### A Chinese Artist in Harlem

Narrator: N Mingliang Lu (Artist): ML Children: C Amy Chin (New York Chinese Cultural Centre): AC Cynthia Mullen Simons (School Representative): CMS

- N: With a population of approximately eight million, the huge cosmopolitan city of New York is a melting pot of immigrant communities. Sometimes, this diversity results in clashes between cultures. Other times, positive outcomes result from the merging of backgrounds and traditions. Artists in particular often use their cultural differences to learn from each other. One such artist, Mingliang Lu, has taken his skills to Harlem to enable others to learn about and understand Chinese art. Born in Shanghai, Ming has studied Chinese art for the majority of his life. At a very young age, he learnt about calligraphy and painting from his father, and has continued to paint through the more difficult times in his life. Ming moved to the US in 1990, and today lives in New York where he continues to create beautiful landscapes, flowers, animals and even the symbol of the United States: the eagle.
- ML: When I first came to America, my only skills were art. I didn't have other skills. I used my art to make a living.
- N: When he first arrived in the US, Ming set up his easel and drew and painted portraits of tourists in order to survive. But even for professional artists, drawing on the street is not the easiest way to make a living. So Ming eventually stopped painting on the street, and began to work for the New York Chinese Cultural Centre. Through them, he brought his skills to Harlem and the children of Public School 36.
- ML: What is this?
- C: A circle.
- ML: It is a circle, right? OK. So I just draw. I change the colour. What colour is this?
- C: Yellow.
- ML: OK. I just put this, you see this? For the ear.
- AC: As we all know, a lot of artists are not employed being artists. So I'm hoping that what we do is to provide them this opportunity to really practise in the field that they've been trained for.

- ML: OK, this time I take this away, little circle one. Yeah, you very good job. Good.
- N: Teaching at the public school, though, is more than just an opportunity for Ming; the programme benefits the children as well. Head teacher Cynthia Mullen Simons says the programme is important to her Year Four pupils.
- **CMS:** You cannot teach solely by the book, paper, and pencil. They have to become involved. We need our students to hear, first hand, people from various cultures talk about their ethnicity.
- ML: Too much water. I show you this, not too much water, you see.
- N: From time to time, Ming stops to help each child get his or her painting just right. The kids view Ming as their teacher from China, but Ming sees beyond ethnicity. He just sees pupils who want to learn how to paint a tiger.
- ML: Chinese children, American children, Hispanic children, and black children, they're all the same. No difference.
- N: Even though New York is already established as a diverse, international city, programmes like the Chinese Cultural Centre's still make a considerable difference.
- **CMS:** When we bring these programmes in, the kids get to see real people from another culture and to relate to them on many different levels. What we don't want to do to our students is to make them ignorant to others and what others can bring. Our students need to understand that we're all human beings, that we all have different backgrounds... different experiences... and that's what makes us so interesting.
- N: These days, in addition to being an artist, Ming is also serving as a kind of cultural ambassador for his country. In the long run, Ming's art may open the door to a whole different world for these children.
- ML: I feel like I am doing very important work, and it makes me really happy to teach calligraphy and painting to the children. I am introducing them to a wider world of Chinese culture, giving them a greater understanding of Chinese people in the world and broadening their horizons.
- N: Ming is not only good in his role as a teacher, he is also excellent in his role of cultural ambassador. In Harlem, this Chinese artist has found a job that makes more than just a living; it makes a difference.

### A Special Type of Neighbourhood

Narrator: N Ray Patlan (Artist): RP Andrea (Balmy Alley Resident): A

N: Each Sunday, the sounds of The Mission Dolores Basilica are heard in San Francisco. These sounds bring memories of the Spanish who built this church in 1791. They didn't know it at the time, but it was the start of a special type of neighbourhood, The Mission District. Some community members describe the neighbourhood as a central part of the city. Why? Because it's where the city began long ago. They feel that understanding the many levels of history here is important. They also feel that it's a big part of understanding what it means to be a real San Franciscan. Over the years, immigrants have come here from Ireland, Germany and Italy. But the most recent immigrants are mainly from Mexico, Central and South America. It's easy to see the style that these recent additions give to the neighbourhood. You can see it on walls, taste it in the food, and hear it in the music!

> Juan Pedro Gaffney grew up in The Mission District. He's the director of the Spanish choir of San Francisco. In the past, the group has performed to raise money for people after natural disasters in Central America. Many people here have friends and relatives in Latin America. Juan Pedro says that the local community here feels a sense of common involvement. They really care when a neighbouring nation is in pain. In good times and bad, the music of The Mission deeply affects everyone. Juan Pedro explains that it's always been a basic part of cultural identity here. It's colourful, lively, and according to Juan Pedro, absolutely 'jumping'!

But it isn't just the music, the art of The Mission is full of life as well. The local art community here stays close to the area's culture and tradition. A local arts organisation leads people on walks through the district. They visit streets like Balmy Alley, which is famous for its murals.

