Appendix B

Audio Track Transcripts

TRACK 1 TRANSCRIPT



Narrator

Listen to a conversation between a student and a librarian.

Librarian

Can I help you?

Student

Yeah, I need to find a review. It's for my English class. We have to find reviews of the play we're reading. But they have to be from when the play was first performed—so I need to know when that was... and I suppose I should start with newspaper reviews...

Librarian

Contemporary reviews.

Student

Sorry?

Librarian

You want contemporary reviews. What's the name of the play?

Student

It's *Happy Strangers*. It was written in 1962 and we're supposed to write about its influence on American theater—show why it's been so important.

Librarian

Well, that certainly explains why your professor wants you to read some of those old reviews. The critics really tore the play to pieces when it opened. It was just so controversial—nobody'd ever seen anything like it on the stage.

Student

Really? It was that big a deal?

Librarian

Oh sure. Of course, the critics' reaction made some people kinda curious about it; they wanted to see what was causing all the fuss. In fact, we were on vacation in New York—I had to be, oh around sixteen or so—and my parents took me to see it. That would've been about 1965.

Student

So that was the year it premiered? Great! But . . . newspapers from back then aren't online, so how do I . . .

Librarian

Well, we have copies of old newspapers in the basement, and all the *major* papers publish reference guides to their articles, reviews, etc. You'll find *them* in the reference stacks in back. But I'd start with 1964. I think the play'd been running for a little while when I saw it.

Student

Oh, how'd you like it? I mean it's just two characters onstage hanging around and basically doing nothing.

Librarian

Well, I was impressed: the actors were famous and, besides, it was my first time in a *real* theater. But you're right—it was definitely different from any plays that we'd read in high school. Of course, in a small town, the assignments are pretty traditional.

Student

I've only read it, but it doesn't seem like it'd be much fun to watch. The story doesn't progress in a, in any sort of logical manner. It doesn't have any real ending either. It just stops. Honestly, y'know, I thought it was kinda slow and boring.

Librarian

Well, I guess you might think that, but when I saw it back then it was anything but boring! Some parts were really funny—but I remember crying, too. But I'm not sure just reading it . . . You know, they've done this play at least once on campus. I'm sure there's a tape of the play in our video library. You might want to borrow it.

Student

That's a good idea. I'll have a better idea of what I really think of it—before I read those reviews.

Librarian

I'm sure you'll be surprised that anyone ever found it radical—but you'll see why it's still powerful dramatically speaking.

Student

Well, there must be *something* about it or the professor wouldn't have assigned it. I'm sure I'll figure it out.

TRACK 2 TRANSCRIPT

Narrator

Listen again to part of the conversation. Then answer the question.

Student

I suppose I should start with newspaper reviews ...

Librarian

Contemporary reviews.

Sorry?

Librarian

You want contemporary reviews. What's the name of the play?

Narrator

Why does the woman say this:

Librarian

Contemporary reviews.

TRACK 3 TRANSCRIPT



Narrator

Listen to part of a lecture in a biology class. The class is discussing animal behavior.



OK, the next kind of animal behavior I want to talk about might be familiar to you. You may have seen, for example, a bird that's in the middle of a mating ritual. And, and suddenly it stops and preens—you know, it takes a few moments to straighten its feathers—and then returns to the mating ritual. This kind of behavior—this doing something that seems completely out of place—is what we call a displacement activity.



Displacement activities are activities that animals engage in when they have conflicting drives if, if we take our example from a minute ago—if the bird is afraid of its mate, it's conflicted, it wants to mate, but it's also afraid and wants to run away, so instead it starts grooming itself. So the displacement activity, the, the grooming, the straightening of its feathers seems to be an irrelevant behavior.



So what do you think another example of a displacement activity might be?

Male student

How about an animal that, um, instead of fighting its enemy or running away, it attacks a plant or a bush?

Professor

That's a really good suggestion, Carl, but *that's* called redirecting. The animal is *redirecting* its behavior to another object, in this case, the plant or the bush. But that's not an irrelevant or inappropriate behavior—the behavior makes sense—it's appropriate under the circumstances, but what doesn't make sense is the *object* the behavior's directed towards. OK, who else? Carol?

Female student

I think I read in another class about an experiment, um, where an object that the animal was afraid of was put next to its food—next to the animal's food—and the animal, it was conflicted between confronting the object, and eating the food, so instead it just fell asleep. Like that?

Professor

That's *exactly* what I mean. Displacement occurs because the animal's got two conflicting drives, two competing urges, in this case, fear and hunger—and what happens is they *inhibit* each other—they cancel each other out in a way, and a third, seemingly *irrelevant* behavior surfaces . . . through a process that we call disinhibition.



Now, in disinhibition, the basic idea is that two drives that seem to inhibit, to hold back a third drive, well, well, they get in the way of each other in a, in a conflict situation, and somehow lose control, lose their inhibiting effect on that third behavior ... wh-which means that the third drive surfaces ... it-it's expressed in the animal's behavior.

Now, these displacement activities can include feeding, drinking, grooming, even sleeping. These are what we call "comfort behaviors." So why do you think displacement activities are so often comfort behaviors, such as grooming?

Male student

Maybe because it's easy for them to do—I mean, grooming is like one of the most accessible things an animal can do—it's something they do all the time, and they have the-the *stimulus* right there, on the outside of their bodies in order to do the grooming—or if food is right in front of them. Basically, they don't have to think very much about those behaviors.

Female student

Professor, isn't it possible that animals groom because they've gotten messed up a little from fighting or mating? I mean, if a bird's feathers get ruffled, or an animal's fur—maybe it's not so strange for them to stop and tidy themselves up at that point.

Professor

That's another possible reason, although it doesn't necessarily explain other behaviors such as eating, drinking, or sleeping. What's interesting is that studies have been done that suggest that the animal's *environment* may play a part in determining what kind of behavior it displays. For example, there's a bird—the wood thrush, anyway when the wood thrush is in an attack-escape conflict—that is, it's caught between the two urges to escape from or to attack an enemy—if it's sitting on a horizontal branch, it'll wipe its beak on its perch. If it's sitting on a vertical branch, it'll groom its breast feathers. The immediate environment of the bird—its immediate, um, its relationship to its immediate environment seems to play a part in which behavior it will display.

TRACK 4 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

So what do you think another example of a displacement activity might be?

Male student

How about an animal that, uh, instead of fighting its enemy or running away, it attacks a plant or a bush?

Professor

That's a really good suggestion, Carl, but that's called redirecting.

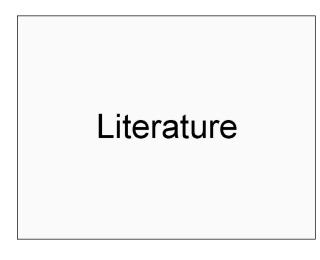
Narrator

What does the professor mean when she says this:

Professor

That's a really good suggestion, Carl, but that's called redirecting.

TRACK 5 TRANSCRIPT



Narrator

Listen to part of a lecture in a literature class.



All right, so let me close today's class with some thoughts to keep in mind while you're doing tonight's assignment. You'll be reading one of Ralph Waldo Emerson's best-known essays, "Self-Reliance," and comparing it with his poems and other works. I think this essay has the potential to be quite meaningful for all of you—as young people who probably wonder about things like truth, and where your lives are going ... all sorts of profound questions.

Knowing something about Emerson's philosophies will help you when you read "Self-Reliance." And basically, one of the main beliefs that he had, was about *truth*. Not that it's something that we can be taught... Emerson says it's found within ourselves.

So this truth . . . the idea that it's in each one of us . . . is one of the first points that you'll see Emerson making in this essay. It's a bit abstract, but he's very into, ah, into each person believing his or her own thought. Believing in yourself, the thought or conviction that's true for you.

But actually, he ties that in with a sort of universal truth, something that everyone knows but doesn't realize they know. Most of us aren't in touch with ourselves, in a way, so we just aren't *capable* of recognizing profound truths. It takes geniuses . . . people like, say, Shakespeare, who are unique because when they have a glimpse of this truth—this universal truth—they pay attention to it and express it, and don't just dismiss it like most people do.

So, Emerson is really into each individual believing in, and trusting, him- or herself. You'll see that he writes about . . . well, first, conformity. He *criticizes* the people of his time, for abandoning their own minds and their own wills for the sake of conformity and consistency. They try to fit in with the rest of the world, even though it's at odds with their beliefs and their identities. Therefore, it's best to be a *nonconformist*—to do your own thing, not worrying about what other people think. That's an important point—he really drives this argument home throughout the essay.

When you're reading I want you to think about that, and why that kind of thought would be relevant to the readers of his time. Remember, this is 1838. Self-reliance was a novel idea at the time, and United States citizens were less secure about themselves as individuals and as Americans.

The country as a whole was trying to define itself. Emerson wanted to give people something to really think about. Help them find their own way and, ah, what it meant to *be* who they were.

So, that's something that I think is definitely as relevant today as it was then ... probably, uh ... especially among young adults like yourselves. You know, uh, college being a time to sort of really think about who you are and where you're going.

Now, we already said that Emerson really emphasized nonconformity, right? As a way to sort of not lose your own self and identity in the world? To have your own truth and not be afraid to listen to it? Well, he takes it a step *further*. Not conforming also means, ah, not conforming with *yourself*, or your past. What does *that* mean? Well, if you've always been a certain way, or done a certain thing, but it's not working for you anymore, or you're not content—Emerson says that it'd be foolish to be consistent even with our own past. Focus on the future, he says: that's what matters more. Inconsistency is good! He talks about a ship's voyage—and this is one of the most famous bits of the essay—how the best voyage is made up of zigzag lines. Up close, it seems a little all over the place, but from farther away the true path shows, and in the end it justifies all the turns along the way.

So, don't worry if you're not sure where you're headed or what your long-term goals are—stay true to yourself and it'll make sense in the end. I mean, I can attest to that. Before I was a literature professor, I was an accountant. Before that, I was a newspaper reporter. My life has taken some pretty interesting turns, and here I am, very happy with my experiences and where they've brought me. If you rely on yourself and trust your own talents, your own interests, don't worry. Your path will make sense in the end.

TRACK 6 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

Remember, this is 1838. Self-reliance was a novel idea at the time, and United States citizens were less secure about themselves as individuals and as Americans.

Narrator

Why does the professor say this:

Professor

Remember, this is 1838.

TRACK 7 TRANSCRIPT



Narrator

Listen to a conversation between a student and a professor.

Professor

Hey Jane. You look like you're in a hurry ...

Student

Yeah, things're a little crazy.

Professor

Oh, yeah? What's going on?

Student

Oh, it's nothing ... Well, since it's your class ... I guess it's OK ... it's, it's just that I'm having trouble with my group project.

Professor

Ah, yes. Due next week. What's your group doing again?

Student

It's about United States Supreme Court decisions. We're looking at the impact of recent cases on property rights, municipal land use cases, zoning disputes . . .

Professor

Right, OK . . . And it's not going well?

Student

Not really. I'm worried about the other two people in my group. They're just sitting back, not really doing their fair share of the work, and waiting for an A. It's kinda stressing me out, because we're getting close to the deadline and I feel like I'm doing everything for this project . . .

Professor

Ah, the good ole "free-rider" problem.

Student

Free rider?

Professor

Oh, it's just a term that describes this situation: when people in a group seek to get the benefits of being in the group without contributing to the work ... Anyway, what exactly do you mean when you say they just sit back? I mean, they've been filing their weekly progress reports with me ...

Student

Yes, but I feel like I'm doing 90 percent of the work. I hate to sound so negative here, but honestly, they're taking credit for things they shouldn't be taking credit for. Like last week in the library, we decided to split up the research into three parts, and then each of us was supposed to find sources in the library for our parts. I went off to the stacks and found some really good material for my part, but when I got back to our table they were just goofing off and talking. So I went and got material for their sections as well.

Professor

Hmm, you know you shouldn't do that.

Student

I know, but I didn't want to risk the project going down the drain.

Professor

I know Theresa and Kevin, I've had both of them in other courses . . . so I'm familiar with their work, and their work habits.

Student

I know, me too, and that's why this has really surprised me.

Professor

Do you . . . does your group like your topic?

Student

Well, I think we'd all rather focus on cases that deal with personal liberties—questions about freedom of speech, things like that—but I chose property rights . . .

Professor

You chose the topic?

Student

Yeah, I thought it would be good for us, all of us, to try something new.

Professor

Maybe that's part of the problem—maybe Theresa and Kevin aren't that excited about the topic and since you picked it ... Have you thought ... talked to them at all about picking a different topic?

Student

But, we've already got all the sources. And it's due next week. We don't have time to start from scratch.

OK, well, I'll let you go 'cause I know you're so busy. But you might . . . consider talking to your group about your topic choice . . .

Student

I'll think about it. Gotta run. See you in class.

TRACK 8 TRANSCRIPT



Narrator

Listen to part of a discussion in a United States government class.



Professor

OK, last time we were talking about government support for the arts. Who can sum up some of the main points? Frank?

Male student

Well, I guess there wasn't *really* any, you know, *official* government support for the arts until the twentieth century. But the first attempt the United States government made to, you know, to support the arts was the Federal Art Project.

Right. So, what can you say about the project?

Male student

Um, it was started during the Depression, um, in the 1930s, to employ out-of-work artists.

Professor

So was it successful? Janet? What do you say?

Female student

Yeah, sure, it was successful—I mean, for one thing, the project established a lot of, like, community art centers and, uh, galleries in places like rural areas where people hadn't really had access to the arts.

Professor

Right.

Male student

Yeah, but didn't the government end up wasting a lot of money for art that wasn't even very good?

Professor

Uh, some people might say that, but wasn't the primary objective of the Federal Art Project to provide jobs?

Male student

That's true. I mean, it did provide jobs for thousands of unemployed artists.

Professor

Right, but then, when the United States became involved in the Second World War, unemployment was down, and it seemed that these programs weren't really necessary any longer.

So, moving on ... we don't actually see any govern—er, well, any *real* government involvement in the arts *again* until the early 1960s, when President Kennedy and other politicians started to push for major funding to support and promote the arts. It was felt by a number of politicians that, well, that the government had a *responsibility* to ... uh, support the arts as sort of, oh what can we say, the soul, or *spirit* of the country. The idea was that there'd be a federal *subsidy*, uh, financial *assistance* to artists and artistic or cultural institutions. And for just those reasons, in 1965, the National Endowment for the Arts was created.



So, it was through the NEA, the National Endowment for the Arts, um, that the arts would develop, would be *promoted* throughout the nation. And then, individual states throughout the country started to establish their *own* state arts councils to help support the arts. There was kind of a cultural explosion—and by the mid-1970s, by 1974, I think, all 50 states had their own arts agencies, their own state arts councils that worked with the federal government, with corporations, artists, performers, you name it.

