

## **Google & the World Brain (Abridged Version)**

[Transcript]

### **HG WELLS RECON:**

There is no practical obstacle whatever now to the creation of an efficient index to all human knowledge, ideas and achievements. To the creation that is of a complete planetary memory for all mankind.

### **CAPTION**

From the essay "World Brain", by H.G. Wells, 1937

### **WARDEN BOYD RAYWARD:**

He was one of the early inventors of science fiction, the idea of time travel, the possibility of invisibility, of intergalactic struggles. And then he came up with ideas of how we might reorganize the knowledge apparatus of the world, which he called the World Brain. For Wells, the World Brain had to contain all that was learnt and known and that was being learnt and known.

### **TEXT CARD**

In the early years of the 21st century, Google began scanning the world's books.

### **ROBERT DARNTON**

They were frank in their ambition and dazzling in their ability to execute it.

### **TEXT CARD**

Their aim was to build a giant digital library for all the world to share.

### **WARDEN BOYD RAYWARD**

The Google Books Scanning Project is clearly the most ambitious world brain scheme that has ever been invented.

### **TEXT CARD**

This library would be a kind of a World Brain, but Google would hold the keys to its door.

### **JEANNENEY NOEL JEANNENEY**

There is a danger that Google's aim is to achieve a monopoly.

### **EVGENY MOROZOV**

The nightmare scenario in 20 years' time would be Google tracking everything you read.

### **PAMELA SAMUELSON**

Google could basically hold the whole world hostage.

### **HG WELLS RECON**

This is no remote dream, no fantasy. It is a plain statement of a contemporary state of affairs.

**TITLE**

Google and the World Brain

**BBC LIBRARY ARCHIVE**

It's a library, a public library, where people go to look at books, and read them and take them away. That girl works at the library and she checks on books that are going out and books that are coming back in.

**LEWIS HYDE**

I love libraries ... I like the smell...the smell of paper properly preserved, it's as if it's the smell of a hay barn that's been cleared of all its animals and made into a human intelligence.

**REGINALD CARR**

And in a library, you really...even if you're sitting in the tearoom, discussing your latest findings it's amazing how much social interaction with other people will actually help you to enrich what you're doing.

**BBC LIBRARY ARCHIVE**

In this part of the library, the grown-ups can read the stories to the children...

**ROBERT DARNTON**

People sometimes say to me, aren't libraries obsolete? It's absurd. They are nerve centers... centers of intellectual energy.

**TEXT CARD**

In 2002, Google began approaching major university libraries, offering to scan all their books and make them searchable online.

**CAPTION**

Harvard University | Boston, USA

**ROBERT DARNTON**

The first appeal of Google's enterprise, when we saw it, was just digitizing millions and millions of books. At Harvard we have by far the greatest university library in the world. It's enormous - 17 million volumes. And every library wants its holdings digitized for lots of reasons, including preservation. But beyond that it raises the possibility of sharing your intellectual wealth. So here comes Google. They've got the energy they've got the technology, they've got the money and they said: We will do it for you. Free.

**SIDNEY VERBA**

About 10 years ago, I got a visit from a vice president of Google. And she walked into my office and described a project that Google had in mind, which was to digitize all the books in the Harvard library. My first thought was - to put it bluntly that maybe they were smoking something, because I didn't think it was possible.

**ROBERT DARNTON**

When you actually negotiate with Google...umm.. and do so on their turf, you enter a strange world. A Google office doesn't have chairs like this chair. The furniture consists of large inflated balls that are coloured green or red or yellow and the young Google engineers are sitting on these. It's a kind of Never-Never Land feeling.

### **CAPTION**

Google Headquarters | Mountain View, California

### **AMIT SINGHAL**

Google is a company that believes in its fundamental mission of empowering everyone in this world with all the information they need. Enriched with the right information people can make better decisions for themselves, their families and their communities. This world is full of wonderful individuals, which have varied needs. From a farmer in Africa to a mother in India to a business person in Japan, everyone needs information in this modern day and age. And Google believes in breaking all the barrier between every individual and the information they seek.

### **EVGENY MOROZOV**

One of the things that you need to understand about Google is that they try to roll out projects first and then to think about the consequences later. So you will often see them experiment with something that looks very cool. It may be the Google Streetview project.

### **STREETVIEW STORY**

Google launched Streetview in 2007, part of the Search Engine's long term goal to create a 3D map of the whole planet right down to street level. But investigations have revealed that Google's Street View cars were collecting more than just photographs for their databanks. Their antennas were also hoovering up personal information from unprotected wi-fi networks including internet history and passwords.