**RP:** What happens is, the murals begin to reflect the community itself.

- N: In 1984, artist Ray Patlan helped paint a series of murals with the theme 'Peace in Central America'. But while the district remains mainly Latino, it's no longer 1984. Politics and the world have changed; the art of The Mission has changed as well. Patlan says that the art is a part of the streets, but also a reflection of the community. As the community changes, the murals change too. The mural messages are always changing, but they're still very powerful.
- A: It's great! It's like coming home to a piece of art every day. Every time we drive up it's just very... it's sort of vibrant.
- N: The artists here have strong feelings about the work they do. One artist explains that the artists of The Mission are fighting for fairness in the community. They're also fighting to help the environment. In the industrial area of The Mission District, this group of artists maintains its cultural identity in traditional San Francisco style. Many artists feel that The Mission is a successful neighbourhood where new immigrants are welcome.

### Confucianism in China

Narrator: N

N: China is one of the largest and oldest countries in the world. Millions of Chinese people share a rich history that has lasted for thousands of years. Over time, China has been influenced by numerous great leaders and thinkers. One of its greatest and most famous philosophers was Confucius, who lived from 551 to 479 BC. Around 500 BC, the Zhou dynasty governed central China: however, its rulers were weak and the dynasty was in decline. Local warlords fought among themselves for land and power; family members also fought one another over property and money. The country of China was caught up in a dark period of war and unhappiness. Confucius travelled across China and hoped to convince the people that his moral and ethical ideas about society could restore order, justice, and prosperity to the country. He believed that peace and harmony depended on having the correct and proper conduct in key relationships: for example, the relationship between a parent and child, or between ruler and subject. Unfortunately, the leaders of the day were warlords. They didn't govern their lands by forming positive relationships with their subjects the way Confucius taught. As a result of this and other issues, the Zhou dynasty continued its decline. Eventually, Confucius retired and focused on teaching his disciples, or followers. After his death, his disciples developed and expanded his ideas through the centuries. Finally, 300 years after Confucius died, the Han dynasty adopted his philosophy as its official government policy. Confucianism became an important part of the Han dynasty, as well as others, and his ideas still influence China today.

> The master said, 'A youth should be respectful of his elders'. The respect that young people show towards elder members of their family is still an important aspect of Chinese life today. Several generations of family members often live and work together. Most children are expected to follow their parents' wishes and do what is best for the family. Traditionally, sons carry on the family name and support their parents when they are older and require care.

The master said, 'Is it not pleasant to learn with a constant perseverance and application?' Confucius felt learning should be a pleasant experience and approached with joy. Nowadays, learning and education are still extremely important to the people of China. From a very early age, students learn to study hard and respect their teachers. Throughout the history of China, and many other cultures, education has been an opportunity to move up in the world and attain success in a number of ways. More than five million young people in China graduate from university every year. Some seek jobs in China, others choose to explore their options by going abroad. Over 30 million Chinese people now live in other parts of the world, including Southeast Asia, the United States, Canada, and other countries and regions.

'Virtue is the root; wealth is the result'. Confucius felt that if people were good and hardworking, they would become rich. Today, many Chinese people continue to work hard to build lives for themselves and their families. This reflects a fundamental principle that those who are dutiful and live in harmony with others will always prosper.

Because Confucianism is often associated with China's past, many people aren't aware of its influence on present-day society. The 2,500 year-old philosophy was the centre of Chinese civilisation and culture for centuries. Some consider it to be at the very foundations of modern Chinese society. As China and the world continue to change, this country's future will surely be impacted by its past.

### **Urban Art**

Narrator: N Nick Posada (Graffiti Artist): NP Chris Murray (Govinda Gallery): CM Jafar Barron (Jazz musician): JB Don Kimes (American University): DK

- Urban art is all about innovation. From using N: buckets on a busy street, to filling an art gallery with local graffiti, to mixing jazz with spoken word – inviting us to listen with new ears, to look with new eves. Wander down this train tunnel in Washington DC, and you'll discover the bold colours of urban graffiti artists. It is Washington's 'Wall of Fame', and Nick Posada's work is here. But unfortunately the art he's created has been covered by other people's graffiti.
- NP: This is what happens when nobody respects 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.
- N: Although the Wall of Fame is open to everyone, Posada cautions there are rules to be followed in the world of graffiti; rules that not everyone appreciates. He says that real graffiti artists understand how to use colour and how to make their work distinctive.
- NP: So you would use colours that contrast one another. Ah, my piece is still there. I did this in, like, '99.
- N: Nick's work is also highlighted here at the Govinda Gallery in Georgetown.
- Graffiti art has certainly brought to public art a CM: whole new dimension.
- N: According to Chris Murray, graffiti art is special because it's fast, uninhibited, and always inventive. Murray is convinced that graffiti is just one more step in the evolution of Pop Art. The works have sold well - to young people, and to collectors of Pop Art. In the gallery, people can appreciate the art in a traditional setting, and they like it. It's good for the artists, too.
- It was a real reversal for them because they're CM: used to being vilified and now they're being enjoyed and that's a good thing.

