UNIT 1
Biology: Brains and Gender

Before You Listen
Exercise 1, Page 13

Professor: So there we have it. We’ve seen some of the ways that modern brain imaging techniques are helping us improve our understanding of the brain, but we’ve also seen that we still have a very long way to go. It’s a new and exciting area of research, and I’m sure discoveries will come thick and fast over the next few years.

In the next lecture, we’ll look at some recent results of ongoing work. Specifically, we’ll look at pain and mental health—two areas where there seem to be some very surprising differences between males and females.

Global Listening
Exercise 1, Page 15

Professor: Hello, everyone. Welcome to the next neuroscience lecture. As we mentioned last time, male–female brain differences are a really exciting field of research. We’re finding out things that completely contradict some points that scientists used to feel sure about. In today’s lecture, we’ll look at two areas where male–female brain differences may have some quite radical implications for medicine: perception of pain and mental health.

Lecture: Different genders, different medicines?¹

Professor: Hello, everyone. Welcome to the next neuroscience lecture. As we mentioned last time, male–female brain differences are a really exciting field of research. We’re finding out things that completely contradict some points that scientists used to feel sure about. In today’s lecture, we’ll look at two areas where male–female brain differences may have some quite radical implications for medicine: perception of pain and mental health.

First, pain. This is a really fascinating area of brain research. Research suggests that the brain circuits that suppress pain may be different in males and females. In fact, a lot of research—but not all—suggests that females experience more pain than males.

Two researchers, separately from each other, have looked for the reasons behind this. They are Anne Murphy at the University of Georgia in the U.S. and Jeff Mogil at McGill University in Canada. An important finding was that males and females appear to use different circuits in the brain to block pain.

This finding may explain something else that has caused confusion in the medical world. As we mentioned before, painkilling drugs are generally tested on men. However, some time ago, doctors noticed that some painkillers have different effects on men and women. For example, nalbuphine works better for women than for men—in fact, it sometimes actually increases pain in men! Others appear to work better on men.

So, with increasing understanding of how painkillers work, in the future we may be able to create painkillers that are more effective for women. Developing drugs is very expensive though, so we will probably have to wait for more research to show whether this will be financially worthwhile.

Another area where there are gender differences is mental health. Let’s take depression, for example. Women appear to suffer from depression twice as often as men, and their brains typically produce about half as much serotonin—a brain chemical linked to depression. Recently, Anna–Lena Nordström from the Karolinska Institute in Stockholm, Sweden, found that there seem to be significant differences in how male and female brains process serotonin. There are no firm conclusions yet, but this is of special interest for two reasons. First, common antidepressants like Prozac work on serotonin. Second, there is evidence that women respond better to these common antidepressants than those that work on neurotransmitters other than serotonin.

Males may be less likely to suffer from depression, but this is balanced by other issues. Boys are more likely than girls to be diagnosed with a wide range of problems affecting brain systems, such as: autism, Tourette’s syndrome, dyslexia, stuttering, attention–deficit disorder, and early–onset schizophrenia. So, a new approach to designing medicines, with one gender in mind may also benefit males in the future. Again, we have to wait for further research.

OK. To sum up, there’s still a lot to learn. We’re just beginning to find out how pain control and mental health are different in men and women. One thing that is still astonishing is that so many researchers failed to include females in their studies. This is especially strange when it comes to pain research. Women are the most common sufferers of pain and yet most basic pain research is carried out only on males. In many areas, there seem to be more and more reports that the results of earlier research are actually only true for males, thus making the earlier researchers look rather foolish. Anyway,

what’s important is that researchers are now beginning to take women into account. We may well see medicines better suited to female physiology in the future. In a few decades’ time, women and men with the same illnesses could be treated in different ways. And this may apply to more than just the brain. So, it’s an exciting field to explore—and one that could make a real difference to people’s lives. OK, for next time please . . .

UNIT 2

Business: Pricing

Lecture: Pricing

Professor: OK. Pricing is today’s topic. In fact, as you’ll see, it’s one of the most important topics we’ll cover—and when you finish this course and start your career in business, price setting could well be one of the biggest decisions you’ll make. The main thing we’ll do today will be to examine two types of pricing—cost–based pricing and value–based pricing—and to discuss the issues around them. We will see that, in most cases, value–based pricing is the most useful. But before that, we’ll take a look at why pricing is so important.

So, first of all, let’s look at the importance of careful price setting. Choice of prices can make or break a company. Set the price too high, and people might buy a competitor’s products instead of yours, right? But, set it too low, and you won’t make a profit—or your profit will be too small. Price can make a very big difference to profit. One expert, a guy named Paul Hunt, claims that, for most organizations, a one percent price change generates a 12.5 percent profit improvement. You can believe that.

