he's a semi-psychopath. He's a gray area in a world that doesn't like gray areas. But the gray areas are where you find the complexity. It's where you find the humanity, and it's where you find the truth. And Tony said to me, "Jon, could I buy you a drink in a bar? I just want to thank you for everything you've done for me." And I didn't go. What would you have done?

Thank you.

(Applause)

# TED Talk 25. 10 ways to have a better conversation. Celeste Headlee (TEDxCreativeCoast, maig 2015)

All right, I want to see a show of hands: how many of you have unfriended someone on Facebook because they said something offensive about politics or religion, childcare, food?

(Laughter)

And how many of you know at least one person that you avoid because you just don't want to talk to them?

(Laughter)

You know, it used to be that in order to have a polite conversation, we just had to follow the advice of Henry Higgins in "My Fair Lady": Stick to the weather and your health. But these days, with climate change and anti-vaxxing, those subjects --

(Laughter)

are not safe either. So this world that we live in, this world in which every conversation has the potential to devolve into an argument, where our politicians can't speak to one another and where even the most trivial of issues have someone fighting both passionately for it and against it, it's not normal. Pew Research did a study of 10,000 American adults, and they found that at this moment, we are more polarized, we are more divided, than we ever have been in history. We're less likely to compromise, which means we're not listening to each other. And we make decisions about where to live, who to marry and even who our friends are going to be, based on what we already believe. Again, that means we're not listening to each other. A conversation requires a balance between talking and listening, and somewhere along the way, we lost that balance.

Now, part of that is due to technology. The smartphones that you all either have in your hands or close enough that you could grab them really quickly. According to Pew Research, about a third of American teenagers send more than a hundred texts a day. And many of them, almost most of them, are more likely to text their friends than they are to talk to them face to face. There's this great piece in The Atlantic. It was written by a high school teacher named Paul Barnwell. And he gave his kids a communication project. He wanted to teach them how to speak on a specific subject without using notes. And he said this: "I came to realize..."

(Laughter)

"I came to realize that conversational competence might be the single most overlooked skill we fail to teach. Kids spend hours each day engaging with ideas and each other through screens, but rarely do they have an opportunity to hone their interpersonal communications skills. It might sound like a funny question, but we have to ask ourselves: Is there any 21st-century skill more important than being able to sustain coherent, confident conversation?"

Now, I make my living talking to people: Nobel Prize winners, truck drivers, billionaires, kindergarten teachers, heads of state, plumbers. I talk to people that I like. I talk to people that I don't like. I talk to some people that I disagree with deeply on a personal level. But I still have a great conversation with them. So I'd like to spend the next 10 minutes or so teaching you how to talk and how to listen.

Many of you have already heard a lot of advice on this, things like look the person in the eye, think of interesting topics to discuss in advance, look, nod and smile to show that you're paying attention, repeat back what you just heard or summarize it. So I want you to forget all of that. It is crap.

(Laughter)

There is no reason to learn how to show you're paying attention if you are in fact paying attention.

(Laughter)

(Applause)

Now, I actually use the exact same skills as a professional interviewer that I do in regular life. So, I'm going to teach you how to interview people, and that's actually going to help you learn how to be better conversationalists. Learn to have a conversation without wasting your time, without getting bored, and, please God, without offending anybody.

We've all had really great conversations. We've had them before. We know what it's like. The kind of conversation where you walk away feeling engaged and inspired, or where you feel like you've made a real connection or you've been perfectly understood. There is no reason why most of your interactions can't be like that.

So I have 10 basic rules. I'm going to walk you through all of them, but honestly, if you just choose one of them and master it, you'll already enjoy better conversations.

Number one: Don't multitask. And I don't mean just set down your cell phone or your tablet or your car keys or whatever is in your hand. I mean, be present. Be in that moment. Don't think about your argument you had with your boss. Don't think about what you're going to have for dinner. If you want to get out of the conversation, get out of the conversation, but don't be half in it and half out of it.

Number two: Don't pontificate. If you want to state your opinion without any opportunity for response or argument or pushback or growth, write a blog.

### (Laughter)

Now, there's a really good reason why I don't allow pundits on my show: Because they're really boring. If they're conservative, they're going to hate Obama and food stamps and abortion. If they're liberal, they're going to hate big banks and oil corporations and Dick Cheney. Totally predictable. And you don't want to be like that. You need to enter every conversation assuming that you have something to learn. The famed therapist M. Scott Peck said that true listening requires a setting aside of oneself. And sometimes that means setting aside your personal opinion. He said that sensing this acceptance, the speaker will become less and less vulnerable and more and more likely to open up the inner recesses of his or her mind to the listener. Again, assume that you have something to learn.