- N: People are beginning to appreciate the talents of Jafar Barron, too. The 28 year-old trumpeter grew up in this neighbourhood, north of Philadelphia. Both his parents are jazz musicians. But Jafar chose to mix more traditional, classical forms of jazz with the rap and hip-hop music of his own generation. His first CD is an innovative mix of both worlds.
- JB: I like to think that the whole of creation is all about music, to me, you know what I'm saying? I believe that the Most High is a musician. I guess it came from my exposure to hip-hop and poetry that comes from that, and from some friends of mine.
- N: Jafar now plays in clubs in the city where he grew up. He also now has a deal with a major recording company. The stories of how these two artists developed – one musical, one visual – are not surprising to art history professor, Don Kimes.
- DK: It's about sort of taking what it is that you come from, what you emerge from, what's authentic for you, and pushing it to the edge of its envelope, to the edge of its boundaries, its limits and taking one more step.
- N: Kimes says artists need to build on their own cultural background, as anything else would be false. It is said that art is fundamentally about exploration and discovery. Urban artists, whether musicians or painters, can take us to places we've never been before... Even if it's as close as a nearby city street.

#### **Bionic Mountaineer**

Hugh Herr (Climber): HH Narrator: N

- HH: I started climbing when I was, I think, seven years old. Very quickly, I loved the sport. I did everything possible to do some climbing every day. I sometimes think if the accident never occurred, what would have happened to my life? Where would I have gone?
- N: In 1982, Hugh Herr and a friend set out to climb Mount Washington in New Hampshire. When they started the hike it was lightly snowing. But the shower turned into a storm. The boys got disoriented and wandered through the storm for three days and nights. Hugh fell three times through the fragile ice into a river. Exposed to the elements, they grew sick and weak. Suffering from frostbite they started to lose sensation in their limbs. Hugh was near death. Eventually, a woman out snowshoeing came across a set of footprints. Within hours, Jeff and Hugh were rescued and taken to safety. Doctors tried to salvage what they could of Hugh's legs, but in the end he lost both his legs below the knee to gangrene. It took many intricate surgeries before he could even walk again. But Hugh still wanted to climb.
- HH: It occurred to me that the legs that were given to me were designed for the horizontal world, for walking. And what I needed to do was to redesign the legs for the vertical world. So I set out on this mission. I decided I didn't need a heel for climbing so I cut off the heel. I decided that the optimal climbing foot should be very short, should be like a baby's foot in length.
- N: Hugh constructed a number of prosthetic legs. Instead of compromising his ability to climb, Hugh's new legs were in some ways more versatile than before.
- HH: I began actually ascending rock faces that I could not have ascended before the accident with biological legs. Some of my colleagues in the climbing world accused me of cheating, which was music to my ears, because to me that meant that they fully accepted my physical difference.

- N: Hugh discovered a new passion. He earned his PhD in bio-physics and now designs advanced prosthetics at the Massachusetts Institute of Technology. He's now working on getting muscle tissue to survive outside the body. He's developing ways to allow the brain to manipulate a prosthesis. He's even looking to the animal world for design ideas.
- **HH:** The problem of developing an artificial leg is very difficult. So we came up with the idea of, well, let's look to nature. One could use the muscle activity at the hip to control the energetics of the ankle. And this is the example of the camel.
- N: A camel's leg is thin, with the bulk of its muscle on its hip, much like an amputee.
- HH: So instead of putting a motor at the ankle, the idea in my head is to build an above-knee prosthesis, where the energetics of the hip muscles can be harnessed to power the ankle. That could be done by a series of springs that not only span a single joint, but spans multiple joints, the knee and the ankle.
- N: Hugh's camel leg takes its first steps across a computer screen. The implication of Hugh's ideas are astounding. If his ideas are implemented successfully, they could represent a revolution in the field of prosthetics.
- HH: It works... We're at the brink of a new age. I can imagine in the coming years a prosthesis that will enable an amputee to run faster than is possible with a biological leg. I could imagine that people with biological legs will choose to get their legs amputated so they can achieve the same performance advantage. I can imagine that.

### **Canyaking Adventure**

Narrator: N

Brad Ludden (Professional Kayaker): BL Christophe Chaume (Reunion Island Canyon Guide): CC Chris Schnoller (Canyoning Guide): CS Seth Warren (Professional Kayaker): SW Ben Selznik (Professional kayaker): BS

- The small volcanic island of Reunion in the Indian N: Ocean might best be described as paradise. Its incredible scenery draws visitors from all over the world. Now, an international team of white-water kayakers and canyoneers have come to the island for a unique challenge. They plan to combine their skills to create a new outdoor experience. Canyoneers explore canyons using a variety of techniques including walking, climbing, jumping, abseiling, and swimming. White-water kayakers typically use a kayak to move through fastflowing water. This team has combined these two adventure activities into an incredibly exciting sport called 'canyaking'. The team is made up of three professional kayakers: Brad Ludden, Seth Warren, and Ben Selznick, all from the United States.
- **BL:** Canyaking's a hybrid that is using your skills as a canyoneer, in other words, your ability to get through a canyon on ropes and harnesses and sliding, as well as your ability and skills as a kayaker, and combining the two.
- N: Two other men have joined the team: canyoneering guide Chris Schnoller of Austria and local canyon guide, Christophe Chaume.
- **CC:** Reunion Island, it's a paradise in the world. You have the sea. You have the mountains. You can do a lot of things.
- N: The first day of the adventure starts early for the team as they prepare for the drive to Cirque de Cilaos. Located in the centre of the island, the Cirque features the largest of three natural amphitheatres formed in the rock of the island.
- **CS:** It's actually supposed to be the best canyoning resort in the world.
- N: The men will start their canyaking adventure at a canyon known as Fleur Jaune. It's a perfect training ground for their ultimate objective: Trou Blanc canyon. On this trip, the group of men will put their lives in the hands of Chris Schnoller, trusting his years of canyoning experience.