### **EVGENY MOROZOV**

I think the case of Google collecting wi-fi information....it reveals a complete lack of respect for privacy within the corporation. Such projects often reveal that Google does not fully understand the social consequences of its own work.

### **PAMELA SAMUELSON**

Google did such a fabulous job in creating a vision, not only that a universal digital library could be created but that it could be done today. The Google engineers are like good engineers everywhere. They just like to think about 'How do we.. how do we surmount these challenges?' They sort of leave the lawsuit to the lawyers to worry about.

### **TEXT CARD**

In America, Google refused to talk to us about Google Books, because of ongoing court action. They said we could only talk to them about Search. But we were able to speak to the head of Google Books for Spain.

### **LUIS COLLADO**

The Internet is a young medium. The only things you used to be able to find on the net were things specially created for it but our entire cultural heritage, all that we know and that humans have learnt through history is contained in books. If books were not available on the internet then all of the potential of the Net as a medium to access information and knowledge would be limited.

#### **CAPTION**

Bodleian Library | University of Oxford, United Kingdom

#### **REGINALD CARR**

I went to Google in January 2003. I actually made, what now I feel quite embarrassed about I made a presentation to them, telling them what they ought to be doing. Only to find out a few months later that they'd actually been doing it for a while already. "Project Ocean" was the kind of code name, development code name that Google were giving to what eventually became Google Books. So it was called Project Ocean because it was big, I imagine. Google seemed to think that they could do almost a million in 3 years.

#### **CAPTION**

Monastery of Montserrat | Barcelona, Spain

#### **FATHER DAMIÀ ROURE**

The library of Montserrat was founded in the eleventh century. When the monks first arrived they needed books for prayer and spiritual readings. This is one of the books digitised in the Google project the spiritual exercises of Father Garcia de Cisneros who was abbot here in the sixteenth century. He devised exercises to guide one to a deeper Christian life. On the Internet you can surf from one web page to another without deepening your knowledge. This book could be interpreted as a call not to flit from one page to another without deepening your spiritual understanding. Google digitised about 23,400 books from this library. It seemed to us that this was a way of spreading our culture. It gives us a great satisfaction that they are available to everybody.

#### **INTERVIEWER**

Google didn't pay you to scan your books - was that fair? What happens if someone turns all this into a business and makes a profit from it? Perhaps the question is too difficult?

#### **FATHER DAMIÀ ROURE**

I am not in a position to comment on anything other than the digitisation and the access to these books from wherever that might be.

#### **REGINALD CARR**

Google were and are free to do what they want with the scans. And why should that concern us? I mean part of our ethos and part of our objective as a library is to make the information that is contained in our library available as free of charge as we can possibly make it to anybody who needs it. And if Google is going to do that on a larger scale, that's fine. If they are going to make money out of it down the line, why not? You know, they have invested a lot of money in it. There is no such thing as a free lunch.

#### **HG WELLS RADIO ARCHIVE**

When automobiles came along first, they seemed likely to become a rich man's monopoly. They cost upward of a thousand pounds. Henry Ford changed that. He put the poor man on the road. We want a Henry Ford today to modernise the distribution of knowledge, make good knowledge cheap and easy, in this still very ignorant ill-educated, ill-served English speaking world... which might be the greatest power on earth for the good of mankind.

#### **CAPTION**

HG Wells Radio Broadcast | December 1937

#### **TEXT CARD**

In the late nineties, pioneers began to combine the scanner, the book and the internet to create giant digital libraries.

#### **BREWSTER KAHLE**

We started the Internet Archive in 1996. The idea was to have all the published works of human kind available to everybody, that this was the opportunity of our generation, that like the previous generation had put a man on the moon. The Internet Archive had been completely open with Google. In fact, I'd gone and given a speech that was attended by I think all of the senior executives on how one could go about building a digital library of all books, music, video, and I'd hoped that there was going to be a way to work with them, but that was not be. Libraries had signed secret agreements with Google - we didn't know what was really going on. When it started coming out as a completely separate project, not working with others, then I started to become suspicious.

#### **TEXT CARD**

Google would not supply us with video material of their scanning operation. This is believed to be the only footage of Google's scanning warehouses. It lasts 5 seconds. The other scanning images in this film have been made at university scanning stations.

