Unit 1
A Hidden Language Recorded

Narrator: Before this trip to a remote part of Northeast India, there were 6,909 living languages known to scientists. Now, there is one more. National Geographic’s Enduring Voices project brought linguists Gregory Anderson and David Harrison to a region of India that requires a special permit just to enter. To reach one village where this language is spoken, the expedition team had to cross a mountain river by bamboo raft. It would be the first known time the language would be recorded.

Arunachal Pradesh is the home of an endangered language named Koro. It’s part of the Tibeto-Burman language family, a group of some four hundred languages. But until now, Koro was unknown to world linguists. Only about eight hundred people are believed to speak it, with few under age 20.

Harrison, Anderson, and Indian linguist Ganesh Murmu sat in the homes of the speakers, making recordings as people shared vocabularies and stories in Koro. The researchers were in the region to study two poorly known languages, but in speaking to the locals detected the third “surprise” language.

David Harrison: It contains very sophisticated knowledge that these people possess about this valley, the ecosystems, the animals, the plants, how they survived here, how they adapted. So, if they switch over to another language, a lot of that knowledge will simply be lost.

Narrator: The scientists believe Koro may have sprung from slaves in the region, but they say more research is needed to determine precise origins. Linguists consider half the world’s nearly seven thousand languages endangered, threatened by cultural changes, ethnic shame, and even government repression. But at least with the Enduring Voices project, languages like Koro can be recorded and documented for the ages.

Unit 2
Borrowing Money

Sometimes we don’t have the money we need to accomplish a goal. Borrowing money can help, but if we aren’t aware of how the system works, it can create bigger problems for us.

This is Borrowing Money in Plain English.

Among friends, borrowing money seems easy—you just pay them back. However, we sometimes need to borrow a large amount of money from a financial institution, maybe for a home, a car, or education. Understanding how these relationships work is a key to being responsible with your money.

Let’s say you need to borrow $10,000 from a bank. As long as you meet their requirements, the bank is happy to loan you this money because when you pay it back, you’ll have to pay a fee. This is how the bank makes money—it’s called “interest.” When you borrow money, the interest you pay is usually a percentage of the total you borrowed. This percentage is called the
“Interest Rate.” You’ll see this rate referred to as the Annual Percentage Rate or APR, which is the interest and fees you’ll pay over a year for borrowing money.

Let’s see how this works for Rachel. She’s a musician who needs to borrow $10,000 to produce her new album. Ten thousand dollars plus interest is a lot of money to pay back, but she doesn’t have to do it all at once. To make it more affordable, she pays it back in monthly payments. Each month, she’s paying back part of the money she borrowed plus part of the interest. It adds up over time.

This way, Rachel can see if she can afford to pay back the loan on a monthly basis. She found one loan that had a 5% APR with a one-year timeframe. To pay it back, she would have had payments of $856 per month. It was too much! With what Rachel earns she would run out of money in just six months.

To avoid serious problems and owing even more money, she kept looking. Eventually, she found the right loan for her—a lower APR and a longer time frame. She found that spreading the payments across a longer time frame meant less to pay each month.

Before signing on the dotted line, she was careful to understand all the terms of her loan. She learned that some interest rates could change during the loan which could impact her monthly payments. Because she had a fixed budget she made sure the interest rate for her loan wouldn’t change.

While Rachel was asking questions, she learned the rules as well, because breaking the rules can cause an affordable loan to become a big headache. For instance, if she pays late, she may owe the bank more money. She made a promise to herself to pay on time and avoid any late fees. It was wasteful.

It was clear to Rachel that without care, problems could snowball. Changing APRs and late fees could have made her loan impossible to afford. Because Rachel took the time to find the right loan for her, she was able to pay back the loan on time and publish her new album. Yea!

Borrowing money can help you accomplish your goals, but only if you’re realistic about what you can afford. When it comes time to find a loan, discuss it with a financial professional and ask questions. Learn about your payments and terms. It’s up to you to make sure you know the rules and get a loan that fits your needs. I’m Lee LeFever and this has been Borrowing Money in Plain English.

Unit 3
Climate Change Drives Nomads to Cities

Narrator: A nomad drives his livestock across the plains of northern Mongolia just as his ancestors have done for centuries. But an increasing number of Mongolians are reluctantly giving up their traditional herding life and moving into the city.

Ulan Bator, Mongolia’s capital, is one of the fastest growing cities in the world. In the last twenty years its population has more than doubled.
Seventy-one-year-old Namdag is one of the hundreds of thousands of Mongolians who have traded their lives on the open steppe for a cramped existence on the outskirts of the capital.

