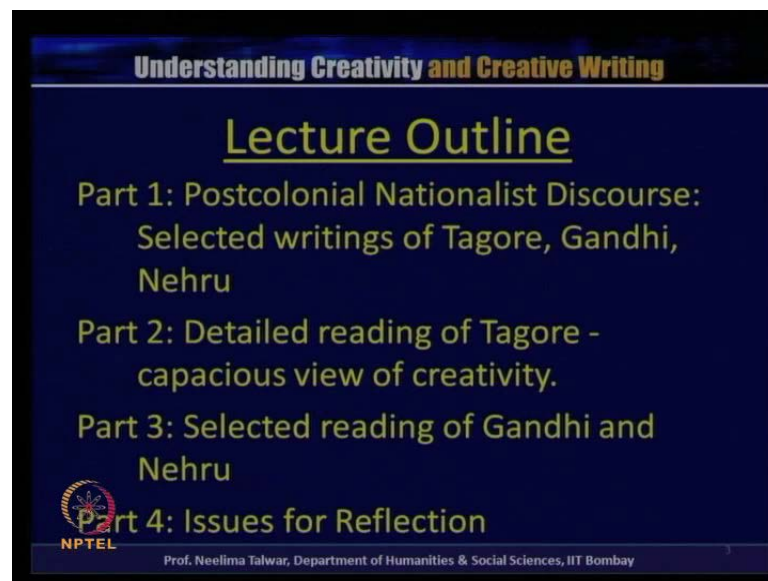


Understanding Creativity and Creative Writing
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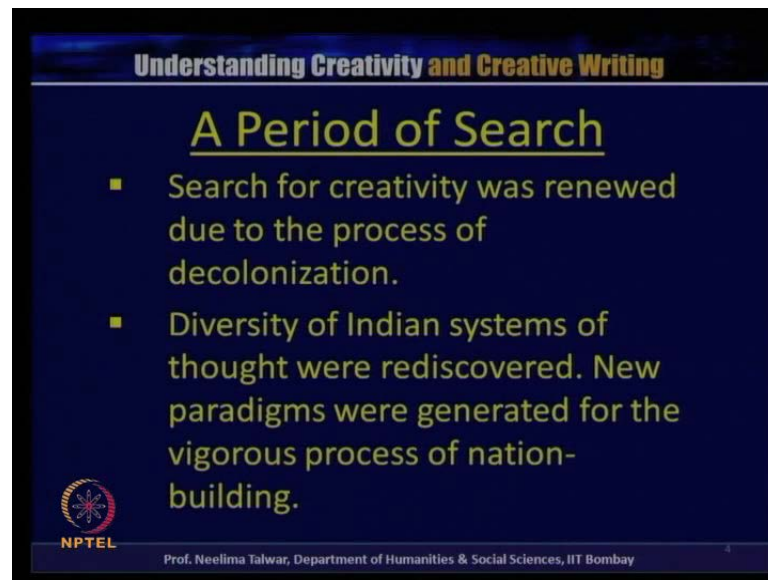
Lecture - 23
Contemporary Indian Writers-The Search for Creativity (II)

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This lecture is titled contemporary Indian writers, the search for creativity. What we will do in this lecture is to again look at 3 (()) of this phenomenon. In part 1, we will look at postcolonial nationalist discourse and bring selected writings of Tagore, Gandhi, and Nehru; in order to understand the ethos and also the contribution of this period. In the 2nd part, we will examine Tagore's ideas in detail; in order to give you a sense of his very, very capacious notion of creativity. And, in the 3rd part we will briefly touch on ideas, relevant ideas of Gandhi and Nehru and provide some issues for reflection. So, this how the lecture is structured?

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Understanding Creativity and Creative Writing

A Period of Search

- Search for creativity was renewed due to the process of decolonization.
- Diversity of Indian systems of thought were rediscovered. New paradigms were generated for the vigorous process of nation-building.

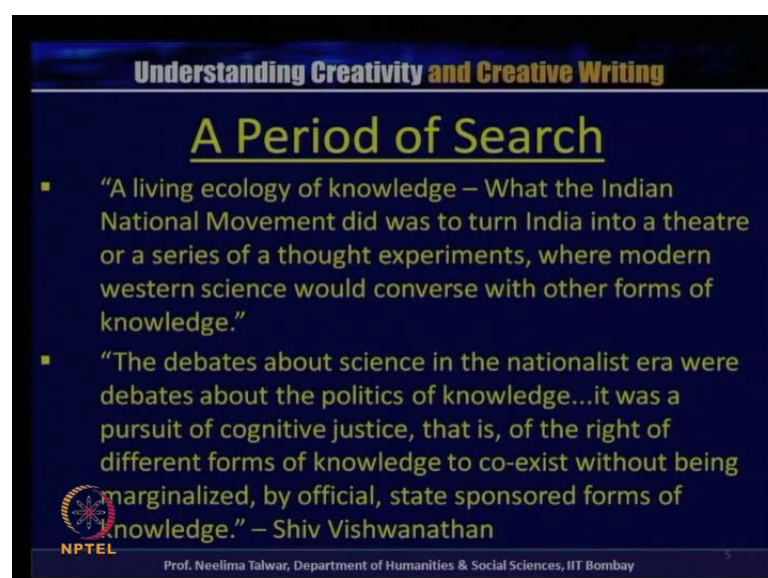
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And, now let us look at what we mean by this period of search? Last time also, in the last lecture we touched on the whole intense sense of change that decolonization imposed on our consciousness. And, what it did is to also bring a live plurality of voices. And, they there were new kinds of paradigms that were generated in order to deal with this whole idea of the new nation. So, this was a sort of creativity of an epic proportion. And, therefore I think it is very important to locate ourselves in this phase and try and understand the paradoxes, the complexities and the problems; that these ideas may have created at the and you know we are in a position to review them again.

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Understanding Creativity and Creative Writing

A Period of Search

- "A living ecology of knowledge – What the Indian National Movement did was to turn India into a theatre or a series of a thought experiments, where modern western science would converse with other forms of knowledge."
- "The debates about science in the nationalist era were debates about the politics of knowledge...it was a pursuit of cognitive justice, that is, of the right of different forms of knowledge to co-exist without being marginalized, by official, state sponsored forms of knowledge." – Shiv Vishwanathan

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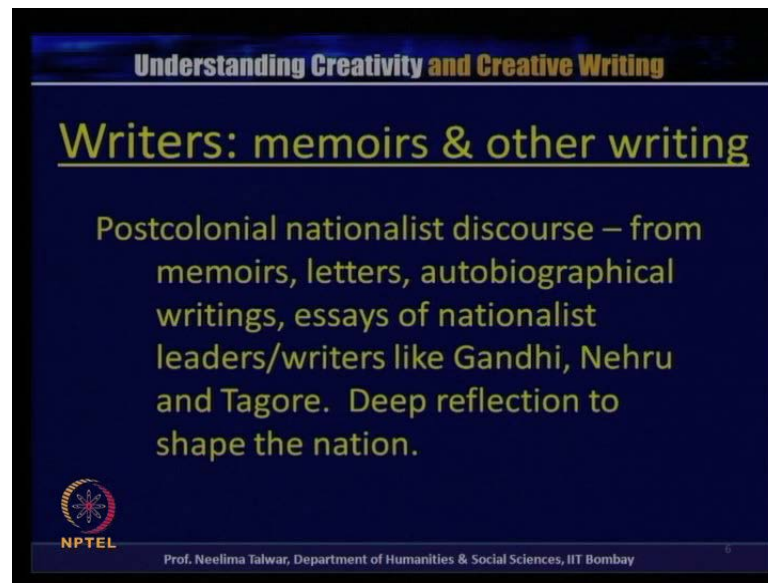
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I would like to bring back a Shiv Vishwanathan's essay, which we had discussed in the last lecture. And, I had pointed out to you that I would really like you to read his a celebration of difference science and democracy in India. It is a short essay and like his extensive studies; it will be easier for you to really understand the thrust of his arguments by looking at this essay. In this particular essay he had also commented on the first phase of institutionalization of western science in India in 1784. And, then he pointed out how the issues of swadeshi they brought in the questions of native indigenous problems. And, it become a very vibrant dialogue starting in the year 1904 and this continue to produce debates on science and democracy; and it is the continuities and discontinuities of this debate that he is interested in.

