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JEREMY WOLFE: When last we met, I think-- so you have to remind me of this. I put the bits on the handout that I didn't have from last time, but we talked about-- if you look at the handout, we talked about what I'm calling the psychopathological theory of love and the chemical theory of attraction, right? I seem to recall that we finished up last time talking about the shaky bridge, so that allows me to start today talking about social exchange theory.

And so we're actually-- I put the other stuff on there because I felt bad about not having it on there last time. But so we'll start sort of in the top middle of page 2, and the question here continues to be, how do we explain why a particular relationship happens? The evolutionary theory is good for saying something about broad forces, but now we want to know something about why specific relationships happen and do not happen.

And I can think of no better place to begin than with me as a high school freshman. Now, the reason that I am explaining this as me as a high school freshman is-- I made up this example a few years ago to illustrate the point that I wanted to make, and I ran through this elaborate scenario about a high school freshman, stuff like that. And then I gave your predecessors a choice, did he do A or did he do B?

Somebody raised their hand. He said B. I said no, that's the wrong answer. And at that point, I realized I'd been giving autobiography, so I thought I might as well just go with the straight autobiography, which is, all right, you've got to imagine this high school freshman, who you can imagine was, well, kind of short and nerdy--

[LAUGHTER]

--and-- but good in English. So, oh, I'm just noticing, as the gentleman in the white shirt over there moves things around, if-- Google has these "how to use your brain" things. What's the actual title on it?

AUDIENCE: How to care for your big, wonderful, high-performing brain.

JEREMY WOLFE: Yes, how to care for your big, wonderful, high-performing brain, if you find one of those around campus-- oh, half the people have them. I realize you all want to go work for Google, but an entertaining act might be to see how many of the little factoids and stuff you think are directly contradicted or directly contradict the contents of this course. There are a variety of oddities on that that-- but it's not bad, and you should send your resume to Google and become rich and famous rather than just being a nerdy high school freshman who was good in English.

So I was in sophomore honors English. Great. In sophomore honors English was, at least through the fog of memory, a very beautiful, very brilliant cheerleader--

[LAUGHTER]

--and woman person.

[LAUGHTER]

And if we return to the psychopathology theory of love, I was pretty infatuated with her. The question is, the "pick A or B" question is, A, I let her know that this infatuation was sort of sitting next to her in class whenever possible and we had a perfectly nice high school relationship, or B, she managed to graduate from high school presumably completely unaware that I had been deeply infatuated with her. How many people vote for A? Oh.

[LAUGHTER]

How many people vote for B? Why isn't John Kerry voting? You would think of all people, he ought to be voting, wouldn't you?

[LAUGHTER]

But--

[APPLAUSE]

He does have excellent hair.

[LAUGHTER]

All right, all right, so-- look, John, stop grinning at me. We can't all marry billionaires. In any case--

[LAUGHTER]

All right, so the intuition of the vast, cruel bulk of you is correct. I suspect in her life I kept sort of turning up like a bad penny. I was continuously around, but there was no relationship there.

Why not? What was my problem? We won't ask for vast-- yeah, all right, we'll ask for some details here.

[LAUGHTER]

AUDIENCE: Fear?

JEREMY WOLFE: Fear, yeah, fear works, but it didn't bother-- in the last example, we had Romeo there, and he was presumably scared out of his little wits, more or less. Yeah?

AUDIENCE: If she found out, she might not want to be around you anymore, so at least you could, like, look at her from afar.

[LAUGHTER]

JEREMY WOLFE: Oh, that's-- I like that. Yeah, that sounds good, but--

AUDIENCE: Self confidence?

JEREMY WOLFE: No, OK, self-confidence-- I think I won't pursue this further because I may learn way more than I want to know about exactly why I should have been fearful, low self-confidence and otherwise.

[LAUGHTER]

But the fact is I didn't-- I didn't do nothing. And the other fact that occurs to me is that it would be entirely possible by this point that her son or daughter could be a student here. Yeah, there's a-- I heard a good, deep intake of breath there. There's a scary thought.

[LAUGHTER]

But, all right, so the intuition is clear. Now, suppose let's flip the example around and ask, suppose that this gorgeous and brilliant high school sophomore was attracted to some nerdy little high school freshman or something like that, would she do anything about that one way or the other? Let's do the A or B vote. Yeah, how many vote that she would say, let's go out together, and that his hair would curl or something?

[LAUGHTER]

How many vote yes, she would do that? How many vote no? Oh, OK, well, a little more divided. There's more chance that maybe she would say something, but the majority goes with the no or the, I'm not voting on this, I just-- I voted once today already, maybe I voted twice.

[LAUGHTER]

But anyway, why, the "why" would be OK, but why not? What's wrong here that--

AUDIENCE: Economics.

JEREMY WOLFE:Economics.

[LAUGHTER]

Oh, I could-- I should've--

[LAUGHTER]

No, no, I-- either we're sitting here reading the handout, or he's on to-- where's economics, man?

AUDIENCE: [INAUDIBLE].

JEREMY WOLFE:What?

AUDIENCE: Her kind of value to other people would go down if she went out with him?

JEREMY WOLFE:(LAUGHING) Oh, we don't have to make this quite so specific, do we?

[LAUGHTER]

Though I should add that-- I mean, this would be, of course, deeply pathetic if since high school I had been a broken and pathetic person who'd never formed a meaningful relationship with another person and I was still waiting for her. But when I did finally get engaged to somebody, my dear sister's first reaction was sort of like that, which was, how did you ever get somebody so attractive to go with you?