- **SW:** The guy has been all over the place. I trust him with my life. He knows exactly what he's doing, when he's doing it. I'm psyched.
- N: The descent down Fleur Juane is full of risk and challenge, but the team knows that a successful descent here will help them adjust to each other's skills and bring them one step closer to their goal of canyaking Trou Blanc. The Fleur Jaune canyon consists of seven steep drops for abseiling, ranging from a relatively short 15 metres to a breathtaking 45-metre drop. The drops are almost vertical and the water is unbelievably fast, one mistake and a team member could get injured or even be killed. After working their way through the series of multiple drops, the team comes to the largest drop of them all; a vertical waterfall almost 50 metres high. It's the classic character of waterfalls like this one that draws canvoneers from around the world to Reunion Island. Schnoller explains that they will descend the waterfall using a special type of knot called a 'clove hitch'. He attaches a long rope onto a carabiner that is hooked to a piton inserted into the canyon wall. To this rope, which extends to the bottom of the waterfall, each member will attach a shorter rope using their own carabiner and slide down. Using this method, Chris says everyone will be fine, but will they? Everyone is aware that a number of things could go wrong at the waterfall, and it's the time when coordination among the team members really matters most. At this moment, the team must unite. A mistake at this demanding vertical drop would lead to disaster – not just for one man, but perhaps for all of them. One by one, the men lower themselves down the rope, carefully and slowly at first, then dropping quickly to the bottom. It takes time and the atmosphere is intense, but in the end the descent is a complete success. The team now know that it's ready for the next step: Trou Blanc!

The next morning the team must leave Cilaos and walk towards the Trou Blanc canyon, which is over the mountain's edge to the north-east. Everyone agrees that the best way to get there is to hike over the highest point on the island, the peak known as Piton des Neiges. After hours of hiking up the forested paths, the group finally reaches the top. From their viewing point at the peak, the team can see far into the distance. It's a beautiful sight, but one that falls tired on the eyes. The team will make camp here and rest for the night before they continue their trip to Trou Blanc. It's four o'clock in the morning when the men wake up after a well-deserved rest. Later, they talk about their plans for the day.

- **BS:** Now that we're here on the top of the peak at six-thirty in the morning, we're ready to go down. We're going to drink a little coffee, have a little bit of breakfast, and then hike another four hours on to Hellbourg while two of the other people from our team go down and get the cars, and meet us over there.
- N: The lovely mountain village of Hellbourg lies in the inner region of the Cirque de Salazie in the north-eastern part of the island. Local guide Christophe Chaume has come with the team to consult and bring first-hand knowledge of the canyons and terrain.
- **CC:** It will be a very, very good day with a lot of sun. It's a perfect day to kayak in Trou Blanc. Yes!
- N: The men must bring all of their equipment with them for the trip, which includes helmets, backpacks, paddles and kayaks.
- SW: It's so much more fun going kayaking with a harness and you abseil in. It just mixes things up and gives kayaking a whole new perspective. So we've just made it through the flat section. We walked our boats through it, got to our first slide, and it looks pretty good to canyak. It does look, though, like you could piton pretty hard at the bottom of it.
- N: The men inspect the waterfall carefully, weighing the risks and dangers. Once committed to the fall, they'll have no control over the direction in which they'll go. Crashing into a rock could mean a broken arm, or worse. The rough and rugged terrain only compounds the problem; if anything were to happen, emergency evacuation would be almost impossible.
- **SW:** There is not much room for diversity in line. So hopefully we all make it down alright. I think it'll be good.
- N: The first kayaker gives it a try. The drop is a great success; all the preparation has definitely paid off. From that point, each man goes down the waterfall at top speed, travelling quickly down the tight gap between two huge pieces of rock. Later, the men continue their canyak through Trou Blanc and it proves to be all they expected.

- **SW:** In these canyons, we have multiple abseils, tight little cracks. It is all about group unity, and when that runs smoothly, the canyon is nothing but butter.
- N: These men certainly make the sport of canyaking look effortless and fun. As they approach the final waterfall, the team realises that their trip through Trou Blanc is complete; they've achieved their goal of challenging the canyon, and they've won. This team of canyakers has successfully combined the skills of canyoneering and kayaking, introducing a completely new sport to Reunion Island.
- **SW:** We finally finished the Trou Blanc. It was kind of a bump and scrape there at the end. We had a great couple of days and a great run, a good group, some good slides...waterfalls... a successful mission.
- **BL:** I think the coolest part about it for a lot of us was that the day before, when we were looking at it, all the locals said it was impossible. And since we've had a lot of people tell us it's impossible, it's kind of fun to tell them that we already did it.
- N: Some people come to Reunion for its beauty, others come to challenge themselves and test their abilities. These five young men have tested themselves in the most daring of circumstances, and have come out of the experience as winners. They took on the wild dangers of Reunion Island on their canyak adventure and they did it, with style!