The reason we have brought this essay here once again and not it is totality; though we have extrapolated part of his observation is related to what he provides by way of the excitement of this nationalist phased. He has label this segment living ecology of knowledge and let me read what he has to say? He says that what the Indian national movement did was is to turn India into a theatre or a series of a thought experiments; where modern western science would converse with other forms of knowledge.

The debates about science is a goes on to say in the nationalist era were debates about the politics of knowledge. It was a pursuit of cognitive justice that is of the right of different forms of knowledge to co-exist; without being marginalize by official state sponsored forms of knowledge. So, it really does provide very exciting frame work; and inside into what happened at that point? And, therefore what we will do now is to keep that backdrop in mind, but at the same time begin to explore briefly though some of the memories and other writings.


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And, also you know essays from the postcolonial period. I have pointed out that postcolonial nationalist discourse; you know if we try to understand it through the memories letters and autobiographical writing. And, then add essays to that it provides a sense of how the self of the individual writer was invested in shaping the nation. And, between the sense of the self and the sense of public spaces or the sense of a nation there is a seem less continuity. And, it is this aspect which will provides a kind of epic sense of that frame work; that that sense that something that was being created it had its sort of place in once being also.

So, that was a very different climate. And, part of it is related to the pressures of decolonization where suddenly you are freed from a certain kind of bondage. And, now the whole feel is you know available for new definitions. So, let us see what we also have said earlier about certain forms of writing in the postcolonial period; where not only are the memories interesting and important, but there is a sense of this creation and the construction of the self through friction and other artistic forms including drama. And, therefore I would like you to again keep the discussion of Bildungsroman in mind.

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Understanding Creativity and Creative Writing

Lecture 9 Module 1: Our Perspective

The suggestive qualities of Bildungsroman
for evolving sense of self

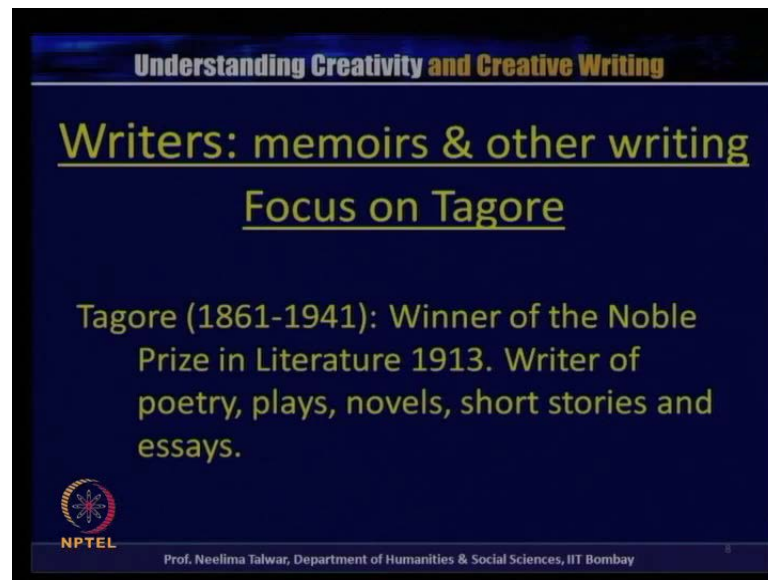
Selected material placed within this perspective

- Bildungsroman: Form of fiction with close formal connections to biography and memoir; lends itself to the cinematic form.
- The quest for identity shaped by overcoming various ordeals. Significance of change & struggle.

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Because again that is that sort of I think has a permanent place in the postcolonial experimental writing. And, therefore we will try and place our discussion of memories. And, the essays within this frame work because the quest for identity shape by overcoming various audials; which is one of the characteristic features of Bildungsroman that actually colors this period in wide variety of very significant ways. So, this is just to bring you back to the question of forms also because we have not lost track of what we set out to do? We are inquest of creativity we want to see how different writers and thinkers undertook this journey? And, if at all there is something now; new that we can add to the pool of ideas that we already generated about writers on writing. So, the most interesting.

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The slide has a dark blue background with yellow and white text. At the top, it says 'Understanding Creativity and Creative Writing'. Below that, the main title is 'Writers: memoirs & other writing' and the subtitle is 'Focus on Tagore'. The text describes Tagore as a winner of the Nobel Prize in Literature in 1913 and a writer of poetry, plays, novels, short stories, and essays. The NPTEL logo is in the bottom left, and the professor's name and affiliation are in the bottom right.

Understanding Creativity and Creative Writing

Writers: memoirs & other writing

Focus on Tagore

Tagore (1861-1941): Winner of the Noble Prize in Literature 1913. Writer of poetry, plays, novels, short stories and essays.

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I think literary figure in the nationalist framework is Rabindranath Tagore who hardly needs any introduction. But at the same time we just place the basic information for your you know clarity. He was the winner of the noble prize in literature in 1913. And, he wrote poetry, plays, novels, short stories and essays. And, he talk to his students, he talk to leaders, he wrote letters to them and. In fact, all of that was seen as a way of shaping the destiny of this young free nation.

We actually researched Tagore's writing extensively for this segment. And, based on this extensive reading and the confusion that it let to in our own minds. I think what we have done is to provide you some sense of what we think he was trying to say. This is a feel where we do not we are not Rabindranath scholars. But at the same time I think you know in reading of translated text does allow us to indulge in certain amount of understanding of what he was trying to do. Most notable aspect of his my life; in my words is this particular except where he talks about an epiphanic experience as a young man.