[LAUGHTER]

And my mother's first reaction-- we were going to be engaged for two years. Because my-- because we'd been reading up on the early-- this was a long time ago, before evolutionary psych was big, but we were ahead of the curve. And we knew that she had to be a couple of years younger than me because she needed to be evolutionarily fit.

Anyway, she was two years younger than me. I was already up here in grad school. She was still at Princeton as an undergrad, so we would get married two years later when she graduated. My mother's first declaration on this subject was that if anything happened to the relationship in the intervening two years, she was keeping Julie, my wife, and getting rid of me.

[LAUGHTER]

The-- so you may be on to something there. Yes?

AUDIENCE: In high school, women generally didn't ask guys out like that.

JEREMY WOLFE: OK, so there's a-- I could've flipped this around and changed the genders here, but there's a possibility of a social norm that the women don't ask men. But I'm-- I will assert that there would have been a certain amount of discomfort if it had been a gorgeous, brilliant male cheerleader and--

[LAUGHTER]

Hey, don't knock it. My sister-in-law married one of those. University of Michigan, the gorgeous male cheerleaders are right there. But anyway, the-- I don't know how-- is the MIT male cheerleading squad a big thing?

[LAUGHTER]

No. OK. Anyway, I think that there would be a certain ambivalence about this relationship even if we switched the genders on it. Any other comments on this?

Well, let me assert that this-- whoops-- let me assert that-- I want to look at my notes-- that this sort of relationship feels uncomfortable because we have a very deeply seated desire for relationships to be reciprocal. And it's not just that-- so one might account for my failure-- if you wanted to account for my failure to ask this young woman out in sort of economic terms, you could imagine that what I did was I sort of looked in my romance wallet and I said, I don't have enough to afford this relationship, not in strictly economic terms, but I don't have enough status for this. I'm a freshman, she's a sophomore, made a big difference at that point, right? You know, she's this, I'm this, she's this, I'm this-- you know, this isn't going to work.

But it also doesn't work like this. If you've got too much in the bank, in a sense, there's a discomfort that has to do with unbalanced relationships, and there seems to be a very deeply seated notion that relationships need to be appropriately reciprocal. Now, this isn't just about romance. If I open the door for you, you say--

AUDIENCE: Thank you.

AUDIENCE: Thank you.

JEREMY WOLFE: Thank you. Now, that's a very simple sort of thing, but it suggests that you feel a need to reciprocate for whatever might come your way. If I ask somebody out to dinner, in the subculture in which I live, the reflexive response is-- if I invite somebody over to my house for dinner, their reflexive response is to say, what can I bring, not because they have some notion that the larder is bare at home and if they don't bring something there's no dinner, right, but there's a notion that it needs to be reciprocal. Quite typically, my response would be, oh, you don't need to bring anything, and quite typically, nevertheless, whoever's coming over would bring something anyway, right?

Now, you get into interesting problems. The exact nature of what is and is not reciprocally appropriate seems to have a strong cultural overlay. This was brought home to me by a tale my parents told me, which was, a few years ago, new neighbors moved in, and so my parents, being nice people, brought them over a sort of a "welcome to the neighborhood" gift. I don't know what it was, but they brought over a little gift.

That's nice, but the people who moved in were Japanese. The Japanese cultural expectation was, if you get a gift, you have to give a gift. So they gave my parents a gift, like, the next day, but the expectation, my parents' expectation, wasn't that they'd get a gift. So if they got a gift, there's now a reciprocal demand here.

[LAUGHTER]

So they gave the neighbors another gift, and at least by the time you get my mother's rendition of this, it sounded like the end of this was sort of medieval warfare with sieges, you know, lobbing gifts over the fence.

[LAUGHTER]

"Stop it, already." But the-- all of these examples point out that there's a deep-seated notion that relationships-- we don't like one-sided relationships. We like relationships that are reciprocal in some fashion.

And the reciprocation needs to match the original act. If I invite you to dinner, and you throw yourself on your face and swear eternal fealty to me, you know, that's reciprocal, but that's odd, right? That's out of proportion and wouldn't be right.

The effort to make these sort of intuitions into something more than intuition, into a systematic theory, one of the efforts is known as social exchange theory. It is an effort to talk about relationships, social relationships, in terms that borrow from commonsense economic terms, where the goal is-- one of the goals is to maximize your profits. There are benefits. There's the income side, there's the cost side, and your profits are going to be something like the subtraction of the costs from the benefits.

Now, costs and benefits in social exchange are not going to be in strictly monetary terms by any stretch of the imagination. Benefits in social exchange can be tangible, like dinner. They can be intangible, like a compliment of some variety.

That's a lovely yellow T-shirt with some cool description on it. Right, I've just add it to the plus side of his ledger. Of course, I've also added to the minus side because I've directed attention to him and now he embarrassed and everybody's looking at him. No, you know, all right, it's good.

AUDIENCE: You're not getting anything back.

JEREMY WOLFE:I'm not getting anything back. No reciprocation here at all.

[LAUGHTER]

I just got something back. Well, sort of. Well, anyway, the-- and they can be internal. The benefits could be internal, like a feeling of self-worth, some boost in morale, something like that. All of these would sort of be things on the plus side and quite different than just straight economic transaction, and the same on the minus side. You could have a physical minus if, you know, somebody smacks you or something like that.

An intangible minus, I won't pick somebody out because that would be rude, but you know, oh, did you get enough sleep last night, or something like that, it sort of suggests that you don't look so good. And you think, I did get a lot of sleep last night, maybe I just don't look so good, you know? And then it could be internal, a feeling of diminished self-worth or something like that, and then you've got your profits that are the difference between those.

