

15.301/310, Managerial Psychology
Prof. Dan Ariely
Lecture 6: Decision Making

(a dash “-“ indicates student responses)

Feedback on 4 page proposal

From here, there are not many opportunities to deviate

Now is the time to get serious about your research projects

From now on, when you submit a paper, also submit the previous version of the paper

project

After you start data collection, there is less and less opportunity to change

This is a crucial time of the semester

COUHES website self tutorial - you have to take it before Wednesday

(Human rights w/ subject - what can and cannot do)

The topic today is **decision making**

When we talked about Perception we looked at visual illusions

One perspective on decision making that says the way we make decisions is similar to the way we look at visual illusions

What are visual illusions? What are some of the aspects we found apparent?

-something not there

-suggestion for blank space like the grid

What in the visual illusions we talked about give us hints about the way we make decisions?

Remember the Stroup test?

-words of colors, printed in other colors

This showed that there are some things we do so well that it is really hard for us to do otherwise

Some people suggest that a good way to think about decision making is to make an analysis of visual illusions. Some things we naturally do well or don't do well, some things we learn, we over-learn, we keep on doing them.

Today we'll talk about a few of those. We will basically cover 5 topics in decision making. We will learn something about all 5, but it of course goes beyond the specific examples

(slide)

What is decision making?

There is a perspective in psychology that says everything people do in terms of changes (how people change over time) is a decision. Not that every word I utter I think about, but the perspective is that you would think of everything as a decision.

It is important that sometimes a decision is deliberate and we think very carefully about it. Should I study for the exam? Or should I maybe go see the last game of the Red Sox?

Sometimes the deliberation is after the fact.

If we think about the decision to come to MIT, many people had a very simple decision – well, my parents told me I need to go there so I went
But Later on they reason about it, after the fact

Decision Making as a discipline is on the opposite side as economics, it is the evil twin of economics. While economics is thinking about rational human beings, Decision Making looks at how people are not necessarily rational when they make a decision and looks at how people behave under those circumstances.

(comic slide)

Cartoon, king says to the guy in the pit, prove your guilt or innocence by the door you pick. One door has a dragon, the other has a beautiful maiden. Which door do you pick? The guy says - the one with the gorgeous maiden.

This cartoon is to illustrate that the decisions that are most apparent to us are the difficult decisions: where to go to graduate school, what job should we take, who to marry, should we ask for a raise, should we quit our job? But in fact we make a million decisions a day that are easy, like the one about the door, or not to cross the street on a red light, or we decide not to kick the people who are standing in front of us in line. We do all kinds of things all the time that involve decisions, but we make them very fast and not interactive. The decisions we will talk about here are not these decisions we make all the time, but the hard decisions, those that are more difficult.

We make a million decisions a day, most are very easy
Most are fast, accurate

Say we design a human being
If we think about how we want a human to behave, it would be the rational view.

Instead, the perspective of Decision Making and psychology is how people actually behave and why they behave that way

Conflict – economics and psychology comes to play

Assumptions for Rational agents (slide)

People know what they know
I know I like Mac more than PC
Like cheese more than broccoli
I know these things
And we are in control, we can control ourselves, self control
We are selfish, we maximize our own utility
We are calculated

In contrast, the perspective we will talk about today is that people are not as calculated and selfish. People are compulsive and myopic, we will talk about hyperbolic discounting when reciprocating, when someone is vindictive

"Boundedly rational" (slide)

From Ernst Berndt's research:

I give you \$10, you can give to Leonard as much as you want, he can accept or reject. If he accepts, both of you get your share. If he rejects, you both get nothing.

How much do you give Leonard?

-5

Why 5?

-So he will accept

So, if you were a rational economist, you would say, Leonard would be happier with a dollar than with nothing. So if I offer him a dollar he will be happier with than without, so he will accept. But this is a more vindictive style. You are saying, if I give him 3 even, he would lose \$3 just to punish you by more, so therefore you have to be nice to him.

