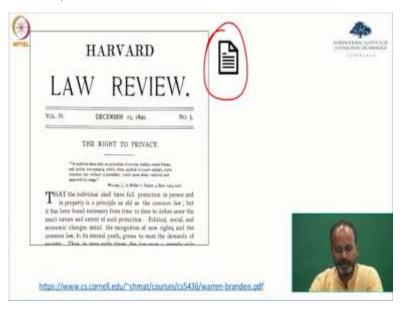
Online Privacy Professor Ponnurangam Kumaraguru Indian Institute of Technology, Hyderabad Right to Privacy and Contextual Integrity

Welcome back NPTEL students, it is great to have you back. I hope you enjoyed the content that we had for week 1. Thanks to some of you for being active on the mailing list, I hope more of you start being active on the mailing list, I think it is generally a good idea to be, up on the topic, through the discussions and through the topics that are going on outside the class also, we will get you more involved in the topics that are outside the class.

But please participate in the mailing list, not just asking questions, the answer questions for others, help others to understand a topic if you have understood better or if you have seen something interesting that is happening outside the class, please post it in the mailing list.

So, what we will do for the week two is actually to look at right to privacy, some old research work done on the space of privacy, then what is contextual integrity, then we will look at privacy policy, privacy policy means quiet amount of time on understanding what privacy policy is, how some of the company's privacy policies are some companies state you may be interacting very regularly, we will look at their privacy policy and see how they do.

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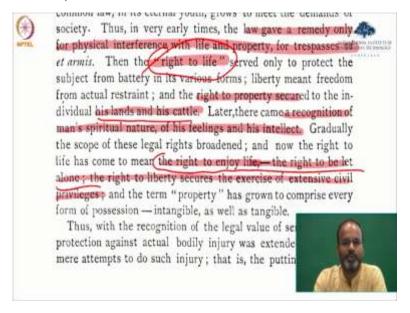
The first one is what we will look at is the right to privacy, this is the work that was done in 1890. This is, I mean, as part of this class is about topic of privacy, this is one of the most important document that you should be doing, this talked about the right to privacy and as I have marked here, we will look at the document itself.

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So, this is written by Samuel Warren and Brandeis, this is very, very popular document, you will generally hear about Warren and Brandeis name in while discussing the topic of privacy.

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So, what did this, this article basically talked about the, meaning raised a lot of questions about the idea of right to privacy, giving the scenarios in that era, showing that how privacy why privacy is needed. So, we will look at some aspects, please again, my role here is to get you excited about some parts of the document, feel free to go read the document as, if you are interested in knowing more details about the article itself.

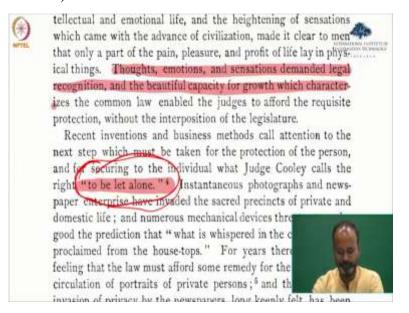
Right to Life. So, this is one of the meaning, I think this right to is also very common now. So, there is GDPR, which is talking about right to be forgotten in 2016-2017 period and the

topic of right to be forgotten has come. So, this is right to life and how it was necessary in those days to be discussing about right to property, his land or his cattle. It is the article, please keep in mind was written in 1890 that is why the context of cattle, all that is coming in and you need, there is one way also to think about privacy as a property right.

So, it is my data, it is my data and who should have access to it, if you have access to it what will I get in return of that access and what benefits do I get because you have access to my data, this if you just think about it, this is just the concept of property which is being used to describe privacy is this one phenomena, one way of describing the content of privacy also, a topic of privacy also.