He says he misses his old life, but that life on the steppe is too difficult.

Experts say climate change is partly driving the migration. Weather pattern changes resulting in extremely harsh winters and drought conditions took a heavy toll on the nomads’ herd animals, forcing many Mongolians to move to the city. With its hot summers and cold winters, Mongolia is reputed to have one of the most extreme climates found anywhere on Earth. But average temperatures in Mongolia have risen about two degrees Celsius in the last sixty years, more than most places in the world.

Global warming is also believed to have brought an increase in extreme weather events. According to the director of the Institute of Meteorology and Hydrology in Ulan Bator, that makes herding difficult.

**Azzaya:** Due to this global warming, a number of weather extremes are increasing. Things like dusty days are increasing, dust storms are more intense and more frequent, particularly in the spring season.

**Narrator:** Rains in the summer have become shorter while snowfall in the winter is heavier. Most importantly, the warmer temperatures and drought conditions have dried the soil, stunting growth of the vegetation that feeds the animals. Global warming, predicts Azzaya, may ultimately lead to the destruction of nomadic life in Mongolia.

For now, many nomadic herders continue with their traditional lives. There are still an estimated 33 million livestock in Mongolia, more than ten times the number of people. On the windswept steppe outside the provincial capital of Möörön, 60-year-old Basanjav made preparations to move his family into the sheltered mountains for the winter. Mongolian herders move their homesteads four times a year, sometimes in the same season. Basanjav says he wants his children to maintain the tradition of herding.

He says his father was a herder and that it’s important that his grandchildren continue in the same footsteps.

But the odds that his grandchildren will grow up to be nomadic herders and continue this proud Mongolian tradition are becoming increasingly uncertain.

Unit 4
The Secrets of Long Life

David McLain travelled to three different cultures of longevity, which included Okinawa, Japan; Sardinia, Italy; and Loma Linda, California. He spent time in each of these places and tried to learn about their cultures of longevity. He learned about what it is they are doing to live vital and healthy lives well into their hundreds.
The first longevity hotspot he traveled to was Sardinia, Italy. What is phenomenal about this region is that men are living just as long as women. Science isn’t exactly quite sure why, but one theory is that it’s because the women wear the pants and that men have less stress as a result. Also, the Sardinians have a fanatical zeal for the family. David witnessed one family of four generations coming together to share a giant meal, which they do every weekend. David reflected, “This is what being alive and having a family is all about.” This social component of longevity is incredibly important. However, the cultures of longevity in Sardinia are rapidly disappearing. Unfortunately, the Sardinians are moving away from traditional, natural food and are leading a sedentary lifestyle. He spent time with a woman who was almost a hundred and her great granddaughter. Later that day he saw that same great granddaughter eating potato chips, and wondered, “Will the next generation live as long?”

Okinawa is an archipelago in the far south of Japan. It’s home to the longest-lived people on Earth. There, David met numerous people who were into their hundreds, and they were leading active and very healthy lifestyles. The 90-year-olds were biking and fishing eight miles offshore using old diving techniques on the reef. He met an amazing woman who was over a hundred. She had been in a moai. The rough translation of the word is a group of friends who go through life together and help each other. David believes the energy and vitality that they would get from that factored into the longevity equation. The Okinawans have a wonderful word called ikigai. It translates roughly into the reason for which you wake up in the morning. All of the centenarians had ikigai, yet another reason why so many Okinawans are living so long. One of the cornerstones of Okinawan longevity is caloric restriction. Yet, interestingly, they are eating a lot of food. The trick is that the foods that they are eating are all low in caloric density. The food included beautiful miso soups filled with carrots, seaweed, onions, and potatoes. Like the Sardinians, the Okinawans grew most of the food themselves, in their gardens . . . they go to the store for very little. Still, Okinawa is losing its longevity edge. Okinawa has the highest rate of obesity in all of Japan. For David, this was quite shocking and somewhat disturbing to see this culture of longevity disappearing right before his eyes.