Perhaps for this reason, some managers see pricing as a big headache. However, clever managers use pricing as a key tool. Price plays an important role in how much value customers see in a product—higher prices often send the message that quality is higher, even if it isn’t. It also plays a role in building customer relationships, which is great: customers often like to see in a product—higher prices often send the message that quality is higher, even if it isn’t. It also plays a role in building customer relationships, which is great: customers often like to associate themselves with products that project a high–quality image, and price can have a role in this. Can you think of any products like that in your life?

Let’s move on now to look at strategies for pricing. The first we’ll consider is rather old fashioned. It’s called cost–based pricing. In cost–based pricing, first a company designs a product. Then it works out how much each item costs to make, plus all the other costs such as delivery, packaging, and design. Finally, a margin is added, to produce the profit. That seems pretty easy, right?

However, there are many disadvantages to cost–based pricing. A very big one is that it doesn’t consider the customers—that is, the market, the people out there. Customers might not want to pay the price. Or competitors’ products may have better features for the same price. Alternatively, your product may have extra features, but not ones that people are happy to pay extra money for. Or, you may find that people buy your competitors’ products just because their brand is stronger. All of these factors could have a big effect on sales. Pricing based just on cost ignores all of these important factors.

But there is an alternative approach. It’s called value–based pricing and is, in fact, what most leading companies use today. To understand it, we first need to understand what value really means. It’s important to remember that “good value” is not the same as “low price.” Here’s an example: some car buyers consider a Bentley, a luxury car now, to be a very good value, even at an eye–popping price of $150,000. You heard me right. For a hand–built vehicle, the quality is as good as cars that sell for twice the price. Value–based pricing reverses the process of cost–based pricing. Instead of starting with a price, the marketers first consider what the customers want, and how much people are happy to pay for it. This may come from market research. From this, all aspects of the product are chosen, including its features and a target price. The product is then designed with this target price in mind. Thus, the customer comes first, and the product is designed to fit what the customer wants, at the price the customer is happy to pay. And we can make sure there is plenty of room for a profit.

The advantages of this are so clear. With a value–based strategy, you can be more certain that people will be happy to pay for your product. Furthermore, you have a good idea in advance whether a product is going to turn a profit. Value–based pricing may be a bit more difficult than cost–based pricing, but it’s worth going to the extra trouble, as it is more likely to lead to a successful product.

So, in conclusion, careful consideration of pricing is important. And we’ve seen that out of the two main ways to go about choosing prices, value–based pricing is the most likely to result in success. In your reading for next week, you’ll look more deeply at value–based pricing, and you’ll see that there are quite a number of different ways to do this. Enjoy your reading everybody!

Before You Speak

Exercise 1, Page 43

Student: Good morning, everyone. In this talk, I’m going to briefly describe to you a purchase decision I made recently. After that, I’ll explain how and why the shop encouraged me to make that decision.

OK. So, I’ll give the situation first. I wanted to buy a new digital camera, and saw an advertisement for one at a very low price. So, off I went to the store, thinking I would quickly pop in, and be out again within a few minutes. But it didn’t quite happen like that. The sales person, first of all, told me that the camera wasn’t very good! This was a surprise, but then

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he started talking about a different camera, which he said was only $50 more, but much, much better. Well, I was in a hurry, and of course I want to take good photos, so I bought the one he recommended, and became $50 poorer than I expected!

Exercise 2, Page 43

Student: So, why did they do this? Well, this is almost a kind of bait--and--switch advertising. The low price was just to tempt people into the store; they actually wanted to avoid selling this product as they might even have made a loss on it. Really, the idea was to talk people into buying a much more profitable model.

Focused Speaking
Exercise 2, Page 45

Reporter: Ever wondered why so many price stickers end in .99 or .95? Surely retailers don’t really believe we’ll think that something priced at $19.95 is much different from $20? We’re not dumb! We can see through that trick straight away . . . right?

Well, it seems that the psychology of pricing is very subtle. Even when the logical part of our minds tells us one thing, the emotional part may do something else—at least for some of us. Price stickers ending in .99 or .95 do actually work. People do buy more when the price ends like that. Otherwise, we wouldn’t still see so many stickers with these prices!

This is just one example of psychological pricing. Another is common with supermarkets. You know that loaf of bread that only costs a couple of dollars? Well, the supermarket might actually be losing money on it. But it’ll make people think the supermarket has some good prices, and more people will visit. That’s when they make their money! These loss–making goods are called loss leaders.