Male student

Did you just say corporations? How were they involved?

Professor

Well, you see, corporations aren't always altruistic, they might not support the arts unless ... well, unless the government made it attractive for them to do so, by offering corporations tax incentives to support the arts—that is by letting corporations pay less in taxes if they were patrons of the arts. Uh, the Kennedy Center in Washington, D.C., you may, maybe you've been there, or Lincoln Center in New York. Both of these were built with substantial financial support from corporations. And the Kennedy and Lincoln Centers aren't the only examples—many of your cultural establishments in the United States will have a plaque somewhere acknowledging the support, the money, they've received from whatever corporation. Yes, Janet?

Female student

But aren't there a lot of people who don't think it's the government's role to support the arts?

Professor

Well, as a matter of fact, a lot of politicians who did not believe in government support for the arts, they wanted to do away with the agency entirely for that very reason—to get rid of governmental support—but they only succeeded in taking away about half the annual budget. And as far as the public goes . . . well, there are about as many individuals who disagree with government support as there are those who agree—in fact, with artists in particular, you have lots of artists who support—and who have benefitted from—this agency, although it seems that just as many artists oppose a government agency being involved in the arts for many different reasons—reasons like they don't want the government to control what they create. In other words . . . the arguments both for and against government funding of the arts are as many and, and as varied as the individual styles of the artists who hold them.

TRACK 9 TRANSCRIPT

Narrator

Listen again to part of the discussion. Then answer the question.

Male student

Yeah, but didn't the government end up wasting a lot of money for art that wasn't even very good?

Professor

Uh, *some* people might say that, but wasn't the *primary* objective of the Federal Art Project to *provide jobs*?

Narrator

What does the professor imply when she says this:

Professor

Uh, *some* people might say that, but wasn't the *primary* objective of the Federal Art Project to *provide jobs*?

TRACK 10 TRANSCRIPT

Narrator

Many universities now offer academic courses over the Internet. However, some people still prefer learning in traditional classrooms. Which do you think is better? Explain why.

TRACK 11 TRANSCRIPT

Narrator

The computer department is considering making a scheduling change. You will have 45 seconds to read an article in the campus newspaper about the change. Begin reading now.

TRACK 12 TRANSCRIPT



Narrator

Now listen to two students discussing the article.

Male student

I just don't think this will work.

Female student

Why not?

Male student

Because it's not gonna solve the problem. Students are busy at night... I mean, we have jobs, families, clubs, social events. Most of us already have something to do every single night of the week.

Female student

I see your point. I sure couldn't fit anything into my schedule during the week—I've got swimming practice most nights.

Male student

Right. And as far as expense goes, I think they're going about it the wrong way. I mean, it costs money to hire more teachers and keep the academic building open later. Which is a lot more expensive than just simply buying more computers.

Female student

More computers?

Male student

That's right. Computer prices have come way down the past few years, so the department won't have to spend as much now as they did in the past. Besides, the computer department classrooms, you know, the rooms themselves, they're actually very big ... there's plenty of space to add more computers.

Narrator

The man expresses his opinion about the proposal described in the article. Briefly summarize the proposal. Then state his opinion about the proposal and explain the reasons he gives for holding that opinion.

TRACK 13 TRANSCRIPT

Narrator

Now read a passage from a psychology textbook. You have 45 seconds to read the passage. Begin reading now.

TRACK 14 TRANSCRIPT



Narrator

Now listen to part of a lecture on this topic in a psychology course.

Professor

Last month my favorite uncle paid me a surprise visit. I hadn't seen him in many years ... The doorbell rang, I opened the door, and there was Uncle Pete. Now, I'm sure when I saw him I said something like: "Uncle Pete! What a surprise! How nice to see you!" Anyway, my wife was standing next to me and according to her—I wasn't really aware of this—my eyes got really wide and I broke into a huge big smile. She said I was actually jumping up and down, like a little boy. Well, anyway, later that evening Uncle Pete told me how very, very good he felt when he saw how happy I was to see him.

But compare that with this: my daughter ... she's six ... We were building a birdhouse together last week. And I was showing her how to use a hammer and nail. And of course, stupid me, I wasn't being very careful and I smashed my thumb with the hammer. Boy, did it hurt! I almost felt like screaming, but I didn't want to upset my daughter, so I said, "Don't worry, honey. It's nothing." Meanwhile, I was shaking my hand, as if that would stop my thumb from hurting, and my face was contorted in pain. My voice was trembling too. So even though I told my daughter I was OK, I'm sure she didn't believe me. Because she kept asking me if I was OK.

Narrator

Explain how the examples from the professor's lecture illustrate the relationship between verbal and nonverbal communication.

TRACK 15 TRANSCRIPT



Narrator

Listen to part of a talk in an art appreciation class.

Professor

In order for art to communicate—to appeal to the emotions or the intellect—it has to combine various *visual elements* to express meaning ... or emotion. It's really the visual components of the work—things like color, texture, shape, lines—and how these elements work together that tell *us* something about the work. Artists combine and manipulate these visual elements to express a message or to create a mood.

Think about how a painter might use *color*, for example. You all know from experience that different colors appeal in different ways to the senses and can convey different meanings. An artist chooses certain colors to evoke a particular mood and make powerful statements. The color red, for example, is a strong color and can conjure up strong emotions ... such as extreme joy, or excitement ... or even anger. Blue, on the other hand, is considered a cool color. Blue colors tend to have a calming effect on viewers.

Another visual element important to art is texture. By texture, I mean the surface quality or "feel" of the work ... its smoothness, or roughness, or softness.... Now, of course, in some types of art, the texture is physical—it can actually be touched by the fingers. But in painting, for example, texture can be visual. The way an artist paints certain areas of a painting can create the illusion of texture ... an object's smoothness, or roughness, or softness. A rough texture can evoke stronger emotions and strength while a smooth texture is more calming and less emotional.

As I said earlier, artists often combine elements to convey a message about the work. Take a painting that, say, uses a lot of strong colors like reds and oranges and ... and uses brushstrokes that are broad—wide, sweeping brushstrokes that suggest a rough texture. Well, these elements together can convey a wilder, more chaotic emotion in the viewer than, more than in, say ... a painting with tiny, smooth brushstrokes and soft or pale colors. Artists use these visual effects and the senses they arouse to give meaning to their work.

Narrator

Using points and examples from the lecture, explain the importance of visual elements in painting.

TRACK 16 TRANSCRIPT



Narrator

Now listen to part of a lecture on the topic you just read about.

Professor

Many scientists have problems with the arguments you read in the passage. They don't think those arguments prove that dinosaurs were endotherms.

Take the polar dinosaur argument. When dinosaurs lived, even the polar regions where dinosaur fossils have been found were much warmer than today—warm enough during part of the year for animals that were not endotherms to live. And during the months when the polar regions were cold, the so-called polar dinosaurs could have migrated to warmer areas or hibernated like many modern reptiles do. So the presence of dinosaur fossils in polar regions doesn't prove the dinosaurs were endotherms.

Well, what about the fact that dinosaurs had their legs placed under their bodies, not out to the side, like a crocodile's? That doesn't necessarily mean dinosaurs were high-energy endotherms built for running. There's another explanation for having legs under the body: this body structure supports more weight. So with the legs under their bodies, dinosaurs could grow to a very large size. Being large had advantages for dinosaurs, so we don't need the idea of endothermy and running to explain why dinosaurs evolved to have their legs under their bodies.

OK, so how about bone structure? Many dinosaur bones do have Haversian canals, that's true, but dinosaur bones also have growth rings. Growth rings are a thickening of the bone that indicates periods of time when the dinosaurs weren't rapidly growing. These growth rings are evidence that dinosaurs stopped growing or grew more slowly during cooler periods. This pattern of periodic growth—ya know, rapid growth followed by no growth or slow growth and then rapid growth

again—is characteristic of animals that are not endotherms. Animals that maintain a constant body temperature year round, as true endotherms do, grow rapidly even when the environment becomes cool.

TRACK 17 TRANSCRIPT

Narrator

Summarize the points made in the lecture, being sure to explain how they challenge the specific points made in the reading passage.

TRACK 18 TRANSCRIPT



Narrator

Listen to a conversation between a student and a counselor at the university counseling center.

Student

Hi, thanks for seeing me on such short notice.

Counselor

No problem. How can I help?

Student

Well, I think I might've made a mistake coming to this school.

Counselor

What makes you say that?

Student

I'm a little overwhelmed by the size of this place. I come from a small town. There were only 75 of us in my high school graduating class. Everyone knew everyone; we all grew up together.

Counselor

So it's a bit of a culture shock for you, being one of 15,000 students on a big campus in an unfamiliar city.

Student

That's an understatement. I just can't get comfortable in class, or in the dorms, you know, socially.

Counselor

Hmm, well—let's start with your academics. Tell me about your classes.

Student

I'm taking mostly introductory courses, and some are taught in these huge lecture halls.

Counselor

And you're having trouble keeping pace with the material?

Student

No, in fact, I got an A on my first economics paper. It's just that, it's so impersonal. I'm not used to it.

Counselor

Are all your classes impersonal?

Student

Nah... It's just that, for example, in sociology yesterday, the professor asked a question. So I raised my hand ... several of us raised our hands ... and I kept my hand up because I did the reading and knew the answer. But the professor just answered his own question and continued with the lecture.

Counselor

Well, in a big room, it's possible he didn't notice you. Maybe he was trying to save time. In either case, I wouldn't take it personally.

Student

I suppose. But I just don't know how to, you know, distinguish myself.

Counselor

Why not stop by his office during office hours?

Student

That wouldn't seem right, y'know ... taking time from other students who need help.

Counselor

Don't say that. That's what office hours are for. There's no reason you couldn't pop in to say hi, to, uh, to make yourself known. If you're learning a lot in class, let the professor know. Wouldn't *you* appreciate positive feedback if *you* were a professor?

Student

You're right. That's a good idea.

Counselor

OK, uh, let's turn to your social life. How's it going in the dorms?

Appendix B

Student

I don't have much in common with my roommate or anyone else I've met so far. Everyone's into sports, and I'm more artsy, you know, into music. I play the cello.

Counselor

Ahhh. Have you been playing long?

Student

Since age 10. It's a big part of my life. At home, I was the youngest member of our community orchestra.

Counselor

You're not going to *believe* this! There's a string quartet on campus—all students. And it so happens the cellist graduated last year. They've been searching high and low for a replacement, someone with experience. Would you be interested in auditioning?

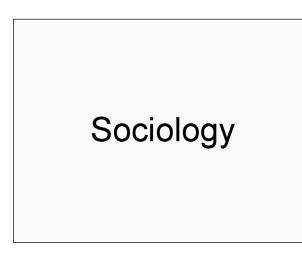
Student

Absolutely! I wanted to get my academic work settled before pursuing my music here, but I think this would be a good thing for me. I guess if I really want to fit in here, I should find people who love music as much as I do. Thank you!

Counselor

My pleasure.

TRACK 19 TRANSCRIPT



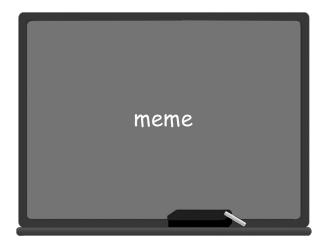
Narrator

Listen to part of a lecture in a sociology class.



Have you ever heard the one about alligators living in New York sewers? The story goes like this: a family went on vacation in Florida, and bought a couple of baby alligators as presents for their children, then returned from vacation to New York, bringing the alligators home with them as pets. But the alligators would escape and find their way into the New York sewer system where they started reproducing, grew to huge sizes and now strike fear into sewer workers. Have you heard this story? Well, it isn't true and it never happened, but despite that, the story's been around since the 1930s.

Or how about the song "Twinkle, twinkle, little star"? You know "Twinkle, twinkle, little star, how I wonder what you are . . ." Well, we've all heard this song. Where am I going with this? Well, both the song and the story are examples of memes, and that's what we'll talk about, the theory of memes.

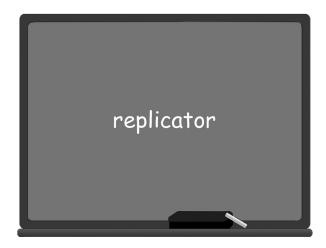


A meme is defined as a piece of information copied from person to person. By this definition, most of what you know ... ideas, skills, stories, songs ... are memes. All the words you know, all the scientific theories you've learned, the rules your parents taught you to observe ... all are memes that have been passed on from person to person.



So what?... you may say. Passing on ideas from one person to another is nothing new... Well, the whole point of defining this familiar process as transmission of memes is so that we can explore its analogy with the transmission of *genes*.

As you know, all living organisms pass on biological information through the genes. What's a gene? A gene is a piece of biological information that gets copied, or replicated, and the copy, or replica, is passed on to the new generation. So genes are defined as replicators . . .



Genes are replicators that pass on information about properties and characteristics of organisms. By analogy, *memes* also get replicated and in the process pass on cultural information from person to person, generation to generation. So memes are also replicators. To be a successful replicator, there are three key characteristics: longevity, fecundity, and fidelity. Let's take a closer look . . .



First, longevity. A replicator must exist long enough to be able to get copied and transfer its information. Clearly, the longer a replicator survives, the better its chances of getting its message copied and passed on. So longevity is a key characteristic of a replicator. If you take the alligator story, it can exist for a long time in individual memory—let's say my memory. I can tell you the story now, or ten years from now. The same with the "Twinkle, twinkle" song. So these memes have longevity, because they're memorable, for one reason or another.



Next, fecundity. Fecundity is the ability to reproduce in large numbers. For example, the common housefly reproduces by laying several thousand eggs. So each fly gene gets copied thousands of times. Memes? Well, they can be reproduced in large numbers as well. How many times have you sung the "Twinkle, twinkle" song to someone? Each time you replicated the song—and maybe passed it along to someone who didn't know it yet, a small child maybe.



And finally, fidelity. Fidelity means accuracy of the copying process. We know fidelity is an essential principle of genetic transmission. If a copy of a gene is a bit different from the original, that's called a *genetic* mutation, and mutations are usually bad news. An organism often cannot survive with a mutated gene—and so a gene usually cannot be passed on unless it's an exact copy. For *memes*, however, fidelity is not always so important. For example, if you tell someone the alligator story I told you today, it probably won't be word for word exactly as I said it. Still, it will be basically the same story, and the person who hears the story will be able to pass it along. Other memes are replicated with higher fidelity, though—like the "Twinkle, twinkle" song? It had the exact same words twenty years ago as it does now. Well, that's because we see songs as something that has to be performed accurately each time. If you change a word, the others will usually bring you in line. They'll say, "That's not how you sing it," right?