#### **ROBERT DARNTON**

You could say that this mass digitization is something like running a huge machine through a library. You take books by the shelf. They are put in cartons, on carts. They are loaded onto trucks. And then Google at this time had 3 places in the country where it was doing digitization. Supposedly it didn't give the address of where they were.

#### **PAMELA SAMUELSON**

Google won't say how much scanning all the books cost. But there are estimates that you know it well...it's somewhere between 30 and 100 dollars per book. So if you multiply that times 20 million.

#### **SIDNEY VERBA**

Google, early on bent over backwards to keep us from communicating with the other libraries. There were 3 or 4 large ones and each of us was told we should not tell the others what kind of a contract we had and how we were working with Google.

#### **CAPTION**

Beijing, China

### **TEXT CARD**

Alongside Google and the Internet Archive, several large internet corporations have been implementing their own book scanning projects. Among them: Amazon, Microsoft and, in China, Baidu.

### **KAISER KUO**

We actually do more search queries in China alone than any other search company does in any other single national market, by which I really mean Google in the United States. So we certainly do aspire to be a World Brain... I think HG Wells was, I mean he is well known for having been quite prescient about a lot of the things he envisaged. Sure we don't have the time machine yet, but pretty much the rest of it was dead on. We have a product, which is a very, very popular product, it's called "Baidu Wenku," the Chinese name of it is the Baidu Library. It allows people to upload materials that they have that are either of their own creation, or that they have the intellectual property rights to, to our site.

### **CAPTION**

Super Star Book Scanning Centre | Beijing, China

### **YU CHUN LEI**

We mainly scan books for schools and universities, and some for individual professors. Each person here scans about 30 books a day on average. The number of books we scan is increasing every year. At first it was only Chinese books. But now we are scanning foreign books and magazines as well. When we started, we just had one scanning centre in Beijing, but now we have 17 scanning centres across China. We can store more information if we scan it and preserve data for the future.

### **JARON LANIER**

Some of the enthusiasts for Google's way of gathering data - and it's not just Google at all, I mean, it's Silicon Valley in general. It's the current cultural moment. It includes the other Silicon Valley companies, but also the modern world of finance and also the modern world of spy craft for states, and also the modern world of criminality, and the modern world of insurance and health care - all these things have this idea, that you grab all this data in order to become very powerful you create a differential in your ability to see information versus an ordinary person. And you create these new incredible castles of power. But it's okay, it not just traditional power-mongering because you are 'making the world more efficient.'

### **LAURENCE LESSIG**

Shortly after the launch of Google Books, at different events I ran into Larry Page and Sergey Brin and had this brief exchange with them about the potential. And, you know, there was a characteristic Google-founder response, which was a kind of glint in their eyes and a smile and the sense that this was just the beginning of something much bigger than even you at this point can imagine.

### **KEVIN KELLY**

It's all human knowledge in books and out of books woven together into a single entity that is accessible by anybody anywhere in the world, any time. And that All Knowledge is transformative. It really kicks up the civilization and our society to another level.

### **AMIT SINGHAL**

I was a little boy in the 70s growing up in India, watching re-runs of Star Trek on our family's black and white TV. And from that... those times the picture of a Star Trek computer was deeply ingrained in my head. As a little boy I was just fascinated by the fact that you can walk up to a computer and ask it: 'Computer, what's the atmosphere of that planet?' That was just the most fascinating thing to a little boy, and from that day on, it was my dream to build that Star Trek computer. Only later would I grow up and realise it is really hard, because computers don't understand language. And I went through this brief period of disbelief as a graduate student, where I didn't think I would reach my dream in my lifetime. But thanks to Google and all the technologies that we have built here, and what I see in the pipeline, I am closer to my dream than ever.

### **JARON LANIER**

If you're in Silicon Valley you have this idea that you're paving the way for the emergence of the great artificial intelligence, that we're building this new life form that's gonna take over the world and Google is providing the memories for its brain.

### **CAPTION**

Paris, France | Bibliothèque nationale de France

### **JEAN-NOËL JEANNENEY**

A couple of Google reps came to visit me. They were well-behaved young people. They'd obviously swapped their jeans for ties because they thought that would be better in Europe. They had a kind of arrogance and a spirit of brutal commercialism. They misread my psychology so badly that they brought me a small gift, a thermoflask, which keeps your tea warm on train journeys. I looked at these young men, I dropped the gift, and suddenly I could see in their expressions, that, these salesmen had miscalculated what kind of commercial target I was. They clearly had no idea who the President of the National Library of France was.