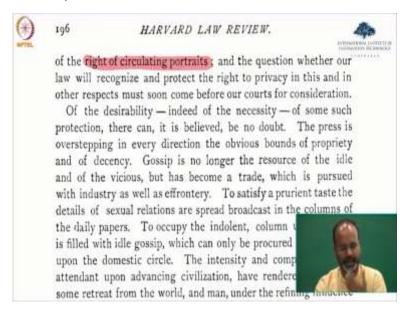
So, if you look at this it says right to be, right to enjoy life, right to be left alone, right to be, right to liberty secure exercise extensive civil privileges. We have talked about let alone if you remember the western's characters that we had created or taxonomy that we had created you would remember the four, five characters that we talked about, solitude, in that also right to be let alone was there, which is I just want to be alone in the topic of privacy, right when I am discussing something when I am wanting to, I do not want to be interacting with anybody else.

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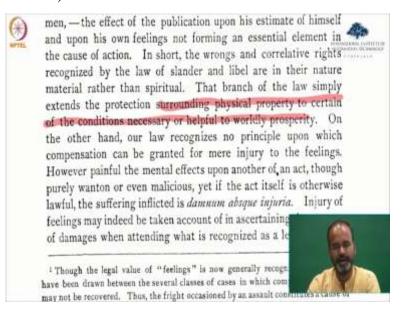
I will get you to some specific to be left alone. So, this is an important aspect of a proposal for this particular article, thoughts, emotions and sensations, the demand or legal recognition and the beautiful capacity for growth which characterises the common laws. I think the idea of common law also is, meaning I am both of them are lawyers. So, they talk about the privacy from the legal point of view.

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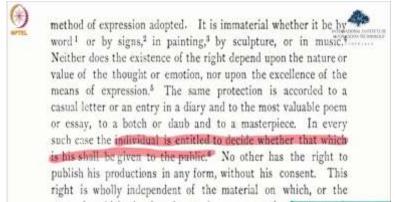
Right of circulating portraits, in emphasising the emphasising the need for the topic of privacy there.

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Surrounding physical property to certain of the conditions necessary or helpful to worldly prosperity. So, again, the necessity of having privacy, what are the benefits of it is being argued here.

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means by which, the thought, sentiment, or emotion It may exist independently of any corporeal being, spoken, a song sung, a drama acted. Or if expre material, as a poem in writing, the author may have the paper, without forfeiting any proprietary right

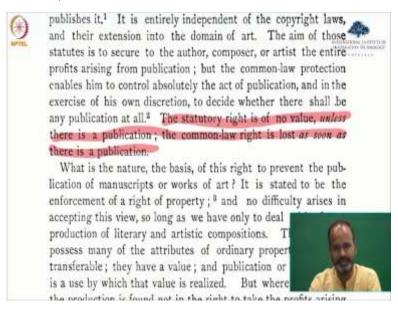
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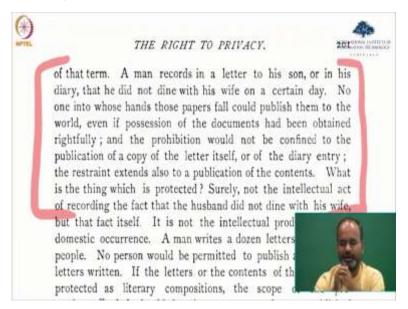
Individual is entitled to decide whether that which is his shall be given to the public. So, the, in every such case, the individual is entitled. So, the control of information that the users have, user should have is actually mentioned here.

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The statutory right is of no value unless there is a publication, the common law right is lost as soon as there is a publication meaning, I think these are all references to the common law and the legal system in the US at that point.

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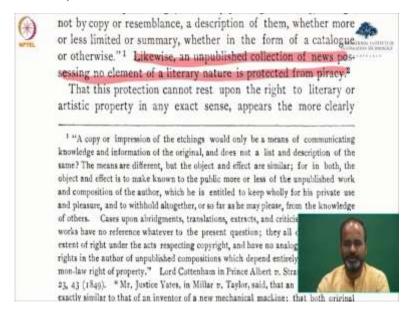


Let us just, meaning I will let you read this, this is again talking about the requirement of privacy a man records in a later, in a letter to his son or his daddy that he did not dine with his wife, on a certain day no one into who, no one into whose hands those papers fall could publish them to the world, again keep the legal background, the document is written in a very legal way, even if positions of the document had been obtained rightfully and the prohibition would not be confined to the publication of a copy of the letter itself or of the diary entry.