There is a necessary-- at least at this stage of any sort of model development, there is a necessary imprecision here. Dinner minus two insults equals what? Oh, no, no, it's clear that dinner, at least a decent dinner, is on the plus side.

The insults are on the minus side, but you can't do the calculation the way you would do a profit-loss statement in economics. So suffice it to say that in its present state, the model is qualitative more than quantitative, but rather like evolutionary psych, the promise is or the hope would be that you could move in a more quantitative direction.

Do people actually do any math of this sort? Well, you can get some intuition about that, perhaps, by asking yourself about some sort of a scenario like, you go to the polls today, you're in line, and you see this guy who you think you saw voting earlier in the day when you voted the first time.

[LAUGHTER]

You think it, so what do you what do you do? Now, you could challenge him or not challenge him, or something like that, and ask yourself what would determine that decision. You'd sort of run down a mental checklist. If I challenge him, I might get sort of a tangible benefit of preserving the democratic process in some fashion. I'd get an intangible set of compliments from people all around me about my bold stand for ballot integrity, and I'd get this great feeling of self-worth.

On the other hand, uh, I might be wrong. He might punch me, and my neighbors in line might simply deride me for being a stupid busybody and getting in the way of-- and it doesn't really matter what your answer is. The point is that this sort of cost-benefit analysis has the feeling of the sort of thing that we do, not explicitly, not on a piece of paper with a checklist, but the sort of thing that we do quite automatically.

The notion that you want to maximize your profits is only one of the core tenets of social exchange theory. You know that because the handout, I think, lists three of them. One of them is to maximize your profits.

Oh, there it is. It says, "Three tenets of social exchange theory-- maximize your profits." The second one is the notion that the profits for both sides in an exchange should be roughly equal. That's the embodiment of this notion of reciprocity, that we don't like relationships where you maximize your profits by exploiting the other part of the-- the other party to the relationship.

And the third one, that we haven't talked about yet, is that for a relationship to last, it's got to be better than the perceived alternatives. So it's not enough merely for-- the plus or minus of that checklist is not itself adequate. You need to know-- well, I mean, we can think about this in boring economic terms.

You've got a pile of money in this account. It's making 1%, so you're making money, right? But you see that there's this other opportunity over here to make 5%. Well, what are you going to do with your money?

You're going to move it over. Ooh, look at that. Not only did I get a sweatshirt out of the deal, I got a nickel and a cute little pink thing. He left the coin he flipped. This is a great day.

Anyway, so the same logic applies in social exchange theory to relationships. So you're in a relationship that's getting you a net profit, right, in this sort of checks and balances. You're with a perfectly nice person. You see this other person, and you say, I could get 5% on my relationship over here.

[LAUGHTER]

What do you do? Now, we'll come back later in the lecture to the possible problematical nature of that tenet of social exchange theory, but the important point for now is it's not just that you want to be running positive not negative. You want to be running as positively as possible, and you're looking at your alternatives to see how you can do that.

Now, this sounds, particularly by the time we start talking about moving your investment from one person to the next person, terribly crass. Is there any evidence that people use this quasi-economic calculation in romance, in making romantic attachments with other people? There have been a number of experiments that have endeavored to look for evidence for social exchange theory principles in the settings of romantic-type relationships, and I want to tell you about a few of them. That's why you've got-- and I've got all these cute little boxes on the handout that allow you to plot out the results and the predictions and the results of it.

So let me tell you about one of the earlier great efforts. That's down on the handout as the great "computer match dance." Here's the way it works. Back in the '60s, in the early days of computers, the signs go up on campus for a big dance, but the thing is you're not supposed to invite anybody. You know, you're not supposed to take your date to this dance.

What you're going to do is you're going to come fill out this big form collecting buckets of information on you like your GPA, your height, your weight, family income, all sorts of stuff, and the people on the other side of the table when you're doing this are looking at you and rating your attractiveness on a scale from 1 to 10 or something like that. And then all this goes into a good 1960s style computer, so it's a big computer with lots of lights that flash on it. And out the other end is going to come out the person you are matched with to go to the dance, right?

OK, you've got the basic setup here. So we've got the male. He can be rated on some scale. You've got the-- whoops-- you've got the female. She can be rated on a similar scale.

And the story here is that we've matched you up with the perfect person for you in some fashion or other. Actually, I don't think they told you that this was the way it was going to be done. And it's some complicated algorithm. The fact is the complicated algorithm was to flip coins. Before-- the pairings were completely random, so the data on any dimension that you looked for were designed that male and female ratings would be uncorrelated.

OK, now you have the dance, and the question is, this being the '60s, the issue of males asking females, rather than the other way around, is a much more straightforward societal norm. The question that they asked was which males asked which females out again for another date. What's the social exchange prediction here?

AUDIENCE: That the [INAUDIBLE]?

JEREMY WOLFE: The social-- that's a hand?

AUDIENCE: It was equal in the middle [INAUDIBLE].

AUDIENCE: Equal on the--

AUDIENCE: On the diagonal.

AUDIENCE: A lot of--

JEREMY WOLFE: Yeah, on-- yes, just so-- in the middle, in this sense, on the diagonal of sort of unit slope, that people should themselves in some fashion to produce essentially reciprocal, balanced relationships. So this situation, this quadrant is the "me not asking her out in high school" neighborhood, and this is the reverse, "her not asking me out" hypothetical relationship. But these are the matched relationships that ought to work.

In fact, this experiment is a bomb. It doesn't work out the way social exchange theory predicted. Turns out-- so you look at the correlational data for all sorts of variables, and it turns out that the only variable that makes any difference is ratings of female attractiveness. And the data look like this.

[LAUGHTER]

Basically, females who are rated as more attractive got asked out. What's going on here?