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Understanding Creativity and Creative Writing

Writers on Writing

His epiphanic experience as a young man

"A veil was suddenly withdrawn and everything became luminous. The whole scene was one of perfect music – one marvellous rhythm. The houses in the street, the men moving below, little children playing, all seemed parts of one luminous whole – inexpressibly glorious.... That morning...gave me inner vision and I have tried to explain it in my poems." (83- 84)

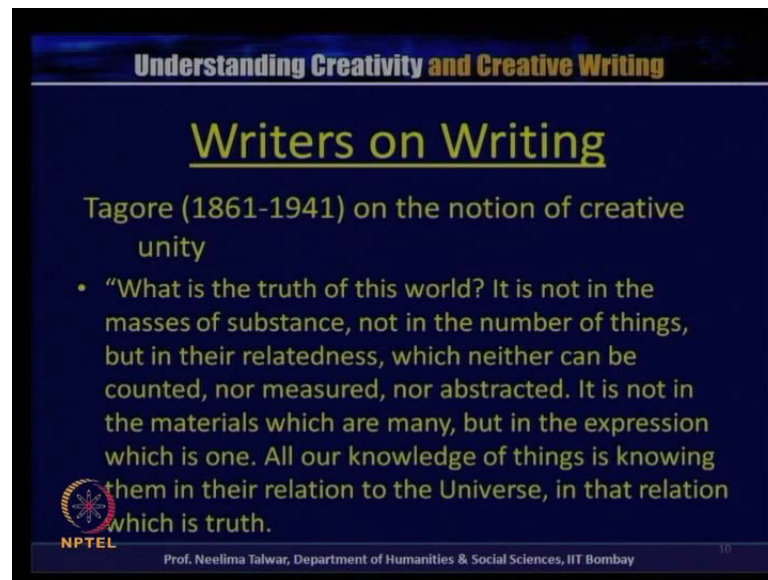
From *Rabindranath Tagore: My life in My Words*

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So, again we have not lost track of our prospective to he started with Shiv vishvanathan. And, we trying to understand what are the different kinds of ideas about knowledge, about once being, about shaping once own being and shaping society which is at the back of this trajectory that we are building for you. So, this epiphanic experience I will read this out. Because later on you see the persistence of this particular state of mind and an idea that you know colors his thinking and writing. He says and I am reading from my life in my words a whale was suddenly withdrawn and everything became luminous. The whole seen was one of perfect music; one marvelous rhythm. The houses in the street, the men moving below, little children playing all seem parts of one luminous whole inexpressibly glorious. That morning gave me inner vision and I have try to explain it in my poems.

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Understanding Creativity and Creative Writing

Writers on Writing

Tagore (1861-1941) on the notion of creative unity

- “What is the truth of this world? It is not in the masses of substance, not in the number of things, but in their relatedness, which neither can be counted, nor measured, nor abstracted. It is not in the materials which are many, but in the expression which is one. All our knowledge of things is knowing them in their relation to the Universe, in that relation which is truth.

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The same sense of everything becoming luminous is actually developed further as a philosophical stands in his notion of creative unity. And, again this is a short accept from that writing philosophical writing, but let us have a look at it. So, from that epiphanic experience is a young person to this point of developing a whole ideology or a whole world view; this is what we are moving towards. And, will plays some of his own engagement with knowledge systems within this frame work. So, he says and I am reading from the text what is the truth of this world? It is not in the masses of substance, not in the number of things, but in their relatedness, which neither can be counted non-measured nor abstracted. It is not in the materials, which are many, but in the expression, which is one again. It is not in the materials, which are many, but in the expression, which is one. All over knowledge of things is knowing them in their relation to the universe; in that relation which is truth. I am not trying to interpret, but I am just trying to give the suggestive possibilities; he goes on to say and again I read from the text.


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Understanding Creativity and Creative Writing

Writers on Writing

Tagore (1861-1941) on the notion of creative unity

- A drop of water is not a particular assortment of elements; it is the miracle of a harmonious mutuality, in which the two reveal the One. ... The joy of unity within ourselves, seeking expression, becomes creative..." (4-5, Creative Unity, RT Selected Essays, Rupa & Co.)

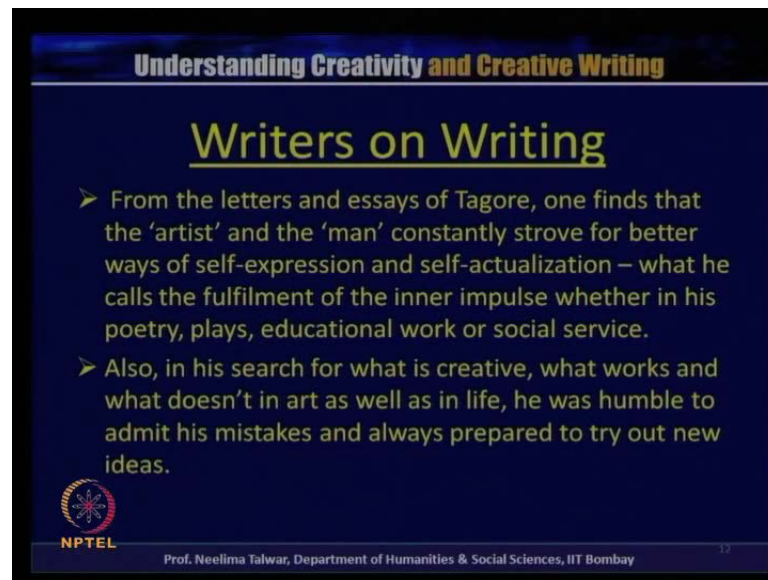
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A drop of water is not a particular assortment of elements; it is the miracle of the harmonious mutuality in which the two reveal the one. The joy of unity within ourselves seeking expressions becomes creative. So, again this particular idea the joy of unity within ourselves seeking expression becomes creative. So, this is his idea of creative unity and how it is purge an act of expression? So, it is not really a passive activity. It is a state of mine, but it is also a state a state of mine that leads you to self expression where again the territory that we would covered is unknown. So, there are whole lots of complexities in this point of view. But also we are not really engaging with philosophical debates per say at this point in time about what could be the problem area; in understanding it in very consistent fashion. Because I think what we have noticed is the is related to a kind of constant transformation and constant striving; that you find in his whole outlook which actually also is a matter of great strength.


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Understanding Creativity and Creative Writing

Writers on Writing

- From the letters and essays of Tagore, one finds that the 'artist' and the 'man' constantly strove for better ways of self-expression and self-actualization – what he calls the fulfilment of the inner impulse whether in his poetry, plays, educational work or social service.
- Also, in his search for what is creative, what works and what doesn't in art as well as in life, he was humble to admit his mistakes and always prepared to try out new ideas.

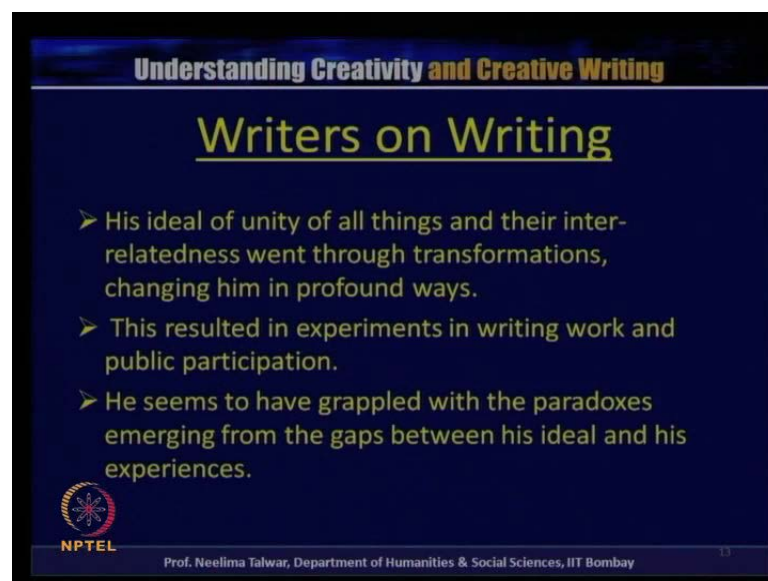
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So, we have pointed out here that from the letters and essays of Tagore, one finds at the artist and the man constantly strove of better ways of self expression and self actualization. What he calls the fulfillment of the inner impulse whether in his poetry, plays, educational work or social service. Also in his search for what is creative, what works and what does not in art as well as in life; he was humble to admit his mistakes and always prepare to try out new ideas. This is our take you know based on the research that we undertook.