### **JEAN-NOEL JENNENEY**

The challenge posed by Google's thunderclap announcement to build a universal digital library and to do that by itself - this challenge required a very swift and clear response. Above all, we discovered very quickly that Google, driven by its own power and perhaps its arrogance, was scanning books without permission of the writers and publishers. They wanted to show small extracts on the screen without permission. And in our view that was unacceptable.

### **EVGENY MOROZOV**

I don't think that Google is aware of the fact that it is corporation. I think Google does think of itself as an NGO that just happens to make a lot of money. And they think of themselves as social reformers who just happen to have their stock traded on stock exchanges, and who just happen to have investors and shareholders. But they do think of themselves as ultimately being in the business of making the world better.

**TEXT CARD**

Google scanned around 10 million books. Six million of these were books in copyright - scanned without asking the authors' permission.

**ROBERT DARNTON**

At Harvard we only permitted Google to digitise books in the public domain but the other research libraries, that Google first went to, permitted Google to digitise books covered by copyright. As soon as you get into the copyright area things get rapidly complicated.

**MARY SUE COLEMAN**

We're allowing Google to scan all of our books, those in the public domain and those still in copyright. We believe it is legal, ethical and a noble endeavour that will transform our society. Legal because we believe copyright law allows us fair use of the millions of books that are being digitised.

**CAPTION**

Speech given to the Association of American Publishers on February 6, 2006.

**TEXT CARD**

It is generally unlawful to make copies of books that are in copyright without the permission of the authors. However, one of the exceptions to this rule in the US is 'Fair Use.'

**LEWIS HYDE**

Fair use is a piece of American copyright law that allows us to make copies without ever asking any permission, without paying any fee for certain carved out uses.

**PAMELA SAMUELSON**

I happen to think that Google's fair use defence is strong. One of the things that courts have done, over the last decade or so, is decided, that Search Engines, who routinely make copies of information, are making fair uses when they do it in order to help people find information that they are looking for.

**TEXT CARD**

In autumn 2005, the Association of American Publishers and the American Authors Guild filed lawsuits against Google for copyright infringement.

**CAPTION**

New York, United States of America

**JAMES GLEICK**

First we learned that Google was scanning books and I remember loving the idea because I'm a reader and I write non-fiction books and I do research and I wanted access to those books. Then we heard that they were scanning our books, they were scanning copyrighted books and they hadn't asked anyone's permission, the libraries had just handed them over. Well... That was obviously a violation of our copyright and a little bit of a surprise to put it mildly.



## **CHARLES SEIFE**

I remember being very curious about what they were doing and I popped my name in Google and saw that it came up with snippets of my books. So what I did was searched for terms that I knew were common in my book like “star, galaxy” and there were lots and lots of hits and it would display several snippets. And then I would search for other common words and it was clear that if you were clever with your searches you could see quite a bit of the text if not all of it.

## **CAPTION**

The Day of the Book  
Barcelona | April 23<sup>rd</sup>, 2012

## **JAMES GLEICK**

Google claimed that it’s use of these millions of copyrighted books that it digitised was an example of fair use. Why I’m not sure. I still don’t understand how that can be justified that point is that the entire book has been copied and it’s been copied by a single company that’s doing it for purposes of profiting off the work. If you allow a profit making company to copy a million books, then how can you say no to the next enterprise that also wants to copy a million books. So the Authors Guild organised a class action suit, asking them to stop doing that.

## **LAURENCE LESSIG**

When Google made its decision to scan these millions of books, it certainly realized, that depending upon how litigation developed, this could be a bet-the-company decision. Because copyright liability in the United States can be quite extreme - \$150,000 per copyrighted work. And, depending on the number of copyrighted works at stake, it could be in the billions of dollars.

## **KEVIN KELLY**

I think the issue of copyright is an archaic and unproductive view. When you create something you’re building on the work of other people no matter who you are, whether you are JK Rowling or Shakespeare. You’re basing your work on the work of others. You’re basically taking their ideas. An artist does not own their ideas. No artist does.

## **JARON LANIER**

Any useful information exists because of the efforts of real people and copyright is our way of remembering who those people are. It’s crucial to not lose that. And I think cyber culture is missing the point of copyright. You might say well who cares about authors, let a few authors not make as much money as they would have...but it’s a precedent... the whole internet will become a tool for the concentration of power and that would be a disaster.