[LAUGHTER]

So the answer is the experiment was a-- there's a fatal methodological flaw here. There are two possibilities. One is that social exchange theory is wrong, but that would be-- if I thought that were the case, then why would I bother to lecture about it, at least in this sort of detail? The other possibility is the experiment had a methodological flaw.

So what's the problem? Why didn't this work out? Oh, up in the cheap seats, next to John Kerry there.

AUDIENCE: People thought that they were well matched, so that didn't end up being an issue for them because [INAUDIBLE].

JEREMY WOLFE: This is-- that's good. Usually, I get half a dozen bizarro ideas before somebody hits on the right idea, but good for you. You got the right idea first.

The problem is with the cover story. It's not people specifically who are the problem. It's guys. The guys thought-- so you've got to imagine a guy here, right, so if this is the scale of attractiveness, so here's ugly guy. Ugly guy has thought all along that he was-- you know, oh, I've got a warm heart, but, you know, I'm ugly.

[LAUGHTER]

And then this high-tech computer spits out your perfect match, and she's gorgeous. It's the "economics of romance" equivalent to looking in the wallet and discovering you've got a whole bunch of 20s you didn't know were there. You're just-- and so everybody decided they were well matched, and this had its biggest effect on the guys who had previously thought that they didn't have that much in the bank.

And they-- well, I guess I can afford this, and so they all asked out the-- well, what we don't know, by the way, is which of these relationships or which of these phone calls actually ended up in a date and/or relationship. The social exchange prediction, again, would have to be that only these would have survived, but we can come back to that in a minute.

Anyway, the experiment's a bust because the cover story gives people the wrong idea. This makes an interesting point about these valuations. They're based on your perception-- in relationship space, they're based on your perception of the other and your perception of yourself.

So if you are-- well, we have met males, for instance, who consider themselves to be god's gift to women, against the evidence. You know, they're people who are going-- if you have a systematic misperception of your own value, you're going to end up in the non-social exchange part of this space, and then the question becomes whether or not that relationship-- whether or not it's a self-correcting system. If you think that you are a 10 on every scale, and you keep asking people who are, by your assessment, also 10s on every scale, and they keep saying no to you, does that eventually cause you to come up with a more realistic assessment of who you might actually be in this marketplace?

Well, we haven't got any evidence that this works at all yet. Let's go find ourselves an experiment that doesn't have this fatal flaw in it. That's-- did I give this a clever name of some sort? No, it just says "let's try again."

So here's this Kiesler and Baral experiment, that works as follows. You go into a psych lab to do what you think is some sort of a cognitive experiment. The details of the task don't matter.

You're doing this task broken into two halves, and at the end-- you're a guy-- and at the end of the first half, you're going to take a break. And you're given some feedback about how you're doing. The feedback is either of the form, "Wow, you did really well on that. Well, most people don't get scores that are that good. You're really good at this sort of thing."

So that's good self-esteem boosting kind of bit of feedback, or you're given feedback of the form, "Did you get enough sleep last night? Most people"-- I think they did use the "get enough sleep" thing, but, "Most people get a higher score. Well, never mind. It's OK. Let's take a break." And so you're-- so you've gotten the bad information.

Now, needless to say, this is a setup. What information you get is uncorrelated with your score. So you may have done brilliantly. You may have done badly.

You have no idea how people do on this task in general, and the experimenter has flipped a coin and arbitrarily assigned you to the high self-esteem or low self-esteem group. That's the manipulation of the male. This is the guy.

Now, you go down to-- we're going to go have a snack. You and the experimenter go off to the cafeteria to have a snack, and you're going to-- you get some food, you sit down at the table, and a female friend of the experimenter comes and says, hi, can I sit down with you? And the experimenter says, hi, sure.

And so the female person comes in two flavors, as you might guess from this two-by-two thing. There's only one female here, but the manipulation here is she's either looking good or she's looking bad. I don't think I've ever seen pictures of this, so I don't quite know what the description-- how they did this, but the idea is that she's arranged herself to look attractive or comparatively unattractive, OK, same person, so no personality variables changing, and a fairly tight script.

And at this point the experimenter says, "Oh, but I need to go rinse a few things out. I'll be right back. You two talk."

And so this woman, also an experimenter, is sitting there, and the data for this experiment are any indications of romantic interest on the part of the guy. You know, does he ask for her phone number would be a sort of a transparent kind of thing, but there's a long checklist of things that he might do or say that would indicate some sort of interest. And you're just making little check marks, presumably relatively subtly, not sitting there with a-- you know, "can I have your"-- [WHOOSHES]

[LAUGHTER]

All right, so the trivial social exchange prediction is he's looking good-- sorry, "he's feeling good, she's looking good, it must be love" kind of thing. And this is where most of-- yeah, this is the cell that gets the highest number of indications of interest. The question is where's the second-highest set of marks in this experiment, and the answer is down here, "she's looking bad, he's feeling bad, it must be a match."

And these two lag behind. I don't know which one is 3 and which one is 4, actually, but the important point is that there are more indications of interest here, as would be predicted by a social exchange theory that's looking for matching. And this is the case where you looked in your wallet and you discovered that you actually had a couple less 20s than you thought, but you still want to buy something and, well, I guess. Doesn't this sound terrible?

[LAUGHTER]

Well, all right, it not only sounds terrible, it sounds a little on the artificial side. Is there any evidence that this happens in a more realistic setting? And the effort to figure that out was done with the realistic setting of large introductory psychology classes, so a large intro psych class, I think maybe Minnesota or Ohio State, someplace where they had a huge intro class.

