An Introduction to Microeconomics
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Lecture – 42
Rationality in Real Life Vs. Rationality in Economics

The term rationality or term being irrational in economics or in day to day life are they the same or are they different?

Student: That they are the same, but interpreted in a different way.

They are the same, but interpreted in different way that is what you are say we will see. Let us take an example, let us say a person just for simplicity, let us take an example of two good world; good 1 and good 2 fine.

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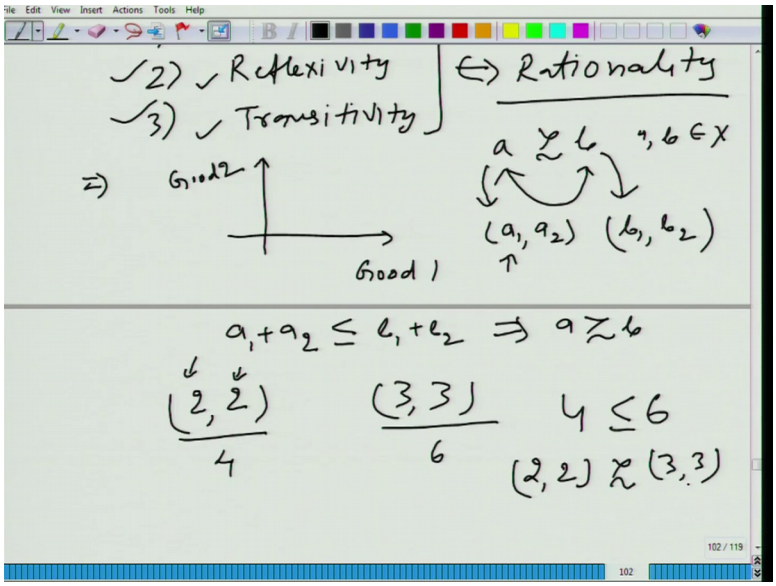

And let us say you are already familiar with this relation. What does it mean? This at least as good as or at least as preferred as that is what it means, this is a relationship when I say a, this at least as good as b. What it is doing? It is establishing a relationship between.

Student: a and b.

a and b and a and b both are element of.

Student: X.

X; that is why this relation set is defined on x. So, now, let us say this person has little bit strange kind of preference, what he does when we have two good word, what does it mean that it has, let us say a 1 and a 2.

A 1 represents the amount of good one and a 1 represents amount of.

Student: good 2.

Good 2 and here b 1 and b 2, and let us say just for definition sake I am talking about a specific individual, what he has that if a 1 plus a 2 is less than or equal to b 1 plus b 2, then he prefers, then he says that a is at least as good as b. So, what he cares about? He does not care about good 1 and good 2 individually. He cares about the sum of good 1 and good 2 that he has and also not only that also less, he has more, he likes that bundle.

Now, let us check, would you call this person in a way I am saying, let us say good 1 is cloth and good 2 is.

Student: Food.

Food or earlier can mention, we were using good 1 as food and good 2 as cloth. So, let us stick to that, good 1 is food and good 2 is cloth. Let us take two bundles 2 comma 2 and 3 comma 3, what it means.

Student: (Refer Time: 03:02)

2 units of food and 2 units of cloth, and it means 3 units of food and 3 units of.

Student: Cloth

Cloths. If we are talking about a person whose preference is just described by me, which one do you think he would prefer.

Student: He will prefer a 2 comma 2.

2 comma 2 why, because what he cares, not individual amount of food and individual amount of cloth, what he prefers, what he cares about, is the total sum, sum here is 4 and sum here is 6 and 4 is of course, less than 6, then 4 is less than 6, I can also write 4 is less

than or equal to 6. This is not a wrong statement fine. So, what it means that 2 plus 2 is at least as preferred as.

Student: 3 comma 3.

3 comma 3 fine. Now let us look at it, does it satisfy all the assumptions, the three assumption, rationality assumption that we have described.

