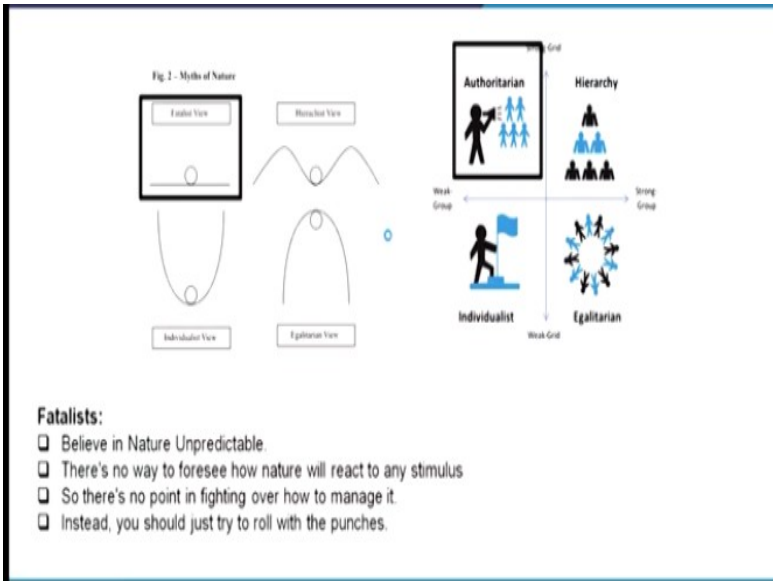
So, we have to help each other to protect as our self from the threat of hazard; from the threat of risk and then we have hierarchical okay, they believe that nature can be exploited freely but there is certain rules, particular way they define there is a limit of it, okay because this limit is put because they have a very strict authority so, the authorities or the higher people those who have or the Kings or the top people they know how to do it.

So, they depends much so, expert can tell you what is right and what is wrong, the king can tell you okay that what is right and what is wrong and you have to follow that extent so, it is okay that you can exploit the nature but you cannot cross certain point, cross certain boundaries okay, if you cross that one you are putting the nature at risk and on the other hand, we have fatalists, there is no way to foresee how nature will react to any stimulus.

(Refer Slide Time: 20:52)



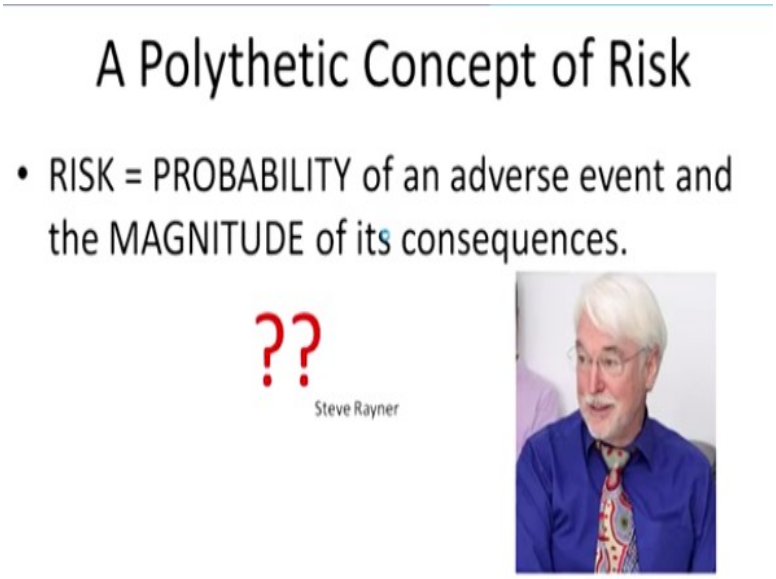
So, they don't know what is the risk okay, it is protected or not so, there is no point in fighting over how to manage it instead you should just try to roll with the punches so, you should go on.

(Refer Slide Time: 20:58)

So, they are the most vulnerable so here, we look at the attitude of 2 risk; one is individualistic, the fear risk that would limit the market and constraints their ability to trade freely. Egalitarian; use the threat of catastrophic risk to generate solidarity, for example, global warming. Hierarchists fear risk that would upset the ranking of people okay. For example; crime or social deviance.