And what they did was they-- a largely freshman class, they looked for who formed relationships. So let's go-- and it's like the "computer match dance" thing, but we'll take the relationships first and work backwards from that. So they got, like, 213, I think, couples out of intro psych, and they did the same business, rated them on attractiveness, rated them on everything under the sun, SAT scores, religion, all sorts of stuff, and scatter-plot the data.

What you find is that these freshman pairings were not highly correlated. They weren't random, like if you randomized in the computer match thing. There are factors that did correlate, but they weren't particularly striking.

But now let's ask-- so we've got some cloud of data points again with perhaps some positive correlation to it. Let's come back two years later and ask who's still together. And what you find two years later, I don't remember how many were still together, but of the ones who were still together, now essentially all of the variables correlated.

So you could pick anything you liked, SAT scores, religion, looks, socioeconomic status, and now it's not that it'll all lay on the line of unit slope. It's not that somehow you went to State University of Minnesota or something like that and you found the one person who had exactly the same SAT scores as you and their parents made exactly the same amount of money and you were exactly the same height and all the-- it's amazing-- no, no, you know, what you've got is, it's still a big cloud of data points, but now all the variables are positively correlated, that the-- well, what's the cliché here? That we're-- I'll give you a hint.

AUDIENCE: Birds of a feather flock together.

JEREMY WOLFE: Thank you. Birds of a feather flock together would be the sort of punchline of this experiment, that after-- there may have been a degree of noise in the initial assortment, but the relationships that lasted were the relationships where the birds of a feather were flocking together, and that hand is going to say but--

AUDIENCE: But that opposites attract.

JEREMY WOLFE: Thank you. Next thing on the handout says the other cliché is opposites attract. Now, the thing about clichés is that clichés don't get to be clichés unless there is an element of truth in there somewhere. And the element of social exchange theory truth in "opposites attract" is that opposites attract when they increase each other's profits, so the sense in which opposites attract is she talks, he listens.

From the outside, it may look like, my goodness, he talks all the time or she talks all the time, you know, and she never says a word. How can they live together? Well, the answer is it's a great deal easier, probably, to live together that way than if they both talk all the time.

[LAUGHTER]

You know, those two birds of a feather are going to drive each other sort of nuts. And, you know, he's a great cook, she's a great eater--

[LAUGHTER]

--or at least an appreciative audience or something like that, that is the sense in which opposites attract. There's no particular evidence that opposites attract in the-- well, I mean, you could ask yourself about sort of roommate issues, where there's a certain amount of random assortment of people or at least-- I gather here you sort of pick your roommate on the basis of sketchy information when you arrive. Is that the current scheme?

AUDIENCE: [INAUDIBLE].

JEREMY WOLFE: Yeah, so it's a sort of a courtship on the basis of limited information. Anyway, when you discover that even though you were correlated on a bunch of variables, it turns out that there are a few variables that really matter. Like, person A is a slob, person B is a neatness freak, that ain't an "opposites attract" kind of situation, and there's a couple of heads shaking around here saying "I know that."

Or in our lab, she wants it to be 80 degrees, I want it to be about 50 degrees, that ain't "opposites attract." But there we have it. This is also a not reciprocal, asymmetrical relationship where I'm the boss so I get to play with the thermostat first--

[LAUGHTER]

Unless Kristen gets in first, in which case it's tropical season in the lab.

[LAUGHTER]

We tough it out. Anyway, the problem is she's got numbers on her side. The other people in the lab seem to it hot. I don't understand them.

Anyway, opposites attract in these sort of romantic relationships when they increase each other's profits. That's a useful, I don't know, complication to keep in mind. It's not just a matter of, you know, we all rate each other on all these scales and then pick the closest thing to exactly us. That's not what's going on. What you're doing-- that's going to end up being one factor, but there's this more general factor of what you're looking for are relationships that are profitable and roughly equally profitable for both sides in the relationship.

Well, OK, so let's-- I think I couched the next-- well, actually, here, let's see. I think I couched the next bit as the problem set. Yeah, the social exchange problem set, let's turn to that after taking a brief break here, the--

[SIDE CONVERSATION]

AUDIENCE: So we're not really on the syllabus anymore. What chapter are we in right now? It says 11, but--

JEREMY WOLFE: I think it-- does it say 10 or 11? It's social psych. Did-- This is the syllabus. It's the syllabus.

AUDIENCE: But, like, there's gender stuff in there.

JEREMY WOLFE: Well, this is a case where out of the very large set of things in social psychology, I've ended up selecting a sort of a "love and romance" path through these topics. You will, for instance, I think, find social exchange theory in there. You will find the--

AUDIENCE: Yeah, yeah. [INAUDIBLE].

JEREMY WOLFE: The topics are there. I'm just using--

AUDIENCE: Is this in the book?

JEREMY WOLFE: I don't think so. Maybe. I can't remember. You know, the problem is every time I find something cool, then the-- you know, Gleitman or now Reisberg finds something cool, and what you going to do?

AUDIENCE: I have a question about the paper.

JEREMY WOLFE: Yeah?

AUDIENCE: OK, so in your notes, or on today's notes, you said that there's no articles about it, but what about the articles on [INAUDIBLE]?

JEREMY WOLFE: Oh, sure. Sure, sure, sure. Absolutely. Yes, there's just not a nice, systematic set.

AUDIENCE: OK.

JEREMY WOLFE: The problem is that originally my scheme was that you could use-- you could write these three different types of papers crossed with these three different chapter ranges. And so the original notion was you could do one of these things where you were going to read one of the papers in the folders. You could do that for the sort of science writing paper, and you could do that either for paper 1, 2, or 3.