### Capoeira: The Fighting Dance

Narrator: N

Mario Riberio de Freitas (Project Axe): MRDF Milton dos Santos (Student): MDS Jefferson Rodriguez (Student): JR

- N: This is capoeira, an unusual combination of dance and martial arts. It was first performed by African slaves in Bahia, Brazil, in the 1800s. Slavery is long gone, but capoeira is still around. Recently, social workers have started using this unusual sport to help in the education and social development of young people. An organisation called 'Project Axe' is leading the way. Project Axe operates an educational and social centre in Bahia's capital city, Salvador. Mario Riberio de Freitas has been working and teaching capoeira here for ten years. The organisation uses capoeira to help street kids and others who are at risk. Mario has practised capoeira for 25 years. He's a master: a combination of teacher and mentor.
- **MRDF:** For these kids, capoeira is important, not just what it does for the body, but for what it does for the mind and soul.

N: And this capoeira master knows from experience. Years ago, Mario was just another young boy from a bad neighbourhood, but then capoeira helped him.

MRDF: I studied with several capoeira masters and learned a tremendous amount from them. I took positive aspects from their lives and applied them to mine; not just to my teaching, but to my whole life, to my family.

- N: Project Axe helps Salvador's young people who are on the street, in trouble, or have drug problems. Axe workers make contact with many homeless kids out on the streets. Those who are interested must first agree to move home or go to a foster home. Then, at the centre, they can learn music, dance, or fashion design as well as capoeira. They also help the kids with their basic education and make sure that the government knows about them. There are considerable numbers of street kids in parts of Brazil, some of whom have disappeared from official records. Mario also says that capoeira teaches students to control their behaviour and treat others with respect.
- **MRDF:** Basically, I take what they have to offer, their body strength and their energy, and mould it by integrating them into the group. Once they are in the circle, which is the most sacred moment

of the capoeira process, I show them that there are norms, rules, and limits within yourself, and with others, that need to be followed.

- N: Hundreds of years ago, slaves in Brazil first practised capoeira as a way of opposing their owners. They made the fighting actions look like a dance so that their owners wouldn't know what they were doing. After slavery was abolished in 1888, capoeira became popular for both amusement and sport. It also helps to raise ex-slaves' awareness of themselves as Afro-Brazilians. Today, capoeira is helping street kids to give up drugs and crime and create new lives.
- MDS: My situation has totally changed. I was living on the street. I was homeless. I did a lot of drugs and I was involved in selling stolen cars. Axe got me off the streets. I'm studying capoeira and I don't do that other stuff anymore. And I have an excellent Master. My life is better.
- JR: I was on the street, begging for money. Then I heard about Axe and they offered me a place. I love capoeira, especially the circle, with two people giving respect and getting respect. We perform and learn to respect each other.
- N: Mario's students may be still a little unsure of their futures, but there are signs of progress. This class is preparing for a two-week trip to perform in Italy. It'll be a long journey, but they've already come a long way. They've made it from the streets of Salvador to a safer, healthier place!

### **Global Warming**

#### Narrator: N

N: For 2.5 million years, the Earth's climate has varied, moving between extremely cold ice ages and warmer periods. But in the last century, Earth's temperature has risen unusually fast – by nearly one degree Celsius. Scientists believe that human activity is making the temperature go up, a process known as global warming. And many are worried the situation is becoming critical.

> Ever since the Industrial Revolution, factories, power plants, and more recently cars, have burned fossil fuels, such as oil and coal, releasing huge quantities of carbon dioxide and other gases into the atmosphere. These greenhouse gasses trap heat near the Earth through a naturallyoccurring process called the 'greenhouse effect'. The greenhouse effect begins with the sun, and the energy it sends to the Earth. The Earth and the atmosphere take in some of this energy, while the rest goes back into space. Naturally-occurring gases in the atmosphere trap some of this energy and reflect it back, warming the Earth. Scientists now believe that the greenhouse effect is being strengthened by greenhouse gasses that are released by human activity.

> Evidence for global warming includes a number of unexpectedly warm years in recent years. Scientists report that 1998 was the warmest year in measured history and 2005 was the second. Studies of ice cores show that greenhouse gases have reached their highest levels in the past 420,000 years. Arctic sea ice is also shrinking. According to NASA studies, the area covered by Arctic sea ice has decreased by about ten per cent in the last 30 years. If countries continue to use a lot of fossil fuel resources, the amount of greenhouse gases in the atmosphere will continue to rise. Researchers predict that temperatures will increase by about 1 to 6 degrees Celsius by the end of the century.

