

Ethics in Engineering Practice
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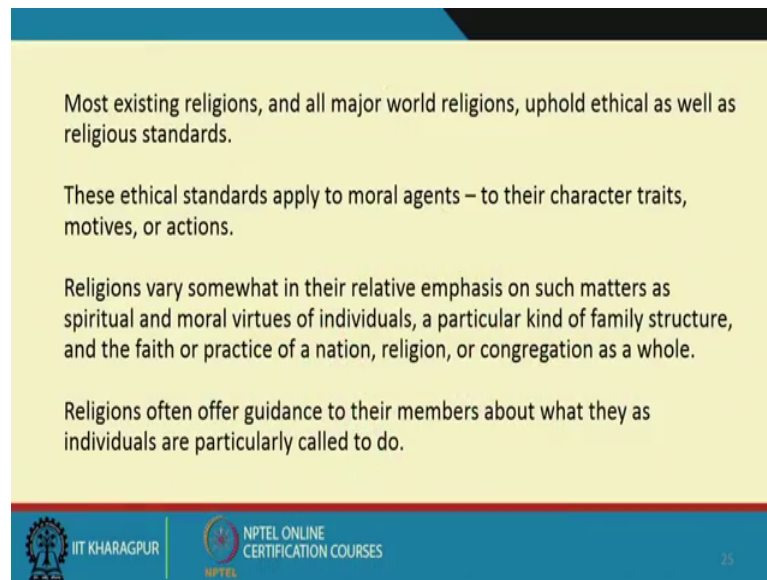
Lecture - 31
Key Questions - Ethical Conduct of Engineers (Contd.)

Welcome back. In the earlier module we have discussed about two key questions that is what makes a good engineer and what are the good engineering practices, what are the ethical values to be followed by engineers and then we have discussed about the next key question like what are the two important values for key values for engineering practice. We will continue with the discussion and we will go to the next key question which are relevant for like ethical conducts were engineers is like, how at all do you feel like the or understand religious and ethical values to be related.

So, sometimes we get confused, we think like whether religious values and ethical values are different or whether they are same. So, what does religiosity has to do with ethical practices and like is it if someone has to be a follower of certain like maybe god so that, we can invite certain values to become ethical. So, these questions are there at the back of our mind.

So, here in this key question we are going to discuss about the relationship of religious values with the ethical values, and try to see if at all there is any relationship between these two things.

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Most existing religions, and all major world religions, uphold ethical as well as religious standards.

These ethical standards apply to moral agents – to their character traits, motives, or actions.

Religions vary somewhat in their relative emphasis on such matters as spiritual and moral virtues of individuals, a particular kind of family structure, and the faith or practice of a nation, religion, or congregation as a whole.

Religions often offer guidance to their members about what they as individuals are particularly called to do.

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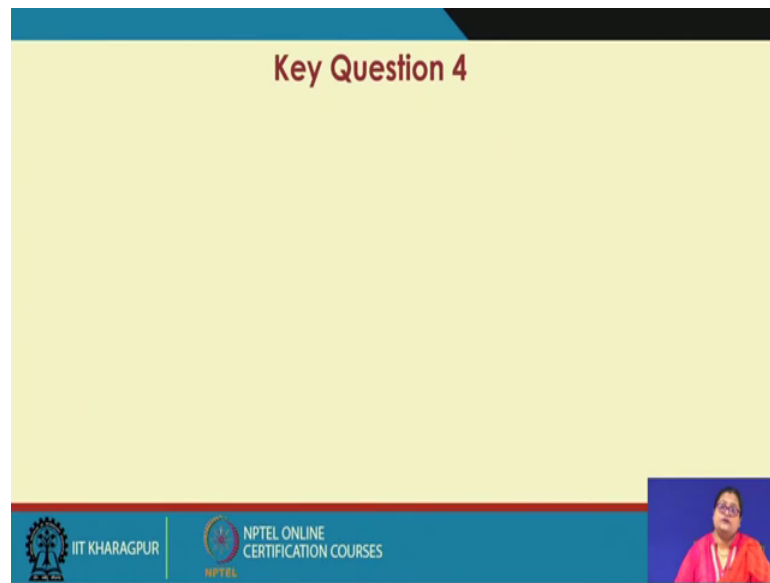
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So, what we see, like most existing religions, so at all major religions of the world uphold ethical as well as religious standards.