And my TAs said, that's wacko, we'll never figure out how to grade these things. So we ended up constraining it, and so then I stopped doing the-- but I thought, well, I'm not going to just throw out the cool stuff. Anyway, don't worry about it. If you like something on the website, use it.

AUDIENCE: OK, good.

JEREMY WOLFE: You don't have to find something on the website.

AUDIENCE: I have another question. It's a little confusing. I know that you said that sleep and dreams is chapter 16, but it seems like chapter 16 is more about, like, mental illness.

JEREMY WOLFE: Freud, let's just say, I think is what's--

AUDIENCE: Oh, yeah, right.

JEREMY WOLFE: No, I'd better say a word about the syllabus and the-- I'll say that in one second here.

AUDIENCE: OK, and the last-- oh.

JEREMY WOLFE: Yeah, yeah, no, no, we're going to-- come back at 3:30 if you want to talk about more things.

AUDIENCE: OK. OK.

AUDIENCE: I was wondering if you could-- I don't know-- do you have [? test ?] averages or standard deviation?

JEREMY WOLFE: You want to know that answer for your recitation not a cross recitation. What's your score?

AUDIENCE: It was 170 [INAUDIBLE].

JEREMY WOLFE: So that's high 80s, high 80%. You're fine. Again, it depends on your recitation, but you're at or above average in any of the recitations, I think. So--

AUDIENCE: I guess [INAUDIBLE] breakdown [INAUDIBLE] recitation.

JEREMY WOLFE: It's recitation specific. That sounds to me like if all of your other scores are like that, you'll be on the A-B border somewhere.

Let me say a quick word. I got a couple questions about the syllabus. Let me say a quick word about this.

The chapters that are assigned at the moment, for instance, are the chapters on social psychology. Like any topic here-- huge area. I'm taking a "love and romance" cut through it, so I think, for instance, you'll find stuff about social exchange theory in the book, but not particularly in this heavily romantic-- not necessarily in this sort of straight, you know, "love and romance" track.

I'm assigning chapters that are-- it'll be less obvious that the book and I are marching in lockstep than it might have been, say, for the memory chapter or something. So for-- but I'll-- somebody pointed out that the "sleep and dreams" lecture has associated with it a chapter that seems to be, like, about mental illness. Well, that's because sleep and dreams is going to be connected with Freudian interpretation of dreams.

It's all part of talking about Freud and psychoanalysis. So that's the most relevant chapter at the moment, but you shouldn't think-- it'll be less true for this half of the course than for the first half of the course that there's an absolute, clear match between the set of topics in lecture one day and the set of topics in the accompanying chapter. They will talk to each other, but they will not match up quite as tightly as they might have earlier in the course.

All right, so let's do a few social exchange sort of problems. One of these is the problem of bad relationships. One of the mysteries on the face of it is why would somebody stay in a relationship that's running a deficit. Perhaps the clearest example of this is why would a woman stay in an abusive relationship. I pick a woman because while there are males who are abused in heterosexual relations and other males who are abused in homosexual relations, the bulk of abused partners in relationships are women.

But so why would anybody stay in an abusive relationship? Why would a woman stay in an abusive relationship? That's where this third tenet of social exchange theory comes in.

The social exchange answer to the question is you would stay in a bad relationship if you couldn't see a better alternative. And so if you imagine a hypothetical situation of somebody in an abusive relationship, maybe she's got a couple of kids, and while she was raising these kids, she's not working, so what's she going to do? If she leaves, what's she going to do with the kids? Where's she-- how is she going to feed herself, et cetera?

Part of the logic of things like shelters for abused women is a logic of giving an alternative of that looks better than the state you're in. Now, there's nobody saying that living in a shelter for abused women is a relationship that's running a great big positive score. But if it's running less of a negative than the relationship that you're in, you might get out of the abusive relationship.

So that's part of what drives this notion that it's important not just what the sign of your profit-loss statement is, but what the alternatives that you perceive are. Now, and the "you perceive" part is important here, too, because we all know people who are in relationships where you, from the outside, look at this relationship, and you think, that's not a good relationship. Why is he in that? Why is she in that? But if they see it as the best current possibility, that relationship in social exchange theory will be relatively stable.

Now, these next two are related to each other, who has power in a relationship and who works harder in a relationship. In a sense, they're sort of the reciprocals of each other. Who works harder is the person with less power.

Let's do this through a sort of a cartoon-- another sort of cliché relationship out there, young, beautiful woman and old, less than beautiful guy. What's the other part of the description of the guy?

AUDIENCE: Rich.

AUDIENCE: Rich.

AUDIENCE: Rich.

JEREMY WOLFE: Rich. Why?

[INTERPOSING VOICES]

[IMITATING CROSSTALK]

We need a hand here. Nobody's got a clue. Yeah, yeah, he's all-- yeah, all right, all right.

AUDIENCE: That gives him a way in which he doesn't have to worry all the time that--

JEREMY WOLFE: Well, there's this perception that she's got more, she's bringing more to the relationship than he is, right? So she, in a sense, has power. If she looks around and looks "what are my alternatives," here I am in beautiful-- all right, so I'm hanging out here. Gee, I ought to be able, if I look at my alternatives, to move here, so I have a certain power to move if I'm this young, beautiful female person, hypothetically.

And what he's got to do, the reason he's got to work hard is to prevent that movement. Well, how do you prevent that movement? One way to do it is to increase or-- well, actually, I suppose it's not to prevent that movement. It's to make that movement within the relationship that you're in now.

So if she's giving-- if she's a 10 and he's a 1 or a 2 or something, he's got to make himself into a 10. How does he make himself into a 10? He can't make himself young. He can't make himself beautiful.