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Understanding Creativity and Creative Writing

Writers on Writing

- His ideal of unity of all things and their inter-relatedness went through transformations, changing him in profound ways.
- This resulted in experiments in writing work and public participation.
- He seems to have grappled with the paradoxes emerging from the gaps between his ideal and his experiences.

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His ideal of unity of all things and their interrelatedness went through transformations changing him in profound way. So, it is not like a very static position it is as I said it is a position of striving. And, at the same time maintaining an ideal because that epiphanic experience that desire to find a certain kind of union and harmony and transcendence; that seems to persist as a very, very important force in Tagore. The experiments in his writing and public participation both can be seen as extensions of his quest. And, he seems to have grappled with the paradoxes emerging from the gaps between his ideal and his experiences; it is it was not an easy situation at all. It is interesting to note and very important indeed not only just interesting. It is important to see that in 1901 he went on to create Shantiniketan. And, he endlessly talked about the nurturance of creativity in the educational framework.

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Understanding Creativity and Creative Writing

Writers and Creativity

Tagore the writer and the creator of Shantiniketan (1901): On the nurturance of creativity in the educational framework

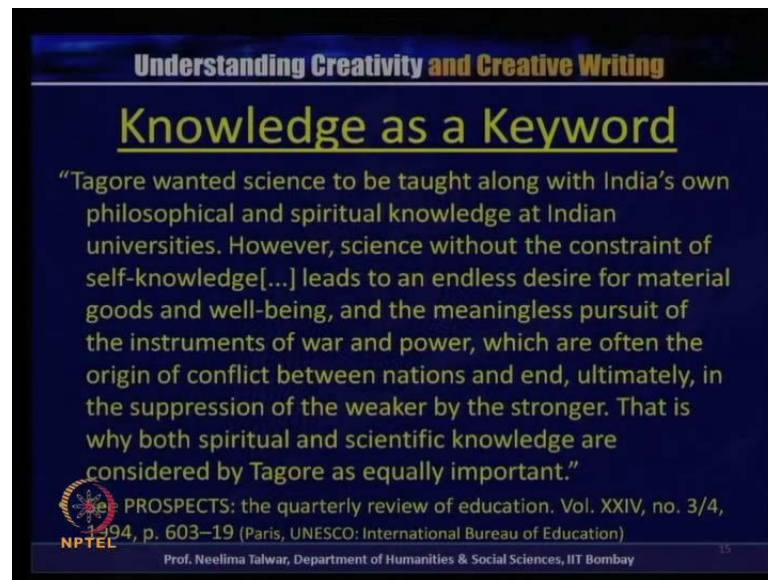
"The main task of universities is to produce knowledge, its dissemination is its secondary function. We must invite those intellectuals and scholars to our universities who are engaged in research, invention or creative activity."

See PROSPECTS: the quarterly review of education. Vol. XXIV, no. 3/4, 1994, p. 603–19 (Paris, UNESCO: International Bureau of Education)

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So, as he said in one of his you know statements. The main task of universities is to produce knowledge; its dissemination is its secondary function. We must invite those intellectuals and scholars to our universities; who are engaged in research invention or creative activity. And, one of the commentators you know who has looked at his writing from the educational prospective he has pointed out that Tagore wanted to beat.


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Understanding Creativity and Creative Writing

Knowledge as a Keyword

“Tagore wanted science to be taught along with India’s own philosophical and spiritual knowledge at Indian universities. However, science without the constraint of self-knowledge[...] leads to an endless desire for material goods and well-being, and the meaningless pursuit of the instruments of war and power, which are often the origin of conflict between nations and end, ultimately, in the suppression of the weaker by the stronger. That is why both spiritual and scientific knowledge are considered by Tagore as equally important.”

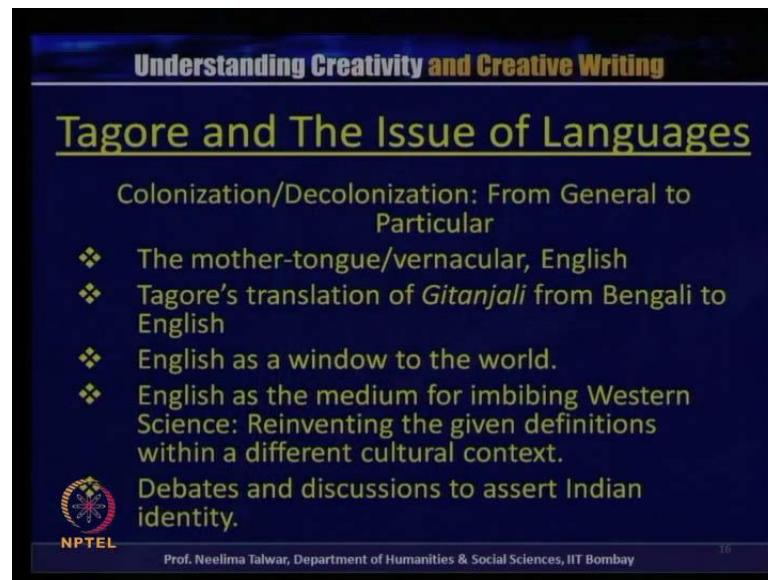
 PROSPECTS: the quarterly review of education. Vol. XXIV, no. 3/4, 1994, p. 603–19 (Paris, UNESCO: International Bureau of Education)

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You know science to be thought along with Indians own philosophical and spiritual knowledge at Indian universities. But he was also aware of the fact that science without the constraint of self knowledge. It leads to an endless desire for material goods and well being; and the meaningless pursuit of the instruments of war and power; which are often the origin of conflict between nations. And, end ultimately in the separation of the weaker by the stronger.

So, again that sense of power politics; politics of knowledge that vishawanathan talked about earlier he is very sharply aware of that also specially from a nationalist position. And, therefore then this commentator points out that that is why both spiritual and scientific knowledge are considered by Tagore as equally important. And, by spiritual of course he meant related to knowledge related to the self. What we would like to do is to place some of only one recent peace of you knows; recent in the recent sense of translation of Tagore’s short story. In order to highlight some of the paradoxes and difficulties of dealing with ideas at an institutional level; and at the level of creative writing. For that purpose it is also important to notice that in the process of colonization and decolonization; the issue of mother tongue and English loom large in these debates. And, Tagore himself had to deal with this issue because he written Bengali.

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The slide is titled "Understanding Creativity and Creative Writing" and "Tagore and The Issue of Languages". It discusses the theme of "Colonization/Decolonization: From General to Particular". The bullet points are:


- ❖ The mother-tongue/vernacular, English
- ❖ Tagore's translation of *Gitanjali* from Bengali to English
- ❖ English as a window to the world.
- ❖ English as the medium for imbibing Western Science: Reinventing the given definitions within a different cultural context.