Topics today (slide)

Anybody here ever experience regret? Anybody not? Nobody is raising their hand in either choice. Try again. Examples, what is regret?

-not sleep enough last night

-take more than 4 yrs to graduate

-going to MIT in first place

What causes you to regret something?

-possibility of a better outcome

If MIT only school in world, still regret coming?

-probably

Why?

Only regret if compare, consider other alternatives.

Who will regret more: miss plane by 2 min, or miss by 2hr and 2 min?

-2 min

Very strong feeling that person A would regret more, why is that?

-closer to target

To what?

-could have made it

Can easily imagine that person A could have made it.

Like we said before, regret is not about current state, about what we can easily imagine are alternate states

Happiness not determined by what have, but by what we don't have. How easy it is to imagine what we don't have.

If we just look at other possible states, how many possible states are there?

-infinite

Infinite number of possible states. How do we do that? Compare ourselves to infinite number of possible states? When we think about coming to MIT, What are we comparing self to?

Shoot, I came to MIT, I could have won the lottery!

Lots of options, possible states, how do you decide what you compare yourself to?

-other people states that discuss with

-if don't like MIT, visit friend, see people have fun...

Easy to imagine, because you have a friend going somewhere else

Someone missed plane compare to alternate state – what easy to imagine in those particular circumstances.

Happiness is not only your state, but also other possible states. Not all possible states, but in particular those that are easy to imagine being in.

Can start thinking how to use regret to motivate

You want to create a state of comparison that would make people think about one thing vs. another

Medal (slide)

Who would be happier, someone who won the silver, or who won the bronze medal in the Olympics?

-Bronze

Why?

-wouldn't expect the gold, at least they got a medal

If silver, could have gotten gold

Think about grades in class, what implications?

-B- happier than B+

If you were a professor, what would you do to make students happy?

-straight A's ☺

-not plus, they would argue for a better grade.

A very difficult problem

High counterfactuals – could have done more

Others?

-break bad news – describe worse situation, then say what happened

Movie, father comes home, son says, terrible news, cat climbed to the roof, fell, eventually died

Father says, shouldn't tell all of a sudden like this – should ease in slowly, nice day, played with cat, cat climbed...

Son –says, well father, I had a very nice day playing with mother, ...

How did we get there?

Show how things could be worse

-increase car price \$2000, reduce when bought

What's one of the biggest things in life where we try to minimize regret?

market mechanisms go around regret?

-product bought, then see one similar for less, rationalize

Nobody wants to be a fool.

What do companies do here to reduce regret?

-SRP – suggested retail price

-find price better elsewhere, give you \$back

Assurance you will not regret

Return policies

Return if want, not have to regret.

Insurance – not feel loss

Another Question

2 gambles (slide)

Which would you choose?

Would you want to see what happened to other gamble?

-no

Don't want to know what could have happened

Don't want to be confronted by the other thing – what could have happened

Ignorance is bliss

Slide (regret 3)

Who more unhappy when car hit by tree

Same road every day or different route every day?

-person B

Why?

Easy to imagine, could have chosen different route that day

Normal circumstances

Not likely to regret if follow routine

More likely to regret if deviate

Talked about market mechanisms to increase regret, decrease regret

think about these, I would like to ask you more on the final

That was regret

context effects

people don't have absolute perspective, but perspective is largely relative.

relative like ice cream in different cups, use cup to figure out how much ice cream

you are going to get

don't necessarily know what we like, we use context to infer what we like.

An example, attribute 1, 2

Product a, b each with attribute 1, 2, but better at different ones

Introduce Dominated alternative – an alternative worse on everything

Question is, can it influence your choice?

A way to think about it:

Go into ice cream store

Chocolate vs. vanilla

You say, give me vanilla

They come back, oh, we have strawberry too

Oh, if you have strawberry, then give me chocolate

Strange – choice between chocolate, vanilla should be independent of if they have strawberry

Asymmetric dominance (slide)

A'

-provides context for A

Easy to see A is superior

So pick A instead of B

Why?