So, again, the argument meaning the analogy that you want to keep in mind here, even though it is talked about a man's record of a diary entry, all that, entry and the diary itself, think about it as web access that you have.

You are, you are accessing Netflix and you are basically leaving out saying that trailers of which movies are you watching? Which movies are you rating all of that? Those are, let us take pages and the entries in the diary and your own profile on Netflix itself is the dairy itself. So, I think that is where the argument is which as a user, what control do you have this over this information.

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Unpublished collection of news, positions, no element of literally nature is protected from piracy. Again, piracy is by itself a separate topic, where copies of it being used meaning I am sure you understand privacy, piracy of movies, new movies shows up and very quickly, many copies of the movies are online and the creators worth is actually lost when you start doing piracy. So, I let you go through this document, but the idea is that this was one of the documents, which argued the right to privacy is the concept.

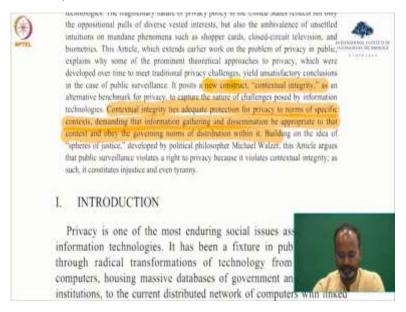
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So, here is another idea. So, I think this idea, so what is the context of these content. The first week we saw about definitions of privacy. So, there are meaning broadly if you see there are very high level, Alan Weston's definition, Warren Brand is looked at what privacy is, then

there is this contextual integrity which came, which is what we are going to be talking about right now. Contextual integrity is an idea by which you can think of how privacy can be provided, how privacy can be protected.

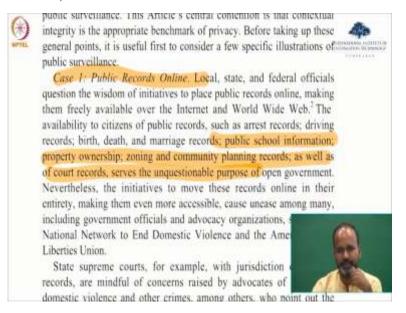
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So, until now, the way we thought about privacy, we talked about control of information, even just now I mentioned about Netflix, you are browsing and probably you are going to a mall somebody is taking a picture all that, in general if you see we never talked about what context is that picture being taken, what context is that information being used? That is what this article is arguing about Helens work.

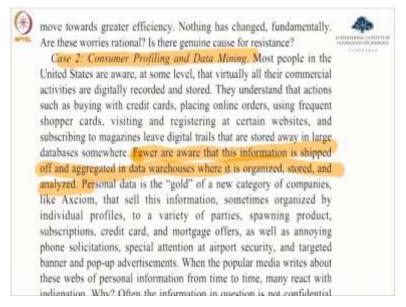
So, here is a contextual Integrity buys adequate protection for privacy to norms of specific context, demanding that information gathering and dissemination be appropriate to that context to obey the governing norms of distribution within it. So, the even if you go back and think about the definitions of privacy that we talked about, control of information, but control of information, what context, what context information is collected, what context information is being used, that is the primary argument of this idea called contextual integrity.

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So, yes, this actually talks about multiple context as an example. So, public records online. This talks about all the public records like public school information, property ownership, all of this and it talks about what is the need for collecting this information, how this information is to be kept all that.

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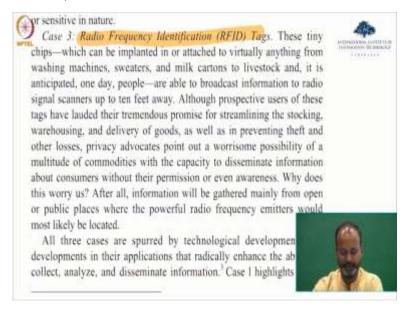
Second, second context is consumer profiling and data mining, which I think all of us agree, all of us understand pretty well profiling, meaning Netflix knowing what your preferences are Amazon, knowing what your preferences are, fewer are aware that this information is shipped off and aggregated in data warehouses, where it is organised, stored and analysed.