By far the most surprising fact that David took away from this story was that Seventh-day Adventists outlive their American counterparts by about ten years. What are they doing? Quite simply, the Seventh-day Adventists, who largely populate Loma Linda, California, have a religion that reinforces positive, healthy behaviors. Example, if you are a devout Seventh-day Adventist, you are a vegetarian, nondrinker, nonsmoker, who takes a Sabbath every Saturday, where for one whole day you have to just unplug. So he met many incredible people there. The most incredible by far was a woman who had just turned a hundred and renewed her driver’s license. Before he could go with her for a cruise, she had to go through her morning routine, where she lifts weights and rides a stationary bike. Interestingly, the Seventh-day Adventists are the only culture of longevity that he visited who are not losing their longevity edge. While photographing a baptism at the church, David remembers thinking, “Wow, this is the perfect example of how this religion is still growing and carrying forward.”
Unit 5
Discoveries in a Village Near Stonehenge

Narrator: Stonehenge has stood a silent watch over England's Salisbury Plain since the twenty-sixth century BC. It has withstood extensive remodeling, looting, and pilfering throughout the centuries. And while it certainly shows its age, in many ways this monument is timeless, it's mysterious . . . and it's a bit of an obsession for Michael Parker Pearson. Pearson is an archaeologist at Sheffield University and he's an expert in what is called the archaeology of death. He's been digging in, and around, Stonehenge since 1998, when he came up with a novel theory about the purpose of this ancient ring of stones. His idea is based on the fact that Stonehenge isn't an isolated monument.

Michael Parker Pearson: In 2006, we made a great discovery. We found a whole settlement, many houses, and these we think are the houses that were lived in by the people who built this thing here. We also think that it's part of a bigger complex—that Stonehenge wasn't here in isolation, sitting on Salisbury Plain, but was part of a much bigger group of monuments. And those houses are all clustered around a timber version of this thing.

Narrator: The second complex is called Woodhenge at a place called Durrington Walls.

Michael Parker Pearson: It's upstream that we found a number of large temple buildings and some of these are houses—we've actually got some idea of where people lived when they came to celebrate and to actually build the temple of stone monuments.

Narrator: And Pearson believes that Durrington Walls was a very large community for its time. It's hardly recognizable now, but may have contained hundreds, perhaps thousands of homes. He also believes that the Durrington Walls site was where people lived. The temporary wood structures housed the living, according to Pearson, and the permanent stone structures were for the dead.

Michael Parker Pearson: It's our biggest cemetery from the third millennium—we estimate that about 240 cremation burials that were placed there.

Narrator: Pearson's theory is that Stonehenge isn't a lone, solitary monument at all, but rather just a small part of a larger community: where people buried their dead and their journey was recorded in the landscape and in the materials they used to build their homes and mortuaries. It's an elegant and compelling idea and one that suggests we're not all that different from our ancestors—it's just a matter of scale.

Unit 6
Profiles in Exploration

Alexandra Cousteau: So there's nothing I would rather be than a National Geographic explorer, and I'll tell you why. Coming from a family of explorers and growing up traveling all over the world and, I learned to dive with my grandfather when I was seven years old. I got to go snorkeling in tide pools. I've gone swimming with dolphins, and diving with whales, and I've made films about sharks in Tahiti. And all of these things are . . . it's like Christmas every day. There's nothing more exciting than being able to go
Sylvia Earle: The best part of my job is that you never know what you’re going to find. It’s the joy of discovery. It’s finding, not just new things, but new ideas, to begin to connect the dots. When you spend a lot of time actually in the ocean as I do, after a while you begin to see things that you might have missed the first time. But over a period of hours, days, weeks, years, you really begin to understand something about how systems work. You get to see the behavior of fish. It’s not just a fish that swims by, but a fish that has a life, and trying to understand how they spend their days and nights, how long it takes for them to grow. I think the best part is just the excitement of discovery. It’s something anybody can do, everybody should do. To look around, see the natural world, and try to understand not only how it works, but where do we fit in to the systems that keep us alive.

Johan Reinhard: I’m probably best known for having discovered the ice maiden. This was on a mountain summit about over twenty thousand feet high. An Inca child that had been sacrificed, but later we returned and found several more mummies and then eventually on some other mountains including up to twenty-two thousand feet on the Argentine border, we found three perfectly preserved Inca mummies. Probably the things that most excited me for discoveries weren’t so much the mummies per se, but what they told us about the past because they were so well preserved. The point that I realized just how important the discovery of the ice maiden was was at the moment I saw her face. Realized then that it was indeed a mummy, because we weren’t a 100% sure what was inside this kind of a dusty covered bundle, an ice-covered bundle. And my companion, Miguel Zarate, turned it on its side to get a better grip on it, to try and lift it up, and all of a sudden we saw this face of this Inca mummy staring at us. But in a way it was tinged with disappointment because the face had dried, and the real moment came when we tried to lift the mummy and realized that it weighed nearly a hundred pounds, and that meant that the body itself was frozen. So even though the face had been exposed and dried out, the rest of the body probably was frozen. Now what that means is that we were not only going to get all the textiles and all the other things in context, this is the key thing for archaeology, but we were also going to be able to get DNA studies. And I knew that she was a she.