Below the bullet points, it says "Debates and discussions to assert Indian identity." The NPTEL logo is on the left, and the footer text reads "Prof. Neelima Talwar, Department of Humanities & Social Sciences, IIT Bombay" with a slide number "16" on the right.

And, of course his you know *Gitanjali* was translated from Bengali to English. The fact is the Tagore had a tough time dealing with this issue of translation. And, at the same time he was very sharply aware of the roll of English; in a world where people needed to converse across differences. So, he did see English as a window to the world which is also of nationalist position. And, he also saw English as the medium for imbibing western science; at the same time for using the same language for reinventing the given definitions within our own different cultural context. So, that is really a very complicated process, but he continued to engage in debates and discussions to find a way out and to also assert Indian identity.

Now, within this I want to place a very very interesting conversation between Tagore and H.G. Wells; because it also shows the kind of writers he was interested in talking to. And, also the content of that conversation enables one to see the visionary aspect of Tagore's thought process. He was not interested only in confining himself to national concerns. But he wanted to talk about national identity and national issue to an international; you know body of people to likeminded people. I will once again not touch on some of controversial aspects of Tagore's interaction with leaders of different nations. But I would concentrate right now on what seems to be a very very even flow of his creative outlook. This conversation with H.G. Wells took place in a Geneva, and before I actually come to that conversation let me just point out that H.G. Wells.

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Understanding Creativity and Creative Writing

Tagore in Conversation with H.G. Wells

- ❖ H. G. Wells (1866-1946): English author best known for his science fiction and political analysis. He was a socialist and pacifist.
- ❖ Notable non-fiction: *Anticipations of the Reaction of Mechanical and Scientific Progress upon Human Life and Thought* (1901). Futuristic predictions about technology and communication in the year 2000.
- ❖ “Scientific romances” for example, *The Time Machine*, *The Island of Dr. Moreau*, *The Invisible Man*, *The First Men in the Moon*, *The War of the Worlds*

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Of course, you may already have read H.G. Wells he was an English author best known for his science fiction and political analysis. He was a socialist and a Pacifist. The title of his books they given eloquent introduction to his outlook. For example his notable nonfiction is titled anticipations of the reaction of reaction of mechanical and scientific progress upon human life. And, thought which contains futuristic predictions about technology and communication in the year 2000. That he also wrote these scientific romances like the time machine, the island of doctor Mario, the invisible man, the first man in the moon, the war of the worlds.

So, this was a kind of very engaged very, very sharp mind that again; you know I think Tagore engaged in you know in literary conversations with. This particular meeting took place in June 1930 in Geneva and the two of them were talking about human civilization. Well, seem to suggest that there is a kind of universality to of course many of the concerns. And, also he was a proponent of a universal civilization.

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Understanding Creativity and Creative Writing

Tagore in Conversation with H.G. Wells

June 1930, Geneva

- ❖ Discussion of human civilization: Wells as a proponent of universal civilization. Tagore in favour of maintaining the uniqueness of different civilizations.
- ❖ Their reflections on rapid changes in modes of communication and the futuristic possibilities of new languages of communication developing.

See: *A Tagore Reader*, edited by Amiya Chakravarty

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And, Tagore immediately instinctively reacts to that idea in this conversation with wells. And, he sort of tries to maintain that the uniqueness of the different civilizations are to be maintained. And, I think there is all that sense also worry about what would happen to unequal political and economic stand of different nations? Because he was I think quick to see that this could be really really very problematic. And, they go on to talk about reflections; their reflections on rapid changes in modes of communication and the futuristic possibilities of new languages of communication developing. So, the science fiction writer with the futuristic sense of what is going to happen and what can happen what should happen? And, Tagore the nationalist who is also interested in creating this kind of harmonious world?

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Understanding Creativity and Creative Writing

Tagore with H.G. Wells

❖ On the issue of “the supremacy of the West”

WELLS: The supremacy of the West is only a question of probably the past hundred years. Before the battle of Lepanto the Turks were dominating the West; the voyage of Columbus was undertaken to avoid the Turks. Elizabethan writers and even their successors were struck by the wealth and the high material standards of the East. The history of Western ascendancy is very brief indeed.

TAGORE: Physical science of the nineteenth century probably has created this spirit of race superiority in the West. When the East assimilates this physical science, the tide may turn and take a normal course.

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This is what Wells said to him on the issue of supremacy of the west. Because as I said instinctively Tagore reacted to Wells' ideas. Wells says the supremacy of the west is only a question of probably the past hundred years before the battle of Lepanto the Turks were dominating the west; the voyage of Columbus was undertaken to avoid the Turks. Elizabethan writers and even their successes were struck by the wealth and the high material standards of the east. The history of western ascendancy is very brief indeed.

And, Tagore says and this is very very interesting. He says physical science of the 19th century probably has created this spirit of race of priority in the west. When the east assimilates this physical science the tide may turn and take normal course. So, now, you will see why we are actually emphasizing? You know the scientific knowledge as a very very important aspect of the conversation of the decolonization. Because right from Gyan Prakash's to Shiv Vishwanathan to Tagore on to Gandhi and Nehru will find that this is seen as a very key ingredient in the creative quest. So, in any case I think this particular line. In fact, it becomes quite problematic when you come to recent sort of story; that has been translated. And, this story is seen as the last notable short story of Tagore.

So, again I am trying to show how this whole conversation around systems of knowledge between you knows institutionalization of systems of knowledge and experiencing these systems. So, to say in one's own being these are two different things. On the one

hand between the self and also the public space there seems to be a seem less kind of connection in the nationalist period. But when we begin to look at the you know debates around ideas we notice the pressures.


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Understanding Creativity and Creative Writing

Introduction to Tagore's
"last notable short story" *Laboratory*

- ❖ The story translated for the first time from Bengali into English by Madhuchchanda Karlekar and published in 2000.
- ❖ The story portrays the complex aspirations of a scientist-cum-engineer in pre-independence India. While it reflects Tagore's belief that scientific knowledge was a key ingredient in freeing Indian imagination, yet the story evokes many ambivalent issues.

See: *Selected Short Stories: Rabindranath Tagore* edited by Sukanta Chaudhuri

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And, also the problems of these attempts to grasp and grapple with the new ideas. The story in is titled laboratory and as I said and this is actually to repeat a prays from (()) who has given comments on this collection; brought out recently by Sukantha Choudary containing many more short stories of Tagore that have been that he has commissioned for translation or he has collected it different sources.

This particular story has been translated by Madhuchandra Kalikar. And, it really gripped our attention because in our attempt to understand Tagore and place some of the key elements of Tagore's creative outlook. We were very puzzled by this story which portrays the complex aspirations of scientist come engineer in pre-independence India. While it reflects Tagore's believe that scientific knowledge was a key ingredient in freeing Indian imagination yet the story evokes really many many ambivalent issues. In fact, there are so many issues that need to be a confronted in reading this story; that we have decided that we will place it for detail reading in module 4 when we look at short stories.