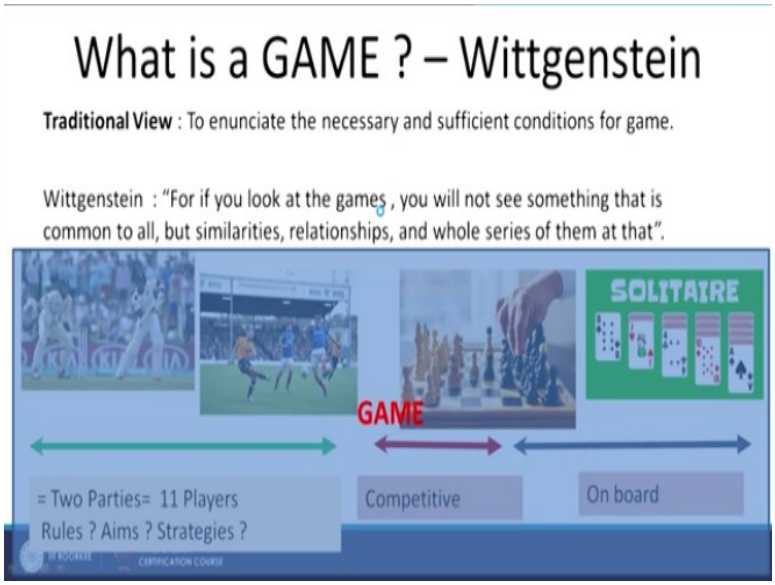
Fatalists; don't see the point of fearing any risk, it's not like they can do anything about them so, we are talking about this that how one see different way of looking at the risk from their cultural perspective so, it is not that risk is objective and his hazard dependent but it is more that how people are culturally when oriented, how their perception values are met as we see in each cases; individuals, egalitarian, hierarchists and fatalists.

(Refer Slide Time: 22:23)



This idea was then little further developed by Steve Rayner, he was talking about polythetic concept of risk and that in generally, we consider risk is the probability of an adverse event and the magnitude of his consequence right, something will happen, an adverse event will happen and it has some consequences.

(Refer Slide Time: 22:46)



But he is arguing that risk is more than that risk actually a kind of perceptions, it varies from one person to another, there is no one meaning, risk is more polythetic, so he got this philosophical idea okay, from Wittgenstein, he is asking that to for you what is the meaning of a game okay, for if you look at the game, you will not see something that is common to all game.

For example, we have the game here; 3, 4 games, one is and the cricket and in the soccer and the chess and solitaire okay so, in the first part they all consider to be a game but they have very less similarities with each other for example, the cricket or soccers both are 11 players play for each team so, they have some similarities but from the point of rules, aims and strategies they are quite different.

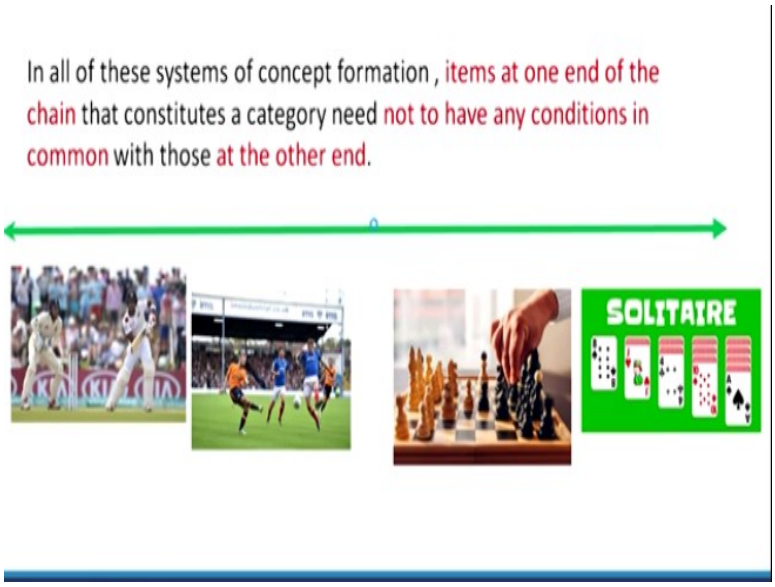
On the other hand, they are completely different from chess or solitaire, in other sense that chess and solitaire are quite similar because they both are played on board and they both are not competitive as such okay.

(Refer Slide Time: 24:22)

- There is a series of links which connect soccer, cricket chess and solitaire.
- But there is no single feature or set of necessary and sufficient conditions which is characteristics of and common to all.
- All games are goal –oriented activities (beating the opposition, solving the puzzle, or completing a number of rounds)
- Although goal orientation maybe a necessary but insufficient conditions of a game. It is also a consistent feature of activities that are not games.

So, there is a series of links that which connect soccer, cricket, chess and solitaire but there is no single feature or that is enough or sufficient condition to call it as a game, right.