Unit 7
Student Voices on University Rankings

Narrator: Since the 1990s, there has been an explosion in university rankings. The lists of the best institutions are eagerly awaited each year, and carry an increasing weight in the decision making by students and where they would like to study.

Narrator: Are these ranking lists really the best way for students to make their choice?

Woman from Thailand: University rankings, for me, were a very useful tool that helped narrow down possibilities and choices.

Woman from Venezuela: By these rankings, you can consult the reputation of [a] university.
**Man from Sweden:** Rankings do not fully reflect the quality . . .

**Man from Cameroon:** University ranking is nonsense. Why? Because we can manipulate this ranking.

**Man from The Netherlands:** It tries to compare completely different schools into one single number.

**Narrator:** Is there a role for international organizations in the business of university rankings?

**Woman from Trinidad and Tobago:** International organizations—they’ll have an objective view on universities. So whereas a university would put up on their Web site only good about it, organizations, like UNESCO, could put up the truth, you know. They could put up what really takes place in a university, what the university really offers the students, and they could probably put this up on their own Web site so that students can access it and know the information here is real because they look at it objectively and are not actually a member of the university or staff who just decided we’re going to make the university look good by putting certain things up . . .

**Woman from Lebanon:** The UNESCO, however, has an important role to play in that it is viewed as an independent body, and it is less likely to be pursuing a promotional goal in its evaluation of establishments.

One such person is Kate Middleton, the Duchess of Cambridge. Her engagement to Prince William instantly made her a global star and fashion icon. She doesn’t even need to make a formal endorsement to have an impact on a product. When she was photographed in this coat on a visit to Ireland, the designer sold out of it within one day. She also started a strange trend in the world of hats. When the world saw what she wore to events, everyone wanted to look like her, even other celebrities.

Kate and William have had an impact on the economy. Their wedding was an industry unto itself. Manufacturers from all over the world produced commemorative products for the wedding that the public was more than eager to buy.

The wedding dominated the press for weeks, and even afterwards, public interest in Kate did not go away. Her wedding dress has been put on display for the public. Statues of Kate can be found in museums all over the world. For a price, visitors can get close to a replica of the royal couple. And the public still eagerly follows her every move. Because of all this attention, the duchess has to be very careful about her public image. She is no longer a private person—she is constantly surrounded by security, and the paparazzi photograph her every move. Kate uses her fame to bring attention to important problems. She is interested in healthcare issues and supports work in hospitals as well as the arts. Her voice and support can help raise money and awareness for important issues.

While people love the Duchess of Cambridge for her status as a role model, they also worry about her. Her husband’s mother, Princess Diana, died a very public and tragic death at a young age. She was trying to escape from the paparazzi when she got into a terrible car accident.

**Unit 8**

**In the Spotlight:**

**Kate Middleton**

Let’s face it, there are different levels of fame. Some people have fifteen minutes in the spotlight, and some have real star power. These people are in the public eye for years, or even decades, and sometimes even after they are gone, their influence remains in everything from pop culture, to fashion, to social expression, and even politics.
William was just a teenager at the time. The ring he gave Kate for their engagement was his mother’s and serves as a constant and public reminder of the dark side of fame. The challenge for the Duchess of Cambridge is to find a balance between her public and private lives. And hopefully the public has learned better than to put someone in danger in pursuit of a celebrity encounter.

**Unit 9**  
**How your Brain Handles Stress**

**John Blackstone:** At her office, corporate attorney Teresa Pahl deals with phone calls and e-mails, deadlines and meetings.

**Ms. Pahl:** There is always so much going on here. If I don’t feed children, that’s a disaster.

**Blackstone:** At home, mother of four Teresa Pahl deals with family meals. . . .

**Ms. Pahl:** The only thing that we haven’t done is mom’s coffee.

**Blackstone:** . . . children’s schedules, clean up the kitchen . . .

**Ms. Pahl:** What time do you want me to pick them up?

**Blackstone:** . . . drop off the kids, juggle some office e-mails and, don’t forget, the dog needs a walk.

**Ms. Pahl:** When you know you’ve got a long list, you just power through.

**Blackstone:** Our brains are designed to help us power through. Under stress, the brain signals to release hormones including adrenaline and cortisol. They give us energy, strengthen the immune system, improve reflexes, even help our memory.