Many clothing retailers have a different psychological trick. You know how department stores often have several different departments for women’s clothes? And how each projects a very different image—some more upmarket than others? Well, who’s to say the clothes actually cost any more to make? People will assume that the clothes in the more expensive department are better quality than elsewhere, and will often pay more for them.

Tricky people, these marketers, eh?

UNIT 3

Social Psychology: Conformity

Global Listening
Exercise 3, Page 63

Professor: Good morning, everyone. Now, what was today’s topic? . . . Oh yes, conformity. Well, conformity has both positive and negative sides. Society runs more smoothly when people know the usual rules of behavior, and also when they share the same attitudes. If you conform in clothing, preferences, and ideas, you’re more likely to feel in tune with friends and colleagues. But conformity can also have some negative effects. It can suppress critical thinking and creativity. In a group, it can lead to bad decision making. As we’ll see throughout the rest of this lecture, groupthink is one concept that can help us understand these negative effects. We’ll look first at what groupthink is, then the circumstances in which it happens; we’ll look at some examples of groupthink, and how to recognize it, and finally, how to avoid it.

Lecture: Groupthink

Professor: Good morning, everyone. Now, what was today’s topic? . . . Oh yes, conformity. Well, conformity has both positive and negative sides. Society runs more smoothly when people know the usual rules of behavior, and also when they share the same attitudes. If you conform in clothing, preferences, and ideas, you’re more likely to feel in tune with friends and colleagues. But conformity can also have some negative effects. It can suppress critical thinking and creativity. In a group, it can lead to bad decision making. As we’ll see throughout the rest of this lecture, groupthink is one concept that can help us understand these negative effects. We’ll look first at what groupthink is, then the circumstances in which it happens; we’ll look at some examples of groupthink, and how to recognize it, and finally, how to avoid it.

So, what is groupthink? Well, the concept was first developed to help understand some controversial decisions made by the U.S. Government. Groupthink occurs when members of a group have strong rapport with each other—in other words, it occurs in highly cohesive groups where the members see relationships as very important. This often means that ideas are not examined carefully, and that other possible courses of action are sometimes not even considered. In short, groupthink occurs when members of a group change their opinions to match the consensus of the group. And they do this even when it goes completely against their original opinion.

Well, you might ask, why would someone change their opinion like this? Some do so because they identify with group members and want to be like them. Some want to be liked. Some believe the group has knowledge that is better than their own. And some conform to keep their jobs, get promoted, or win votes. Also, social pressure is often very strong, and being a nonconformist can be uncomfortable.

Let’s look now at when groupthink happens. The psychologist most associated with groupthink is Irving Janis. He identified several conditions likely to promote groupthink. The most important is high group cohesiveness. Related to this is similarity of members’ social backgrounds and values. Then

there's group isolation. Groups having little contact with outside people are more likely to be affected by groupthink. Leaders who order their team around also encourage groupthink. And so does the presence of external factors causing a high level of stress, as well as anything else that makes it difficult to reach a decision.

There are many examples of important events in which some people say groupthink played a role in decision-making. These include the space shuttle disasters and the collapse of Enron Corporation. In situations such as these, group members were often uncomfortable with dissenters. In the end, groups might punish, isolate, or even throw out the nonconformist.

Now, you're probably asking yourself, “How can I know when groupthink is happening?” Well, Irving Janis also did some work in this area. He identified a number of symptoms of groupthink. I’ll list a few to watch out for. First, there’s a feeling of invulnerability across the group. When a group feels that it can do nothing wrong, there’s likely to be a problem. Second, there’s self-censorship. Dissenters choose to keep quiet rather than speak their mind, so that they don’t cause trouble or risk negative opinions from other group members. Another danger sign is when there’s pressure on dissenters to conform. Maybe the leader makes fun of doubters, or makes them feel uncomfortable in some way. This often takes the form of accusations of “disloyalty” or not being a “team player.”

This all sounds rather scary, doesn’t it? But all is not lost. There are a few things you can do to avoid groupthink—well, if you’re leader, anyway. One is to encourage and even reward expressions of doubt and dissent. Another is to try to bring out as many different ideas as possible. Well . . . maybe you could ask people to come up with counter-arguments. Or you could bring in people from outside who may have fresh ideas. Being clear about the role of group members can help, too. If people think of themselves as open-minded problem solvers, they are more likely to deal with different ideas than if they think their purpose in the group is just to justify their own opinion.

So, in summary, now you know the dangers of groupthink, how to recognize it, and how to avoid it. Good luck with your future group decision-making!