So, you can see how looking at pieces of cultural information as replicators, as memes, and analyzing them in terms of longevity, fecundity, and fidelity, we can gain some insight about how they spread, persist, or change.

TRACK 20 TRANSCRIPT

Narrator

Why does the professor say this:

Professor

If you change a word, the others will usually bring you in line. They'll say, "That's not how you sing it," right?

TRACK 21 TRANSCRIPT

Note: The actual lecture contains color images. The colors from one image are discussed by the professor. You do not need to see the colors to understand the lecture or to answer the questions.



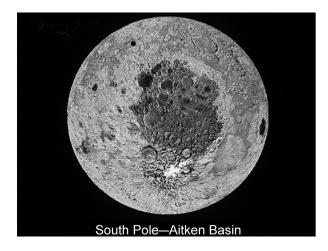
Narrator

Listen to part of a lecture in an astronomy class.



Professor

Last week, we covered some arguments *against* going back to the Moon. But there are compelling reasons *in favor of* another Moon landing, too, um, not the least of which is trying to pinpoint the Moon's age. We could do this, in theory, by studying an enormous impact crater known as the South Pole–Aitken Basin. Ah, it's located in the Moon's south polar region. But, since it's on the *far* side of the Moon, it can only be seen from space. Here's an image of ... we'll call it the SPA Basin.



This color-coded image of the SPA Basin—ahh, those aren't its actual colors, obviously—uh, this image is from the mid-nineties, from an American spacecraft called Clementine. Um, unlike earlier lunar missions, Clementine *didn't* orbit *only* around the Moon's *equator*. Its orbits enabled it to send back data to create *this* topographical map of . . . well, the gray-and-white area toward the bottom is the *South Pole*. The purples and blues in the middle correspond to low elevations—the SPA Basin itself. Uh, the oranges and reds around it are higher elevations. The Basin measures an amazing 2,500 kilometers in diameter, and its average depth is 12 kilometers. That makes it the biggest known crater in our *solar system*. And it may well be the *oldest*.

Y'know, planetary researchers *love* studying deep craters to learn about the impacts that created them, um, how they redistributed pieces of the planet's crust. And, in *this* case, we especially want to know if any of the mantle, the layer *beneath* the crust, was exposed by the impact. Not everyone agrees, but some experts are *convinced* that whatever created the SPA Basin *did* penetrate the Moon's mantle. And we need to find out, because much more than the crust, the *mantle* contains information about a planet's or moon's *total composition*. And that's *key* to understanding planet formation. Um, Diane?



Female student

So the only way to know the Basin's age is to study its rocks directly?

Professor

Well, from radio survey data, we know that the Basin contains lots of smaller craters. So it must be *really* old—about 4 billion years, give or take a few hundred million years. But that's not very precise. If we had *rock samples* to study, we'd know whether these small craters were formed by impacts during the final stages of *planetary formation*, or if they resulted from *later* meteor showers.

Female student

But if we know *around* how old the Basin is, I'm not sure that's reason enough to go to the Moon again.

Professor

Oh, but such crude estimates . . . mmm, we can do better than that! Besides, there's other things worth investigating. Like, is there water ice on the Moon? Clementine's data indicated that the wall of a south polar crater was more *reflective* than expected. So *some* experts think there's probably ice there. Also, data from a later mission indicate significant concentrations of *hydrogen*, and by inference, *water*, less than a meter underground at both poles.

Male student

If there's water, how'd it get there? Underground rivers?

Professor

We think meteors that crashed into the Moon, or tails of passing comets, may have introduced water molecules. Any water molecules that found their way to the floors of craters near the Moon's poles, that water would be perpetually frozen because the floors of those craters are always in shadow. Uh, furthermore, if the water ice was mixed in with rock and dust, it'd be protected from evaporation.

Female student

So, are you saying there might be primitive life on the Moon?

Professor

Uh, that's not my point at all! Um, OK, say there *is* water ice on the Moon. That would be of very *practical* value for a future Moon base for astronauts. Uh, water ice could be melted and purified for *drinking*. It could also be broken down into its component parts—oxygen and hydrogen. Oxygen could be used to breathe. And hydrogen could be turned into *fuel*, rocket fuel. So, water ice could enable the creation of a self-sustaining Moon base someday, a mining camp, perhaps, or, uh, a departure point for further space exploration.

Male student

But hauling tons of equipment to the Moon to make fuel and build a life-support system for a Moon base . . . wouldn't that be too expensive?

Professor

A *permanent* base, uh, may be a ways off, but we shouldn't have to wait for *that*. The dust at the bottom of the SPA Basin really *does* have a fascinating story to tell. What I wouldn't give for a few *samples* of it!

TRACK 22 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Female student

But if we know *around* how old the Basin is, I'm not sure that's reason enough to go to the Moon again.

Professor

Oh, but such crude estimates ...

Narrator

What does the professor imply when he says this:

Professor

Oh, but such crude estimates ...

TRACK 23 TRANSCRIPT



Narrator

Listen to a conversation between a student and a professor.

Student

Hi. I was wondering if could talk with you about the assignment in the Film Theory class?

Professor

Of course, Jill.

Student

It seems that pretty much everyone else in the class gets what they're supposed to be doing, but *I'm* not so sure.

Well, the class *is* for students who are really serious about film. You must have taken film courses before?

Student

Yeah, in high school, Film Appreciation.

Professor

Hmm, I wouldn't think that'd be enough. Did you concentrate mainly on form, or content?

Student

Oh, definitely content. We'd watch, say, Lord of the Flies, and then discuss it.

Professor

Oh, that approach ... treating film as literature, ignoring what makes it unique ...

Student

I liked it, though ...

Professor

Sure, but *that* kind of class . . . well, I'm not surprised you're feeling a little lost. Y'know, we have two introductory courses that are supposed to be taken before you get to *my* course—one in film art, techniques . . . technical stuff . . . and another in film history. So students in the class *you're* in should be pretty far along in film studies. In fact, usually the system blocks anyone trying to sign up for a class they shouldn't be taking, who hasn't taken the courses you're required to do *first*, as *prerequisites*.

Student

Well, I did have a problem with that, but I discussed it with one of your office staff and she gave me permission.

Professor

Of course. No matter how many times I tell them, they just keep on . . . Well, for your own good, I'd really suggest dropping back and starting at the usual place . . .

Student

Yes, but . . . I've already been in this class for four weeks! I'd hate to just drop it now, especially since I find it so different, so interesting.

Professor

I guess *so*—frankly, I can't believe you've lasted this long! These are pretty in-depth theories we've been discussing, and you've been doing OK so far, I guess. But, still, the program's been designed to progress through certain stages. Like any other professional training, we build on previous knowledge.

Student

Then maybe you could recommend some extra reading I can do, to catch up?

Professor

Well, are you intending to study film, as your main concentration?

Student

No. No, I—I'm just interested; I'm actually in marketing, but there seems to be a connection ...

Professor

Oh, well, in *that* case ... if you're taking the course just out of *interest* ... I mean, I'd still highly recommend signing up for the introductory courses at *some* point. But in the *meantime*, there's no harm, I guess, in trying to keep up with *this* class. The interest is clearly there. Uh, instead of any extra reading just now, though, you *could* view some of the *old* introductory lectures—we have 'em on video—*that'd* give you a better handle on the subject. It's still a pretty tall order, and we'll be moving right along, so you'll really need to stay on top of it.

Student

OK, I've been warned. Now, could I tell you about my idea for the assignment ...?

Literature

TRACK 24 TRANSCRIPT

Narrator

Listen to part of a lecture in a literature class.



Now, we can't really talk about fairy tales without first talking about *folk* tales . . . because there's a strong connection between these two genres, these two types of stories. In fact, many fairy tales started out as folktales.



So, what's a folk tale? How would you characterize them? Jeff?

Male student

Well, they're old stories, traditional stories. They were passed down orally within cultures, from generation to generation, so they changed a lot over time; I mean, every storyteller, or maybe every town, might have had a slightly different version of the same folktale.

Professor

That's right, there's local difference, and that's why we say folktales are communal.



By "communal," we mean they reflect the traits and the concerns of a particular community at a particular time. So essentially the same tale could be told in different communities, with certain aspects of the tale adapted to fit the specific community. Um, *not* the plot... the details of what *happens* in the story would remain constant; that was the thread that held the tale together. But all the other elements, like the location or characters, might be modified for each audience.

OK, so what about *fairy* tales? They also are found in most cultures, but how are they different from folktales? I guess the first question is what is a fairy tale? And don't anyone say, "a story with a fairy in it." Because we all know that very few fairy tales actually have those tiny magical creatures in them. But what else can we say about them? Mary?

Female student

Well, they seem to be less realistic than folktales. Like they have something improbable happening—a frog turning into a prince, say. Oh, that's another common element, royalty... a prince or princess. And fairy tales all seem to take place in a location that's nowhere and everywhere at the same time.

Professor

What's the line, ah—how do all those stories start? "Once upon a time, in a faraway land ..." In the case of *folk* tales, each storyteller would specify a particular location and time, though the time and location would differ for different storytellers. With *fairy* tales, however, the location is generally unspecified, no matter who the storyteller is ... that "land faraway ..." We'll come back to this point in a few minutes.

Male student

Um, I thought a fairy tale was just the written version of an oral folktale.



Professor

Well, not exactly, though that is how many fairy tales developed. For example, in the late eighteenth century, the Grimm brothers traveled throughout what's now Germany recording local *folk* tales. These were eventually published—as *fairy* tales—but not before undergoing a process of evolution.

Now, a number of things happen when an oral tale gets written down. First, the language changes, it becomes more formal, more standard—some might say less colorful. It's like the difference in your language depending on whether you're talking to someone or writing them a letter.

Second, when an orally transmitted story is written down, an authoritative version, with a recognized author is created. The communal aspect gets lost; the tale no longer belongs to the community; it belongs to the world, so to speak. Because of this, elements like place and time can no longer be tailored to suit a particular audience, so they become less identifiable, more generalizable to any audience.

On the other hand, descriptions of characters and settings can be developed more completely. In *folk* tales, characters might be identified by a name, but you wouldn't know anything more about them. But in *fairy* tales, people no longer have to remember plots—they're written down, right? So more energy can be put into other elements of the story, like character and setting. So you get more details about the characters, and about where the action takes place, what people's houses were like, whether they're small cabins or grand palaces ... And it's worth investing that energy because the story, now in book form, isn't in danger of being lost, those details won't be forgotten. If a *folk* tale isn't repeated by each generation, it may be lost for all time. But with a fairy tale, it's always there in a book, waiting to be discovered again and again.

Another interesting difference involves the change in audience—who the stories are meant for. Contrary to what many people believe today, folktales were originally intended for adults, not for children. So why is it that fairy tales seem targeted toward children nowadays?

TRACK 25 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Female student

And fairy tales all seem to take place in a location that's nowhere and everywhere at the same time.

Professor

What's the line, ah—how do all those stories start? "Once upon a time, in a faraway land"

Narrator

Why does the professor say this:

Professor

What's the line, ah—how do all those stories start? "Once upon a time, in a faraway land . . . "

TRACK 26 TRANSCRIPT

Narrator

Do you agree or disagree with the following statement? Why or why not? Use details and examples to explain your answer.

It is more important to study math or science than it is to study art or literature.

TRACK 27 TRANSCRIPT

Narrator

The university has announced a new policy regarding dining services. Read an article about it in the student newspaper. You have 50 seconds to read the article. Begin reading now.

TRACK 28 TRANSCRIPT



Narrator

Now listen to two students discussing the article.

Female student

Did you see that article?

Male student

Yeah—and it sounds like a great idea. It's really good for the students in that program.

Female student Don't they cook in class anyway?

Male student

Well, yeah, they do... but my cousin was in the program a few years ago, and she said that it's very different to cook for a lot of people in that kind of atmosphere than to cook for classmates.

Female student

Why is that?

Male student

Well, in class you can take your time. But, cooking for more people, there's more pressure—I mean, you're in a rush, people are waiting ... and it might be easy to make a mistake with all that stress ...

Female student Then they'll think you're a bad chef, right?

Male student

Absolutely!

Female student

So, OK, it's good practice. But what about the extra cost?

Male student

Well, look at it this way. You've eaten at some of the fancier restaurants in town, right?

Appendix B

Female student

Yeah, there are some great places to eat around here.

Male student

Well, these students . . . they'll be making fantastic meals. And it's gonna be cheaper than going out to one of those restaurants.

Female student

Much cheaper actually ...

Male student

So, you know, it'll be worth it. The meals will be as good as the ones in those expensive restaurants.

Narrator

The man expresses his opinion about the plan described in the article. Briefly summarize the plan. Then state his opinion about the plan and explain the reasons he gives for holding that opinion.

TRACK 29 TRANSCRIPT

Narrator

Read the passage about target marketing. You will have 45 seconds to read the passage. Begin reading now.

TRACK 30 TRANSCRIPT



Narrator

Now listen to part of a lecture on this topic in a marketing class.

Professor

Nowadays, something you notice more and more is television commercials that are made specifically for certain television programs. So, let's say a company wants to sell a telephone ... a cell phone. Now, during TV shows that young people watch—you know, shows with pop music or teen serials—they create a commercial that emphasizes how fun the phone is. You know, the

phone has bright colors, and they show kids having a good time with their friends. And, well, the company wants the kids watching TV at this time to want to buy this phone—this phone that's made especially for them.

But, the same company will make a different commercial to be shown during, say, a program about business or a business news show. Now, for this group of people, businesspeople, the company will have to show how efficient their phone is, how it can handle all business easily and maybe even save money. And here's the thing—it's basically the same phone; the company has just made two different commercials to appeal to different groups of people.

Narrator

Using the professor's examples, explain the advertising technique of target marketing.



TRACK 31 TRANSCRIPT

Narrator

Now listen to part of a lecture in a psychology class.

Professor

Why do we do the things we do? What drives us to participate in certain activities... to buy a certain car... or even to choose a certain career? In other words, what motivates us to do what we do?

Well, in studies of motivation, psychologists distinguish between two very different types. Our reasons for doing something, our motivations, can be *extrinsic*—in other words, based on some kind of *external* reward like praise or money ... or they can be *intrinsic*... meaning we engage in the activity because it pleases us *internally*. Both create strong forces that lead us to behave in certain ways; however, intrinsic motivation is generally considered to be more long-lasting than the other.

As I said, extrinsic motivation is ... *external*. It's the desire to behave in a certain way in order to obtain some kind of external reward. A child, for example, who regularly does small jobs around the house does them not because she enjoys taking out the garbage or doing the dishes but

Appendix B

because she knows if she does these things, she'll be given a small amount money for doing them. But how motivated would the child be to continue doing the work if her parents suddenly stopped giving her money for it?