## **CAPTION**

Heidelberg, Germany

## **ROLAND REUSS**

In 2007, I discovered that a lot of our books had been digitized by Google Book Search without us being asked. And then it turned out that, just from the one publishing company which prints my books, over 200 books had been scanned by Google without any permission being obtained. This is about a serious company which acts illegally on such a massive scale that it appears legal. In

2007 I wrote my article, which not only pointed out the legal issues, but also pointed out the abysmal quality of the scans of the books. You see hands of the scanner-operators, or a third of the page is corrupted, so the scans are useless. It's like this, you make a very delicate work of art, where every detail counts, but what comes out on Google Book Search is as if they had put this work of art through a meat grinder.

### **JARON LANIER**

A book is really a plateau that a person reaches to say this is my testament this is what I can offer. A book is not just an extra-long tweet a book is something that is hard to do. It's hard to finish. It's hard to publish. It's a certain achievement of scale it's a declaration of this is what my life has learned this is what I can offer. And that is not something that can be dissected and the little minced pieces simply can't mean the same thing.

### **TEXT CARD**

American authors and publishers began talks with Google to try and find an agreement.

### **PAMELA SAMUELSON**

The lawsuits were commenced in the fall of 2005 and within six months the Authors Guild and the publishers came to Google with a proposal about settling the lawsuit.

### **JAMES GLEICK**

It took three years to work it out because there were a lot of issues to be discussed. There were publishers at the table as well as authors and publishers. And authors did not have identical interests there were libraries not at the table but very much in the picture they were talking to Google away from the room. I'm not sure how much I can say. I definitely cannot talk specifically about the negotiations because I signed a non-disclosure agreement, which I'm told is still in force, and I don't want to go to jail.

### **TEXT CARD**

In October 2008, American publishers and the Authors Guild reached a \$215 million agreement with Google.

### **JOHN HOLLAR**

For those of you who don't know the details of the Settlement agreement. It's 385 pages. It has 46 sections of definitions, it's got 15 sections on Google's obligations, it's got 9 sections on the economic terms, it's got 6 sections on libraries' obligations. So this is not a little 3 or 4-page memorandum of understanding that we are talking about here. This is a very heavily negotiated agreement.

### **CAPTION**

"Books, Google and the Future of Digital Print"  
The Computer History Museum | July 30<sup>th</sup>, 2009

### **DAN CLANCY**

So how many people have not read the 334 pages?

**JAMES GLEICK**

We proposed something that was a little bit outside the box and that was If money is being made, share the money with the rights holders. It couldn't be simpler. So I thought it would be pretty non-controversial that apparently was naïve of me.

**ROBERT DARNTON**

I personally became increasingly disenchanted with what originally looked like a great idea. They basically transformed the search service into a gigantic commercial enterprise. They really thought they would digitize every book in existence and make it available, for a price, everywhere.

**TEXT CARD**

The Settlement gave Google an exclusive right to sell scans of all out-of-print but in-copyright works. These books are sometimes known as 'Orphans.'

**PAMELA SAMUELSON**

The settlement would allow Google to have essentially a licence to commercialize all books that are out of print. There were certainly hundreds of thousands and probably millions of books, for whom, even if they were in copyright, no author, no publisher, no rights holder would come forward. And those books are orphans and Google would be able to commercialize those and nobody else would.

**DAN CLANCY**

When I talk to people in the publishing industry, they find it humorous because it's like, well, they are orphan for a reason! And that, in fact, if we suddenly found this goldmine where the future of the book are the orphan books then okay, boy, those publishers sure aren't very smart.

**ROBERT DARNTON**

A monopoly was being created, a monopoly of access to knowledge. Did we want the greatest library that would ever exist to be in the hands of one giant corporation, which could really charge almost anything it wanted for access to it?

**TEXT CARD**

In September 2009, the US Congress held a hearing into competition and monopoly in the digital books market.

**CHARLES A. GONZALEZ**

Listed below are various potential revenue streams for Google as identified within the settlement - institutional subscriptions, consumer purchases, advertising uses, public access service, print-on-demand, custom publishing, pdf downloads, consumer subscription model, summaries, abstracts, compilations of books. That's what you are going to end up with at a minimum. What I am saying to you Mr Drummond, does this in fact place Google at such a tremendous advantage in disregard of what has been historically copyright law. How do you respond to those concerns?

**CAPTION**

Hearing on: Competition and Commerce in Digital Books | September 10<sup>th</sup>, 2009

**DAVID C. DRUMMOND**

As of today we have zero market share in any sort of books so we are a new entrant into the market. Far from being someone who's controlling the market we're not even in it yet and we are trying to get in there.