**Focused Listening**

*Exercise 1, Page 64*

**Excerpt One**

So, what is groupthink? Well, the concept was first developed to help understand some controversial decisions made by the U.S. Government. Groupthink tends to occur when members of a group have strong rapport with each other—in other words, it occurs in highly cohesive groups where the members see relationships as very important.

**Excerpt Two**

In short, groupthink occurs when members of a group change their opinions to match the consensus of the group. And they do this even when it goes completely against their original opinion.

**Excerpt Three**

Well, you might ask, why would someone change their opinion like this? Some do so because they identify with group members and want to be like them . . .

**Excerpt Four**

There are many examples of important events in which some people say groupthink played a role in decision-making. These include the space shuttle disaster, and the collapse of Enron Corporation.

**UNIT 4**

**Architecture: Aesthetics**

**Global Listening**

*Exercise 2, Page 81*

**Professor:** Good buildings should inspire strong emotional responses. Think about the Taj Mahal, serene and relaxed. Who could fail to feel peace and calm when looking at it? In comparison, the Sydney Opera House with its elegant sail-shaped roofs projects a livelier, energetic feeling. So, what aspects of a building inspire these feelings? Three factors which appear to strongly affect this are form, texture, and scale. Today I’m going to talk a little about each.

**Lecture: Architecture for the People: Emotional Responses**

**Professor:** Good buildings should inspire strong emotional responses. Think about the Taj Mahal, serene and relaxed. Who could fail to feel peace and calm when looking at it? In comparison, the Sydney Opera House with its elegant sail-shaped roofs projects a livelier, energetic feeling. So, what aspects of a building inspire these feelings? Three factors which appear to strongly affect this are form, texture, and scale. Today I’m going to talk a little about each.

So, let’s begin with form. Let’s look at two examples. First, a building from the so-called “modern” era, a typical skyscraper—the MLC Centre in Sydney. It’s pretty rectangular, isn’t it? And what emotions does it inspire? Interest? Boredom? Anger—at how something so ugly could be allowed? Perhaps it’s so plain you just feel nothing? Let’s compare it with the Sydney Opera House. These buildings were both designed at around the same time, but they could hardly be more different from one another. The curved roofs of the Opera House form a far more interesting shape. And the shape actually means something—the curved roofs remind us of the sails of the yachts on Sydney Harbor. I think that explains why people feel so much more affectionate toward the Opera House! A lovely building, isn’t it? Now, which building would you be most proud to work in?
OK. Now, here’s another building—the Chrysler Building, in New York City, which, incidentally, is still the world’s tallest brick building. Just like the MLC Centre, it’s an office building. Now, the MLC Centre is just a plain block, a box. But look at the variety on the Chrysler Building—far more curves, complex shapes at the top . . . in short, more interest! There’s far more to look at in the older building, isn’t there?

That leads us to our next theme, texture. See how the windows and decoration of the Chrysler Building create repeated patterns? And look again at the MLC Centre. Notice there’s also a lot of repetition there—in fact, the same pattern for the whole height of the building. Now, I would call that effect a texture. I don’t mean the close-up texture that comes from the materials; I mean patterns that can be seen from a distance, from where people usually view buildings. Yes, there’s also repetition, a texture, on the Chrysler Building, but not the exact same effect repeated over the whole building. I think you’ll agree that there’s something much more interesting about the surfaces of the Chrysler Building compared with the MLC tower. I think texture goes a long way toward explaining why more people like the Chrysler Building than most “modern” architecture—and why the Chrysler Building generates a more positive emotional response. I can see why this building was recently ranked the ninth most popular building in the U.S.

It’s worth looking further at texture. It’s often said that older buildings look much better than modern ones. So let’s examine that opinion in terms of texture. First, here’s Durham Cathedral in England, which is a great example of a European cathedral. Durham’s a wonderful place to visit by the way. It’s a great little town, very friendly. I spent some time there a few years ago. Really enjoyed it! And here’s Todai–ji in Japan, one of the most famous temples in that country. Now, the texture of these buildings is far richer and more detailed than on most modern buildings, isn’t it? There’s still some repetition, but there’s also a lot more variety. And there are no large areas with the same monotonous texture. Having the same texture all over just inspires boredom. I believe this is a key point that many modern architects have forgotten.

OK. The third factor, as I mentioned, is scale. Think about a small house and a large one on the same street. Which one would you prefer to live in? Which one projects the best image? And would the Taj Mahal create such strong emotions if it were only 12 feet high? That’s not to say that big is necessarily beautiful, just that the emotional response is different. Architects of older religious buildings knew the effect of scale on emotional response very well. A sense of power and importance is one reason that towers are so popular in these buildings, and why temples, mosques, and churches often dominate their towns.