Can reason A over A', clear

Hard to decide A vs. B

Say I offer a weekend in Paris or weekend in Rome

What would you choose?

Weekend in Rome with espresso, or Paris?

Rome with espresso, Rome without or Paris?

Espresso not a big difference, but makes it apparent that espresso Rome is better than without in Rome

Now you work for Ford, sell cars, what do to sell better?

How do we use the asymmetric dominance effect?

-introduce weaker Ford Focus, little worse in every aspect – a little less \$ too

More convinced to buy regular one

Bread maker

Introduced, \$400, nobody bought

How much bread have to consume to make it worth the price?

Market research – what needs to be changed to improve this breadmaker?

Add timer, set overnight, fresh bread when wake up

\$450 w/ timer

400 w/o

What do you think happened?

People bought w/o timer

If new product introduced to the market, hard to figure out if worth it or not. Could think about \$400 worth of bread. How long to justify, with ingredients, etc.

But with, without timer, something to compare, people say, \$450? vs. \$400, forget about the timer, don't need a timer.

Market by itself, hard to reason if worth it

Comparing is much easier

Another effect is the Compromise effect

People will pick the middle alternative between 2 options.
Can be vastly different choices, but people will compromise.

Another example

company tried to distribute cheap condoms in Bangladesh for population Control, help people with family planning
Turns out, there was a mildly expensive product and cheap product. What do you do?

Not for profit, wanted people to buy cheap condoms
offered another slightly more expensive cheap condom
if 1 costs \$2, 1 cost \$.10, you think it can't be right.
choice space

Economist subscription

Web \$59

Print \$125

Both \$125

These are smart people offering these choices.

Friend at Columbia replicated this for an experiment

What do you think happened? What was market share of 3rd?

Went up from like 30% to 70%, something like that.

These smart Columbia MBA students who know the magazine are affected by giving 3 choices vs. 2

People use context to evaluate options. They try to be objective, but is very hard
Come back to this throughout semester

If think about how happy you are, compare to those around you

Happy with starting salary? People around you?

Some decisions very hard to make

Using context makes life simpler

Because relative advantages are more obvious.

Decision difficulty

Too Much Choice

Can you have too much choice? What do you think is too much choice?

-all options similar, hard to pick

-unfamiliar options – uncomfortable

-like all – conflict

Have you ever encountered a situation where you had too much choice?

-sandwich shops – million breads, cheeses, etc

Chinese restaurants an expert at this – how many combinations they can make

- pick ties from grandfather 3/hundred, had to rank all to find just 3

-choosing career

Big book of careers, could go through all of them, at the end of the day not know which to pick. What else?

-cereal

Ah, good. I don't see how people do that

Slide – which would you pick?

1 temptation, choose temptation
2 temptation, stick with default, go to library

Slide 2 which would you pick
(2 conflicting temptations you like)

How many would go to movie or concert?
Less, why?

Go to library, 1 temptation, go to temptation
Go to library, 2 temptations -> go to library

w/ 2 temptations, have to make tough decision. people not want to give any up.
Easier to stick w/ initial plan.

Ex.

Expert physicians (slide)
Realize 1 drug not tried before – try it first (ibuprofen)
2 – refer to specialist

These are expert physicians in their field, but give them 2 choices, they get so
baffled, just refer to another expert

Very easily to give people too many options

Say you were part of CUP, committee on undergraduate performance.
You decide curriculum for MIT
How many options do you give your students?
We have a lot of choices. Would you restrict # of options?
No, why not?
-I like my options

How many would go to an institution that would not let you choose, who said we are
going to decide for you? Very few, right?
People want options. They don't do well with options, but they want options.

Fundamental dilemma:
Like options, but don't do well with options

If we ask the physicians if they prefer us to tell them 1 drug existed, not tell about 2,
they say no, want to know what exists. But they make worse decisions if knew more
options exist

-MIT, we have a lot of options, but they are very constrained.