(Refer Slide Time: 24:40)



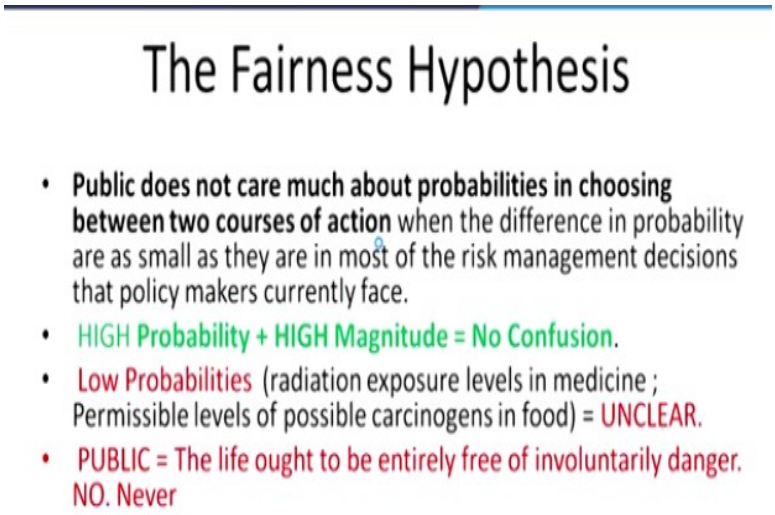
In all these system of concept of formation, items one end of the chain that constitute a category need not to have any conditions in common with those at the other end that means, that they all are in a sense and that they have some commonalities but and like they all are goal-oriented okay but that is not only defining the characteristics of the game, game needs to be more characteristics.

So one; so they have some similarities but they have also some differences so, one single feature of anything is maybe sometimes necessary but not sufficient condition to define or to call it as game, okay but similarly the public does not care much about the probabilities in

choosing between two course of action, he is arguing when the difference in probability are as small as they are in most of the risk management decisions.

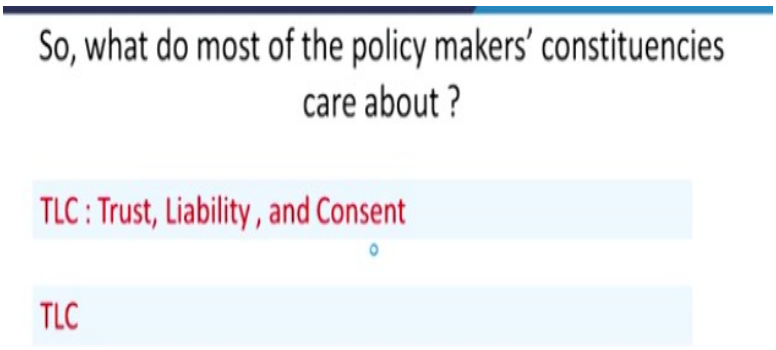
So, people don't care when the probability is let's say high probability and high magnitude, there is no confusion, people say okay, I accept the risk.

(Refer Slide Time: 26:02)



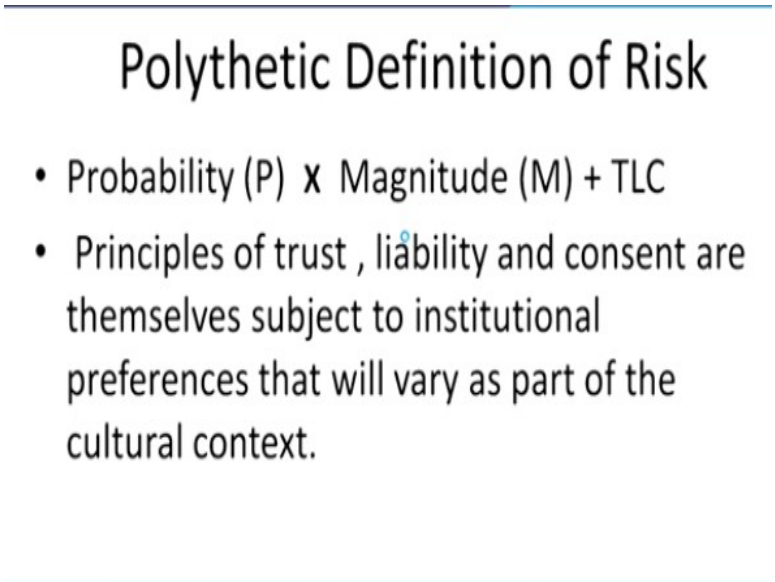
But in case of low probability okay, like radiation exposure, labels in medicine or permissible level or possible carcinogens in cancer, these kind of low probability event of risk is very unclear to the people so, what people will do the life, how they will consider it as an accepted or not accepted.