So, these ethical standards are actually applied to the moral agents like, it is more focused on their character traits motives or actions. So, there are there is difference between religions in their emphasis that speak like that they place on such matters as spiritual and moral values of individuals or a particular kind of family structure because, the family structure helps you to develop a bond, collaborate with each other understand each other's feelings, maybe make small sacrifices for each other that is, what you learn from a family structure and the faith and practice of a religion of a nation or a conglomeration of the or of all these things.

So, religion often puts their guidance to members about what they are supposed to do as individuals and particularly what they are called to do. So, every religion has like certain values which are important and these values are the guiding principles or a virtues.

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So, whenever we are talking of ethical values, which are based on moral qualities, virtues what happens if we study different religions also.

There are certain key values what we talk of spiritual values, which are similar across religions. Religions are just the practices expression of those spiritual values and how like we see in what nature it can be practiced. But if we get to understand the essence and we get to study the values connected to it. So, there is a difference between spirituality when you talk of the values that are connected, key principles that are accepted by a particular religion.

And when you talk of religiosity, it is the practices. And practices may vary from region to region, but if we study the core of the values of the religion and if you study throughout, you will find there is lot and lot of similarity in the key values which are mentioned for every religion. And all the values focused towards the synergy of the person with the others in the society and to the cosmos at large. So, he talks of how to maintain a balance it talks of sustainability.

So, if we are talking of ethical values for the engineers, which is focused towards sustainability, there is definitely lot to be learned from the spiritual values shared by the different religions; be it whatever religion. We have already discussed it in like environmental values and spirituality related to it.

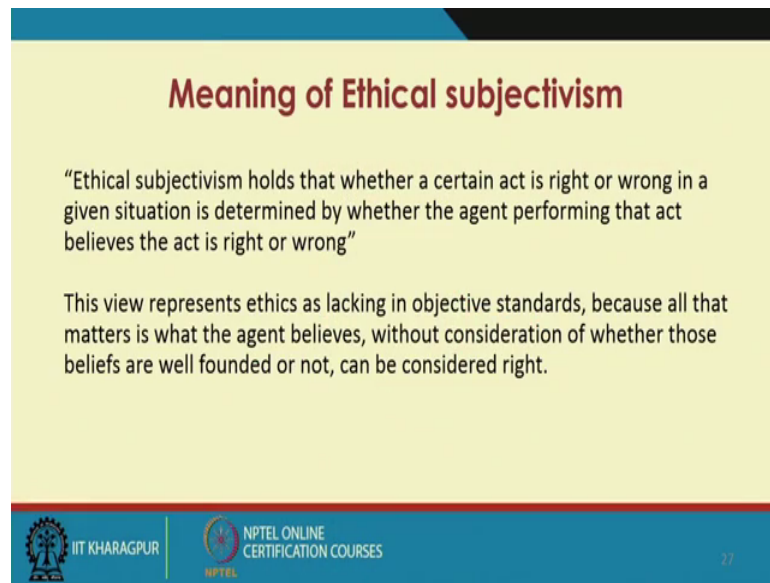
So, we find like all the religions have certain core values, which talks of the like synergy, which talks of sustainability, which talks of balance between the my needs and wants and how I need to what is the my degree of responsibility towards others my duty towards others. So, as an engineer, if we understand this values, it helps us for becoming more dutiful in our profession understanding our responsibility as a person, understanding like what should be the primary focus when we are designing for certain things it is our own self interest or is it the like the synergy and the sustainability perspective which needs to be taken care of and the spiritual values has gives guidance in this regard also.

Now, we will come to the key question for this module which is how can we have the ethical subjectivism. Whenever we are talking of ethical subjectivism, we are talking of issues like some relativism because, we have already discussed about ethical principles which may be universal in nature, which may be objective in nature, which needs to be followed everywhere.

But still that we find like based on situations case to case basis, there could be some specific needs arising to discuss about whether, like this decision is correct in this regard or a different decision could have been taken, like do we always decide where the way that it is decided in ethical absolutism or we take a pragmatic lens and we talk of ethical (Refer Time: 08:03) also. So, when we are talking of ethical subjectivism, we will be focusing on those issues in details again.