With intrinsic, or internal, motivation we want to do something because we enjoy it, or get a sense of accomplishment from it. Most people who are internally motivated get pleasure from the activity... so they just feel good about doing it. For example, I go to the gym several times a week. I don't go because I'm training for a marathon or anything. I just enjoy it. I have more energy after I exercise and I know it's good for my health so it makes me feel good about myself. And that's what's kept me going there for the past five years.

Narrator

Using points and examples from the talk, explain the two types of motivation.

TRACK 32 TRANSCRIPT



Narrator

Now listen to part of a lecture on the topic you just read about.

Professor

Unfortunately, none of the arguments about what the Chaco great houses were used for is convincing.

First—sure, from the outside the great houses look like later Native American apartment buildings, but the *inside* of the great houses casts serious doubt on the idea that many people lived there. I'll explain. If hundreds of people were living in the great houses, then there would have to be many *fireplaces* where each family did its daily cooking. But there're very *few* fireplaces. In one of the largest great houses there were fireplaces for only around ten families. Yet there are enough *rooms* in the great house for more than a *hundred* families. So the primary function of the houses couldn't have been residential.

Second, the idea that the great houses were used to store grain maize is unsupported by evidence. It may *sound* plausible that large, empty rooms were used for storage, but excavations of the great houses have *not* uncovered many traces of maize *or* maize containers. If the great houses were used for storage, why isn't there more spilled maize on the floor? Why aren't there more remains of big containers?

Third, the idea that the great houses were ceremonial centers isn't well supported either. Ya know that mound at Pueblo Alto? It contains lots of other materials besides broken pots, stuff you wouldn't expect from ceremonies. For example, there're large quantities of building materials sand, stone, even construction tools. This suggests that the mound is a just a *trash heap* of construction material, stuff that was thrown away or not used up when the house was being built. The pots in the pile could be regular trash, too, left over from the meals of the construction workers. So the Pueblo Alto mound is *not* good evidence that the great houses were used for special ceremonies.

TRACK 33 TRANSCRIPT

Narrator

Summarize the points made in the lecture, being sure to explain how they cast doubt on the specific theories discussed in the reading passage.

TRACK 34 TRANSCRIPT



Narrator

Listen to a conversation between a student and an employee in the university's career services office.

Student

Hi. Do you have a minute?

Administrator

Sure. How can I help you?

Student

I have a couple of questions about the career fair next week.

Administrator

OK, shoot.

Student

Um, well, are seniors the only ones who can go? I mean, you know, they're finishing school this year and getting their degrees and everything ... and, well, it seems like businesses would want to talk to them and not first-year students like me...

Administrator

No, no. The career fair is open to all our students and we encourage anyone who's interested to go check it out.

Student

Well, that's good to know.

Administrator

You've seen the flyers and the posters around campus, I assume.

Student

Sure! Can't miss 'em. I mean, they all say where and when the fair is ... just not who should attend.

Administrator

Actually, they do. But it's in the small print. We should probably make that part easier to read, shouldn't we? I'll make a note of that right now. So, do you have any other questions?

Student

Yes, actually I do now. Um, since I'd only be going to familiarize myself with the process—you know, "check it out"—I was wondering if there's anything you'd recommend that I do to prepare.

Administrator

That's actually a very good question. As you know, the career fair is generally an opportunity for local businesses to recruit new employees and for soon-to-be graduates to have interviews with several companies they might be interested in working for. Now, in your case, even though you wouldn't be looking for employment right now, it still wouldn't hurt for you to prepare much like you would if you were looking for a job.

Student

You mean like get my resume together and wear a suit?

Administrator

That's a given. I was thinking more along the lines of doing some research. The flyers and posters list all the businesses that are sending representatives to the career fair. Um, what's your major, or do you have one yet?

Student

Well, I haven't declared a major yet but I'm strongly considering accounting. See, that's part of the reason I want to go to the fair ... to help me decide if that's what I really want to study ...

Administrator

That's very wise. Well, I suggest that you get on the computer and learn more about the accounting companies, in particular, that will be attending. You can learn a lot about companies from their Internet Web sites. Then prepare a list of questions.

Student

Questions . . . hmm. So in a way I'll be interviewing them?

Administrator

That's one way of looking at it. Think about it for a second. What do you want to know about working for an accounting firm?

Student

Well, there's the job itself ... and salary, of course ... and, um, working conditions ... I mean, would I have an office or would I work in a big room with a zillion other employees? And ... um ... and maybe about opportunities for advancement ...

Administrator

See? Those are all important things to know. After you do some research you'll be able to tailor your questions to the particular company you're talking to.

Student

Wow, I'm glad I came by here! So, it looks like I've got some work to do.

Administrator

And if you plan on attending future career fairs, I recommend you sign up for one of our interview workshops.

Student

I'll do that.

TRACK 35 TRANSCRIPT

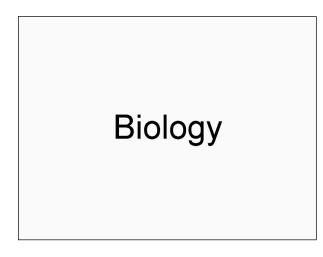
Narrator

Why does the student say this:

Student

So, it looks like I've got some work to do.

TRACK 36 TRANSCRIPT



Narrator

Listen to part of a lecture in a biology class.



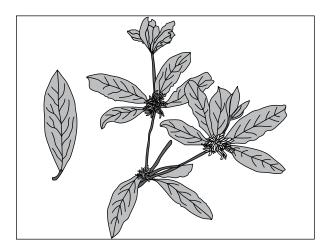
Professor

OK, I have an interesting plant species to discuss with you today. Uh, it's a species of a *very* rare tree that grows in Australia—*Eidothea hardeniana*—but it's better known as the Nightcap Oak.



Now, it was discovered only very recently, just a few years ago. Uh, it remained hidden for so long because it's so rare, there're only about, oh, two hundred of 'em in existence. They grow in a rain forest, in a mountain range in the north part of New South Wales, which is, uh, a state in Australia. So just two hundred individual trees in all.

Now, another interesting thing about the Nightcap Oak is that it is ... it represents ... a-a very old ... *type*, a kind of a tree that grew ... a hundred million years ago. Uh, we found fossils that old that bear a remarkable resemblance to the tree. So, it's a *primitive* tree, a living fossil, you might say. It's a relic from earlier times, and it has survived all these years without much change. And ... it-it's probably a kind of tree from which other trees that grow in Australia today evolved. Just-just to give you an idea of what we're talking about, here's a picture of the leaves of the tree and its flowers.



I dunno how well you can see the flowers; they're those little clusters sitting at the base of the leaves.

OK, what have we tried to find out about the tree since we've discovered it? Hmm, well, how ... why is ... is it so rare is one of the first questions. Uh, how is it, uh, how does it reproduce, is another question. Uh, maybe those two questions are actually related? Jim.



Male student

Hmm, I dunno, but I can imagine that ... for instance ... uh, seed dispersal might be a factor—I mean, if the, uh, y'know if the seeds cannot really disperse in a wide area then you know the tree may not, uh, *colonize* new areas, it-it can't spread from the area where it's growing.

Professor

Right, that's-that's actually a very good answer. Uh, of course, you might think there might not be many areas where the tree could spread *into*, uh, because, uh, well it's-it's very specialized in terms of the habitat. But that's not really the case here, uh, the-the suitable habitat-habitat that is the actual rain forest is much larger than-than the few hectares where the Nightcap Oak grows. Now, this tree is a flowering tree as I showed you, uh, uh, it-it produces a fruit, much like a plum, on the inside there's a seed with a hard shell. Uh, it-it appears that the shell has to crack open or break down somewhat to allow the seed to soak up water. If the Nightcap Oak remains, if their seeds remain locked inside their shell, they will not germinate. Now actually the seeds, uh, they don't retain the power to germinate for very long, maybe two years, so there's actually quite a short window of opportunity for the seed to germinate. So the shell somehow has to be broken down before this, uh, germination ability expires. And-and then there's a kind of rat that likes to feed on the seeds as well. So, given all these limitations, not many seeds that the tree produces will actually germinate. So this is a possible explanation for why the tree does not spread. It doesn't necessarily explain how it *became* so rare but it explains why it doesn't increase.

OK, so it seems to be the case that this species, uh this Nightcap Oak, is not very good at spreading. However, it seems, though we can't be sure, that it's very good at *persisting* as a population. Uh, uh, we, uh, there-there're some indications to suggest that the population of the Nightcap Oak has not declined over the last, uh, y'know, many hundreds of years. So, it's stayed quite stable; it-it's not a remnant of some huge population that has dwindled in the last few hundred years for some reason. It's not *necessarily* a species in retreat. OK, so it cannot spread very well but it's good at maintaining itself. It's rare but it's not disappearing. OK, the next thing we might wanna ask about a plant like that is what chances does it have to survive into the future. Let's look at that.

TRACK 37 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

OK, what have we tried to find out about the tree since we've discovered it? Hmm, well, how ... why is ... is it so rare is one of the first questions. Uh, how is it, uh, how does it reproduce, is another question. Uh, maybe those two questions are actually related?

Narrator

Why does the professor say this:

Professor

Maybe those two questions are actually related?

TRACK 38 TRANSCRIPT



Narrator

Listen to a conversation between a student and a professor.

Student

Professor Martin?

Professor

Hi, Lisa-what can I do for you?

Student

Well, I've been thinking about, you know, what you were saying in class last week? About how we shouldn't wait until the last minute to find an idea and get started working on our term paper?

Professor

Good, good. And have you come up with anything?

Student

Well, yeah, sort of—see, I've never had a linguistics class before, so I was sort of ... I mean, I was looking over the course description, and a lot of the stuff you've described there, I just don't know what it's talking about, you know? Or what it means. But there was one thing that really did jump out at me...

Professor

Yes . . .?

Student

The section on dialects? 'Cause, like, that's the kind of thing that's always sort of intrigued me, you know?

Professor

Well, that's certainly an interesting topic, but you may not realize, I mean, the scope ...

Student

Well, especially now, 'cause I've got, like, *one* roommate who's from the South, and *another* one from New York, and we all talk, like, *totally* different, you know?

Professor

Yes, I understand, but . . .

Student

But then I was noticing, like, we don't really get into this till the end of the semester, you know? So I...

Professor

So you want some pointers where to go for information on the subject? Well, you could always *start* by reading the chapter in the book on sociolinguistics; that would give you a basic understanding of the key issues involved here.

Student

Yeah, that's what / thought! So I started reading the chapter, you know—about how everyone speaks some dialect of their language? And I'm wondering, like, well, how do we even manage to understand each other at all?

Professor

Ah! Yes, an interesting question. You see ...

Student

So then I read the part about "dialect accommodation"—you know, the idea that people tend to adapt their speaking to make it closer to the speech of whoever they're talking to. And I'm thinking, yeah, *I* do that when I talk with my roommates! And without even thinking about it or anything, you know?

Professor

OK, all right—"dialect accommodation" is a more manageable sort of topic ...

Student

So I was thinking, like, I wonder just how much other people do the same thing? I mean, there's students here from all over the place; does everyone change the way they talk to some degree, depending on who they're talking to?

Professor

You'd be surprised!

Student

So, anyway, my question is, do you think it'd be OK if I did a project like that for my term paper? You know, find students from different parts of the country, record them talking to each other in different combinations, report on how they accommodate their speech or not, that kind of thing?

Professor

Tell you what, Lisa: Write me up a short proposal for this project—how you're going to carry out the experiment and everything, a-a design plan—and I think this'll work out just fine!

TRACK 39 TRANSCRIPT

Narrator

Listen again to part of the conversation. Then answer the question.

Student

The section on dialects? 'Cause, like, that's the kind of thing that's always sort of intrigued me, you know?

Professor

Well, that's certainly an interesting topic, but you may not realize, I mean, the scope ...

Narrator

What can be inferred about the professor when he says this:

Professor

Well, that's certainly an interesting topic, but you may not realize, I mean, the scope ...

TRACK 40 TRANSCRIPT



Narrator

Listen to part of a lecture in a creative writing class.



Professor

All right everybody. The topic for today is, well . . . we're gonna take a look at how to start creating the characters for the stories you're writing. One way of doing that is to come up with what's called a character sketch. I don't mean a sketch like a drawing. I guess that's obvious. It's, um . . . a sketch is a way of getting started on defining your characters' personalities.

To begin, how do we create fictional characters? We don't just pull them from thin air, do we? I mean, we don't create them out of nothing. We base them—consciously or unconsciously—we base them on real people. Or, we, um ... blend several people's traits ... their attributes ... into one character.

But when people think fiction, they may assume the characters come from the author's imagination. But the writer's imagination is influenced by ... by real people. Could be anyone, so pay attention to the people you meet ... someone in class, at the gym, that guy who's always sitting in the corner at the coffeehouse ... uh, your cousin who's always getting into dangerous situations. We're pulling from reality ... gathering bits and pieces of real people. You use these people ... and the bits of behavior or characteristics as a starting point as you begin to sketch out your characters.

Here's what you should think about doing first. When you begin to formulate a story, make a list of interesting people you know or have observed. Consider *why* they're unique ... or annoying. Then make notes about their unusual or dominant attributes. As you create fictional characters, you'll almost always combine characteristics from several different people on your list to form the identity and personality of just one character.

Keeping this kind of character sketch can help you solidify your character's personality ... so that it remains consistent throughout your story. You need to define your characters ... know their personalities so that you can have them acting in ways that're predictable ... consistent with their personalities. Get to know them like a friend. You know your friends well enough to know how they'll act in certain situations, right?

Say you have three friends, their car runs out of gas on the highway. John gets upset, Mary remains calm, Teresa takes charge of handling the situation. And, let's say . . . both John and

Mary defer to her leadership. They call you to explain what happened. And when John tells you he got mad, you're not surprised because he always gets frustrated when things go wrong. Then he tells you how Teresa took charge, calmed him down, assigned tasks for each person, and got them on their way. Again you're not surprised. It's exactly what you'd expect. Well, you need to know your characters like you know your friends . . . if you know a lot about a person's character, it's easy to predict how they'll behave. So if your characters' personalities are well defined, it'll be easy for you as the writer to portray them realistically . . . believably in any given situation.

While writing character sketches, *do* think about *details*. Ask yourself questions, even if you don't use the details in your story . . . uh, what does each character like to eat, what setting does each prefer . . . the mountains? The city? What about educational background? Their reactions to success . . . or defeat? Write it all down.