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I think, I think at this point, this article was written I think, in 2004. But now, I think we understanding of this data being collected, analysed and stored is probably much more well known.

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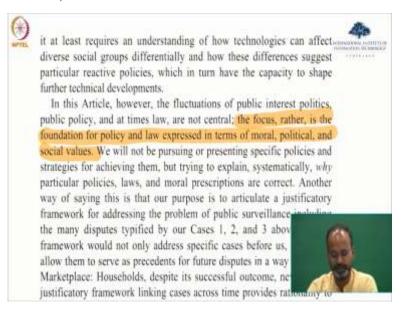


The third context is radio frequency identification shortly called as RFID tags, primarily driven for doing production making knowing, where the products are in the production line and keeping track of stocks in particular store RFID can be very, very useful, my kurta has a RFID tag, which can actually tell when the purchase was made, when from the time of production till the time of sale, you can actually track by having this RFID tag, which is

basically sending out some signals, receivers are collecting the information about where the product is.

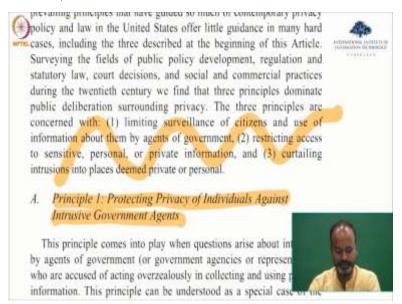
So, is it still in the production state, is it still it in transit from production to let us take retail is it from the shop, which part of the shop it is kept and how long the product. So, you can also understand about when the product came into the shop and how long is it taking for it to be actually being sold, that is radiofrequency ID, RFID tags.

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In this article, our the fluctuations of public interest politics, public policy and at times law are not central. The focus rather is the foundation of for policy and law expressed in terms of moral, political and social values. The main crux of what the argument for the article is.

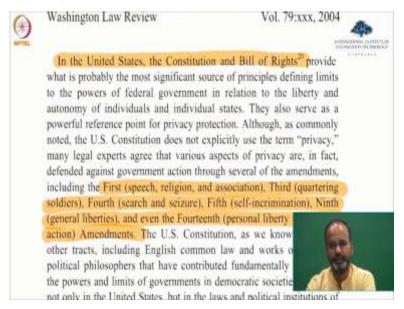
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Some of the three principles concerned in limiting surveillance of citizens and use of information about them by agents of government, restricting access to sensitive personal or private information and curtailing instructions into places deemed private or personal.

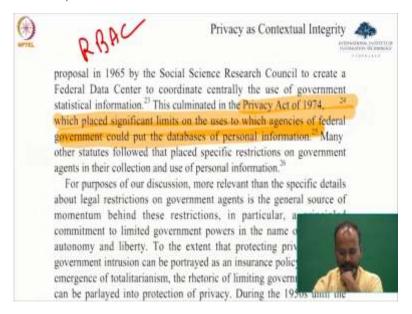
So, these are the principles that are concerned with in terms of the principles that the article is talking about protecting privacy of individuals against intrusive government agents. I think we talked, I think first we talked briefly mentioned about government having access to information all that.

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Constitution and Bill of Rights provide what is probably the most significant source of principles defining limits, by which the information about the citizen can be collected, can be used. Examples of the production that the citizens get is First Amendment, first, third, fourth, fifth, ninth, and fourteenth amendment with the examples that is given which is speech. Soldiers search and seizure self-incrimination and personal liberty versus state action amendments. So, that is the amendments that are available for protection of privacy for US citizens.

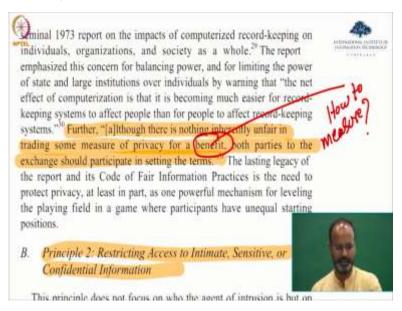
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Privacy Act of 1974. I think these are, so probably later in the course. We will talk about just the legal aspects different laws across different worlds. But for now Privacy Act of 1974, significant limits of use of wench agencies, the federal government could put databases of personal information, which is it gives protection of who can get a, it gives protection for how much of information can be collected? Who gets access to what information, at what level should we be getting.