Now, what is the meaning of ethical subjectivism?

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Meaning of Ethical subjectivism

“Ethical subjectivism holds that whether a certain act is right or wrong in a given situation is determined by whether the agent performing that act believes the act is right or wrong”

This view represents ethics as lacking in objective standards, because all that matters is what the agent believes, without consideration of whether those beliefs are well founded or not, can be considered right.

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Ethical subjectivism holds that whether a certain act is right or wrong in a given situation is determined by whether the agent performing that act believes that it is right or wrong. So, this means we present ethics as a subject where it talks of not having any objective standard, it is trying to focus on like whatever the agent, where who is implementing the standards believes whatever is right is right and whatever that the agent believes to be wrong is wrong.

So, without trying to consider whether, they are very well founded in theory whether, do they have backup support for past evidences or the earth can be considered right. So, this leaves a place for dilemma on our mind.

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How can we tackle this problem?

Code of this as the solution?

Or Theories can be used as a way to resolve them?

- ✓ - Utilitarianism
- ✓ - Duty Ethics
- ✓ - Rights Ethics
- ✓ - Virtue Ethics

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So and when we talk of subjectivism, so question may come how do we tackle this problem or our code of ethics a solution for this or we can use utilitarianism, duty ethics, rights ethics and virtue ethics as a solution for these things.

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Key Question 5

What kinds of considerations are relevant to judging an act or course of action morally justified or unjustified?

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So, what we find over here, whenever we are talking of ethical subjectivism and we are talking of as per a given situation, then it talks of; if I think it to be right then it is right if I think it will be wrong. Then, it is wrong then this may sound an unethical, but if it is

grounded on the pillars of decision making like that, we have mentioned of utilitarianism like which talks of doing a cost benefit analysis of the benefits and the potential harms.

And what are the of action one compared to the potential harms and benefits of the action 2 and then making a comparative judgment then if you are choosing something based on that that is utilitarianism. And like we have to understand like, if I take something is I think it to be right because, it is right, it is not like we should be making a covering statement like that, but we need to justify; that is very important. We need to justify because we are rational human beings who are making a decision about certain issue and who are like putting up comments like, we are thinking this to be right then, why we are thinking something to be right, must be based on well grounded reasons.

Now, I am making something to be right, people will be differing in their understanding of right and wrong, but these right and wrong should be well grounded in their reasons for like, if I ask you, why you think this to be right, why you think that to be wrong then, you must be in a position we must be in a position to answer I think this is to be right because, of these things I this think this to be wrong because, of these things.

Now, the ethical pillars of decision making like, utilitarianism, who writes, duties, justice care these helps us in framing our moral reasoning. For telling I think this is to be right because, of this utilitarianism talks of cost benefit analysis where it takes care of the costs and relevant benefits with terms of that cost and which talks of like them if, it is good for a majority of people and then, we have already discussed debates about it like who defines this majority, who takes care of the minority, if it is a rule utilitarianism if it is an act utilitarianism, so do you think the principle is correct or deterring the action is correct and right and it is it is bringing go to the majority of people, so that is based on utilitarianism perspective.

Another perspective could be the right perspective every people have the right to enjoy certain things and whether, we are trying to compromise on their rights in order to get your projects done. We are we making them suffer, we are not allowing people to enjoy their rights for something so, and now if rights of two stakeholders are coming to conflict with each other then, which right is supersedes the other right these are important thoughts to be kept in mind.

When you talk of duty, it is a part of our duty I mean towards the organization, towards the public at large. So, like again, we should be like we should be knowledgeable about these duties and we should try to see that through our practices, we are able to do this duty. When you are talking of fairness then, it is fairness of process fairness of distribution and we are talking of being fair in your actions means giving like looking through all the options before we take a decision and whether we are doing justice to people whether, they were just doing justice to the environmental large these needs to be taken care of.

When you are talking of care, you are talking environmentally things, we are talking of people who are like not able to speak for themselves, who were not able to like claim for their rights then, it comes off or how do you realize your duty for these like sensitive stakeholders and how do we care for these stakeholders is a caring perspective.