> So, what are the possible consequences for the environment of these rising temperatures? Some climate models say there will be only slight changes. Others predict rises in sea levels that could flood coastal areas. Changing weather patterns could make huge storms like hurricanes more frequent. Extreme droughts could be more common in warm areas, and some animals, which may not be able to adapt, could face extinction.

There is still a lot to be learned about global warming. However, many believe that governments and corporations can help reduce the impact of global warming, by cutting greenhouse gas emissions. Consumers can also help by saving energy around the house, for example, by using light bulbs that require less energy, and driving fewer miles each week. These simple changes may help to keep the Earth cooler in the future.

### Dinosaur Builder

Narrator: N Peter May (Dinosaur Builder): PM Kevin Seymour (Royal Ontario Museum): KS Garth Dallman (Blacksmith): GD Kevin Prudeck (Dinosaur Builder): KP

- N: Even before Hollywood's big hit dinosaur films, museum dinosaur displays fascinated children and adults alike. However, few likely consider who makes these amazing creations. Canadian craftsman Peter May's workshop, near Niagara Falls, Ontario, seems a bit like a 'dinosaur building site'.
- **PM:** It's a work in progress on a stegosaurus, and we haven't put the plates on it yet or reconstructed the backbone. This one is pretty straightforward. It's your old standard dinosaur.
- N: Straightforward only if you're Peter May, but that's because he's one of the world's best at this craft.
- **PM:** This came right out of the blue. It's just grown. I don't think anybody could sit down in their late teens and say, 'I'm going to be a dinosaur builder'.
- N: May began his career working in Toronto's Royal Ontario Museum in the early 1980s. However, many of the museums around the globe could no longer afford to keep experts like May on staff. So the dinosaur builder found a job more suited for him. Instead of limiting himself to one museum, he started hiring himself out as a freelancer.
- KS: So, he found that if he freelanced, then the museums of the world could come to him, and so that's what's happening. He has jobs in Europe and in Japan and all around the world. Most people believe he's the best.
- N: It's rare for May's company, Research Casting International, to mount actual dinosaur bones. Most of their work is in making casts of real bones to create artificial ones. The process begins with painting the actual bone with rubber to recreate its feel and shape. Next, they wrap the cast shape in a hard covering for support and pour in a fibreglass compound. The finished project is an artificial bone that is identical in shape to the real one. These artificial bones are cheaper and lighter than actual fossils. And holes can be drilled into them so the skeletons can be assembled on a central supporting structure, thus making them more stable. Most of the skeletons, however, are incomplete. The builders must shape the missing

pieces to recreate parts of animals that have been extinct for millions of years. There aren't many courses about mounting dinosaurs. May's team must learn on the job. Some started their careers in another trade and transferred their skills. Garth Dallman was a blacksmith.

- **GD:** It's a good blend of science and art. My skills are actually... I guess they're coming back in a lot of ways. Some people are wanting decorative iron work, but the actual trade of blacksmithing is a bit of a dinosaur too.
- N: Putting a skeleton together is a natural version of a construction project. The unfortunate aspect of this puzzle is that if just one piece of the skeleton is placed incorrectly, the entire structure could be thrown out of shape.
- KP: And if you don't start with the leg in the right way, then the hip will be wrong and the backbone will be wrong. So, you really have to know what you're doing from the beginning on, so that everything works properly. I mean, it's like a puzzle. You can't put one piece in wrong and expect everything else to fit.
- N: The builders in May's workshop also help scientists solve the mysteries surrounding these ancient reptiles that roamed the earth.
- KS: They are in the fore of the controversies of how these animals lived and acted, because how can you put them together, what kind of posture do you put them in, really is the way they are interpreted. A palaeontologist might say, 'well we believe it's done this way', and the guy who's mounting it could say, 'well, I don't think the bones go together that way. Look'. You know, so there is this conversation back and forth that's quite valuable. And there's a very big difference between an average mount and a fantastic mount. A really beautiful posed mount is a work of art.
- N: Dinosaur builders are the public face of palaeontology. They provide the 'big show' that follows the hard work in the field, and the responsibility really means something to them.
- **PM:** It's like anything. It becomes a labour of love. These guys were king of the hill back then, you know. As you work on it, your mind drifts, and then when it's mounted, and it's on display in a museum, that the one skeleton becomes part of a whole, which is the history of our world.

### Aquarium on Wheels

Martha Schaum (Aquarium on Wheels Coordinator): MS Narrator: N Dejane Jones: DJ Actor: A George Faulk: GF Student Employee: SE

- MS: Let's get this stuff out and see what we've got here.
- N: In a class at the National Aquarium in Baltimore, ten secondary school students are preparing for a lesson.
- MS: But look at the camouflage on it... the eyes... Containers that are made from them. We have a frog.
- N: They're also preparing a show-and-tell presentation to give to a group of children and creating costumes for a play that they've written.
- MS: And where's the poison dart frog container? OK.
- N: Due to their age, this preparation and planning appears to be schoolwork, but it isn't. In fact, these students are employees of a very special programme called 'Aquarium on Wheels'.
- DJ: There's a lot of kids who do not have the opportunity to come to the aquarium, or see live animals or anything like that, so we bring the aquarium to them.
- N: The overall objectives of Aquarium on Wheels are to entertain and educate. This year's goal is to explain the importance of the world's rainforests to young people. These student teachers want to help their young audience to better understand conservation. The play is about a species threatened by the loss of the rainforest because it relies on it for food: the monkey.
- A1: They're going to cut down this tree.
- A2: They're going to cut down this tree? How am I going to find my leaves to eat? That means I'm going to have to fight other monkeys! I can't fight other monkeys; I'm going to mess up my hair!
- **GF:** We're trying to get through to the kids that saving one tree can be important to all the animals in the rainforest.