But at this point also one would briefly like to point out that the protagonist of course in some ways gives you a sense of importance that was gives to scientific quest. He

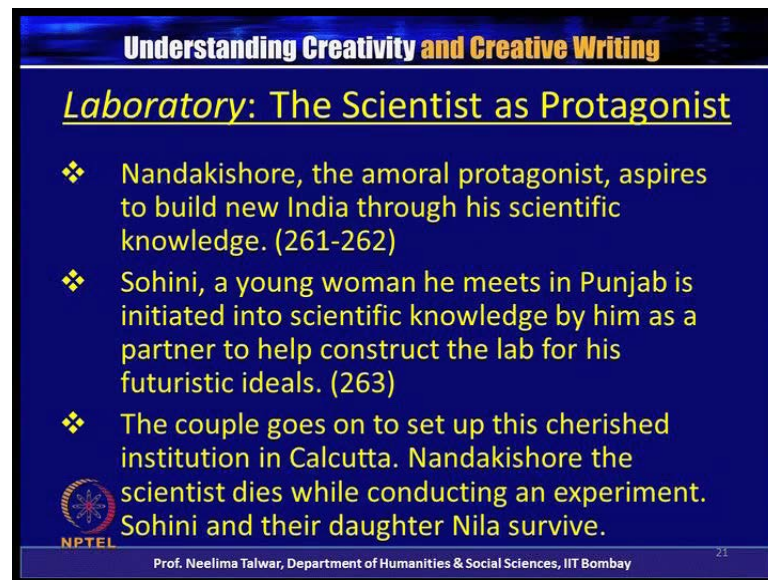
although he is an amoral person, but he aspires to build new India through his scientific knowledge. So, let me read part of this Potrel of this complex rounded character. And, at the same time you know I think I will place some of the difficulties in reading this mainly from the point of view of Tagore's relationship to scientific endeavor. So, I will only briefly read parts of it. So, he is described his name is Nandakishore he is the protagonist and this is how he is described. He did however build a massive mansion for scientific research.

Now, this however is actually related to the fact that he used to work for the British railway system as an engineer. And he was extremely capable one of the best that they had. And, he has no forms in collecting money in illegal fashion while working as an engineer because that seem to be a way of life at that time also. And, therefore what he does is to collect this money and then he goes on to build a scientific research; and development outfit through his own personal money. And this is how Tagore describes him.

So, pre-occupied was he with this hobby that he paid no heed when tongue started wagging. Where did this skyscraper come from? Where did he find Aladdin's lamp; Tagore goes on to say some hobbies can become obsessive like an alcoholic addiction. One pays no heed to what people might be saying Nandakishore had a curious cast of mind. He was crazy about science. He flip through the pages of a scientific catalog and clush the arms of his chair in shivers of excitement. He would order such expensive instruments from Germany and America as one not to be found even in the big universities of India. It was this that most saddened the seeker after knowledge. His poor country had to survive on the left over's from the feast of learning; not having the opportunity to use the the fine equipment available abroad. Our young people had to make do this grasp of knowledge out of dry text books.

We are not short of brains we are simply short of money. He would Rore. His life's ambition was to open up the high way of science to our young men. Now, in this story Nandakishore not only builds this lab. But he also finds very unconventional partner who helped him actually you know build on his trends. And, that is Sohini a young women he meets during a visit to Punjab.


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Understanding Creativity and Creative Writing

Laboratory: The Scientist as Protagonist

- ❖ Nandakishore, the amoral protagonist, aspires to build new India through his scientific knowledge. (261-262)
- ❖ Sohini, a young woman he meets in Punjab is initiated into scientific knowledge by him as a partner to help construct the lab for his futuristic ideals. (263)
- ❖ The couple goes on to set up this cherished institution in Calcutta. Nandakishore the scientist dies while conducting an experiment. Sohini and their daughter Nila survive.

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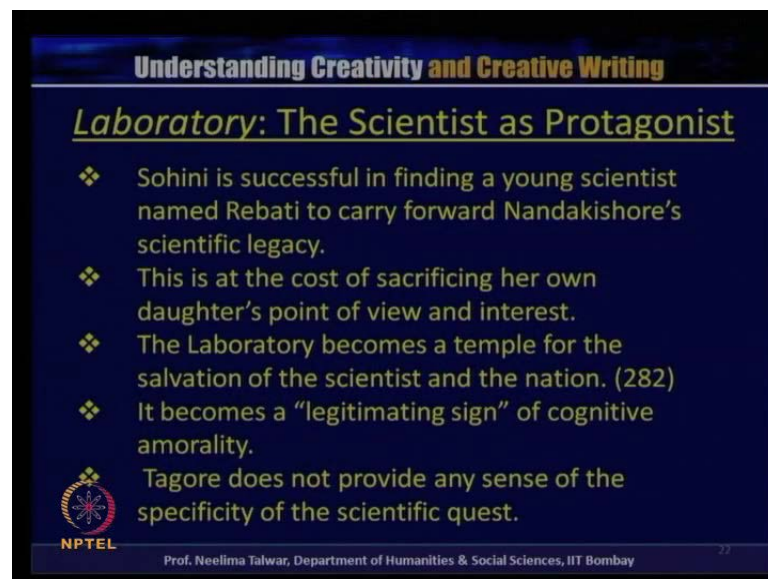
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And, what Sohini does is to really understand something which again creates the kind of ambivalence that I was talking about. Because she is not educated and at the same time she watches Nandakishore's interaction with business people. Now, which seems at he continued have business ties related his scientific work. And, then this is what she has to say in a very instinctive street smart manner. So, this is a brief you know a reference to interaction between Nandakishore and Sohini; the young girl from Punjab whom he goes on to marry. Nandakishore was truly amaze the girl continued do not mind my saying. So, Babu but you have the devil's inspiration too. So, you are bound to succeed. And, this ship sort of this reference she makes you know; in terms of you have the devils inspiration too this reference is too the Britishers who she felt were also full of devilish ways. Because of which they actually had greater power and they were able to rule us for such a long time.

And, she begins to see the same streak in Nandakishore. That is why I pointed out that there is a lot of ambivalence in Tagore about the kind of consciousness that Nandakishore the scientist represents. On the one hand this scientific lab that he constructs; it becomes sort of legitimating sort of sign to use Gyan Prakash's prays of I would say amoral cognitive pursuits because this is at any cost. And, the costs are very high because he first of all dies during this particular experiment; the experiments and the scientific details are not explained in any detail.

So, one can only speculate that it could be chemical you know experiment or an electrical engineering experiment. Because the lab that he is described seems more like a physics lab, but also a wing, which is devoted to chemistry. So, it is really not clear what exactly was going on in that lab. But it is shown in the early part of the story that Nandakishore dies in while performing a scientific experiment. And, then it is left to Sohini his wife to really find a suitable successor to carry out Nandakishore's scientific legacy.

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Understanding Creativity and Creative Writing

Laboratory: The Scientist as Protagonist

- ❖ Sohini is successful in finding a young scientist named Rebati to carry forward Nandakishore's scientific legacy.
- ❖ This is at the cost of sacrificing her own daughter's point of view and interest.
- ❖ The Laboratory becomes a temple for the salvation of the scientist and the nation. (282)
- ❖ It becomes a "legitimizing sign" of cognitive amorality.

Tagore does not provide any sense of the specificity of the scientific quest.