Above all, the virtue of the person, the characteristics of the person where we have discussed of the ethical values like honesty, integrity, trustworthiness, responsibility, reliability these are the characteristics of the engineers the virtues of the engineers, which develop such an integrity in the character, such a personality pattern in them like they are always prone to think positively, they are prone to under understand the duty for others for the public at large for the environment at large think of sustainability and all the decisions that they are taking are based on their conviction of understanding, based on the yardstick of these values and the understanding of the professional ethics.

And based on that, whatever they think to be right is they take it to be right and they believe in that and whatever the thing to be wrong is they believe it to be wrong in a particular situation, based on the virtues and their understanding of their professional ethics.

So, if we look at what the subjective decision of right and wrong is based on; whether it is based on reasons well reasoned rational and who is the person who is talking of this right or wrong, what is the nature of this person who is talking of this right and wrong it may not appear to be unethical. If you are talking of ethical subjectivism provided it is thought of by a person having virtues of integrity, honesty, fairness, trustworthiness, reliability, responsibility and he or she is using a pragmatic lens of looking through all the options taking care of the rights of the people and environment understanding the

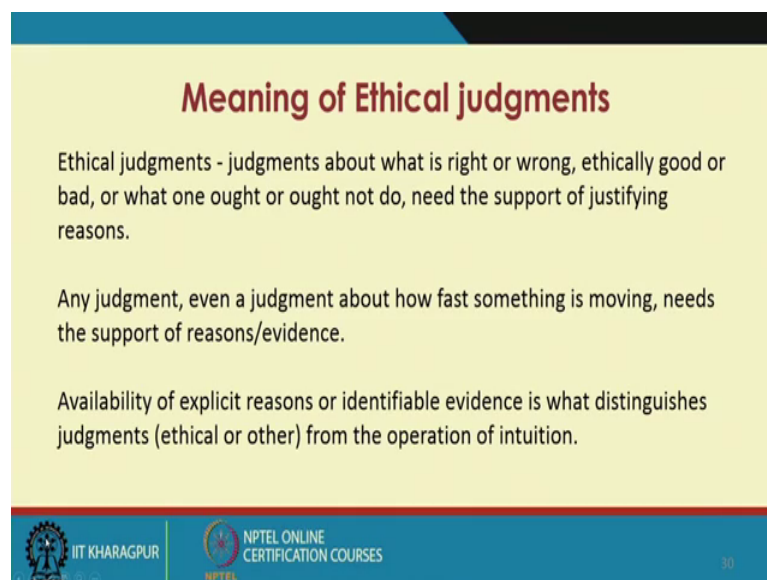
duties towards the others and stakeholders before arriving at a decision of right and wrong then ethical subjectivism is not unethical, but it is an ethical way to decide in a particular situation what is right and wrong and then move forward to give a decision about it.

Now, we will come to the key question 5, like what kinds of considerations are relevant to judging and act or a course of action morally justified or unjustified So, this question focuses on like, the what are the situations what are the things which keep identified in a particular situation would qualify it to be considered as motive morally right or morally justified or not justified.

What are the triggers specifically, when we are discussing about the triggers what are the triggers which if present in a situation in a act or a course of action which will qualify it to be ethical or not ethical. So, in the last question we discussed about the person who is making the decision and whether it is subjective decision and it is right and wrong.

Here we are focusing on the triggers present in the situation, which will qualify it to be unethical or an ethical situation.

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Meaning of Ethical judgments