**PAMELA SAMUELSON**

They thought that 'All we have to do is kind of announce this to the world and the world will go "God what a great agreement!" ... and for a while some people did but then you started reading the agreement really carefully and there were lots of questions. The problem was there was nothing in the agreement that respected the privacy of the people who were looking at the books. Google was going to be keeping track of who exactly was reading that book, how long they were reading it and what they read next. That information could get back to the government, could get back to the FBI, could get back to the police, could get back to their employer. Because Google wasn't making any kind of guarantees about what they were going to do in respect of this privacy.

**ROBERT DARNTON**

It was a gradual process of getting to know the details of Google Book Search and it was the cumulative effect of these details that made me feel, this project was actually something that I myself could not recommend to the president and fellows of Harvard as something that we should enthusiastically support.

**KEVIN KELLY**

If people find that the privacy policies of a particular technology are not to their liking, they should unplug it. They should retreat from the internet. They should cut off their phone lines and they should go up hide in the mountain. They have that choice.

**TEXT CARD**

Some authors had a further objection that Google were using data from their books for more than Search.

**ROLAND REUSS**

The snippets are just what you can see on the surface. The question is: What is a company doing with all the data I have produced? If they are simply inputting my texts into their databases, that is illegal, whether they have a visible web interface or not. You understand? Because they are doing it for commercial and not private ends.

**WARDEN BOYD RAYWARD**

H.G. Wells' idea of the World Brain was a dictatorship of technologists and intellectuals. These are the geeks of their day and gradually he saw that their power would spread from laboratory to laboratory, from university to university, as these people with the expertise began to coalesce into almost like managerial groups that would mean that we don't need the politicians and the conflicts and the noise, the confusion, the babble. But for the World Brain there was to be a further component - and this is the component that is what disturbs me - it's how that would be used to achieve the ultimate goals of civilization as it appears to have been evolving towards.

**CLAY SHIRKY**

After IBM's success with Deep Blue they looked around for other kinds of games that they could take on and they wanted something that was a very different kind of game than chess and so they picked Jeopardy, which is basically a fancy trivia game, it's one of those games that you or I could play.

### **IBM EPK ARCHIVE**

[Voiceover] It's a human standing there with their carbon and water versus the computer with all of its silicon and its main memory and its disk.

### **GAME SHOW HOST**

After Germany invaded the Netherlands this Queen, her family and cabinet fled to London - Maria?

### **MARIA**

Who is Beatrice?

### **GAME SHOW HOST**

No, Watson?

### **WATSON**

Who is Wilhelmina?

### **GAME SHOW HOST**

That is correct. This US President negotiated the treaty of Portsmouth ending the Russo-Japanese war, Watson?

### **WATSON**

Who is Theodore Roosevelt?

### **GAME SHOW HOST**

Good for \$800.

### **KEVIN KELLY**

I did talk to Larry Page when Google first started because I was really perplexed about why would anybody make a new search engine when we had Alta Vista which was the current search engine. It seemed good enough. And he said: "Oh, it's not to make a search engine, it's to make an A.I."

### **RAY KURZWEIL**

Most of my discussions have been with Larry Page. We have talked in general about their quest to digitize all knowledge and then develop true AI. You can create intelligent systems if you have very large databases. And books are actually probably more valuable than all the other stuff on the internet, because we have a high standard for what we put in books. The computer industry and its implications in terms of information technology is a multi-trillion-dollar part of the economy. It will be you know the basis of everything we do in the future.

### **CLAY SHIRKY**

What Watson showed was, you can take a very large, very messy set of data and if you can use those inputs correctly you can actually answer really sophisticated questions. And certainly the presence of large amounts of data on the Internet is going to be as much an input for machines as it is for people.

### **RAY KURZWEIL**

Not only did Watson have to understand the convoluted language in the jeopardy query which includes metaphors and similes and puns, and riddles and jokes, but it got its knowledge to respond to the query, from actually reading 200 million pages of natural language documents, including all of Wikipedia, and several other encyclopedias.

### **NEWS ARCHIVE**

An IBM supercomputer named Watson has won the first ever “Jeopardy” quiz show competition starring a computer as a player.

### **KEVIN KELLY**

Google Books Project is in a sense trying to make that universal library which could then be read by an AI or a Watson-like supercomputer.

### **AMIT SINGHAL**

Google search is going to be assisted intelligence not artificial intelligence. In my mind I think of search as this beautiful symphony between the user and the Search Engine and we make music together.