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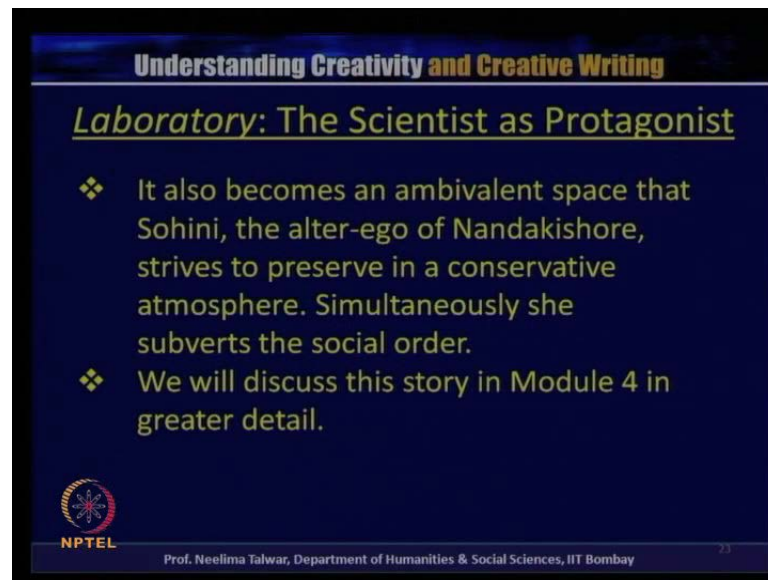
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Now, this struggle to keep the lab despite any cost; this becomes a fashion that governs Sohini to the extent that she is willing to sacrifice her own daughter Neela. In order to save the lab and also ensure that scientific work would continue in that lab. So, she hires a young man Revathi in order to carry forward the work. But as I said that you know the point that about this amoral a morality emerges from Sohini's taken on the lab.

She of course gets educated mean while so she understands that work of great importance is being carried out in this lab, but she begins to treat it like a temple. And, in fact she describes it as a temple which would lead to the salvation of the individual and also the nation. She repeats the words of Nandakishore actually in order to reaffirm this point of view. So, it is sort of this story leaves us with the sense of surprise as to what sort of position Tagore had taken in this story about the pursuit of science.

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Understanding Creativity and Creative Writing

Laboratory: The Scientist as Protagonist

- ❖ It also becomes an ambivalent space that Sohini, the alter-ego of Nandakishore, strives to preserve in a conservative atmosphere. Simultaneously she subverts the social order.
- ❖ We will discuss this story in Module 4 in greater detail.

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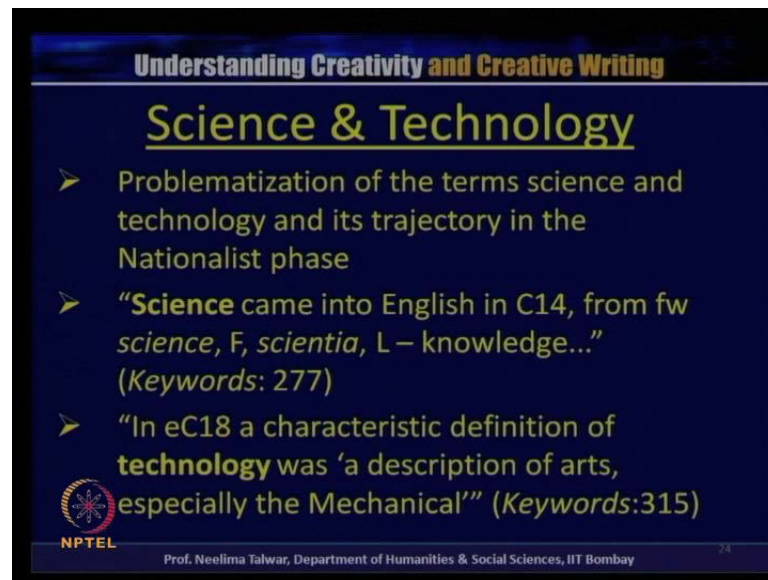
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And, it hardly matches up with the kind of ideal they that he has posited in his conversation with H.G. Wells; where he felt that this you know doing of science would actually free the Indian mind. Because then it would be able to apply its ideas and concepts to the Indian situation. But instead here you have a amoral question I think we therefore, need to think a little more about what was happening with these ideas? What were the problem areas or they repressed or they sort of engage with I have still not made up my mind. As a you know I am not able to really fully deal with his philosophical ideas on the one hand. And, see this particular story which of course he wrote towards the last phase of his writing courier.

But I think we need to read this story and try and understand the nationalist framework through its problematizations and its problems also. And, therefore I think one way of doing this would be to also try and understand that science and technology; both these terms are really not simple terms to begin with, because they also contain many connotations in the nationalist fir ware. I think science was being actually you know internalize sometimes in a limited way sometimes without really relating it to the deeper issues of values that it also contained. But in any case I think we will briefly look at Williams and what he had to say about the term science?

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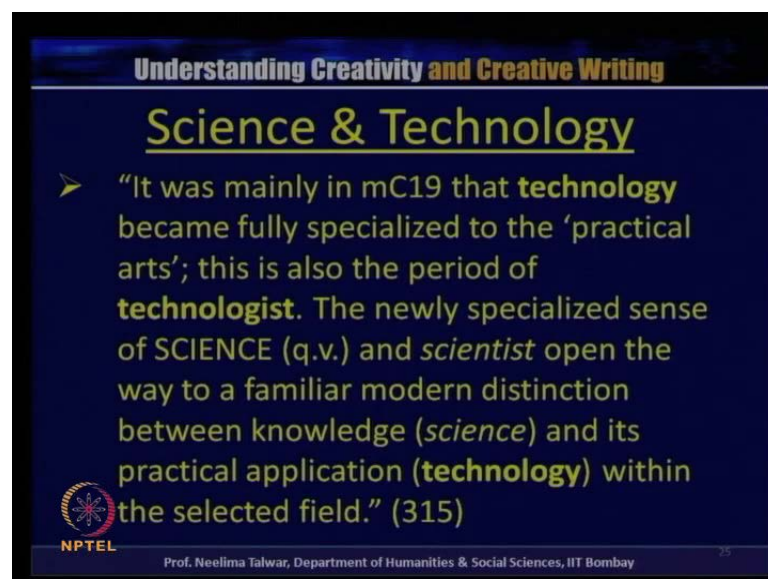
Science & Technology

- Problematization of the terms science and technology and its trajectory in the Nationalist phase
- “**Science** came into English in C14, from *science*, F, *scientia*, L – knowledge...” (Keywords: 277)
- “In eC18 a characteristic definition of **technology** was ‘a description of arts, especially the Mechanical’” (Keywords: 315)

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And, how it came into English in the 14th century? You can have a look at the slide here where I have pointed out that based on Raman William's observations and key words. The science came into English in 14th century from the word *scientia*, which meant knowledge. So, it had a greater sense of a knowledge system may not a very restrictive sense of only the natural or the physical sciences. Although he also goes on to say in with reference to technology; that a characteristic definition of technology was a description of arts especially the mechanical.