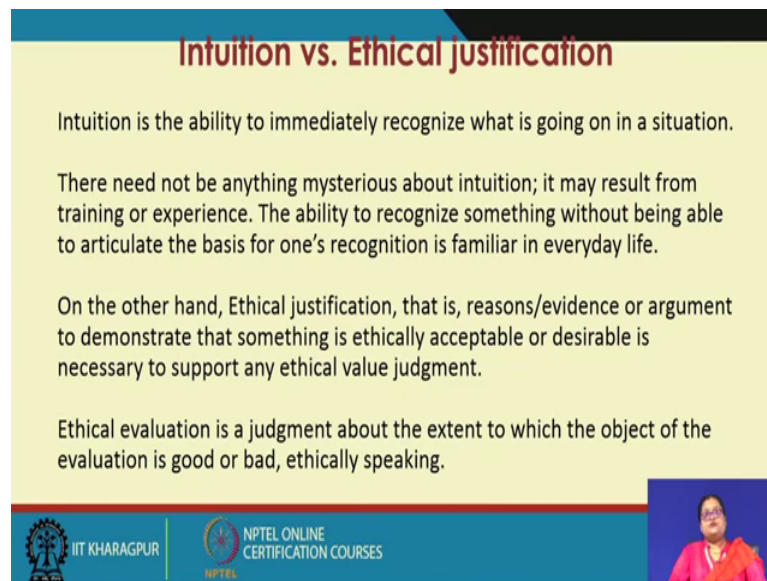
- Ethical judgments - judgments about what is right or wrong, ethically good or bad, or what one ought or ought not do, need the support of justifying reasons.
- Any judgment, even a judgment about how fast something is moving, needs the support of reasons/evidence.
- Availability of explicit reasons or identifiable evidence is what distinguishes judgments (ethical or other) from the operation of intuition.

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So, ethical judgments, when you are talking of judgments, it is about right and wrong good or bad what ought to be done and not to be done and it requires support of reasons justified reasons. As were discussing it is like if you are thinking something to be right,

why it is right, if you are thinking something to be wrong then, why it is wrong and so on. So, it requires evidence, reasons, so judgments with identifiable evidence reasons is what it distinguishes judgment, which is ethical or aesthetic whatever it is from like talking on intuition where we may not have evidence, but we will tell like we think like this is happening in this way.

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Intuition vs. Ethical justification


Intuition is the ability to immediately recognize what is going on in a situation.

There need not be anything mysterious about intuition; it may result from training or experience. The ability to recognize something without being able to articulate the basis for one's recognition is familiar in everyday life.

On the other hand, Ethical justification, that is, reasons/evidence or argument to demonstrate that something is ethically acceptable or desirable is necessary to support any ethical value judgment.

Ethical evaluation is a judgment about the extent to which the object of the evaluation is good or bad, ethically speaking.

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So, first we will try to differentiate between intuition and ethical judgment. So, intuition is that ability to recognize what is going on in a particular situation. So, but this is based on actually past experience, if we tell like this is right and maybe intuition is not scientific ethical justification is scientific it is actually a circular process.

And it is an years of experience maybe experience of like judging different situations forming ethical justification evidence and then developing of like virtuous traits and utilizing the pillars of decision making, throughout in different kinds of situations develops an insight in the person about the situation and what is going to happen next and what are the possible connections between the unconnected dots that we may not see it, what could be the possible consequences of a particular situation and a action and what we will be right in this scenario.

So, that years of experience or experience of handling different kinds of situations with an ethical justification develops intuition in a person. So, when someone is using intuition, it does not mean like the person is not thinking, maybe the thinking is

happening at the back end back processing is happening and which is very instantaneous happening because, the cell connectivity about this thought processes have already developed in the person which has developed an expertise in that person to think intuitively and that is what the expertise speaks like the professional knowledge experience of facing different situations taking judgments about different situations, which may have an ethical like connotation, that develops the intuition in that person that that we call of wisdom also which we develops and that gives you and like storehouse of knowledge which you can immediately refer to and draw like this is going to happen.

So, if somebody is thinking intuitively, does it mean like the always like the person is not referring back to any rational yardstick of deciding, but definitely the person is doing it which is a processing happening at the back, but it is happening so fast that, we may not be able to recognize it because, it has already become a storehouse which and you do not have to revisit it like new situations again and again a template has been formed, which you can refer to an immediately tell this is lookalike this part is common this part is different this is what may happen and these are the consequences of it.

So, that develops the intuition, so ethical justification is again based on reasons, which evidence argument to demonstrate that something is ethically acceptable or desirable so and it is a necessary ethical value judgment. So, ethical valuation is a judgment about the extent to which and the object is like right and wrong as for a particular situation.