So, to conclude, we have looked at three of the things that allow an architect to affect people’s emotional responses to buildings. I say again—people’s emotional response is often the most important thing to think about when considering a building’s appearance. Get that right, and you’ll have a building that people remember and like.

Alright, our time is up. For next time, please read chapter . . .
transportation engineers face when they design transportation systems, or networks.

First, let’s consider efficiency, which is related to location utility and time utility. Essentially, vehicle use of roads is inefficient due to the normal highs and lows of travel demand. We all know that for about two hours each morning and afternoon, on weekdays only, we need wide roads, large numbers of buses, more drivers, and so on—but during the other 20 hours a day, and on weekends and holidays, we only need a fraction of this capacity. So how big do we have to build? This problem becomes even more complicated when a city is growing. Large, growing cities such as Beijing, Berlin, Dubai, Los Angeles, Mexico City, Toronto, and so on, must consider how big their transportation systems need to be to meet their needs today, and tomorrow. Of course, the size of a transportation system is directly related to its cost.

Now, we can talk about the cost utility of transportation projects; it’s very expensive to build roads, subways, airports, and train tracks. And we don’t often have all the money to build all the projects we need. So right away we must consider which projects will bring the most benefit, and we start looking at trade-offs. For example, a city may need a bigger airport, but if the local highway isn’t wide enough to carry the rush hour flow of vehicles, then it might be better to spend money on widening the highway. So engineers must make trade-offs.

Our third challenge is that transportation projects usually involve some damage to the environment. Land that could be used for agriculture, retail, residential, or recreational purposes is used for roads, tunnels, and tracks. Also, there are pollution concerns. All vehicles require some kind of energy—mostly the burning of fossil fuels—which creates air pollution. Similarly, transportation creates noise, and many people will fight to prevent noise pollution near their homes. For instance, in Thailand, transportation engineers had to complete an environmental impact plan before building Suvarnabhumi Airport to service Bangkok City. The environmental plan considered noise pollution, air quality, traffic congestion, wastewater production, and even bird migration impacts. It’s not easy to balance environmental concerns with efficient and affordable transportation.

And finally, transportation projects must be as safe as possible. To make transportation systems safe, you may need to build them bigger. Wider roads, longer airport runways, and bigger bridges may be safest for people traveling and people living nearby; and of course, all of these require more money and more space. Again, there are trade-offs that must be made between safety and cost or safety and the environment. You can see how safe projects may not be the cheapest or most environmentally friendly. However, it is still possible to build safe transportation projects that are also cost-effective. In many cities, there are transportation safety committees that consider how to build local roads, freeways, and airports both safely and cost effectively. This is one of the major goals of transportation engineers.

Now, as you know, conventional approaches to traffic problems have included building new roads, or new lanes onto existing roads, increasing public transit, encouraging carpooling and high-occupancy vehicle lanes, and providing radio and TV traffic reports. However, these solutions have only been able to help so much; there are still significant increases in traffic. So now, transportation engineers are looking for new solutions to old problems. Recently, a wide range of advanced electronic technologies have been combined into what we now call Intelligent Transportation Systems (ITS). This will be the subject of your next reading. See you next class.

**UNIT 6**

**Art History: Art versus Craft**

**Previewing the Academic Skills Focus**

**Exercise 1, Page 120**

**Audio Tour Guide:** The Ardabil Carpet was produced in Islamic Persia during the Safavid Dynasty in the 16th century. It was made with about three hundred knots per square inch of carpet, or approximately 25 million knots in total. It is one of the greatest of all Persian carpets.

The quilt Tar Beach, made by Faith Ringgold in 1988, shows a poor family and their friends on a hot night. They are on the roof of their apartment building—their “beach”—because there is no air conditioning in their apartments. There are two children on a blanket; their parents are playing cards and eating. Ringgold explained that the girl child dreams she can give her father the job he didn’t get because of his race, and let her mother sleep late and eat ice cream every day. Art critics believe that the combination of fantasy and hard reality makes this quilt special. Ringgold is telling us that imagination is the key to overcoming obstacles.
Let us begin with defining craft more exactly. Craft means the creation of objects that have no specific function. This meant that his theory could be applied to many forms of artistic creation.

Some believed realists were enemies of true art. Realists focused on ordinary things and common life. For example, many religious paintings and portraits were commissioned by specific churches or wealthy people—kings, for example. These paintings have always been considered art, but not according to Collingwood. If these paintings were planned, painted to create a specific emotion in specific viewers, then according to Collingwood, it is a craft.