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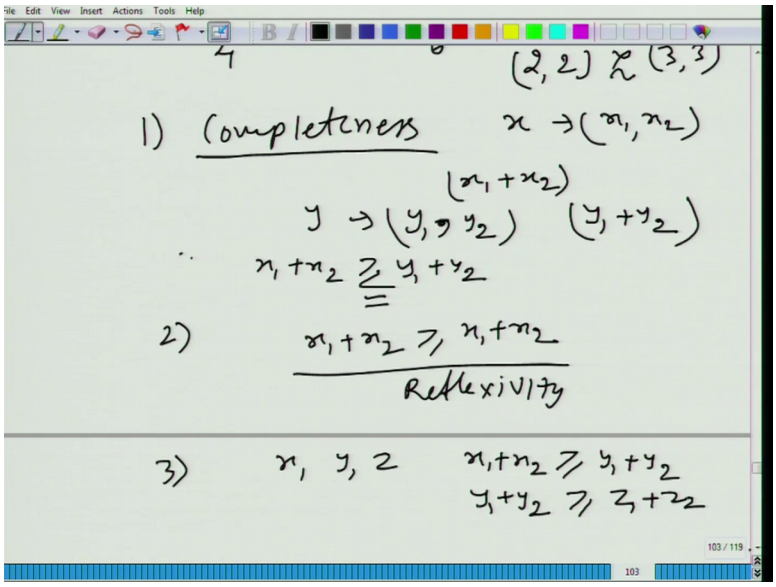

Let us check for completeness, when we pick any bundle from this consumption set, we will be able to figure out, let us say if that bundle is x. From x we will get x 1 comma x 2. And we will be able to figure out x 1 plus x 2, and let us say if we are picking any other bundle y of course, what we will get y 1 comma y 2.

And again we will be able to figure out y 1 plus y 2, and there are one of these three possibilities; either x 1 plus x 2 is greater than y 1 plus y 2 or it is less than y 1 plus y 2 or.

Student: Equals to.

It is equal to. So, by going starting from here and if we go back, we will always be able to compare. So, it satisfies.

Student: Completeness.

Completeness. How about reflexivity?

Student: Satisfy

It satisfies x 1 plus x 2 is at least is greater than or equal to x 1 plus x 2, this is not wrong. It does not preclude the scenario when x 1 plus x 2 is equal to x 1 plus x 2. So, this is also satisfied, it means reflexivity is satisfied. Are you with me? And when we take three bundle x comma y comma z, when x 1 plus x 2 is greater than or equal to y 1 plus y 2, and let us say y 1 plus y 2 is greater than or equal to z 1 plus z 2 what we will be able to figure out.

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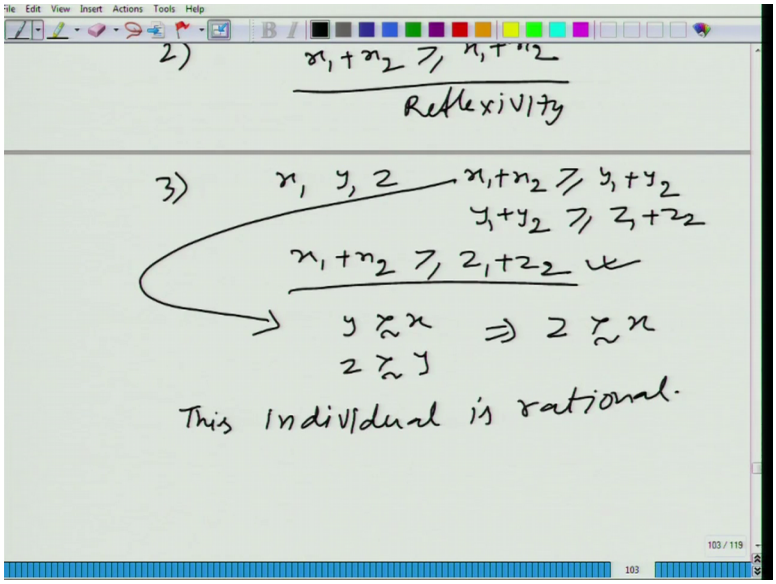

That x 1 plus x 2 is able to, is greater than or equal.