But here I need to warn you about a possible pitfall. Don't make your character into a stereotype. Remember, the reader needs to know how your character is different from other people who might fall in the same category. Maybe your character loves the mountains and has lived in a remote area for years. To make sure he's not a stereotype, ask yourself how he sees life differently from other people who live in that kind of setting. Be careful not to make him into the cliché of the rugged mountain dweller.

OK. Now I'll throw out a little terminology ... it's easy stuff. *Major* characters are sometimes called *round* characters. *Minor* characters are sometimes called ... well, just the opposite. *Flat*. A round character is fully developed. A flat character isn't—character development is fairly limited. The flat character tends to serve mainly as a, um, a motivating factor. For instance, you introduce a flat character who has experienced some sort of defeat ... and then your round ... your main character, who loves success and loves to show off, comes and boasts about succeeding ... and jokes about the flat character's defeat in front of others ... humiliates the other guy. The flat character is introduced solely for the purpose of allowing the round character to show off.

TRACK 41 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

One way of doing that is to come up with what's called a character sketch. I don't mean a sketch like a drawing. I guess that's obvious. It's, um . . . a sketch is a way of getting started on defining your characters' personalities.

Narrator

Why does the professor say this:

Professor

I don't mean a sketch like a drawing.

TRACK 42 TRANSCRIPT



Narrator

Listen to part of a lecture in an earth science class.



Professor

We're really just now beginning to understand how *quickly drastic* climate change can take place. We can see past occurrences of climate change that took place over just a few hundred years. Take, uh, the Sahara desert . . . in Northern Africa.



The Sahara was really different 6,000 years ago. I mean, you wouldn't call it a tropical paradise or anything—ah, or maybe you *would* if you think about how today in some parts of the Sahara it only rains about once a century. Um, but basically, you had greenery and you had water. And what *I* find *particularly* interesting, amazing, really what *really* indicates how *un*-desert-like the Sahara was thousands of years ago, was something painted on a rock: prehistoric art—*hippopotamuses*. As you know, hippos need a lot of water, and hence ... Hence what?



Female student

They need to live near a large source of water year-round.

Professor

That's right.

Male student

But how's that proof that the Sahara used to be a lot wetter? I mean, the people who painted those hippos . . . well, couldn't they have seen them on their travels?

Professor

OK, in principle they could, Carl. But the rock paintings aren't the only evidence. Beneath the Sahara are huge *aquifers*, basically a sea of fresh water that's perhaps a million years old, filtered through rock layers. And, ah, and-and then there's fossilized pollen from low shrubs and grasses that once

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grew in the Sahara. In fact these *plants* still grow, ah, but hundreds of miles away in more vegetated areas. Anyway, it's this fossilized pollen, along with the aquifers, *and* the rock paintings—these three things are all evidence that the Sahara was once much greener than it is today, that there were hippos and probably elephants, and giraffes, and so on.

Male student

So, what happened?

Professor

How did it happen? Well now we're so used to hearing about how human activities are affecting the climate, right; but that takes the focus away from the natural variations in the Earth's climate. Like the Ice Age, right? The planet was practically covered in ice just a few thousand years ago. Now, as far as the Sahara goes, there's some recent literature that points to the migration of the monsoon in that area.

Male/Female students

Huh?

Professor

What do I mean? OK. A monsoon is a seasonal wind that can bring in a large amount of rainfall. Now, if the monsoon *migrates*, well *that* means the rains move to another area, right?

So what *caused* the monsoon to migrate? Well, the answer is the dynamics of Earth's motions—the same thing that caused the Ice Age, by the way. The Earth's *not always* the same distance from the Sun. *And* it's *not always tilting* toward the Sun at the same angle. There're slight variations in these two parameters. They're gradual variations, but their *effects* can be pretty abrupt, and *can* cause the climate to change in *just* a few hundred years.

Female student

That's abrupt?

Professor

Well, yeah, considering that other climate shifts take *thousands* of years, this one's pretty abrupt. So these changes in the planet's motions, they caused the climate to change; but it was also *compounded*. What the Sahara experienced was a sort of *runaway drying* effect.

As I said, the monsoon migrated south—so there was less rain in the Sahara. The *land* started to get *drier*—which in turn caused a huge *decrease* in the amount of *vegetation*, because vegetation doesn't grow as well in dry soil, right? And then, less vegetation means the soil can't hold water as well—the soil *loses* its ability to *retain* water when it *does* rain. So then you have less moisture to help clouds form ... nothing to evaporate for cloud formation. And then the cycle continues—less rain, drier soil, less vegetation, fewer clouds, less rain, etcetera, etcetera.

Male student

But what about the people who made the rock paintings?

Professor

Good question. No one really knows. But there might be some connection to ancient Egypt. At about the same time that the Sahara was becoming a desert, mmm ... 5,000 years ago, Egypt *really* began to flourish out in the Nile River Valley. And that's not that far away. So it's only *logical* to hypothesize that a lot of these people migrated to the Nile Valley when they realized that this was

Appendix B

more than a temporary drought. And some people take this a step further—and that's OK, that's science—and they hypothesize that this migration actually provided an important impetus in the development of ancient Egypt. Well, we'll stay tuned on that.

TRACK 43 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

I mean, you wouldn't call it a tropical paradise or anything—ah, or maybe you *would* if you think about how today in some parts of the Sahara it only rains about once a century.

Narrator

Why does the professor say this:

Professor

Or maybe you *would* if you think about how today in some parts of the Sahara it only rains about once a century.

TRACK 44 TRANSCRIPT

Narrator

Some people have one career throughout their lives. Other people do different kinds of work at different points in their lives. Which do you think is better? Explain why.

TRACK 45 TRANSCRIPT

Narrator

Now read a letter that a student has written to the university newspaper. You have 50 seconds to read the letter. Begin reading now.

TRACK 46 TRANSCRIPT



Narrator

Now listen to two students discussing the letter.

Female student

I totally disagree with Tim's proposal.

Male student

Why?

Female student

Well, look. Tim's my friend, but he's not your typical student. He stays up late partying every night—weeknights too.

Male student

If he parties every night, no wonder he can't pay attention.

Female student

Yes, and most students aren't like that. They come to class prepared and rested, and they can concentrate.

Male student

So you're saying the problem is really Tim.

Female student

Yes. He was in one of my classes last year and whenever I looked at him, he was actually sleeping.

Male student

I guess if he's sleeping, he can't really know what's happening, what other people in class are doing.

Female student

Right. And you want to know what does happen in that last hour of seminar? In a lot of seminars that I've been in, that's when things get interesting.

Male student

Really?

Female student

Yes. That's usually when students get really involved in the discussion and start exchanging important ideas. And if the history department actually did what Tim suggests, well, if they did that, what would happen is you'd lose what might be the most worthwhile part of a seminar.

Narrator

The woman expresses her opinion about the proposal described in the letter. Briefly summarize the proposal. Then state her opinion about the proposal and explain the reasons she gives for holding that opinion.

TRACK 47 TRANSCRIPT

Narrator

You have 45 seconds to read a passage from a psychology textbook. Begin reading now.

TRACK 48 TRANSCRIPT



Narrator

Now listen to part of a lecture on this topic in a psychology class.

Professor

OK, the first kind of memory, we're all very familiar with this, right? You probably remember what you had for dinner last night. You have a conscious memory of last night's dinner, so, um, if I ask you "What did you eat last night?" you could tell me.

But these other kind of memories—implicit memories. They work differently.

Let's take an example from the world of advertising. When you're driving along a highway, you see plenty of billboards—you know, roadside advertisements. You certainly don't remember them all. But they still affect you. Marketing researchers have shown . . . well, to be specific, let's say there's a billboard on the highway advertising a car called "the Panther." The ad shows a big picture of the car. And above the car in huge letters is the name of the car: "Panther." A lot of people drive by the

billboard. But . . . ask those drivers later if they saw any advertisements for cars, and, well, they'll think about it, and a lot of them will say no. They honestly don't remember seeing any. They have no conscious memory of the "Panther" billboard. So you ask these same people a different question: You ask, um, OK, ah, you ask them to name an animal starting with the letter P. What do you think they will answer? Do they say "pig"? Pig is the most common animal that starts with the letter P. But they don't say "pig." They say "panther." The billboard had an effect, even though the drivers don't remember ever seeing it.

Narrator

Using the example of the car advertisement, explain what is meant by implicit memory.



TRACK 49 TRANSCRIPT

Narrator

Now listen to part of a talk in an education class.

Professor

One of the hardest parts of teaching is keeping your students' attention. Now, the key to doing this is understanding the *concept* of attention.

Basically, there are two types of attention. The first type is active. Active attention is voluntary—it's when you intentionally make yourself focus on something. And since it requires effort, it's hard to keep up for a long time. OK, so, um, let's say you're teaching a . . . a biology class. And today's topic is frogs. All right, you're standing at the front of the room and lecturing: "A frog is a type of animal known as an amphibian . . ." Well, this isn't necessarily going to keep the students' interest. But most of them will force themselves to pay active attention to your lecture . . . but it's only a matter of time before they get distracted.

Now, the other type of attention is *passive* attention—when it's involuntary. Passive attention requires no effort, because it happens naturally. If something's really interesting, students don't have to *force* themselves to pay attention to it—they do it without even thinking about it. So back to our biology lecture. You start talking about frogs, and then you pull a live frog out of your briefcase. You're describing it while you hold it up... show the students how long its legs are and

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how they're used for jumping, for example. Then maybe you even let the frog jump around a bit on the desk or the floor. In this case, by doing something unexpected . . . something more engaging, you can tap into their passive attention. And it can last much longer than active attention; as long as the frog's still there, your students will be interested.

Narrator

Using points and examples from the talk, explain the difference between active and passive attention.



TRACK 50 TRANSCRIPT

Narrator

Now listen to part of a lecture on the topic you just read about.

Professor

The communal online encyclopedia will probably never be perfect, but that's a small price to pay for what it *does* offer. The criticisms in the reading are largely the result of prejudice against and ignorance about how far online encyclopedias have come.

First, errors: It's hardly a fair criticism that encyclopedias online have errors. Traditional encyclopedias have never been *close* to perfectly accurate. If you're looking for a *really* comprehensive reference work without *any* mistakes, you're not going to find it—on- *or* off-line. The real point is that it's easy for errors in factual material to be corrected in an online encyclopedia—but with the printed and bound encyclopedia, the errors remain for decades.

Second, hacking: online encyclopedias have recognized the importance of protecting their articles from malicious hackers. One strategy they started using is to put the crucial facts in the articles that nobody disputes in a *"read-only"* format, which is a format that no one can make changes to. That way you're making sure that the crucial facts in the articles are reliable. Another strategy that's being used is to have special editors whose job is to monitor all changes made to the articles and eliminate those changes that are clearly malicious.

Third, what's worth knowing about: The problem for traditional encyclopedias is that they have limited space, so they have to decide what's important and what's not. And in practice, the judgments of the group of academics that make these decisions don't reflect the great range of interests that people really have. But space is definitely *not* an issue for online encyclopedias. The academic articles are still represented in online encyclopedias, but there can be a great variety of articles and topics that accurately reflect the great diversity of users' interests. The diversity of views and topics that online encyclopedias offer is one of their strongest advantages.

TRACK 51 TRANSCRIPT

Narrator

Summarize the points made in the lecture, being sure to explain how they oppose the specific points made in the reading passage.

TRACK 52 TRANSCRIPT



Narrator

Listen to a conversation between a student and an employee in the campus computer center.

Computer center employee

Hi, what can I help you with today?

Student

Hi, um, I wanted to—you see, the thing is, I don't know much about computers, so I was wondering if, uh, if there's a class or something ... so I can learn how to use computers, like to write papers for my classes.

Computer center employee

Oh, I see ... um, we don't really offer a course for beginners, since most students already have computing experience. But all the computers in our labs have a general tutorial installed on them. You could just go there and run it.

Student

And the tutorial explains everything? I mean, it might sound strange but I've never used a computer.

Computer center employee

Well, all the computer labs on campus are staffed with student assistants, and I'm sure that any one of them would be more than willing to get you started.

Student

Yeah? That sounds good. But is it expensive?

Computer center employee

No, in fact, it won't cost anything; it's one of the services of the computer center.

Student

That's great. How do they—I mean, how do I get in touch with the student assistants? Should I just go to a computer lab and ask whoever's there?

Computer center employee

Sure, you could do that, or I can let you have a list of names of the students who are assistants in the labs. You might know one of them.

Student

Actually, I think I'd prefer someone I don't know, um, so I can ask dumb questions . . . Is there anyone you'd recommend?

Computer center employee

All of our student assistants are really knowledgeable about computers. I mean, they have to be, in order to work in the computer labs ... It doesn't mean that they're necessarily good at teaching *beginners*... but you probably won't be a beginner for very long.

Student

Hope not.

Computer center employee

And I just thought of something else. The bookstore has a lot of books on computers—there might be one for people like you, I mean, people who don't have a lot of experience with computers. I actually bought one for my father so he could learn how to use e-mail, basic word processing, that sort of thing—and it worked pretty well for him.

Student

OK, I'll try that, too. And if the bookstore doesn't have it, they can just order it for me?

Computer center employee

Right. Now is there anything else I can help you with today?

Student

Uh, just the list of names and the times they're working. I'd like to get going on this as soon as possible.

Computer center employee

Right. Good luck.

TRACK 53 TRANSCRIPT



Narrator

Listen to part of a lecture in an economics class.



Professor

When attempting to understand international trade, some things seem so obvious that they can hardly be controverted, and other points that are important are invisible unless you've thought about the subject carefully.

Consider the following: if there's an increase in imports, let's say, um, let's say imports of furniture, and the domestic producers of furniture find this new competition very difficult and are cutting production and employment, then it seems obvious and easy to understand and many people conclude from this that increasing imports will cause generally greater unemployment at home.

What is not so obvious is that how much we import and how much we export... those are interdependent and you can't understand the one without the other. But the exports that are generated are not easily discernable, so most people don't see them. They see only the imports of furniture rising and employment in domestic furniture production falling.

So as a result, many people argue that we ought to protect jobs by limiting imports—either by tariffs, quotas, regulations, or whatever—without realizing that this also has the effect of reducing potential future exports to the rest of the world, things that we can produce very, very ... cost effectively and therefore profitably.

The fundamental proposition in international economics is that it makes sense to import those things that we ... that can be produced more economically abroad than at home and export things to the rest of the world that we can produce more cost effectively than produced elsewhere in the world. Therefore, if we limit imports, we put ourselves in danger of not being able to export.

The details of this relationship will take much longer to explain than I can fully go into now but the point of the matter is that gains—the benefits of gains—from international trade result from being able to get things cheaper by buying them abroad than you can make them at home. Now there're some things that we can make at home that are ... that we can do more economically than they can do abroad.