### **SERGEY BRIN ARCHIVE**

I’ve been surprised at the level of controversy there because digitising the worlds books and making them available there’s really there’s nobody else who’s attempted it at our scale or who is really working on it so and I feel like we had a number of technical challenges which we’ve overcome there was this legal dispute which we have a settlement, settlements proposed that we at least jointly agree to with the authors and publishers and so forth but anyway it remains somewhat controversial so yeah I’m surprised at the amount of resistance that’s had but ultimately I’m optimistic that we’re going to be successful.

### **CAPTION**

Web 2.0 Summit  
San Francisco | October, 2009

### **TEXT CARD**

Under American law, The Google Book Settlement had to be reviewed in an American Court. Authors, publishers and their representatives, who were against it, had the right to object. A judge had to consider their arguments and then decide which side was right.

### **ROLAND REUSS**

I quickly realized that the Google Book Settlement would have an effect on the copyright situation in the Federal Republic of Germany. I considered that totally unacceptable, because no one had negotiated with us. We decided that we would launch a public petition called the Heidelberg

Petition and within two to three weeks we had all the major authors. Herta Mueller with the Nobel Prize, she joined later. Gunter Grass signed and so there was a snowball effect.

### **GERMAN NEWS READER**

Whether it's a slim paperback or a fat doorstopper, more and more books are available to read in their entirety on the Internet. Google have uploaded over ten million titles and that is just the start. But this is something that outrages many European authors.

### **ROLAND REUSS**

The goal was to get the German government to take action.

### **ANGELA MERKEL**

The German government believes that there must be a place for copyright on the Internet. That's why we are opposed to the scanning of books without any copyright protections as Google has done. The German government is determined to defend the rights of German authors.

### **JEAN-NOËL JEANNENEY**

It was like a bushfire, which suddenly erupts and spreads. And I have to say that I was assisted by the President of the Republic.

### **NICOLAS SARKOZY**

We will not allow our cultural heritage to be taken away by a large corporation. No matter how nice they may be, important they may be, or American they may be.

### **CAPTION**

Beijing, China

### **MIAN MIAN**

The first time I realized Google scanned my book was 2009. November. Actually my lawyer called me and he said, do you know your book be scanned by Google Book?

### **CHINESE NEWS ARCHIVE**

The Search Engine Google came under intense fire from Chinese authors as the digital library used books written by Chinese authors without permission.

### **MIAN MIAN**

The reader, they can search my book by keyword and made maybe around 100 keywords, but I remember the most ridiculous keyword of my book 'bed,' b-e-d, and 'telephone.' That's two words I remember and that made me laugh. That is not intellectual at all. Me and my lawyer decided to sue Google.

### **CAPTION**

New York, United States of America

### **TEXT CARD**

In Autumn 2009, an American court began Fairness Hearings to consider whether it should approve the Google Book Settlement. No cameras were present.

**CAPTION**

Southern District Court of New York

**COURT ROOM ANIMATION, JUDGE DENNY CHIN**

Before the court is the plaintiff's motion to approve the settlement as fair and reasonable. Numerous materials have been submitted. Did anyone count up the number of objections?

**CAPTION**

From the Transcripts of the Google Books Fairness Hearings 2009-2011.

**COURT ROOM ANIMATION, MICHAEL BONI**

We have in the range of 500.

**COURT ROOM ANIMATION, JUDGE DENNY CHIN**

Thank you.

**PAMELA SAMUELSON**

I flew to New York and it was very exciting there were 25 outside parties that made presentations to Judge Chin.

**COURTROOM ANIMATION, DR. IRENE PAKUSCHER**

The proposed settlement results in a de facto monopoly on information and an intensification of media concentration on Google.

**PAMELA SAMUELSON**

There was a risk of monopolisation there, that the Department of Justice saw.

**COURTROOM ANIMATION, WILLIAM CAVANAUGH**

The proposed settlement would establish a marketplace in which only one competitor would have authority to use a vast array of works.

**PAMELA SAMUELSON**

The risk was that Google could basically hold the whole world hostage to the price of access to these books and because no one else would have a licence, no-one else would have a corpus like the corpus they had. We'd have to pay whatever they wanted to charge.

**COURTROOM ANIMATION, DARALYN DURIE**

The core concerns seem to be that this would diminish the ability to read books in private. That is not true. This service will be available at public libraries. You can walk into your neighbourhood library, you can sit down at a free access terminal, anonymously, you can search for and read a book.