Federal agencies mean, does everybody in the federal agency get access to all the information of every citizen in the country or is there some kind of grades, is there some kind of restriction on the role, which also talks about, which also can be connected to role based access control of information, who gets access to what information depending on the roles that apply?

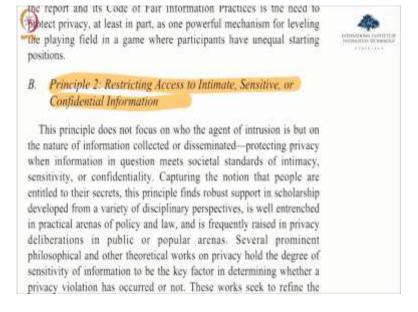
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Another line here is further although there is nothing inherently unfair in trading some measure of privacy for a benefit, both parties to exchange should participate in setting the terms, since again, both parties here talking about the government and user or the Amazon and the customer. All of that.

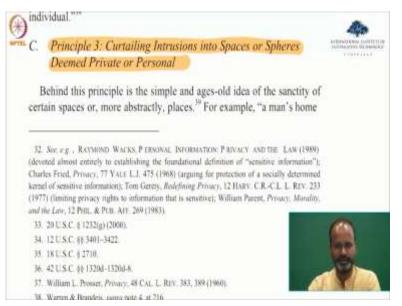
One thing to keep in mind is that, one thing to keep in mind and one thing is even hard is actually how to measure the benefit, benefit of information being collected, benefit of using that information and benefit of what is that the I mean as a consumer I really, do not know what benefit that Amazon is getting because of collecting the information about my recommendations.

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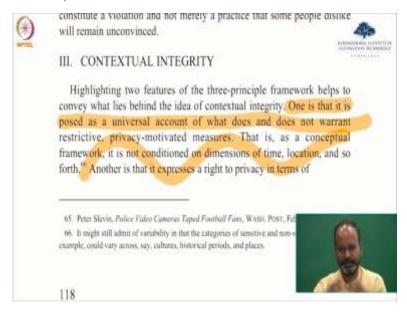
Restricting access to intimate, sensitive or confidential information. In some of these are self-explanatory, this is basically talking about who gets access to what information but particularly looking at sensitive and confidential information.

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Curtailing intrusions into spaces or spheres deem private or personal. Again, this is also self-explanatory who should get access to what space, so the arguments that the article is continuing to make is that look, privacy cannot be defined the principles that we saw, OECD principles, FTC principles all of that. And generally the definition of privacy itself cannot be universal, has to be kept in particular context.

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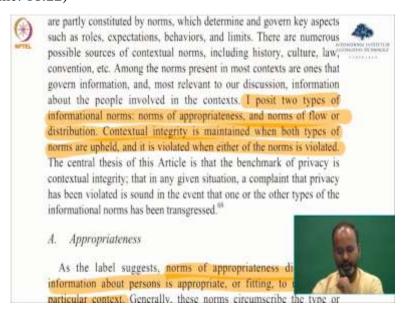
One is that it is posed as an universal, exactly universal account of what does and what does not warrant restrictive privacy motivated measures that is, as a conceptual framework, it is not conditioned on dimensions of time, location and so forth. That is the definition of privacy that has been looked at.

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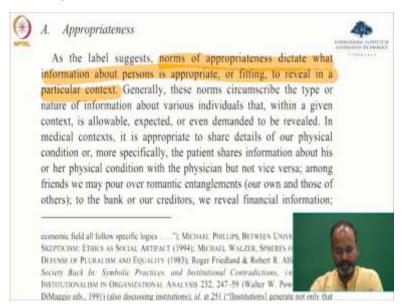
Another is that it expresses a right to privacy in terms of dichotomies sensitive and non-sensitive. So, if you just look at it until now, also, we have been talking about just the definition of privacy, just being binary, sensitive or non-sensitive, private or public, government and private. So, that is, that is probably not the best way of describing what the privacy is.