To demonstrate this point, let’s compare the carpenter with a painter. When the carpenter sets out to make a table, he has a plan. He knows exactly how long the legs should be and the exact dimensions of the tabletop. When the plan is achieved, the table is finished. The craftsperson plans the table, builds the table according to the plan, and stops building when the table is finished. The outcome of a craft is dependable, reliable, predictable. Also, carpenters make tables for customers. There is a market for tables of this particular size and shape. These are characteristics of crafts.

On the other hand, the painter may begin her painting with an idea, but probably not a plan. As she paints, she explores the possibilities of her subject, her materials, and the light. She is not certain what the painting will look like when she is finished. In fact, she may not know when the painting is finished. She could always keep painting, keep adding details, color, subjects. In this way, the painter is part of her own audience. Just as a viewer cannot know the outcome of her painting, she does not know the outcome of her painting. This is very important for defining art. And finally, she may paint the painting without knowing who will buy it. She has no specific consumer in mind. Painting is an exploration, not a product for market. These are characteristics of art.

Of course, another key idea that Collingwood proposes is that art creates emotion in the viewer, while craft does not. A painting may make a viewer feel a certain emotion, and this is a characteristic of art. It may make different viewers feel different emotions—emotions the painter could not have predicted. This is art. However, if a painting was planned and painted in a specific way to create a specific emotion in specific viewers, then according to Collingwood, it is a craft.

So let’s just recap these key points. Craft and art can both be skillful and useful. However, craft is planned, with an obvious end point to the creative process, and made for a consumer. Art is an unplanned exploration of the creative process; it may make viewers feel a variety of emotions unanticipated by the artist. Its creation has no clear end point, and no obvious consumer. As a result, the artist is part of her own audience.

One of the interesting things about Collingwood’s theory is that much of what has been considered art in the past is really not art. For example, many religious paintings and portraits were commissioned by specific churches or wealthy people—kings, for example. These paintings have always been considered art, but not according to Collingwood. If these paintings were planned, painted to create a specific predictable outcome—with an obvious end point—and painted with a purchaser in mind—then they are art—they are craft.

To conclude, one reason Collingwood’s theory of art and craft has been so influential is that it explains that the difference between art and craft is not related to the materials used, the style of the object, the gender, or social status of the creator. Instead, the distinction is based on the kind of creating. And .

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Focused Listening
Exercise 2, Page 126

Viewer 1: This is a decorative panel from the Alhambra Palace in Granada, Spain. It was created in the 14th century by an unknown craftsman. The detail is fantastic. I am certain that this panel will fascinate mathematicians for centuries to come.

Viewer 2: This work of art titled Tar Beach was made by Faith Ringgold. It’s beautifully made with cloth, acrylic paint, and pieces of fabric stitched together to make a quilt. This quilt should inspire many fabric artists.

Viewer 3: This is a ceramic bowl with a closed top made by artist Toshiko Takaezu. It’s a functional item made into an art object. In the beginning, objects like this were considered controversial because they used craft materials to make works of art. This object will never be considered a functional object.

Viewer 4: The audio tour says that Utamaro Kitagawa painted Reflected Beauty in 1790. The painting is memorable because of the composition—the main focus is not in the middle of the painting. The curved line of the mirror is strong, and the figure leaning in from the right is cut off by the frame. I think that in the future, it’s unlikely that this kind of composition will seem so unusual.

Viewer 5: Barbara Kruger created this work of art in 1987. It’s called Untitled (I shop therefore I am). This work makes a serious statement about our consumer society. This kind of anti-consumer statement may be better understood by people who reject capitalism.

UNIT 7

Biology: Genetic Testing

Before You Listen, Page 149

Student 1: So genetic testing means the same thing as genetic screening?

Student 2: Yes, the instructor said that right at the beginning. Did you hear it?

Student 1: I must have missed that part, but I’m glad I knew all the synonyms for the word disease. Did you hear those words? There were two.

Student 2: Ummm . . . disease and disorder, right? What was the second synonym for disease?

Student 1: Condition . . . You can have a condition like Huntington’s disease.

Student 2: Right. I laughed about the image the instructor used for genetic testing. What was it again? . . . oh yeah, he said genetic testing was a technology whose time has come, that it was gaining momentum like a snowball rolling down a hill. I guess he meant that genetic testing can’t be easily stopped, like a snowball rolling down a hill is hard to stop.

Student 1: You have to come from a country where there’s snow to understand that expression. But what was the instructor’s primary purpose for that lecture—was it informative or persuasive?

Student 2: Well, I’m not sure. I thought it was informative, but at the end, maybe it was persuasive. What did you think?