What he's got to do is, in the cliché version, shower her with diamonds and furs or something like that, increasing the benefits that she's getting in this relationship so that other relationships don't look more attractive. So the basic notion is that if you're bringing less apparent stuff to the relationship, your partner is sitting there saying, I could do better, at least hypothetically, and you're sitting there saying, if I don't want him/her to go elsewhere, I've got to be more loving or I've got to be cook better or I've got to do something here. So I'm the one who's got to work hard, and the other is the one with the-- the other is the one with the power there.

Now, are romantic relationships really just this crass economic kind of thing? Sounds pretty grim. Well, there are important differences between economic exchange and social exchange. One of them we've already pointed to, which is the fact that the economic costs and benefits are typically much more calculable than the social ones. That's the "dinner minus two insults" problem.

The other one that I point out here is that the rules of negotiation, what's permissible as negotiation in economic exchange is considered desperately gauche, you know, not done in social relations, right? So, look, you just wouldn't have a conversation that says, you can come up to my room later if you take me to dinner.

Oh, OK, what kind of dinner do you want? Well, you got to take me to a four-star restaurant. No way. We'll go to Burger King.

You know, no, uh-uh, no, no, how about three stars? Three stars, go for three stars. All right, how about the two-star Thai place down the street? OK, it's a deal, but you can only come up for 20 minutes.

[LAUGHTER]

It doesn't sound like-- that sort of haggling in strictly economic terms is not sort of considered mainstream romance, mostly. It's also not really mainstream US economic haggling these days either. If you go to Target and want to argue about the price of a toaster oven or something, they're not actually going to be that interested.

But in those places in the economic sphere where haggling is still permissible, a talented haggler, a talented negotiator will work hard to be your friend. Why? Because-- the clearest example that I know of in American economic life is car dealerships.

Go to a car dealership. You will do this one of these days. Go to a car dealership. The guy who comes out-- typically a guy-- who comes out to sell you a car is going to be your best buddy almost instantaneously, very nice, friendly guy.

Why? Well, maybe he's a very nice, friendly guy. We shouldn't disparage that possibility. But the other reason is that if you behave to him as though you are in a social exchange while he knows perfectly well that what you are doing is an economic exchange, he's going to make money because you are disabled.

You cannot argue with your friend about money in the way you can argue with somebody in a strictly economic marketplace, so he's going to be your friend. You're going to come to a nice, friendly agreement, and then it turns out that after you have made this deal, that's not enough. You shake hands on that.

That's not quite enough because then he's got to go talk to his manager about it. He's such a good friend of yours that he may have gone a little too far, he worries, so he's got to go talk to the manager. And the manager is not your friend, so he's got to go and talk to the-- but he's your friend, so he'll go and fight it out with the manager.

He goes-- you're never invited to this discussion, by the way. He goes back to talk to the bad manager, and I think what they actually do is they chortle a little bit about their kids and the Red Sox and stuff like that. And then your friend comes back with a sad face and says, my mean, nasty, evil manager-- not in quite those terms-- won't go for it.

We can't-- we just can't do this. You know, you and I, we could do this with just an extra, say, \$500 of your money, and because we're friends, you put up the \$500. And this, I think-- I don't know this, but I think that car dealers are explicitly-- they know about social psychology. They're explicitly instructed that this is a useful way to negotiate, that by being your friend, by moving the discussion from an economic exchange to a social exchange, because of the differences in those sorts of interactions, that can be exploited in a way that makes you money, makes money for the car dealer.

The most beautiful example of this in my own personal experience was not at a car dealership but was in the city of Marrakesh, in Morocco, where everything is negotiable. The cup of water is, the price is negotiable, but anyway, a lot of haggling there. And so I was there for a conference, and we were taken off as a group for a tour of the old market, which is great. You should all go there sometime.

And we went to a rug merchant. This was early in my career. I didn't have no money. So I'm not buying any rugs because to buy rugs, it's good to have money.

So I'm sitting there drinking buckets of mint tea, which is what you get in Morocco, while other people are negotiating for rugs. It's kind of fun to watch. But at some point, some guy decides that he's going to sell me a rug, and he's going to show me the special rugs out back. Oh, OK.

[LAUGHTER]

So we're going out back. We're up the back stairs, and he asks me, are you Jewish? Yeah, well, you know, my mother brought me up to be honest.

Yes, I'm Jewish. The next thing you know, we're hugging and kissing because he's Jewish, too. Last week, I think he was a Methodist.

[LAUGHTER]

But in any case, so now we're friends, of course. Not friends, I mean, we're practically blood relations. He shows me only rugs woven by Jewish virgins.

[LAUGHTER]

How do you know this is the case? Well, they've got this six-pointed star on them, as he points out. Well, it turns out that every rug in Morocco seems to have six-pointed stars on it, but never mind. Plus, the guy has also taken his intro psych class, and he knows about forced-choice psychophysics. Rather than saying, do you like this rug, what he's doing is holding up two rugs and saying, which one do you better?

[LAUGHTER]

So you've got to give an answer, right? I like that one better. OK, it goes in the stack. By the time we're playing this game a little while, not only does he have the theory that I'm buying a rug, I'm buying a stack of rugs.

[LAUGHTER]

But I still don't have any money. And so I remember what it said in the guidebook. In the guidebook, it said that if you're at the state store-- go to the state store because at the state store they only mark up by 50%. And so you should-- the price you're looking for is to negotiate down by about 50%, and then everybody will be happy.

So I remember this, and we're in the state rug store. I know what I'm going to do. I'll offer this guy 10% of his asking price. He'll be so offended that he throws me out. All right, so I offer him 10%, and he accepts.