- N: For aquarium administrators, on the other hand, the programme is about more than just teaching biology, or even teaching about the environment; it's about offering student employees lessons for life. Martha Schaum is the programme coordinator at the aquarium.
- **MS:** Most kids like to play in the water, let's be realistic, so marine biology is a really great vehicle to use to teach the other skills that they need to know.
- N: One set of skills that the secondary school students need are the communication skills necessary to get, and keep, a job.
- **MS:** I think many of them, probably for most of them, they are probably the first in their family to go to college. And so what we're doing is coming along behind them and saying, 'You can do it!'.
- DJ: I wouldn't be the person I am today if it wasn't for them. Basically, they taught me responsibility. That's a big thing I've learnt here.

Now the rainy season, it rains, like, all day.

- MS: They knew they were going to discuss the rainforest. That's a big topic. They had to decide how they wanted to present it, the concept that they wanted to use. They had to write the script. They had to decide on the sort of things that they wanted in the lab.
- N: Through this work, the student teachers learned an enormous amount about organisation and planning, and they also learned a bit about themselves as well.
- DJ: It means a lot to me. Like I said, I have been here for three years and I really feel like I've helped a lot of people understand conservation.
- N: However, for many of these teachers, the real value of Aquarium on Wheels is more personal; it's about their dreams for their lives.
- **SE1:** At first it just seemed like a really cool job to work at the aquarium. Now that I've been working here, I've finally found out what I want to be. I've found out that I want to be a marine biologist.
- **GF:** I want to be an environmental lawyer, so it helps me out a lot.

- **SE2:** The programme really means a lot to me because I want to major in marine biology. And here at the aquarium I can get the experience that most other students wouldn't be able to receive.
- N: The programme is proving to be advantageous for these students in helping them to prepare for their future professional lives. For Martha Schaum, the programme allows her to achieve personal and professional satisfaction from watching these teenagers grow as people.
- **MS:** This programme has meant more to me than anything else, because I have watched these kids grow and develop.
- N: The Aquarium on Wheels programme is having a powerful impact on more than just the rainforests; it's having a positive effect on everyone involved with this very special programme.

### Gliding Across the Gobi

Narrator: N

George Steinmetz (National Geographic Explorer): GS Alain Arnoux: AA

Don Webster (National Geographic Explorer): DW

N: Far from the rest of the world lies a distant desert land: Badain Jaran. It is trapped by some of the world's tallest sand dunes. For thousands of years, the land here was very fertile, but it is now being threatened. The Gobi Desert is the fourth largest desert in the world. It's growing larger by hundreds of kilometres every year. The desert's fast and unstoppable growth may soon change the lives of everyone around it.

> Two National Geographic explorers, Don Webster and George Steinmetz, have arrived in the urban bustle of modern China. However, they're still far from their destination. The two explorers are travelling north-west to the small, untouched part of the Gobi desert called Badain Jaran. It's a region that some people think the rest of the world forgot. Steinmetz and Webster travel as far as the edge of the desert. Here, they must wait for a camel team to guide them farther into the Gobi. They wait, but the team doesn't come. Finally, they decide to camp for the night and hope that the team will arrive tomorrow.

Early next morning, their guide, Lao Ji, and his camels finally arrive. Lao Ji has 22 camels and they know the desert well. He was born and raised in the arid region, so he'll be able to take the explorers safely into the desert.

The group carefully plans their route. This is important, because the Gobi is huge and it can get very hot. It could be easy to get lost in this dry, empty place. The team needs to work with one another to ensure that they can successfully reach their destination. As the group begins their long trek deep into the desert, the dunes slowly rise beside them. The temperature rises too. By noon, it reaches 120 degrees Fahrenheit, and there's no shade from the sun.

**GS:** I think that getting lost here, it could be bad, or it could be very bad.

Beautiful, absolutely beautiful. It's amazing; this is like the result of 40 million years of winds.

N: By day three, the dunes are more than 1,000 feet high. It takes one full day to climb a single sand mountain.