Student 1: I’m not sure either.

Lecture: Genetic Testing

Professor: Hello, everyone. Today I want to talk about genetic testing or genetic screening. Genetic screening is the testing of people who have no symptoms to determine if they carry genes that will increase their chances of developing certain genetic diseases. It’s a technology whose time has come. Like a snowball rolling downhill, the practice is gaining momentum. However, genetic screening raises many ethical issues, and we have to think about these now so we can make informed decisions about genetic testing.

Certainly, there are advantages to genetic testing. One is that if you know you have a treatable or preventable condition, you can take steps to reduce the risk of developing the disorder. Another advantage is that you are informed about the likelihood of passing on a genetic disorder. You could choose to prevent suffering in future generations if the disorder is caused by a recessive allele that can remain hidden for generations or by a dominant allele that is not expressed until late in life. Consider, for instance, Tay–Sachs disease. Now, this disorder causes the death of children, usually by the age of five. The infant appears healthy at birth, but at about six months old it gradually stops smiling, crawling, or turning over. Eventually, the child becomes blind, paralyzed, and unaware of its surroundings. This terrible condition is especially prevalent in descendants from Jewish communities from Eastern Europe. Many people in these communities have volunteered to be genetically tested, and as a result, the number of children born with Tay–Sachs disease has decreased by tenfold in many communities.

However, genetic testing also has a dark side. The psychological consequences of test results can be devastating. Many genetic disorders cannot be prevented or treated. So do you really want to know now what will cause your death? For example, Huntington’s disease is caused by a dominant allele that provides no hint of its existence until relatively late in

life. About 60 percent of the people with Huntington’s disease are diagnosed between the ages of 35 and 50. The gene causes degeneration of the brain, leading to muscle spasms, personality disorders, and death, usually within 10 to 15 years. Because Huntington’s disease is caused by a dominant allele, a bearer has a 50 percent chance of passing it to children. Thus, a person whose parent dies of Huntington’s disease could be relieved if a gene test did not detect the allele. But it’s equally likely that the allele will show up. Many people at risk for Huntington’s disease prefer to live without the knowledge of their possible future. Also, a genetic test that confirms the risk of a serious disease can cause anxiety and depression in carriers and feelings of guilt in siblings who do not carry the allele.

OK. There is also the possibility that the results of gene tests will not remain private. What would happen if information about your genetic test was available to your employer or health insurer? As an employer, if you had information about the genetic test of someone you might hire, would you choose to invest time and money in training a person who carried an allele that increased the risk of cancer, heart disease, Alzheimer’s disease, or alcoholism? As an insurer, would you knowingly insure a carrier of these genes?

There are also a large number of unanswered questions about genetic testing. Who should decide whether screening should be done, for which gene, on whom, and in which communities? Could we make laws to clarify the answers to these questions? Should we leave ethical issues to judges and legislators? Should moral matters be decided by society or clergy—or should they be personal decisions?

So, if genetic testing is done, who should be told the results? If the affected person is an infant, should the parents always be told the results, even if the condition is poorly understood? Would that be helping or hurting the child?

Also, unfortunately, we live in a world of limited resources. So, as soon as we decide who should be tested, we must decide who should pay the bill. Both testing and treatment are expensive. Should testing be done only when treatment or preventative measures are available? And if there is bad news, who pays for the medical treatment?

As you can see, there are no easy answers. We must all think about the issues raised by these and similar questions.

OK now. . . our time is up. For next class, please read unit eight and be prepared to . . .

Global Listening

Exercise 2, Page 150

Excerpt Two
Certainly, there are advantages to genetic testing. One is that if you know you have a treatable or preventable condition, you can take steps to reduce the risk of developing the disorder. Another advantage is that you are informed about the likelihood of passing on a genetic disorder.

Excerpt Three
Consider, for instance, Tay–Sachs disease. Now, this disorder causes the death of children, usually by the age of five.

Excerpt Four
Many people in these communities have volunteered to be genetically tested, and as a result, the number of children born with Tay–Sachs disease has decreased by tenfold in many communities.

Excerpt Five
However, genetic testing also has a dark side. The psychological consequences of test results can be devastating.

Excerpt Six
Many genetic disorders cannot be prevented or treated. So do you really want to know now what will cause your death? For example, Huntington’s disease is caused by a dominant allele that provides no hint of its existence until relatively late in life.

Excerpt Seven
There is also the possibility that the results of gene tests will not remain private. What would happen if information about your genetic test was available to your employer or health insurer?