Student: z 1 plus z 2.

z 1 plus z 2.

So, what does the first one say, it says that.

Student: y is (Refer Time: 06:17)

y is at least as good as.

Student: x

x, and the second one, it says z is at least as good as y.

Student: y

So, by combining these two we should get z is at least as good as.

Student: x

X and that is what we are getting from here. So, it satisfies transitivity.

Student: Transitivity.

So, by our definition this person has

Student: (Refer Time: 06:43)

rational preferences or this person is rational, but can we call probably in real life, in day to day life. Such kind of a person would be called stupid or mad. So, of course, our definition of rationality is bit different from the definition of rationality that we use in every days language ok.

They are not the same. So, what are the difference, what are the differences? can you think of the differences?.

Student:. So, the completeness definition of rationality here does not match with the rationality there. Like if there we have seen that something is related to something in a, means one way it is then one way, but here it is defined in three ways.

See, what you are saying let me put it little differently and in more general way, what we have is that when we say in everyday's language that someone is rational, what we are talking about that the person has sound choice.

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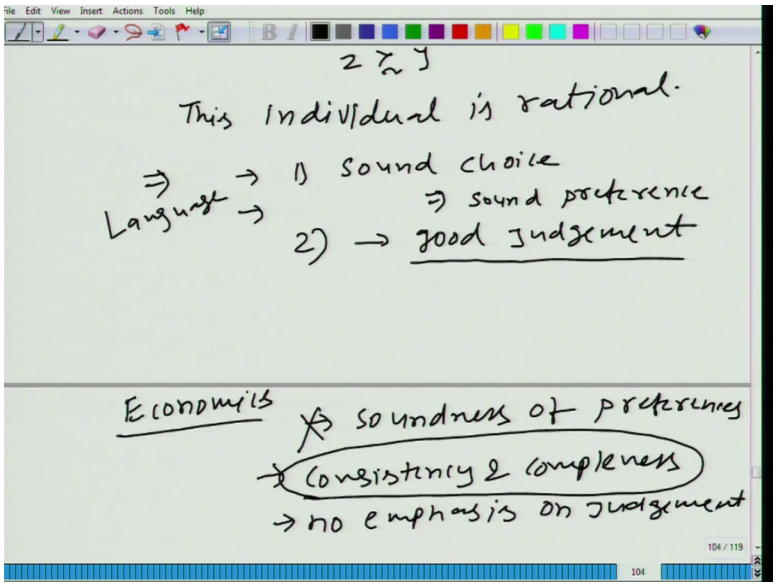

And sound choice, from where it is coming. One can interpolate and say its coming from sound preferences and society has some definition of this soundness. When the preference is sound, society has some, you know not in an explicit manner, but implicitly society thinks that what kind of reference is sound preference fine. So and the second that this sound preference should lead to good judgment fine.

What in economics say, its language in economics, here we do not care about the soundness of preferences, what we care here about this consistency, consistency and completeness. Although the example did not exhibit, but it say that in real life when a person will be called rational, even if his choice or his preference is not complete, but here. So, in some sense, the economics definition is narrow and in some sense it encompasses the more things. So, here it is, the focus is on the consistency and completeness and no emphasis on judgment yet. Of course, in economics also we focus on judgment, but not because of preferences.

Remember the fourth building law. What was the fourth building law?

Student: A human behavior.

So, that is where we are bringing the judgment. So, judgment is separate from the rationality of your preferences. While in our day to day life we combine all these things in one. You understand this is the way these two are different, but roughly in most of the

cases they mean the very same thing. If we talk about a force, I can take a leak I took an example of a very weird person. Remember in economics there is no weird person or weird individual. Here we are not talking about why did he get such weird kind of preference in economics, we do not put any value judgment here about a person's preferences, what we care about it, what we care about is, that it has to be consistent and complete. Consistent coming from transitivity.

Srtudent: (Refer Time: 11:23)

Fine, is it clear. So, whenever you are using this rational term, be careful about it, whether you are using it in economic sense, or you are using it in day to day sense, because they are not always the same fine.