**COURTROOM ANIMATION, JUDGE DENNY CHIN**



And if you want to look at it at home, then what?

**COURTROOM ANIMATION, DARALYN DURIE**

Well, if you want to look at it at home, that may present an issue. Here's the rub. This is a tension between requirements for security that are insisted on in order not to have these works be sort of freely disseminated.

**ROBERT DARNTON**

This is a fascinating turning point actually in the whole history of knowledge and of access to knowledge and it was being played out in a New York courtroom.

**COURTROOM ANIMATION, CYNTHIA ARATO**

There's a real risk that, should the court approve the settlement, members of the World Trade Organisation will initiate settlement proceedings against the US government and if the US government were to lose such proceedings, which is a very real possibility, our partners would be entitled to impose trade sanctions against the United States.

**PAMELA SAMUELSON**

And you know you don't use words like that very often it wasn't kind of like, oh gee there are these issues and we're concerned about something, it was like: This violates a treaty. How can the judge do something that's going to violate a treaty? This is crazy.

**COURTROOM ANIMATION, JUDGE DENNY CHIN**

I am not going to rule today. There is just too much to digest. I will reserve decision. There's much to think about.

**COURTROOM ANIMATION, CLERK**

All rise.

**ROBERT DARNTON**

And then Judge Chin thought about it, he thought about it and he thought about it. He took a very long time and every morning I got up and I thought, what, is Judge Chin going to announce his decision today? and when he finally did I myself felt thrilled because the court actually refused to sanction the settlement, then Google Book Search could not take place at least according to Google's original business plan.

**FINANCIAL NEWS NETWORK**

US circuit judge Denny Chin said the creation of the digital library would benefit many but would simply go too far. Chin said the settlement of a class action lawsuit that the company reached with US authors and publishers would grant Google significant rights to exploit entire books without permission of copyright owners.

**RONALD REUSS**

I imagined that this would be the outcome. I wasn't surprised. Of course I was happy that it happened but I didn't crack open the champagne. No, no!

### **JEAN-NOËL JEANNENEY**

I don't know Judge Chin, but I salute him as an example of the remarkable independence of the American judicial system. Despite all the formidable financial power of Google, he quietly ruled that the agreements drawn up by this Mountain View firm were invalid, baseless and inappropriate.

### **KEVIN KELLY**

I think you could read the decision by Judge Chin as a defeat of the screen by the book. But this is a long war. This is one battle and, whatever triumph there might have been for books, it's gonna be short-lived, because the screen will ultimately triumph.

### **TEXT CARD**

Now Governments and libraries in Europe and America are working together to build their own public and free digital libraries.

### **ROBERT DARNTON**

I think that we owe a great deal to Google. I can't imagine that this Digital Public Library of America would ever have gotten off the ground had Google not started to race ahead with its own version of digitization on this massive scale. However, you know, wonderful as it is, Google is not familiar with books. For example, Walt Whitman's famous book of poems Leaves of Grass was catalogued under gardening.

### **TEXT CARD**

Google have now signed agreements with many publishers to show snippets of copyrighted books. However, the Authors Guild is still suing Google for up to 2 billion dollars.

### **CAPTION**

San Francisco, USA

### **JARON LANIER**

AI is just a religion, it doesn't matter. What is really happening is real world examples from real people who entered their answers, their trivia, their experiences into some online data base. It's actually just a giant puppet theatre repackaging input from real people that were forgotten, we're pretending they aren't there. This is something I really want people to see, the insane structure of modern finance is exactly the same as the insane structure of modern culture on the internet. They are precisely the same, it's an attempt to gather all the information into a high castle, optimize the world and pretend that all the people information came from don't deserve anything.

### **ROLAND REUSS**

You can't just argue that this serves the common good. If I go into the Deutsche Bank, steal all the money and distribute it on the streets and say, "Look how many unemployed people I am helping! Look, there aren't any beggars anymore." It's still a bank robbery!

### **WARDEN BOYD RAYWARD**

HG Wells' view of science and technology was what sustained him and sustained his ideas throughout his whole life. He had the sense that if only we could get the scientists and technologists working in the right way we could transform the world. And he continued with that belief up until

the absolute final disillusionment with the entire human world, with a book which he called so fittingly "Mind at the End of its Tether...." He felt that the whole evolutionary process that he had been studying, and that what he felt was leading us to something new and wonderful, had failed. And his last words were...

### **HG WELLS RECONSTRUCTION**

There is no way out, or round or through.

[END]