Excerpt Eight
Who should decide whether screening should be done, for which gene, on whom, and in which communities? Could we make laws to clarify the answers to these questions? Should we leave ethical issues to judges and legislators? Should moral matters be decided by society or clergy—or should they be personal decisions?

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UNIT 8

Business: Mediation

Lecture: Mediation Techniques

Professor: Good day, everyone. As you may guess, being a mediator is not easy. Today I want to talk to you about what a mediator actually does to help people resolve their disputes. Mediation sessions usually begin with a broad and confused
discussion of issues seen from competing perspectives. What the mediator wants to do is to move the general discussion to a more detailed and specific discussion. Based on these specifics, cooperation and shared values can emerge. To move the discussion from general to specific, mediators use techniques such as fractionation, framing, reframing, highlighting common ground, and brainstorming.

To start, mediators use fractionation. This technique involves breaking down complex issues into smaller, more manageable ones. After separating issues into their smallest components, the mediators can ask the disputants to deal with each issue one at a time. Hopefully, the parties can resolve some of these smaller conflicts, which will build a feeling of success, one at a time. Hopefully, the parties can resolve some of these smaller conflicts, which will build a feeling of success, and give the parties some confidence in the process by the time they get to resolving the larger issues. For example, two roommates might decide that they are not getting along. But after the discussion moves from the general to the specific, the mediator discovers that they have a number of specific differences. They disagree about the music they play on their stereo, what they like to eat, when they have visitors, when they wake up, and when they study. Some of these issues should be easier to resolve than others, so the mediator will start with those issues. This is fractionation.

Another mediation technique is known as framing, where mediators ask neutral or friendly questions that avoid blame or passing judgment. These questions should help the parties open discussion or summarize their issues. Returning to our example of the two roommates, the mediator might frame the problem like this: “You clearly have some problems living together, but you are both here trying to resolve these problems, and that’s a step in the right direction.”

One more technique is reframing, where mediators restate negative, biased, or insulting statements made by one of the parties. The mediator reframes the statement using neutral vocabulary, or restates positions in a way that makes the parties look at the issues differently. For example, if one of the roommates says, “He always comes in late and makes noise just when I need to study the most,” the mediator could reframe this statement by saying, “Getting good grades is important to you, and you need some quiet time to study—is that right?”

Finally, mediators highlight common ground, by finding shared attitudes, values, behaviors, expectations, and goals. This can help lay the ground for a possible agreement. Getting back to our roommate example, the mediator might discover that although the roommates prefer to study at different times of the day, receiving good grades is important to both of them. The mediator will highlight this common ground between the two roommates by saying something like, “Both of you want to get good grades and need some quiet time to study—you’re similar in this way.”

As the discussion progresses, the mediators brainstorm alternative proposals or solutions to the problem that would satisfy the interests and needs of both parties. The mediators also help the parties brainstorm alternative proposals. The idea is not to criticize or limit the proposals in any way, but simply to create as long a list as possible. Sometimes one suggestion, even if ridiculous, triggers the parties to think of something better. Brainstorming plays an important role in expanding the range of options for reaching an agreement.

Throughout the discussion, mediators use fractionation, framing and reframing, and highlighting common ground to encourage discussion. They use brainstorming to identify possible solutions. And of course, they encourage positive contributions, and show attentiveness by responding verbally or nonverbally to comments by both parties. This positive feedback encourages the parties to continue the mediation and work toward agreement. These are some techniques that serve mediators well when they help to resolve disputes. Your challenge now is to practice some of these techniques yourselves.

Global Listening
Exercise 3, Page 173

Excerpt One
Today I want to talk to you about what a mediator actually does to help people resolve their disputes.

Excerpt Two
For example, two roommates might decide that they are not getting along. But after the discussion moves from the general to the specific, the mediator discovers that they have a number of specific differences. They disagree about the music they play on their stereo, what they like to eat, when they have visitors, when they wake up, and when they study. Some of these issues should be easier to resolve than others, so the mediator will start with those issues. This is fractionation.

Excerpt Three
Your challenge now is to practice some of these techniques yourselves.

Focused Listening
Exercise 1, Page 174

You are a neighbor to two people who have asked you to mediate their dispute. The complaining neighbor wants the other neighbor to stop playing basketball from 6:30 to 8:30 every morning and not to move her garbage cans away from the road on garbage collection days. She says she needs to sleep in the mornings; furthermore, the garbage doesn’t get collected if the garbage can is not next to the road, and her garbage is piling up. The basketball—playing neighbor insists he needs to practice basketball every day. On garbage collection days, her garbage can is at the edge of the basketball court, so he moves her garbage can out of his way before he plays basketball.


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