Constrained options – better than regular, but still options
Even in very small numbers, options can be too many.

Example – jam study

By Anger, who used to be a faculty member here

Booth in supermarket

6 jams displayed - 40% of people approached

24 jams displayed - 60% of people approached

Supports idea – more options, people like it.

People sampled about the same number of jams in each case – 1.4, 1.5

Gave them coupons – see how many bought

Buy w/ coupon

30% - 6 jams

3% - 24 jams

Shina has a new paper on this

Retirement, 401k plans

When I came to MIT, there were 3 options

Then there was this whole big thing, we moved to Fidelity, and now there were thousands of options.

What is the effect?

More options, fewer people joined.

3 options, I'll choose one, thousands, I'll do it tomorrow.

If I join, more likely to join something like a money market – very low returns

Other things with lots of options – anyone tried online dating?

You know MIT has a dating site? Matchup?

It's great, you should try it out.

If you go to a dating site, how many people are there? Thousands! How easy is it to make a choice when there are so many people who may be compatible?

Very very hard.

Moving – if you have not moved for a couple of years

Often there are so many options that people give up.

Direct contrast to society

Need consumer choice, consumer freedom.

Superficial freedom – we can make more choices, but we don't

Can think about this in marketing, but how do you want a company to operate – how to have people make choices, not necessarily more options. Healthcare would be the same.

2 social psychology aspects

The "spotlight" Effect

Volunteer.

Choose song, tell me.

Tap it out on the board

How many people do you think recognized the song?

Most think others will, but they don't

We focus on ourselves very heavily, think others focus on us

People think others pay a lot of attention to them

“Barry Manilow” effect

College students

Wear T shirt to campus party

-thinks everyone saw, ruined his reputation

At party, almost nobody had noticed

-do embarrassing thing, think people notice

Things more or less likely to do because of spotlight effect?

-time getting ready

-makeup

-careful, for good impression, prevent trip

-prevent stealing

Think everyone notice

People think they convey thoughts, from a look

Convey something about what they are thinking – not true.

Magical thinking

Chocolate cockroach

Would you eat?

Why would it be disgusting?

You’re not eating a cockroach, your eating chocolate.

-thinking of roach whole time

Voodoo dolls

Fact that it’s shaped like a cockroach gives some characteristics of a cockroach

Bedpan, new, put lemonade in

How much pay you to drink?

A lot

Same plastic as cup, though

Original purpose sticks to things

Burn pictures of people you love?

Digitized, don’t need

Why hard burn, shred

-like burn in real life

Like voodoo

Most have intuition, that this is hard to do

Something about the person sticks to the picture.

Paul Rosen

Darts

Picture of JFK, Sadaam Hussein

Paid for accuracy.

JFK people missed more

Revolver, into pieces
Asked to assemble
Spin chamber
Put to temple
Pull trigger
Nothing would come out! No bullets!
Very very hard to do anyway.

OJ Simpson's house impossible to sell
Why?
Many Murder, crime houses, difficult to sell
Law - have to tell of crime when you sell the house
People not want contaminated house, by certain kind of death

Sweatshirt company, "AIDS"
How well would it do? Anyone buy? Why not?
Words make it harder to swallow

Summary

Decision making
Many w/o thinking – talking, walking, driving
Metaphor - like visual illusions
People do things naturally, are trained to do them, learn to do them
Not always correct, but do very easily
Not talked about difficult, heartwrenching decisions - another day

All kinds of things the system does not do well

Regret - nobody wants to be a sucker
Not think about what we have, think about what we don't have, and specifically those things that are easy to imagine.

Context effects
Not understand value, context helps figure out
Too much choice
How buy cereal? how pick job?

Social effects
Spotlight effect
Magical thinking

Meaning of objects stick to them, even in other contexts

Wed exam, bring calculator
Friday experiment