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A variety of criteria are relevant to the ethical evaluation of an act or course of action. A reasoned judgment about whether (or the extent to which) some act (or course of action) is morally justified will mention some or all of the following:

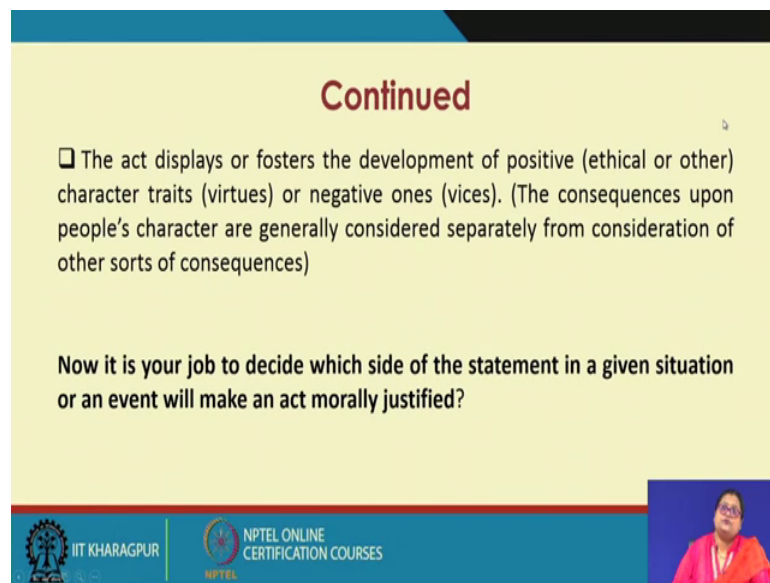
- The act produces good or bad consequences
- It respects or violates rights
- It fulfills or shirks obligations
- It honors or ignores agreements and promises

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So, what we find like there are different criteria for understanding the ethical evaluation of an act or a course of action. A reasoned judgment of about whether or the extent to which some actor course of action is morally justified we will mention some or all of the following like it produces good or bad consequences, it respects or violates rights whether it fulfils or it shirks obligations and whether, it honours our ignores agreements and promises.

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- The act displays or fosters the development of positive (ethical or other) character traits (virtues) or negative ones (vices). (The consequences upon people's character are generally considered separately from consideration of other sorts of consequences)

Now it is your job to decide which side of the statement in a given situation or an event will make an act morally justified?

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So, these are some of the pointers triggers, which may help you to understand whether it is moving towards an ethical or unethical domain.

So, the act displays or for fosters development of positive character traits or negative ones. So, now when you have all these pointers to yours so, it is now the decision makers choice to understand, how the event or situation what terms the situations are taking and whether it is becoming an ethical or unethical situation and like how to deal with it.

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Key Question 5

What do we understand by Justifications and Excuses for Lying?

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So, next what we deal with is justifications and sometimes people give justifications for their actions and their excuses.

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What is your stake on the situation

Suppose you are helping to install some equipment. You are to install one component by yourself. Afterward you are criticized for the way you installed it. Which of the following responses are excuses, which are justifications, and which are something else? Give reasons for your answers.

- _ I was given the assignment late in the day and told to finish by 5. There wasn't time to do it any other way.
- _ That is what the building/safety code required.
- _ This was my first time, so I made a few mistakes.
- _ If you don't like it, do it yourself next time.

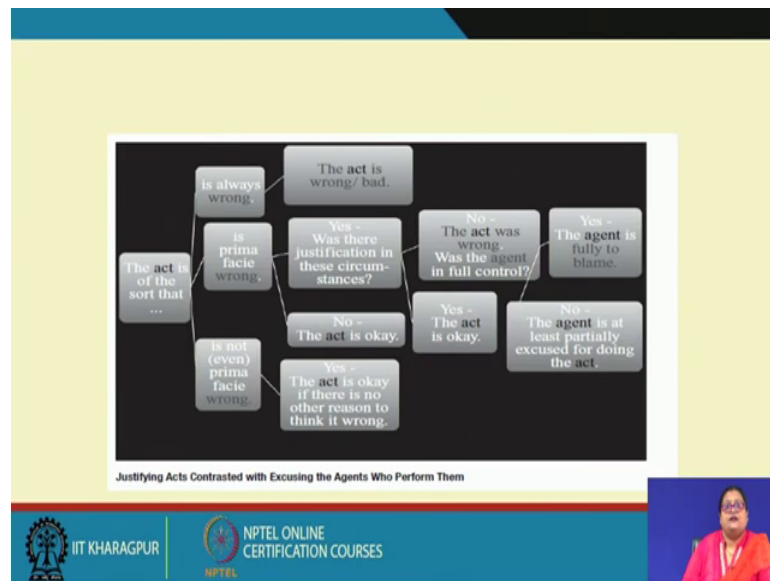
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So, how do we go for it, how do we define for it So, like we have a small check over here like, suppose you are helping to install some equipment, you are to install one component for yourself. Afterward you are criticized for the way that you installed it. We talked of following our excuses and which are justifications and something else. So, I