(Refer Slide Time: 26:26)



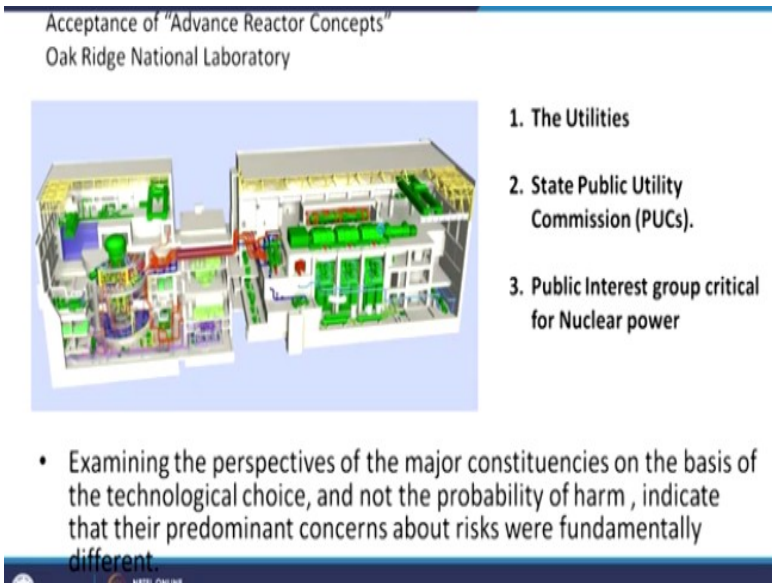
So, he is offering that for that we can have a kind of model which is called TLC; trust, liability and consent okay.

(Refer Slide Time: 26:38)

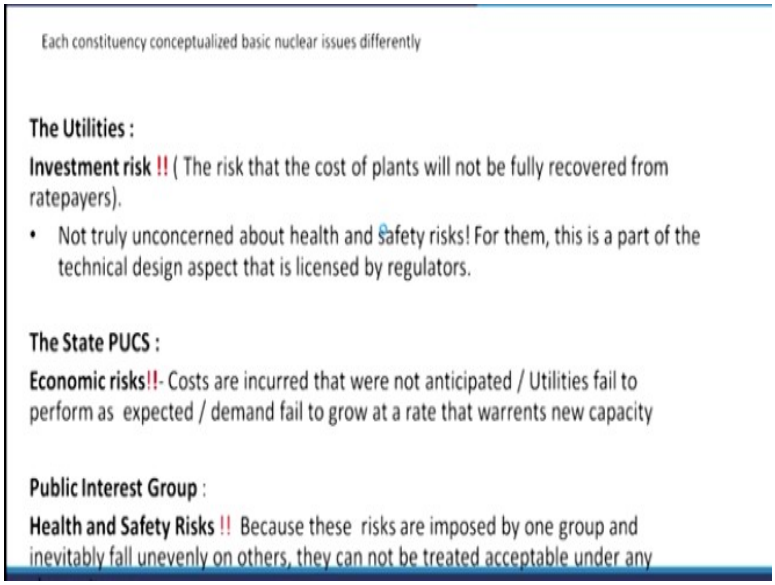


So, polythetic definition of risk is that probability and magnitude that is the traditional way of looking at risk but that is not enough, we should add the TLC okay, this is the principle of trust, liability and consent are themselves also, the subject when we define that what is risk.

(Refer Slide Time: 27:02)

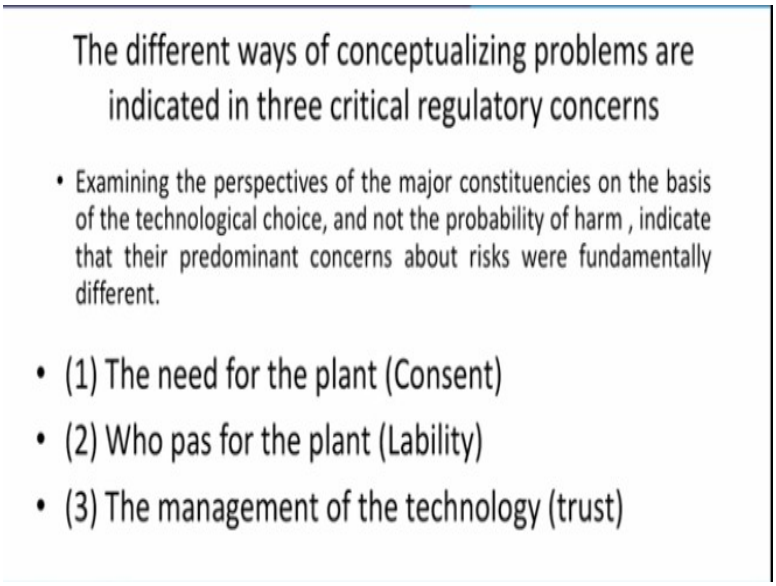


(Refer Slide Time: 27:12)



Like, in case of nuclear power plant that if we want to tell people what should be done, we should can consider this; this TLC concept okay.

(Refer Slide Time: 27:18)



So, that's how the problem of the need for the plant, why it is necessary to have a nuclear power plant, so that should be defined and agreed among the parties and who pass for the plant, who will take the liability of it, if something happened, who will be benefited out of it and who will take the benefit of it so, these should be considered when we are defining the risk and the management of the technology.

So, trust is a very critical important point when we are talking about this kind of risk management so, there are some informations, I giving and thank you very much.