In the case of the United States, typically high-technology products, uh ... are things that Americans have innovated in and started firms doing that sort of thing at which they do very well. Whereas goods that produce ... that use a lot of relatively low skill labor, like furniture production, cotton production, sugar production ... those are things that are frequently made more inexpensively in places where wage rates are low and the cost of using capital is very high.

However, in Florida they produce a lot of sugar, but the costs are so high, if we didn't have extensive restrictions on imports of sugar, the output of sugar would decline dramatically. But the sugar industry in the U.S. doesn't produce high-paying jobs, it uses resources in ineffective ways and it blocks the import of more cost-effectively produced sugar. It, it's a very bad bargain for the people in the United States to want to protect low-paying jobs thereby halting the growth of world trading and international ... uh, more international specialization. It would be better to remove restrictions on imports and allow other countries in the world ... countries that can produce them more cheaply ... let them specialize in producing those products.

Now, I agree that people who are directly affected by imports, what they focus on ... is, is that their prospects ... their job prospects are being reduced, and their economic circumstances are getting worse. And that's a relevant problem and an important problem; what isn't so obvious is ... that by retraining and relocating people to places and industries where jobs are expanding rather than contracting, we can make the whole economy function more effectively and productively than by trying to block imports.

Um, what is interesting to note is that, even if there were no international trade issues, like imports, any changes that occur in a country's economy—any new technology, change in preferences, change in regulations or whatever—will lead to "adjustments" that lead some sectors of the economy to decline and others to expand.

And that's what we have to figure out, and that's a hard problem to deal with in detail, is how to facilitate people adjusting from sectors where their job prospects are not so good, and in particular where real wages aren't so high, to acquire skills that will permit them to move into

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higher-paying jobs in other parts of the economy either by retraining or relocating. Helping pay for the relocation of these people would be very helpful, but trying to block the changes is really counterproductive. It makes people in our country poorer, and it makes people elsewhere in the world poorer as well.

TRACK 54 TRANSCRIPT



Narrator

Listen to a conversation between a student and a professor.

Student

Hi, uh ... Professor Anderson ... wondering if you had a couple minutes ...

Professor

Of course, Paula . . .

Student

Thanks . . . uh, you sent me a letter recently about doing, uh, an honors project—inviting me to come in and talk about . . .

Professor

Right, right, well, as your academic advisor, it's my job to look out for your academic interests, and based on your grades, and some very positive feedback I've heard from your professors, I wanted to formally invite you to consider doing an honors project...

Student

Yeah ... well, thanks ... uh, actually I kinda wanted to ask you ... quite frankly—like how much work it would probably be? I mean, I'm gonna be spending a lot of time applying to law schools next semester and ...

Professor

Well, let me tell you how it works ... and then you can decide from there.

Student

OK.

Professor

Basically, the honors project is an opportunity to do ... some in-depth work on a topic you're interested in before graduating college. You register for the class, but it doesn't work the same way a regular class does—you find a professor who you want to work with—you ask the professor—a sort of mentor who's knowledgeable on the topic you're interested in—the topic you're gonna write your honors thesis on ...

Student

Writing a thesis? That's part of the project? Ah, like how many pages are we talking?

Professor

Usually about 50... but it's a valuable experience, writing a thesis paper.

Student

So, basically, after I register for the class, I need to ask a professor who'll sorta help me ...

Professor

Actually, you need to do that—a professor needs to agree to oversee your honors project—before you register.

Student

Oh, OK . . .

Professor

I mean, I know it sounds kinda daunting, but that's what the professor's there for—to help guide you through the different steps of the process and ... uh ... most students are very pleased with the experience ... they're able to demonstrate advanced research skills, which is important; especially in your case, writing an honors thesis would be a big plus ...

Student

You think so?

Professor

Absolutely. Especially considering your plans, since you're applying to law schools. It shows initiative, that you've done well as an undergraduate—to be allowed to do the honors project ... that you're able to work independently and, of course, you would graduate with honors ...

Student

Yeah, it does sound good—it's just, you know, I've never written something like that before, so ...

Professor

Well, you choose something you're interested in—maybe you can even expand a shorter research paper from another class or . . .

Student

So, like, maybe... You know, I took this course from Professor Connelly—his course on Comparative Governments last semester and, uh... did pretty well—I wrote a paper actually, on political parties in Venezuela and—and he seemed to like my research. Anyway, he, uh, I got an A in the course.

Professor

Good, so it sounds like you do have a general idea for a topic, and you might know what professor you want to work with ... and look, it's still a couple weeks before registration, maybe you should talk to Professor Connelly and then get back to me.

Student

Yeah, I will-thanks. I'll come by again sometime next week.

Professor

That's fine. Good luck.

TRACK 55 TRANSCRIPT

Narrator

What does Professor Anderson imply when he says this:

Professor

... they're able to demonstrate advanced research skills, which is important; especially in your case, writing an honors thesis would be a big plus ...

TRACK 56 TRANSCRIPT

Narrator

What does the woman imply when she says this:

Student

Yeah, it does sound good—it's just, you know, I've never written something like that before ... so ...

TRACK 57 TRANSCRIPT



Narrator

Listen to part of a lecture in a journalism class. The professor has been discussing newspapers.



Professor

About 40 years ago, half of all Americans felt they'd be lost without a daily newspaper. But today, only one in *ten* Americans say they'd be lost without a paper. In fact, today, half of all Americans say they don't need a newspaper at all. And so people in the newspaper industry are trying to figure out how they can get more people reading the newspaper more often. They're trying to crack journalism's riddle for the ages: what makes people read newspapers? OK, well, let me ask you—as a journalism student, what do *you* think is the answer to this question? Elizabeth?



Female student

Um, I would probably try to improve the content of the newspaper.

Professor

Better content. Hmm. You mean like well-written editorials and articles?

Female student

Well, I mean provide more *interesting* content, like, I would first try to find out what readers really want to read... and then put *that* into the paper.

Professor

Yes, in fact, not too long ago, there was an extensive study conducted to investigate what draws people to newspapers. Uh, they found out that there's a clear, strong link between satisfaction

Appendix B

with *content* and overall readership. Those newspapers that contained what the readers wanted most brought in the most readers. No big surprise there, right? So, what kind of content brings in readers? The study found that *people-centered local news* ranks at the top of the list . . . stories about *ordinary* people. For example, you could write about the experiences of those who were involved in a news story, and their friends and relatives . . . The vantage points would be those of *ordinary* people, not of police or other officials . . . OK? Now the study also showed that people want more stories about movies, TV, and weather, and *fewer* stories and photos about natural disasters and accidents So, to get reader satisfaction, you need to select the right topics, and within those topics, the right news events or stories to cover. Yes, James?



Male student

It seems to me that a lot of what you just mentioned doesn't line up with the principles of good journalism. Catering to readers' tastes may improve overall readership, but what about the social responsibilities that newspapers have? I mean, there are some topics that newspapers *need* to write about in order to serve the public interest. Those topics may not always be fun and interesting for the average reader, but it's still the newspaper's responsibility to make that information available to the public.

Professor

That's a good point. You need a good mix of content. You can't just rush towards an attractive topic and forget about the reporting role of newspapers. There's a danger of going soft—newspapers *do* have to perform their obligations to citizens. So what newspapers sometimes do is to combine serious journalism with a reader-friendly *presentation*. Um, let me give you an example: When the justice department opened an investigation on the local police—some pretty serious stuff that could be boring to some readers—well, one local newspaper ran a lead story on their front page, but they also simplified the format by including small breakout boxes that presented—in a nutshell—the highlights of the story. That way, they could report the serious stories they needed to report, and, and still hold their readers' attention. OK? Uh, going back to the research on readership growth we were talking about . . . Uh, the most vital step of all, the study shows, may be making the paper easier to *use*. How can we make the paper "easier to *use*"? Well, it means stories need to include information, such as phone numbers, times, dates, addresses, Web sites and the like, so that readers can "go and do" things based on what they've read.

Female student

Professor Ellington? Um, when you said we need to make the paper "easier to use," I thought you were gonna say something about use of graphics, colors, and stuff like that.

Professor

Well, I guess those things do help in a way, but it turned out that those contemporary touches, uh, such as more attractive designs, extensive use of color, and informational graphics matter much less than you'd expect. Surprising, isn't it?

Female student

Yeah, it is ... Um, how about service? Does the study say anything about improving service? I don't think people are gonna subscribe if the paper doesn't arrive, or shows up late ...

Professor

Or shows up wet, which by the way, happened to me this morning. Oh, absolutely. Service affects readership. In fact, improving your service is much more likely to increase your readership than making changes in your editorial content . . . Not only on-time delivery in good condition, but also things like efficient billing, affordability, um . . . Yes?

Female student

They could also, like, increase the number of sites where they sell single copies.

Professor

Certainly that's one way to improve service.

TRACK 58 TRANSCRIPT

Narrator

What does the student imply when he says this:

Male student

It seems to me that a lot of what you just mentioned doesn't line up with the principles of good journalism. Catering to readers' tastes may improve overall readership, but what about the social responsibilities that newspapers have?

TRACK 59 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Female student

I don't think people are gonna subscribe if the paper doesn't arrive, or shows up late ...

Professor

Or shows up wet, which by the way, happened to me this morning. Oh, absolutely. Service affects readership.

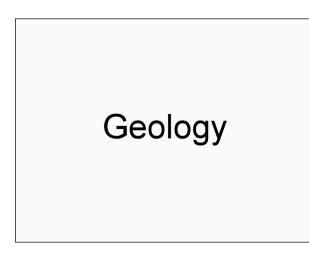
Narrator

What does the professor imply when he says this:

Professor

Or shows up wet, which by the way, happened to me this morning. Oh, absolutely.

TRACK 60 TRANSCRIPT



Narrator

Listen to part of a lecture in a geology class.

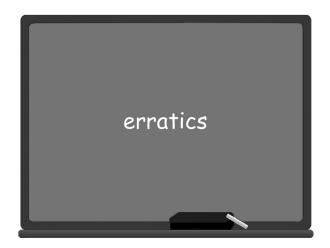


Professor

Um, beginning in the late 1960s, geologists began to uncover some evidence of a rather surprising kind when they looked ... um ... at various places around the world. What they found out when they examined rocks from about a ... the period from about 750 million years ago to about 580 million years ago, they found that ... it seemed that glaciers covered the entire surface of the Earth—from pole to pole, including the tropics.

Um ... how did they come to this astonishing conclusion? What was the evidence for this? Especially when glaciers today are found only at the poles ... or in the mountains.

Well, uh... basically when glaciers grow and move they leave behind a distinctive deposit consisting of primarily... of, at least on the top level, of ground up little bits of rock... almost ... they almost look like rocks that have been deposited by streams, if you've ever seen those. And that's caused because, although the glacier is ice, it is actually flowing very slowly and as it moves it grinds the top layer of rock, it breaks off pieces and carries them away. So when you have glaciation you have a distinctive pattern of these pieces of rock which are called "erratics."

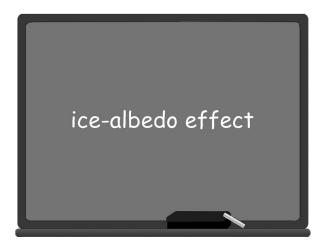


Erratics are rocks . . . they're the stones that are often carried long distances by glaciers.

So, in the 1960s and onward up through the 1990s, we keep finding evidence for glaciation, no matter what the latitude... even in tropical latitudes. Now, today there are glaciers in the tropics but only at very high elevations. But 750 million years ago, apparently there were glaciers even at sea level in the tropics.

How could this have happened?

Well, first . . . the growth of glaciers, uh, benefits, if you will, from a kind of a positive feedback loop called the "ice-albedo effect."



With the ice-albedo effect, glaciers—'cause they're white—reflect light and heat more ... much more than does liquid water ... or soil and rock, which are dark and absorb heat. So, the more

glaciers there are, the more heat is reflected, so the climate gets cooler, and glaciers grow even more.

However . . . normally, on a global scale, there is a major process that functions to curb the growth of glaciers. And, that process involves carbon dioxide.



Now, we're all familiar with the notion that carbon dioxide is what we call a "greenhouse gas." The more carbon dioxide there is in the atmosphere, the more heat the atmosphere retains. That's what a greenhouse gas does. So, the greenhouse-gas effect is kinda the opposite of the albedo effect.

Um... now as it happens... when silicate rocks, which is a very common class of rock, when they're exposed to the air and to normal weathering, they erode. Carbon dioxide is attracted to these eroding rocks and binds to them, forming calcium carbonate.



Calcium carbonate is eventually washed into the ocean where it settles to the bottom. This process, this forming of calcium carbonate, has the effect of sucking the carbon dioxide out of the air and storing it at the bottom of the ocean.



Now, follow me here. The process that's sucking carbon dioxide out of the air, keeping the greenhouse gas levels low, cannot happen if the rock is covered with ice.

So, while glaciers reflect light and heat ... cooling the Earth, they at the same time cover rocks so there's less calcium carbonate formed ... which leaves more carbon dioxide in the atmosphere. Higher levels of carbon dioxide keep the atmosphere warm ... which slows the growth of glaciers. So, it's a balance, and the glacier growth remains pretty much under control.

Now, what happened 750 million years ago to upset that balance? It seems a relatively simple explanation actually...

750 million years ago ... all the major continents are rocky, bare, and pretty much lined up along the equator; they hadn't yet moved to where they are today. So, what happened was, perhaps a slight cooling of ... the very slight and temporary cooling of the Sun—which still happens from time to time—and the Earth starts to cool, the ice starts to spread on the oceans ... starting at the poles.

Now, by the time the ice reaches about two-thirds of the way to the equator, it's too late.

See... because the continents are the last things to be covered by glaciers, they continue weathering... the rocks keep eroding and the carbon dioxide levels keep falling... So, the ice-albedo effect from the glaciers is increasing in strength while the atmosphere continues to lose its ability to retain heat making glacier growth unstoppable. Now you have what's called a "runaway freeze." And for perhaps as long as 50 million years, possibly with some interludes, the Earth was frozen from pole to pole, like a giant snowball.

TRACK 61 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

Well, uh... basically when glaciers grow and move they leave behind a distinctive deposit consisting of primarily... of, at least on the top level, of ground up little bits of rock... almost ... they almost look like rocks that have been deposited by streams, if you've ever seen those.

Narrator

Why does the professor say this:

Professor

... they almost look like rocks that have been deposited by streams, if you've ever seen those.

TRACK 62 TRANSCRIPT

Narrator

When some people visit a city or country for the first time, they prefer to take an organized tour. Other people prefer to explore new places on their own. Which do you prefer and why?