Bill Nye: "Everyone you will ever meet knows something that you don't." I put it this way: Everybody is an expert in something.

Number three: Use open-ended questions. In this case, take a cue from journalists. Start your questions with who, what, when, where, why or how. If you put in a complicated question, you're going to get a simple answer out. If I ask you, "Were you terrified?" you're going to respond to the most powerful word in that sentence, which is "terrified," and the answer is "Yes, I was" or "No, I wasn't." "Were you angry?" "Yes, I was very angry." Let them describe it. They're the ones that know. Try asking them things like, "What was that like?" "How did that feel?" Because then they might have to stop for a moment and think about it, and you're going to get a much more interesting response.

Number four: Go with the flow. That means thoughts will come into your mind and you need to let them go out of your mind. We've heard interviews often in which a guest is talking for

several minutes and then the host comes back in and asks a question which seems like it comes out of nowhere, or it's already been answered. That means the host probably stopped listening two minutes ago because he thought of this really clever question, and he was just bound and determined to say that. And we do the exact same thing. We're sitting there having a conversation with someone, and then we remember that time that we met Hugh Jackman in a coffee shop.

# (Laughter)

And we stop listening. Stories and ideas are going to come to you. You need to let them come and let them go.

Number five: If you don't know, say that you don't know. Now, people on the radio, especially on NPR, are much more aware that they're going on the record, and so they're more careful about what they claim to be an expert in and what they claim to know for sure. Do that. Err on the side of caution. Talk should not be cheap.

Number six: Don't equate your experience with theirs. If they're talking about having lost a family member, don't start talking about the time you lost a family member. If they're talking about the trouble they're having at work, don't tell them about how much you hate your job. It's not the same. It is never the same. All experiences are individual. And, more importantly, it is not about you. You don't need to take that moment to prove how amazing you are or how much you've suffered. Somebody asked Stephen Hawking once what his IQ was, and he said, "I have no idea. People who brag about their IQs are losers."

#### (Laughter)

Conversations are not a promotional opportunity.

Number seven: Try not to repeat yourself. It's condescending, and it's really boring, and we tend to do it a lot. Especially in work conversations or in conversations with our kids, we have a point to make, so we just keep rephrasing it over and over. Don't do that.

Number eight: Stay out of the weeds. Frankly, people don't care about the years, the names, the dates, all those details that you're struggling to come up with in your mind. They don't care. What they care about is you. They care about what you're like, what you have in common. So forget the details. Leave them out.

Number nine: This is not the last one, but it is the most important one. Listen. I cannot tell you how many really important people have said that listening is perhaps the most, the number one most important skill that you could develop. Buddha said, and I'm paraphrasing, "If your mouth is open, you're not learning." And Calvin Coolidge said, "No man ever listened his way out of a job."

#### (Laughter)

Why do we not listen to each other? Number one, we'd rather talk. When I'm talking, I'm in control. I don't have to hear anything I'm not interested in. I'm the center of attention. I can bolster my own identity. But there's another reason: We get distracted. The average person talks at about 225 word per minute, but we can listen at up to 500 words per minute. So our minds are filling in those other 275 words. And look, I know, it takes effort and energy to actually pay attention to someone, but if you can't do that, you're not in a conversation. You're just two people shouting out barely related sentences in the same place.

# (Laughter)

You have to listen to one another. Stephen Covey said it very beautifully. He said, "Most of us don't listen with the intent to understand. We listen with the intent to reply."

One more rule, number 10, and it's this one: Be brief.

[A good conversation is like a miniskirt; short enough to retain interest, but long enough to cover the subject. -- My Sister]

(Laughter)

(Applause) All of this boils down to the same basic concept, and it is this one: Be interested in other people.

You know, I grew up with a very famous grandfather, and there was kind of a ritual in my home. People would come over to talk to my grandparents, and after they would leave, my mother would come over to us, and she'd say, "Do you know who that was? She was the runner-up to Miss America. He was the mayor of Sacramento. She won a Pulitzer Prize. He's a Russian ballet dancer." And I kind of grew up assuming everyone has some hidden, amazing thing about them. And honestly, I think it's what makes me a better host. I keep my mouth shut as often as I possibly can, I keep my mind open, and I'm always prepared to be amazed, and I'm never disappointed.

You do the same thing. Go out, talk to people, listen to people, and, most importantly, be prepared to be amazed.

Thanks.

(Applause)