- **GS:** I think this is about as 'inner' as you get to the Inner Mongolia; four days by camel through thousand-foot dunes. This place time forgot. It's just beautiful.
- N: At last, the explorers reach Badain Jaran. Steinmetz plans to meet his friend Alain Arnoux here, so they can paraglide over the Gobi. Finally, Arnoux arrives.
- AA: Ah, bonjour, monsieur!
- N: The men are happy to see each other.
- **GS:** Great to see you. Most definitely. We have a lot of stories to hear.
- AA: Sure, sure.
- N: When darkness comes, the group gathers to have a good time.
- **GS:** It's nice to have a full tent.
- N: In Mongolia, this often means eating mutton and listening to music.
- DW: She's topping them off, isn't she?
- N: After all the wonderful food and drink, it's not easy to get up early. However, Steinmetz and Arnoux must prepare themselves for their first paraglide. Arnoux, one of the best paragliders in the world, has come to help Steinmetz.
- AA: This lake, this lake, this lake, this lake, and come back.
- N: The two adventurers plan to fly over a number of different lakes and then return. Steinmetz is going first.
- AA: His engine... maybe don't work so well.
- **GS:** I just didn't have enough power, and going towards these dunes, I just didn't want to do a...
- AA: Yeah, yeah, yeah sure.
- GS: ...a chance, so...
- N: They try again and again.
- **GS:** When I try to go now, the engine has less power than when we were standing still.

- N: The morning light is going fast, and the wind conditions have become difficult. Then, finally, after many failed attempts, Steinmetz manages to take off. Arnoux quickly follows.
- DW: Oh, he's having a good time.
- N: The two men glide smoothly over the desert. Steinmetz is finally able to do what he really wants to do: get photos of the Gobi Desert from a bird's eye view.
- **GS:** The picture... the view I really want, is being able to really understand what makes this place so unique. There's no other place in the world that has this size of a dune and with lakes in between. It's the most beautiful place in the world to me.
- N: From above, the photo journalist can see how small the desert makes people seem. He says that it's difficult to believe that people can actually live in it. The view also reminds him of another fact that's not so pleasant; the growing desert may soon completely change the lives of everyone around it.

After his first trip, Steinmetz goes up to take one last picture. In his photographs, he wants to show the relationship between the desert and its people. For him, flying above the Gobi makes him feel closer to the desert itself. It also helps him to better understand the people who live there. For Steinmetz, gliding across the Gobi has been an experience he won't soon forget.

#### Living in the Slow Lane

#### Narrator: N

Paolo Saturnini (Mayor of Greve): PS Sandro Checcuci (Greve Resident): SC Salvatore Toscano (Slow Food Chef): ST Luana Pagliai (Cheese Maker): LP Luciano Bertini (Slow Food Farmer): LB

- N: The fertile hills between Florence and Siena, home to some of the world's best-known vineyards. This is Chianti, one of Italy's most famous wine regions. Near its centre, one can find the quaint little town of Greve. Greve in Chianti, or Greve, is a quiet, modest town with a population of a few thousand. It's a regional centre for the trading of wine and various types of produce and cheeses. But while it's full of activity, it's also a village that appreciates tradition. The town's culture is inherently slow, which has helped to make Greve an official 'Slow City' and part of an organised Slow Movement.
- **PS:** Our challenge and our duty is to try to maintain the soul, the essence, the 'specialness' of Greve in Chianti and all the other Slow Cities.
- N: These unusual cities are vetted according to carefully selected criteria. The manifesto of the movement is to improve the quality of life in smaller towns and villages, and to resist the globalised atmosphere of the big cities. Alongside the Slow City movement, another movement has developed: the 'Slow Food' movement. Its practitioners aim to preserve the pleasures of good, locally grown, high-quality food that is prepared slowly and carefully. Now the movement has gone international, having more than 80,000 members in over 100 countries worldwide.
- **SC:** It's very nice to live here, because we have a nice atmosphere, we have nice landscapes, and so, when you have nice things to see, a nice place to live in, it's very easy.
- N: Chef Salvatore Toscano left the fast life behind. He used to manage an American-style restaurant in Florence, where he spent his days serving up hamburgers. Five years ago, he left all that behind and moved to Greve, where he's opened a new restaurant.
- **ST:** It means taking the time. Finding the rhythm that lets you live more calmly in a lot of ways, starting, of course, with what you eat.

- N: Another local example of slow food lies in the mountains of Pistoia in northern Tuscany. Here, generations of farmers have produced a magnificent pecorino cheese that is said to be delightfully unique. Made from the raw milk of black sheep, the cheese is hand-moulded twice a day. The process is long and labour-intensive, as each cheese is individually pressed and shaped, but of course, the result of all that labour and care can be uniformly delicious. The tradition was dying out until the Slow Food movement stepped in with a special promotion to organise the farmers and promote the cheese. These days, cheese production is on the increase again, and cheese makers like Luana Pagliai have been able to continue making and selling her own pecorino.
- LP: It's brought us a kind of fame. Not everyone knew about our product. The project is getting us noticed.
- LB: From Singapore to Macau, in New York and Rome, you always find the same pizza, the same hamburgers. Slow Food doesn't want this. Slow Food wants the specialness of every product to be respected.
- N: The residents of Greve and other Slow Cities could be on to something. They're making an effort to maintain a high quality of life, and to prevent the world from becoming bland. While it might seem an unusual approach for some, their way of thinking may just be what the world needs. In years to come these people may be able to look back with great satisfaction. They will have been enjoying life, while most of the rest of the world has been rushing through it.