TRACK 63 TRANSCRIPT

Narrator

A university professor is switching to a new position. Read the article from the university about the professor. You will have 45 seconds to read the article. Begin reading now.

TRACK 64 TRANSCRIPT



Narrator Now listen to two students discussing the article.

Female student

I don't like this at all.

Male student

Why not? She's done a lot for the philosophy department ... like, well, hiring some great new teaching assistants ... and putting together seminars.

Female student

Well, she has trouble organizing schedules.

Male student

Whadda'ya mean?

Female student

Well, she only realized last minute that she didn't have enough teaching assistants in the department, so some classes got cancelled.

Male student

Oh!

Female student

And I wanted to take a special two-week philosophy course in Europe . . . she was supposed to sign all the paperwork, but she didn't do it in time so I missed the whole trip!

Male student

Oh, wow. So organization's not her strong point, I guess.

Female student

Yeah. Besides, she's always critical. A lot of us on the team have complained to the university about her aggressive coaching style.

Male student

Oh, really? I met her ... I mean, I thought she was nice.

Female student

Humph! Well, my friend ... she had some serious problems in her family. She went to talk to Professor Fox and ...

Male student

Yeah? What happened?

Female student

Well, she wanted emotional support from someone she looked up to, but instead Professor Fox made all kinds of critical comments. Maybe she's good at philosophy, but she's not a counselor. When students go to the dean, they go because they need someone to talk to, not so someone can criticize them.

Narrator

The woman expresses her opinion about the change described in the article. Briefly summarize the change. Then state her opinion about the change and explain the reasons she gives for holding that opinion.

TRACK 65 TRANSCRIPT

Narrator

Read the following paragraph from a psychology textbook. You will have 45 seconds to read the passage. Begin reading now.

TRACK 66 TRANSCRIPT



Narrator

Now listen to part of a lecture in a psychology class.

Professor

Let's start with a physical attribute, say, uh, in kittens. Adult cats have extremely good vision, especially at night. But in order for a kitten's eyesight to develop normally, the kitten must be exposed to light during the first four months of its life. Without that, its eyesight will not develop correctly, it will never be able to see as well as it should. Even if the kitten is exposed to plenty of light *after* those four months of darkness, it won't matter, its vision will *never* develop normally.

As far as behavior's concerned, well, have you ever seen how little baby geese line up and then, single-file, they follow their parent goose around? Well, what would happen if they didn't see a parent goose within the first two days of their lives?

Actually, for normal behavior to develop, they must see what to follow within these first two days. What happens is, whatever large moving object they first see during those two days, they'll adopt that object as their parent . . . forever. It can never be changed. For example, suppose after the baby geese were hatched, the only other animal around was, I don't know, say a dog. OK? So the baby geese see a dog, but no other geese. Even though the dog is a totally different species, the geese will adopt it as their parent—they'll follow it around. And even if the parent geese reappear later, it won't matter to the babies—they'll follow the dog. After two days the behavior is fixed and they'll never exhibit the normal behavior of following their real parent—a goose.

Narrator

Using the examples of kittens and geese, explain the idea of a critical period.

TRACK 67 TRANSCRIPT



Narrator

Now listen to part of a lecture in a business ethics class. The professor is discussing advertising.

Professor

Advertisers often try to sell you things by exaggerating about the quality of their products. It helps them get your attention. And exaggeration in advertising is usually considered acceptable, but not always. In the United States, there are laws to help determine what advertisers can say about their products. Basically, the law says advertisers can exaggerate as long as no one's gonna actually believe the exaggeration and take it literally. So, the exaggeration has to be very extreme. If it's not extreme enough and someone would actually buy the product because they believed the exaggeration, that advertisement may be illegal.

Take this example: a vacuum cleaner manufacturer made a vacuum cleaner that didn't weigh very much, and they wanted to get the point across about how light it was. So they made a TV commercial showing the vacuum cleaner floating in the air while cleaning the house. Well, that was a visual exaggeration. It got people's attention. And because a floating vacuum cleaner is obviously impossible, the commercial was legal because no one would actually believe the visual exaggeration and buy the vacuum cleaner because they thought it floated in the air.

But what if the company wanted to show that the vacuum cleaner was very powerful? What if it made a television commercial where a person uses the vacuum cleaner to perfectly clean this really big and really dirty carpet in, uh, just a few seconds. Well that would really grab your attention. But the thing is, even though the commercial is an exaggeration, you can imagine someone actually believing it and buying the vacuum cleaner and then being very disappointed because the vacuum cleaner couldn't do that. So advertisers can't use an exaggeration like that because it's actually not extreme enough and someone might believe it.

Narrator

Using the example of the vacuum cleaner, explain when it is legally acceptable to use exaggeration in advertising and when it is not.

TRACK 68 TRANSCRIPT



Narrator

Now listen to part of a lecture on the topic you just read about.

Professor

Many people think that if you want to go into business for yourself, it's best to buy a franchise. But recently a study looked closely at franchises, and some of the findings call that idea into question.

One interesting point was that many franchise contracts force franchise owners to ... to buy very specific goods and services, and those goods and services tend to be overpriced. In other words, even though there are equivalent goods and services available on the market, uh, that are considerably cheaper, the owners aren't *allowed* to buy them.

Another point was about advertising. When you buy a franchise, you agree to pay up to *six percent* of your sum total in sales—that's quite a lot of money. One thing you're supposed to get in return for this money is that the company does the advertising for you. But the company doesn't advertise your business. What gets advertised is the *company's* brand, the *company's* products, which are sold by many other businesses in many other places. It turns out, individual franchise owners mostly get very little benefit—*much* less than they would get by spending even half that money to advertise their own business directly.

Finally, the biggest issue: security. Starting a franchise is not the most secure option out there. True, it's less risky than starting an independent business. But there's a *third* option that the passage didn't talk about. You can buy an *already existing independent* business from a previous owner. And the study showed that independent businesses bought from previous owners have *twice* as much chance of success during the first four years as franchises.

TRACK 69 TRANSCRIPT

Narrator

Summarize the points made in the lecture, being sure to explain how they challenge specific points made in the reading passage.

TRACK 70 TRANSCRIPT



Narrator

Listen to a conversation between a student and an admissions officer at City College.

Student

Hi. Can I ask you a few questions about starting classes during your summer session?

Admissions officer

Sure. Ask away! It starts next week, you know.

Student

Yeah, and I want to get some required courses out of the way so I can . . . maybe I can graduate one term earlier and get out into the job market sooner.

Admissions officer

That sounds like a good idea. Let me pull up the summer school database on my computer here ...

Student

OK.

Admissions officer

OK, there it is. What's your student ID number?

Student

Oh, well, the thing is . . . I'm not actually admitted *here*. I'll be starting school upstate at Hooper University in the fall. But I'm down here for the summer, staying with my grandparents, 'cause I have a summer job near here.

Admissions officer

Oh, I see, well ...

Student

So I'm outta luck?

Admissions officer

Well, you would be if you were starting anywhere but Hooper. But City College has a sort of special relationship with Hooper... a full exchange agreement... so our students can take classes at

Hooper and vice versa. So if you can show me proof . . . um, your admissions letter from Hooper, then I can get you into our system here and give you an ID number.

Student

Oh, cool. So . . . um . . . I wanna take a math course and a science course—preferably biology. And I was also hoping to get my English composition course out of the way, too.

Admissions officer

Well all three of those courses are offered in the summer, but you've gotta understand that summer courses are condensed—you meet longer hours and all the assignments are doubled up because . . . it's the same amount of information presented and tested as in a regular term, but it's only six weeks long. Two courses are considered full time in summer term. Even if you weren't working, I couldn't let you register for more than that.

Student

Yeah, I was half expecting that. What about the schedule? Are classes only offered during the day?

Admissions officer

Well, during the week, we have some classes in the daytime and some at night, and on the weekends, we have some classes all day Saturday or all day Sunday for the six weeks.

Student

My job is pretty flexible, so one on a weekday and one on a weekend shouldn't be any problem. OK, so after I bring you my admissions letter, how do I sign up for the classes?

Admissions officer

Well, as soon as your student ID number is assigned and your information is in our admissions system, you can register by phone almost immediately.

Student

What about financial aid? Is it possible to get it for the summer?

Admissions officer

Sorry, but that's something you would've had to work out long before now. But the good news is that the tuition for our courses is about half of what you're going to be paying at Hooper.

Student

Oh, well that helps! Thank you so much for answering all my questions. I'll be back tomorrow with my letter.

Admissions officer

I won't be here then, but do you see that lady sitting at that desk over there? That's Ms. Brinker. I'll leave her a note about what we discussed, and she'll get you started.

Student

Cool.

TRACK 71 TRANSCRIPT

Narrator

Listen again to part of the conversation. Then answer the question.

Student

So I'm outta luck?

Admissions officer

Well, you would be if you were starting anywhere but Hooper.

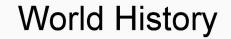
Narrator

What does the woman mean when she says this:

Admissions officer

Well, you would be if you were starting anywhere but Hooper.

TRACK 72 TRANSCRIPT



Narrator

Listen to part of a lecture in a world history class.



Professor

In any introductory course, I think it's always a good idea to step back and ask ourselves "What are we studying in this class, and why are we studying it?"

So, for example, when you looked at the title of this course in the catalog—"Introduction to World History"—what did you think you were getting into ... what made you sign up for it—besides filling the social-science requirement?

Anyone . . .?



Male student

Well... just the—the history—of everything ... you know, starting at the beginning ... with ... I guess, the Greeks and Romans ... the Middle Ages, the Renaissance ... you know, that kinda stuff ... like what we did in high school.

Professor

OK . . . Now, what you're describing is *one* approach to world history.



In fact, there are several approaches—basic "models" or "conceptual frameworks" of what we study when we "do" history. And what you studied in high school—what I call the "Western-Heritage Model," this used to be the most common approach in U.S. high schools and colleges . . . in fact, it's the model I learned with, when I was growing up back—oh, about a hundred years ago . . .

Uh...at Middletown High School, up in Maine ... I guess it made sense to *my* teachers back then since, well, the history of western Europe *was* the cultural heritage of everyone in my class ... and this remained the dominant approach in most U.S. schools till ... oh, maybe ... 30, 40 years ago ... But it doesn't take more than a quick look around campus—even just this classroom today—to see that the student body in the U.S. is much more diverse than my little class in Middletown High ... and this Western-Heritage Model was eventually replaced by—or sometimes combined with one or more of the newer approaches ... and I wanna take a minute to describe these to you today, so you can see where *this* course fits in.

OK... so... up until the mid-twentieth century, the basic purpose of most world-history courses was to learn about a set of values... institutions... ideas... which were considered the "heritage" of the people of Europe—things like... democracy... legal systems... types of social organization... artistic achievements...

Now, as I said, this model gives us a rather *limited* view of history. So, in the 1960s and '70s it was combined with—or replaced by—what I call the "Different-Cultures Model." The '60s were a period in which people were demanding more relevance in the curriculum, and there was criticism of the *European* focus that you were likely to find in all the academic disciplines. For the most part, the Different-Cultures Model didn't challenge the basic assumptions of the Western-Heritage Model. What it did was insist on representing *other* civilizations and cultural categories, *in addition* to those of western Europe ...

In other words, the heritage of *all* people: not just what goes back to the Greeks and Romans, but also the origins of African... Asian... Native American civilizations. Though more inclusive, it's still, basically, a "heritage model"... which brings us to a *third* approach, what I call the "Patterns-of-Change Model."

Like the Different-Cultures Model, this model presents a wide cultural perspective. But, with this model, we're no longer *limited* by notions of fixed cultural or geographical boundaries. So, then, studying world history is not so much a question of how a particular nation or ethnic group developed, but rather it's a look at common themes—conflicts . . . trends—that cut across modern-day borders of nations or ethnic groups. In my opinion, this is the best way of studying history, to better understand current-day trends and conflicts.

For example, let's take the study of the Islamic world. Well, when I first learned about Islamic civilization, it was from the perspective of Europeans. Now, with the Patterns-of-Change Model, we're looking at the past through a wider lens. So *we* would be more interested, say, in how interactions with Islamic civilization—the religion ... art ... literature—affected cultures in Africa ... India ... Spain ... and so on.

Or ... let's take another example. Instead of looking at each cultural group as having a separate, *linear* development from some ancient origin, in *this* course we'll be looking for the common themes that go beyond cultural or regional distinctions. So ... instead of studying ... a particular succession of British kings ... or a dynasty of Chinese emperors ... in *this* course, we'll be looking at the broader concepts of monarchy, imperialism ... and political transformation.

TRACK 73 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

So, for example, when you looked at the title of this course in the catalog—"Introduction to World History"—what did you think you were getting into . . . what made you sign up for it—besides filling the social-science requirement?

Narrator

What is the professor's attitude?

TRACK 74 TRANSCRIPT



Narrator

Listen to a conversation between a student and his academic advisor.

Student

Excuse me, Ms. Chambers? Um, I don't have an appointment, but I was kinda wondering if you had a minute to help me with something.

Academic advisor

Oh, sure. Have a seat.



What's on your mind?

Student

Well, uh ... I guess I really don't know where to start ... It's not just one class. It's ... I'm not doing all that great. Like on my homework assignments. And in class. And I don't know why. I mean, I just don't get it! I-I read the assignments and I do the homework and I'm still not doing too well ...

Academic advisor

Um, which classes? You mean, like Spanish . . . you're taking Spanish, right?

Appendix B

Student

Oh, no, not Spanish . . . if it weren't for Spanish I'd really be in trouble . . . no, but it's really all the others, psychology and sociology especially.

Academic advisor

Is it the material, what you read in the textbooks? You don't understand it?

Student

No, that's just it—I think I understand stuff when I read it ...

Academic advisor

You don't re . . .

Student

Remember? Well, I remember names and definitions, but . . . like, in class, when the professor asks us about the theories, what they're all about, I never have the answer.

Academic advisor

Sounds like you're trying to learn by memorizing details, instead of picking out the main points of the reading. So, tell me, how do you study?

Student

Well, I—I...I mean, I read the assigned chapters, and I try to underline everything...like all of the words I don't know, and I always memorize the definitions. But, I dunno, when I get back in class, it always seems like the other students've gotten a better handle on what was in the reading. So, maybe it's just me...

Academic advisor

Oh, it's not. Believe me. Lots of students ... You know, my first year as a college student ... I really had a hard time. I spent hours reading in the library ... but I was just wasting time, 'cause I wasn't really studying the right things. I did the same sort of thing it sounds like you're doing, not focusing on what's really important in the reading, but on the smaller details.

Student

Yeah, maybe. But I spend so much time studying, it seems like I should be doing better.