[LAUGHTER]

Now, you want to violate both the borders of social and economic exchange, backing off your own offer is really, really rude, and at that point he threw me out, which is too bad. I probably should've just maxed out the credit card because I think I probably had a pretty good deal at that point. But in any case, it was another beautiful example of trying to use the rules of social exchange, not to mention a half a dozen other bits of applied psychology, to make-- to close an economic deal. And I think all my friends who came back saying, I got him down to only 50% of the price, probably made a bunch of people really, really happy.

So the last thing I want to mention here is one last problem in social exchange. That's the problem of vastly unequal and inevitably unequal relationships. There are relationships out there that are simply not going to be reciprocal. One of the clear examples are parent-child relationships right?

Even if you think in strict economic terms, how much money have your parents put into you? How much money have you put into your parents? I mean, and it doesn't get any better by the time you're my age, right? I mean, it's an inevitably-- it's inevitably a relationship that is going to be unequal, and that produces, as you may have noticed at various stages in your life, a sense of discomfort about that inequality.

How do you deal with it? There are lots of ways to deal with it, and social exchange theory is not capable of predicting which one to choose at this point. But for example, a very typical early adolescent one is the assertion to one's parents, you never did nothing for me, right?

No rational 13-year-old really, if you ask, you really-- in the midst of some fight, you never did nothing for me. OK, where did the food come from? Well, yeah, you did that, but-- it's not a logical statement, but it's a statement that attempts to balance the accounts in some fashion. It's a way of dealing with this feeling that the relationship is unequal.

There are-- the parental-- how many of you have heard at some point the line from your parents, one day you should have a child like you, or words to that effect? Yeah, yeah, yeah. Well, that's another sense in which this can be balanced, the parental notion that the accounts will be balanced when your children do unto you as you have done to your parent. And guess what? Your parents are right.

Oh, how many-- can you remember thinking at some point that you're never, should you ever have children, you're never going to say anything as stupid to your own children as-- oh, well, one perfectly lovely concrete example, why do I have to do this, the parental answer to which is--

AUDIENCE: Because I said so.

JEREMY WOLFE: Because I said so. Have you heard the little voice in your head promising that you will never say anything that lame to your own kids?

[LAUGHTER]

Guess what? It's very grim. You know, and you can just sit there listening to yourself as you say it, and you say, oh, god, I said I'd never do that.

All right, but there's an-- beyond that realm, what do you do about these unequal relationships? Last thought, there's an interesting thought that comes out of Roger Brown's book *Social Psychology*, a beautifully written textbook on social psychology. He talks about the central exchange in social exchange. The argument is that not all of the interactions need to be between you and another-- and the person with whom you are having a relationship at this particular moment. There can be a bank in there.

The experiment, here's the experimental evidence, last-- or a bit of experimental evidence, last little two-by-two on there, and my new free nickel will do just fine. It's becoming a slightly archaic example because most people don't use phone booths anymore, but you still know what a phone booth is, right? You go into a phone booth. The first thing you do before going and dialing the number or anything is to check what?

AUDIENCE: If you have a quarter.

JEREMY WOLFE: Not if you have a quarter, is there a quarter in the change slot, right? Everybody goes and checks that little change slot.

[LAUGHTER]

Oh, I've just changed her life. Check next time. Sometimes there's a quarter there. It's really good.

Anyway, what these guys do-- all right, we can use this two-by-two here. What this experiment did was to spike phone booths. They put quarters in the phone booth. And so you go into the phone booth, and some people got a coin and some people didn't get a coin.

So this is not a big change in your life, but it is an unreciprocated good, right? You're getting this good, but you can't say, I got to go do something for the guy who gave me a quarter. It can't work.

So here's what happens next. You come out of the phone booth having made your phone call, and as you're walking out, a woman comes by. And she trips, and her stuff goes all over the place. The question is, do you help her? Oh, [GRUNTS] it's a long way to the floor.

And the data are, from this particular experiment-- so it's help and no help. Of the people who got a coin in this particular study, 14 helped, one didn't. Of the people who didn't get a coin, so this is the bulk of the population as a whole, two people helped and 24 didn't. I don't know why they--

[LAUGHTER]

So, now, that's very interesting. That suggests that just getting that coin produced what Brown would see as an effort to reciprocate to the world more generally. Now, that's a big effect. Does this mean that we could make the world a better place by mailing everybody a quarter? Doesn't sound right.

Now, the experimental evidence that it's not right comes from another version of this experiment. You're at home. Somebody rings the doorbell and gives you-- and says, "I'm new in town. I'm setting up a new company. We're going to sell paper. I wanted you to have this stationery."

Just a-- oh, that's a nice stationery, thanks, bye. Shortly thereafter, you get a phone call. Somebody on the phone says, is so-and-so there?

No, you got the wrong number. "Oh, no, I'm in a phone booth. I got-- I don't have any more money. Could you please call Fred and tell him I'll be home late," or something like-- I don't remember what the exact story is, but it's a request to do a favor.

If you just got off the phone call, no paper involved, only 12% of people were willing to do this favor. If you got the paper and you got a phone call five minutes later, 80% of people complied, but if you got the paper and were called 20 minutes later, it had dropped back down to 12%. So it produced a little bump of good feeling.

Now, does this-- now, what we don't know, because you can't really do the experiment, is whether this means that the central exchange idea is trivial and is a very short-lived, teeny phenomenon, or if you live a life where much bigger good things happen to you or, for that matter, bad things, do you end up with an account at the central exchange? If life is good in general, do you feel a central exchange obligation to be good to others? If life is bad in general, do you feel a need to trip people and watch the folders fly?