was given the assignment late in the day and tell to finish by 5 there was not time to do it another way.

That is what the building safety code required. This was my first time, so, I made a few mistakes if you do not like it, do it yourself next time.

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So, which of these are you find out excuses and justifications and what is the part of it. So, what we find is that, when the act is of the sort that is always wrong, the wrong the act is wrong or bad. When the act of the sort that is prime facie wrong yes, was the justification in this circumstances no, the act was wrong was the agent in full control yes, the agility is fully to blame is the act prima facie wrong no, the act is ok.

Yes was there any justification in the circumstances, yes the act is ok. Then, when he come to this no, the agent is at least partially excused for doing the act, when we come to the acts of the sort that is not even prime facie wrong then, yes the act is if there is no other reason to think it is wrong So, if justifying acts contrasted with excusing the agents, who performed the perform them.

Now, if you go for this like suppose, you are helping to install some equipment you have to install one component by yourself. Later on you are criticized for the way you installed it. So, for this what we can say, that of the is it like always wrong then, if maybe not like in that case like you are helping to install and you have been given a part to

install. So, one of the primary responsibilities of the engineers is competent in their work.

So, you have been given the responsibility to install because, you are competent to do it and you have been helping people to install that is why, you have been given a part of that responsibility. So, is the act prime facie wrong, so if it is no then, the act is then, you find though the act of giving the person to install was ok.

So, if we find like the act is wrong maybe, you should not have been given the full responsibility. If you try to justify it that way, you should not be sure you are only a maybe junior engineer and you should not be given the full responsibility to install something. So, was there any justification in the circumstances then, you tell no the act was wrong. Was the agent in full control, so we need to like this situation given we need to understand who was under the full control like, do you whether like the it is given like the act was given to me at 5 p m so, I did not have resources for it.

So, was I full control for the consequences, where other people responsible also. So, in that case if it is no then, the agent is partially responsible if yes, then the agent is fully responsible. So, what we try to see like, when we are justifying this type of things. So, like you are talking this is the building or safety code required me to do, so again did I am verifying it, go beyond it to see like whether I have followed all the codes or not. So, this was my first time so I made few mistakes.

If there is no place for mistakes in case of like in engineering practices, you cannot be casual with your responsibilities So, if you do not like it, you do it next time these are again excuses. So, you this thing so like I was given the assignment late and told to finish it there was no time to do it and that is what the building code required.

So, these are justifications and we have to see whether, these justifications given, what is the part of responsibility, what is the degree of control that the person telling was having, was the person fully responsible, somewhat responsible, what are the situational was a situation responsible to certain extent and then we try to figure out like whether, the agent is fully to blame for it or they at least can be partially excused for doing the act. We need to do have a chain of thought process before, we take care of like when you are talking of like justifying the acts which excusing the agents who performed it.

So, these are some of the like key questions that, we have discussed earlier with respect to ethical conducts of engineers coming to what makes a good engineer, what is a good engineering practice, what are the ethical values to be followed then, what are the two best practices then, we have discussed about like ethical subjectivism, we have discussed about the three triggers present in the situation.

And we have also discussed about if somebody gives certain excuse or justification for a certain acts then, to what extent by following like branching and process of thought and trying to map with the degree of responsibility of the person and the extent to which the person was in control of the situation or not; how can we hold the person to what extent we can hold the person responsible for the, may be errors done and to what extent we can excuse the engineer for it.

Based on like maybe other circumstances present, all things present in the situation or the act per say. We will come up with more key questions in the next module.

Thank you.