**Unidentified Man:** What’s the percentage on the maintenance?

**Blackstone:** But if we are always under stress, the release of cortisol begins to work against us.

**Mr. Bruce McEwen (Rockefeller University):** Chronic stress affects your head, your heart, your liver, your immune system.

**Blackstone:** McEwen has discovered that chronic stress causes neurons in the brain to shrink and change shape. In animals, that causes a loss of memory, increased anxiety and aggressiveness, and can lead to signs of depression. Other research has shown how chronic stress can speed up aging and make us more prone to disease.

**Ms. Elissa Epel (University of California, San Francisco):** Stress has been shown to affect almost every physiological system we have, and we’ve now shown that stress even affects cells at the molecular level.

**Blackstone:** Research has shown that telomeres, the protective coating at the end of chromosomes, gets frayed and worn by stress, mimicking the effects of aging. In a world now filled with cell phones and BlackBerrys, instant messaging and expectations of 24/7, our brains can get a stress signal every time an e-mail comes in. Technology is creating new sources of chronic stress.
Ms. Pahl: I actually had one of my partners walk into my office, and I looked at him and just said, “What? What? What? What now?”

Blackstone: Even those who manage stress well can sometimes be overwhelmed. Those who don’t manage stress, psychologist Christina Maslach discovered, can reach a breaking point, burnout.

Ms. Christina Maslach (University of California, Berkeley): When people are experiencing burnout, they are more likely to make mistakes, make errors. You know, they don’t work as well.

Blackstone: But scientists say the brain’s resilience can help prevent burnout.

Mr. McEwen: The important thing to remember, though, is when we stop the stress, the neurons will grow back to normal size.

Blackstone: The key is to give the brain time without stress, relaxing with family, exercising, eating well and sometimes, just sometimes, ignoring those e-mails.

Unit 10
Jellyfish Lake

Narrator: Twelve thousand years ago, melting glaciers fed rising seas, and the ocean began to seep into the speck of an island in the Pacific, creating a lake like no other. The few creatures that trickled in here with the sea evolved in quiet isolation, and the most triumphant survivor gave the lake its name: Jellyfish Lake.

Golden jellyfish by the millions thrive here, but have a bargain to keep, a bargain that drives two remarkable daily migrations of mutual hunger. The jellyfish survive thanks to millions of generous guests that actually live inside their bodies: tiny dynamic algae that turn sunlight into sugar. The sugar feeds the jellies, and the jellies dedicate their lives to tending the algae. And so, they follow the sun.

At dawn, it begins. The sun’s flare beckons, and the jellyfish stream eastward, flapping bells propel them toward the light that will feed this symbiosis. Five million golden creatures, colored by the algae they harbor, glide across the lake’s surface.

Unit 11
Urban Art: Graffiti

Narrator: A train tunnel in the nation’s capital is a gritty gallery. The signatures, or tags, of graffiti artists taken to a new level with broader strokes and bolder colors. It is Washington’s Wall of Fame, and Nick Posada’s work is here; “Tale” is his tag.

Nick Posada: This is what happens when nobody respects any . . . any type of work that someone spent their paint and their time on. This is what the Wall of Fame in DC has come to.

Narrator: Even on such a public canvas, there are rules to be followed in the world of graffiti. And Posada has learned them well in the six years that he’s been “tagging up.”
Nick Posada: You got...you got people that understand colors and understand what’s aesthetically pleasing and want their stuff to stand out, so you would use colors that contrast one another. Ah, like, these are still there. I did this, like, ‘99.

Narrator: But Nick’s work is also here, at the Govinda Gallery in Georgetown, thanks to owner Chris Murray.

Chris Murray: Graffiti art has certainly brought to public art a whole new dimension, because public art as we know it was always commissioned. Graffiti art was spontaneous, had nothing to do with any transaction. It feels fast, it feels bright, it feels very inventive.

Narrator: Murray believes that graffiti is just one more step in the evolution of pop art. And the works have sold, mostly to young people, but also to long-time collectors of pop art. They could appreciate graffiti in a safe, traditional setting, and they liked it. Good for the artists, too.

Chris Murray: It’s a real reversal for them, because they used to be vilified, and now they’re being enjoyed. And that’s a good thing.

Narrator: Beauty may always remain in the beholder’s eye, but art is about exploration and discovery, even if it’s just a nearby city street.

Unit 12
The Immigrant

Note that there is no video transcript for these clips, as they show silent movies.