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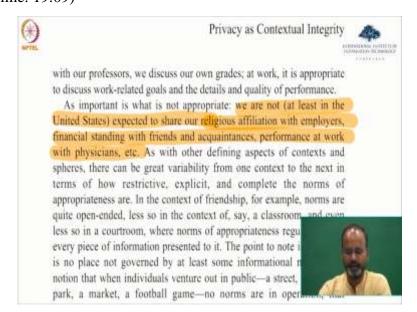
Two norms are proposed in this article, which is norms of appropriateness and norms of flow of distribution. I will just show you what it means briefly. But these are two expectations of contextual integrity definition. Contextual integrity is maintained when both types of norms are upheld, which is followed and it is violated when either of the norms is violated.

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Appropriateness, norms of appropriateness dictate that information about person is appropriate or fitting to reveal in the particular context. So, appropriate information that is provided in a given context again.

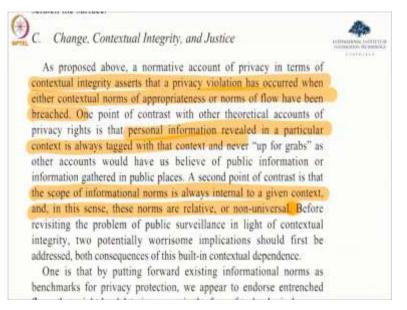
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As important is what is not appropriate, we are not expected to share our religious affiliations with employers, financial standing with friends and acquaintances, financial standing with

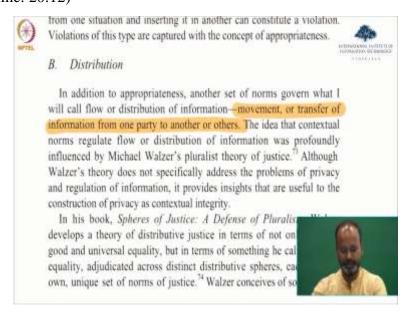
friends and acquaintances, performance at work with physicians, etc. So, this is expectations or appropriateness that is defined here. Generally, you are not expected to share all this information is what mentioned here.

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So, this next one is, so this is about contextual integrity and justice. This is later part of the article which is talking about contextual integrity assert set of privacy violation has occurred when either contextual norms of appropriateness or norms of flow are being breached. So, we should look at actually the flow part also.

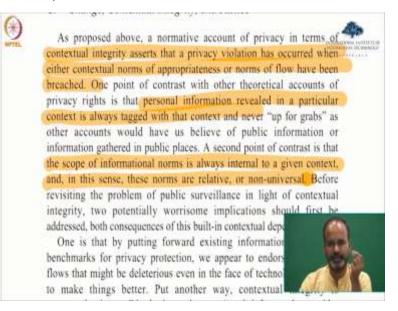
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So, the flow part is here it is mentioned as distribution, movement or transfer of information from one party to other is the flow. So, the definition again it says, appropriateness and flow,

if both are maintained contextual integrity is provided, if any one of them is not upheld or followed, contextual integrity is broken.

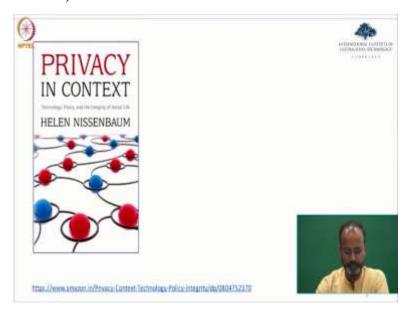
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One point of contrast with other theoretical accounts of privacy rights is that personal information revealed in a particular context is always tagged with that context and never up for grabs. So, which is information that is collected in a particular context stays in that context, it cannot be given away, the context cannot be removed and the information can be used for in other context also, a picture being taken in a mall, information that is collected for you for giving you some service in a mall cannot be used for some other context, the conditions has to be maintained in that particular context.