Academic advisor

The first year of college can be a little overwhelming, I know. Point is, lots of students have trouble adjusting at first, you know, figuring out how to study, how to use their time, you know, to your best advantage. It's good that you do the assigned readings . . . but, you've . . . well, I think you're unnecessarily underlining and memorizing. That takes a lot of time, and, well, it's not the best use of your time. Here's something you can do: when you read, just read the assigned sections, and then . . . and without looking back at the text—write a summary of the key points, the main ideas in the chapter. And after you do that, it-it's good to go back and reread the text. And you look for any examples you can find to support those key points. Let me show you an example of what I mean.

TRACK 75 TRANSCRIPT



Narrator

Listen to part of a lecture in an astronomy class.



Professor

I'll tell you a story about how one astronomy problem was solved. It happened many years ago, but you'll see that it's interesting and still relevant. Two, three hundred years ago, astronomers already had telescopes, but they were not as powerful as those we have now. Let's say... they were at the level of telescopes amateur astronomers use today. Tell me, what do you see in the night sky when you use a telescope like that? Quick, tell me.

Female student

Planets . . .

Professor

Right . . .

Male student

Even ... like ... the moons of Jupiter?

Professor

Right ...

Female student

Stars.

Professor

OK ... what else? ... You think that's all? ... Ever heard of nebulae? ... I bet you have ... Well, let's just, um, put it up anyway ...



Nebulae are small fuzzy patches you see in the sky, they look like little clouds. Many of them have a spiral shape, and that's why we called them *spiral* nebulae... So astronomers in the eighteenth century ... *eighteenth* century ... when they looked through the telescope, they could see planets—and they knew those were planets ... the moons of Jupiter—and they knew they were the moons of Jupiter ... and then they saw spiral nebulae and they didn't have a clue.

What could those be? So, some of them thought—"these things are cloudy and fuzzy, so they're probably small clouds of cosmic dust, and they don't have to be very far away from us." But there were others who thought, "OK, the things *look* small and fuzzy, but *maybe* they're actually distant galaxies of stars, but we can't see the stars, because they're so far away and they seem so tiny that they *look* like dust, and even the whole galaxy looks like a tiny little cloud."



Which of the two theories do you think was more ... uh, surprising?

Male student

The galaxy one.

Professor

And why?

Male student

Well, I mean it assumed that the nebulae are not what they look like at first sight. The first theory assumed that, right?

Professor

OK. And now tell me this ... which one would have seemed more likely at the time?

Male student

Uh... They couldn't tell.

Professor

Right. Two morals here: first, there can be different explanations for the same observation. And second, "obvious" doesn't necessarily mean "right" ... What happened next was ... for a long time nothing. More than 150 years. No one could decide ... Both hypotheses seemed plausible ... And a lot was at stake—because if the *galaxy* theory was right, it would be proof that the universe is enormous ... and if the *dust* theory was right ... maybe *not* so enormous. So the size of the universe was at stake ... Finally in the 1920s we came up with a telescope that was strong enough to tell us something new here. When we used it to look at the spiral nebulae, we saw ... well, we were not absolutely sure ... but it really looked like there were stars in those nebulae. So not dust after all, but stars ...



But how far away were they, really? How would you measure that? Any ideas? Laura?

Female student

Well, how about measuring how strong those stars shine? Because, if the star is far away, then its light would be weak, right?

Professor

Yes . . . but there's a problem here. You need to know how bright the star is in the first place, because some stars are naturally much brighter than others. So, if you see a star that's weak . . . it can mean one of two things . . .

Female student

Oh . . . it's either far away or it's just a weak star.

Professor

And you can't really always tell which. But you're on the right track. There is a kind of star where you can *calculate* its natural brightness . . . and—you guessed it—we found some in the nebulae. It's called a *variable* star—or a "variable" for short—because its brightness *varies* in regular intervals. I won't go into detail here, but . . . basically . . . the longer the interval, the brighter the star, so from the *length* of those intervals we were able to calculate their natural brightness. This told us how distant they were—and many turned out to be very, very far away. So we can be sure that the spiral nebulae really *are* very distant galaxies—which is what some eighteenth-century astronomers *guessed* but didn't have the instruments to prove . . .

Now, one reason I told you this story is that *today* there are still plenty of situations when we see something out there, but we really aren't sure *what* it is. An example of one such mysterious observation would be gamma-ray bursters.



We've known about these gamma-ray bursters for a long time now, but we can't all agree on what they are.

TRACK 76 TRANSCRIPT

Narrator

Listen again to part of the lecture. Then answer the question.

Professor

But how far away were they, really? How would you measure that? Any ideas? Laura?

Female student

Well, how about measuring how strong those stars shine? Because, if the star is far away, then its light would be weak, right?

Professor

Yes... but there's a problem here. You need to know how bright the star is in the first place, because some stars are naturally much brighter than others. So, if you see a star that's weak... it can mean one of two things...

Female student

Oh ... it's either far away or it's just a weak star.

Narrator

What can be inferred about the student when she says this:

Female student

Oh . . . it's either far away or it's just a weak star.

TRACK 77 TRANSCRIPT



Narrator

Listen to part of a lecture in an art history class.



Professor

Today we're going to talk about how to look at a piece of art, how to "read" it—what you should look for . . . what aspects of it you should evaluate. A lot of people think that if you stand in front of a work of art and gaze at it for a couple of minutes, you're evaluating it. But truly reading a piece of art, evaluating it properly, is a complex process, a process that takes *time*.

When we're confronted with a piece of art, there're several things we have to keep in mind, for example, its beauty... that's where aesthetics comes in.



Aesthetics is the philosophy that deals with the definition of beauty, which goes all the way back to ancient Greece. They, um, the early Greek philosophers said that beauty and art are based on imitation. Their feeling about art was that it's beautiful when it imitates life; they thought that the *truthfulness* of an image, how truthful it is to life, determines its value as art. Today we have a broader definition of aesthetics.

Now *don't* identify aesthetics as personal taste. Taste is bound by time; taste is tied to a society, a given set of moral values, usually. You may not like a piece of art from a different culture—it may not be your taste—but you appreciate its beauty 'cause you recognize certain aesthetic principles. Art generally adheres to certain aesthetic principles like balance, uh, balanced proportions, contrast, movement, or rhythm.



We'll discuss aesthetics more in detail when we look at some pieces of art together. Another thing to keep in mind in evaluating art is that art has a *purpose*, generally determined by the artist. You may not know what it is, and you don't need to know what it is to appreciate a piece of art, but it helps. For example, if you know what the artist's purpose is ... if you know that a piece of art expresses the artist's feeling about a political or social situation, you'll probably look at it differently.

Now, besides beauty and purpose, what are the other aspects of a piece of art that need to be evaluated? Very simple—you examine a piece of art following these four formal steps. The first step is *description*...describe physical characteristics of the piece—like this painting is large, it's oil

Appendix B

on canvas. Describe the subject—it's a person, it's a landscape—or predominant colors like, um, earth colors . . . that's a description.

OK? So, you've described the piece. The next step is *analysis*. You're looking at the piece for any universal symbols, characters, or themes it might contain. Certain symbols are universal, and the artist counts on your understanding of symbols. Even colors have symbolic significance, as you may know. And also *objects* depicted in a piece of art are often used to represent an abstract idea. Like wheels or spheres—they look like circles, right?—so wheels and spheres represent wholeness and continuity. I have a handout, a list of these symbols and images and their interpretations, that I'll give you later. But for now, the point is that after you describe the piece of art, you *analyze* its content ... you determine whether it contains elements that the artist is using to try to convey a certain meaning.

If it does, the next step is *interpretation*. Interpretation follows analysis very closely. You try to interpret the meaning of the symbols you identified in the piece. Almost all art has an obvious and an implied meaning. The implied meaning is hidden in the symbolic system expressed in the piece of art. What we see depicted is *one* scene, but there can be several levels of meaning. Your interpretation of these symbols makes clear what the artist is trying to tell us.

The last step is *judgment or opinion*—what do you think of the piece, is it powerful or boring? but I give that hardly any weight. If the four steps were to be divided up into a chart, then description, analysis, and interpretation would take up 99 percent. Your opinion is not important in understanding a piece of art. It's nice to say: I like it ... I wouldn't mind hanging it over my couch, but to evaluate a piece of art, it's not critical.

OK. Now you know what I mean by "reading" a piece of art, and what it entails. Try to keep all that in mind next time you go to an art museum. I can tell you right now that you probably won't be able to look at more than 12 pieces of art during that visit.

OK, now let's look at a slide of a piece of art and try to "read" it together.

TRACK 78 TRANSCRIPT

Narrator

What does the professor imply when he says this:

Professor

Try to keep all that in mind next time you go to an art museum. I can tell you right now that you probably won't be able to look at more than 12 pieces of art during that visit.

TRACK 79 TRANSCRIPT

Narrator

Some people enjoy watching movies or television in their spare time. Others prefer reading books or magazines. State which you prefer and explain why.

TRACK 80 TRANSCRIPT

Narrator

Read the announcement about City University's plans for the campus gym. You will have 45 seconds to read. Begin reading now.

TRACK 81 TRANSCRIPT



Narrator

Listen to two students discussing the plan.

Male student

Hey, have you read about this ... the plans for the gym?

Female student

Yeah, but I could sure think of better things to do with the money.

Male student

You're kidding. I thought you'd be all for it. You go to the gym all the time.

Female student

Yeah, but I never have any problem. Sure there're a lot of people there but I never have to wait to use the exercise bikes, or even the weight machines. Do you?

Male student

Not really. It's not that busy.

Female student

The other thing is ... well, we have all sorts of exercise programs, a terrific swimming pool that's always open, great running paths, all kinds of sports teams. I'm just saying that a bunch of new machines in the gym aren't gonna make any difference. People like to get their exercise in different ways ... and on this campus there're already plenty of choices.

Male student

You may be right ...

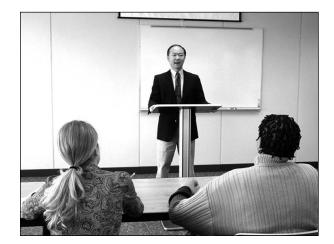
Narrator

The woman expresses her opinion about the plan described in the announcement. Briefly summarize the plan. Then state her opinion about the plan and explain the reasons she gives for holding that opinion.

TRACK 82 TRANSCRIPT

Narrator

Now read the passage about keystone species. You will have 50 seconds to read the passage. Begin reading now.



TRACK 83 TRANSCRIPT

Narrator

Now listen to part of a lecture on this topic in a biology class.

Professor

Let's take the elephant, for example. Elephants are an important species in the African grasslands. Without them, the grasslands actually stop being grasslands at all if you can believe it—they change to forests. What happens is that in the grasslands some types of seeds other than grasses can sprout and begin to grow, which ... if they're left alone ... they could eventually grow into shrubs or trees. But what happens is that elephants come along and eat the sprouting plants ... or the plants get crushed under the elephants' feet. And even if a plant or two manage to survive, it won't last long because sooner or later the elephant will knock it over or pull it out of the ground.

So what if the elephants weren't there and these plants were allowed to grow to maturity? Well, pretty soon there'd be whole clusters of trees. Their branches and leaves would shade the grasses . . . and without the sunlight, the grasses won't survive. So pretty soon the grass disappears, trees grow in its place and eventually the whole grassland changes to forest.

And as you can imagine the elephant has an impact on other animal species in the habitat as well. A lot of animals in this habitat rely on the grasses for food, for example. When the grasses disappear—when their food source disappears—these animals are eventually forced to leave. Gradually, some new species come into the habitat—species that are better suited to life in the forest. These new species replace the ones that left. So you can see the influence of the elephant on the environment is significant.

Narrator

The professor gives examples of the effects of elephants on the African grasslands habitat. Using the examples from the talk, explain why elephants are considered a keystone species.



TRACK 84 TRANSCRIPT

Narrator

Now listen to part of a lecture in a creative writing class.

Professor

As writers, you want the dialogue in your story to have impact. Well, there are many ways to do that, and I'm gonna talk about two of them—exaggeration and understatement. Now, understatement is the opposite of exaggeration, but you can actually use them both to do the same thing—to create emphasis or impact. Let's compare them and see how they do that.

OK, exaggeration. When you want your characters to emphasize a point, you can have them describe things or their feelings as bigger or more extreme than they really are. For example, your main character comes back from a very long walk and she's very tired. Well, you can have her say "Boy, I'm tired." Or you can have her say, "I can't take another step." Well, of course she can take another step, but you see, if she exaggerates, she'll make her point in a more forceful and interesting way.

But you can also create emphasis with *understatement*, and like I said it's the opposite of exaggeration, but it does the same thing. With understatement you emphasize by saying, by saying *less*, by saying less than you mean. That sounds paradoxical, so I'll give you an example. From real life.

My friend Ed is a very talented cook. So last week he cooked me a delicious meal. Now, I could've said to him, "This food is really great, Ed," but that's kinda boring. Plus, Ed *knew* I thought the food was delicious. I'd eaten three servings. So instead I said, "This food's not bad, Ed." Now clearly the food was a lot *better* than *not bad*. But by understating, by describing the food as—as *less* good than it really was, I actually made a stronger statement. The characters in your stories can do this too.

Narrator

Using the examples mentioned by the professor, describe two ways that writers create emphasis when writing dialogue.



TRACK 85 TRANSCRIPT

Narrator

Now listen to part of a lecture on the topic you just read about.

Professor

Even if computerized smart cars meet all the technological expectations set for them, it's not clear that they'd produce the benefits some have predicted.

Smart cars will still get into some accidents. After all, even the most technologically advanced devices fail occasionally. And since the smart car technology will allow cars to be more tightly packed together on the roads, these accidents will be pileups that involve many more cars and so be much worse than accidents that occur today. Overall, there is little reason to believe that smart cars will save lives or reduce the number of injuries in automobile accidents.

Second, let's talk about the potential to increase highway speeds and therefore decrease commuting time. Well, history has consistently shown that when some driving convenience is introduced, more and more people decide to drive because they expect an easier driving experience. But then the increased number of drivers in the case of smart cars of the future would not decrease commuting time. This is because the traffic congestion caused by the additional cars on the road would not allow the drivers to take advantage of the smart cars' potential for higher speeds.

And finally, it's not reasonable to expect that smart cars will save drivers money. The global positioning technology required to direct smart cars to their desired destinations is very expensive, and smart cars will need other costly technologies too, such as sensors that control how far a smart car stays behind the car in front of it. Moreover, the advanced technology of smart cars will make repairs to them more expensive than repairs on conventional automobiles. These new expenses will more than offset the expected savings on the repair and replacement of traditional mechanical car parts.

TRACK 86 TRANSCRIPT

Narrator

Summarize the points made in the lecture, being sure to explain how they challenge specific points made in the reading passage.