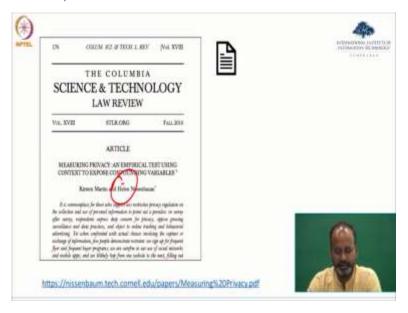
So, that is the article again, the article is pretty long, which is a 39 pages, I will let you take a look at it at your leisure, feel free to actually ask questions. If you are reading the article, we can actually go through I can discuss it, if you have any particular specific questions from the article separately also. But the idea for me to show this is to give you a sense of another definition of what privacy is.

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This is also a book privacy in context linked to the book is here, again, feel free to take a look at it.

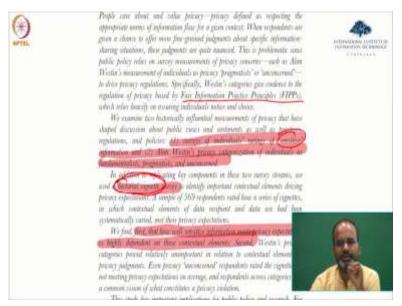
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So, until now we actually saw about meaning last week one we saw about definitions of privacy, particularly also looking at Allen Weston's (())(22:21) all that. This article is, meaning I will let you go again, take a look at the article but this article argues that why that measurements are not actually appropriate. Such measurements may not be appropriate, because the questions do not have enough context and it again, same author for the contextual integrity.

So, talking about how the measurements done through Allen Weston's and few studies, all of that is very restrictive is the argument this article makes, quickly here is the article, but I will go through it quickly on this again.

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The main argument about this article is that, surveys that are been done by Alan Weston and few studies are restrictive and it is not I mean the results may not be when useful in many different contexts is the articles are given defining the different context, sensitive information collected, so, this is.

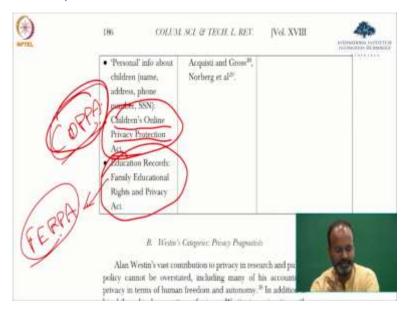
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So, this article also shows that the privacy has been studied and even others have actually argued that why the context for collecting this information by Alan Weston is actually very

important. So, this is researchers work we are just looking at different parts of privacy, how privacy has been studied in different contexts.

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So, here is a, here is another one that will come up which is children Online Privacy Protection Act, which is called COPPA and another Act which this helps actually children, protects children. This one is about educational records. This protects the family from getting access to let us take your grades, unless you give consent to your family for them to get access to your grades in simple terms.

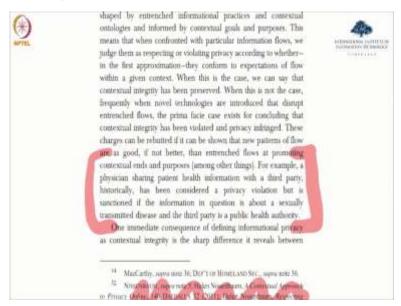
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This is also another important one which is HIPAA, HIPAA, health insurance and portability and accountability Act. Again later in the semester, we will look at how the details of each

one of them, but quickly this Act allows gives protection for the citizens saying let us take if we were to share the information about you to hospital or a secondary physician, how long will they get access to, should they get access to, they will get access to it only when you give consent. I mentioned this in the week one also in a different context. So, I would like you to go take a look at this article.

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But the argument is be sceptical when you look at the results from studies like Alan Weston, which is good, I think as part of the class. First we saw how these kinds of data can be collected and how the policy decisions can be made with these kinds of data and then there is also this thought of be sceptical, be a little bit sceptical and take it with a pinch of salt that it cannot be, it may not be useful for all context in all situations. That is the first part of this week, which is to look at right to privacy. What is contextual integrity and how we want to be a little bit sceptical about survey data.