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Understanding Creativity and Creative Writing

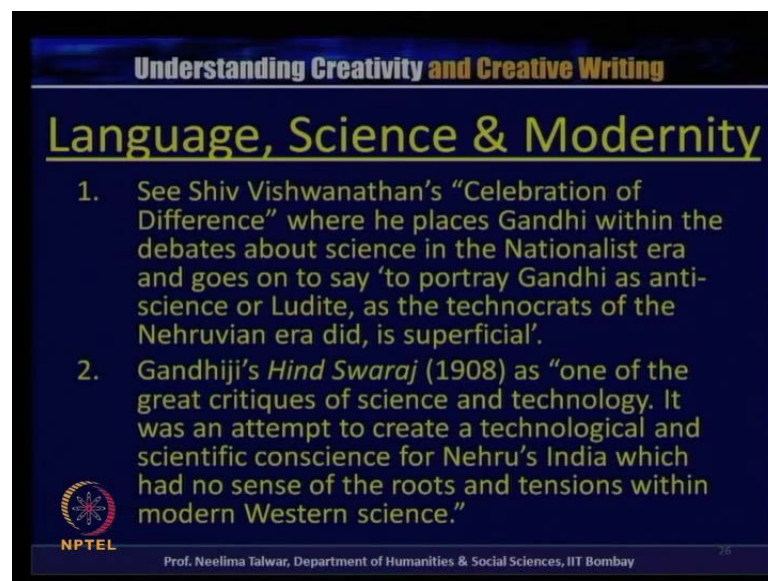
Science & Technology

- “It was mainly in mC19 that **technology** became fully specialized to the ‘practical arts’; this is also the period of **technologist**. The newly specialized sense of SCIENCE (q.v.) and *scientist* open the way to a familiar modern distinction between knowledge (*science*) and its practical application (**technology**) within the selected field.” (315)

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Then, he asks that it was mainly in the 19th century that technology became fully specialized to the practical arts; this is also the period of technologist. The newly specialize sense of science and scientist open the way to a familiar modern distinction between knowledge; that is science and its practical application that is technology within the selected field. So, it is I think these terms have been you know undergoing lot of changes.

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Understanding Creativity and Creative Writing

Language, Science & Modernity

1. See Shiv Vishwanathan's "Celebration of Difference" where he places Gandhi within the debates about science in the Nationalist era and goes on to say 'to portray Gandhi as anti-science or Luddite, as the technocrats of the Nehruvian era did, is superficial'.
2. Gandhiji's *Hind Swaraj* (1908) as "one of the great critiques of science and technology. It was an attempt to create a technological and scientific conscience for Nehru's India which had no sense of the roots and tensions within modern Western science."

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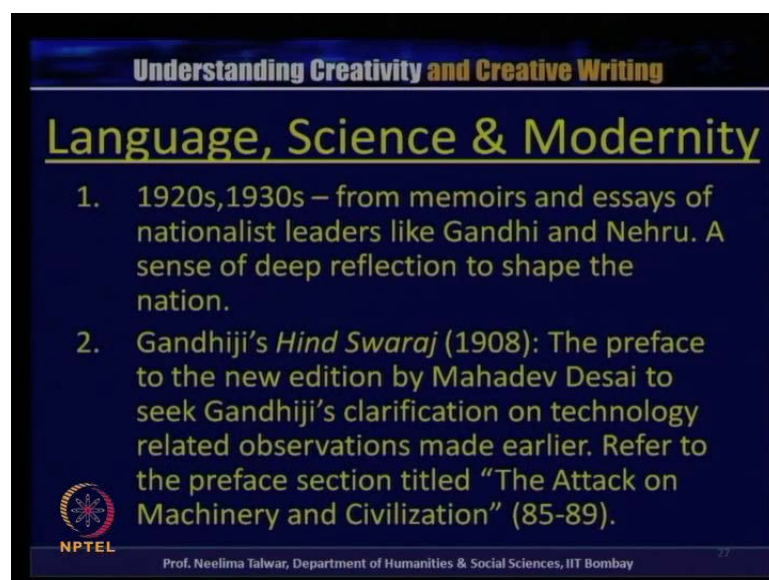
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And, what perhaps we can now do is to again bring back Shiv Vishwanathan for our help in understanding these issues better. So, he goes on to place Gandhi within the debates about science in the nationalist era. And, he goes on to portray Gandhi as you know he says that he goes on to say that portray Gandhi as anti science or luddite as the technocrats of the Nehruvian era did is superficial. So, I moving from Tagore to Gandhi now in order to point out that this discourse around creativity, around ideas related to knowledge systems, ideas related to the whole sense of the indigenous versus the western all these were extremely complicated issues.

And, therefore we need the help of you know scholars who have devoted time and attention to these debates. And, he points out that if we look at Gandhi who often is labeled as anti science or luddite; as the technocrats of the Nehruvian era labeled him as that is a superficial enterprise. Because just a Tagore found would found it difficult to reconcile science within the framework of these characters.

Similarly, there is a different kind of issue that emerges when we look at Gandhiji's *Hind Swaraj* which was written in 1908 as he says that it is one of the great critics of science and technology. It was an attempt to create a technological and scientific consensus for Nehru's India very, very important words I would say. It was an attempt to create a technological and scientific consensus what Nehru's India which had no sense of the roots and tensions within modern western science. I think we can often trust Gandhiji's ideas with Pandit Nehru's ideas and leave you for certain thoughts for reflection. In 1920s and 30s when these memoirs were written; I think they do show this engagement of thinkers writers with you know institutionalization of ideas also. So, this is what Gandhiji had to say by way of clarifying his position viz-a-viz technology that is application of scientific knowledge.


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Understanding Creativity and Creative Writing

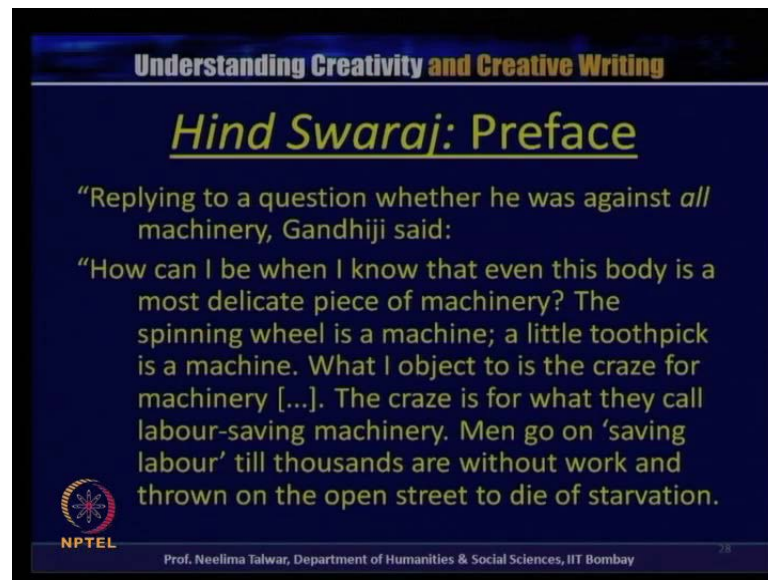
Language, Science & Modernity

1. 1920s, 1930s – from memoirs and essays of nationalist leaders like Gandhi and Nehru. A sense of deep reflection to shape the nation.
2. Gandhiji's *Hind Swaraj* (1908): The preface to the new edition by Mahadev Desai to seek Gandhiji's clarification on technology related observations made earlier. Refer to the preface section titled "The Attack on Machinery and Civilization" (85-89).

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So, we have taken this excerpt from the preface to the new addition by Mahadev Desai; where he try to see Gandhiji's clarification on technology related observations made earlier, The this preface is titled the attack on machinery and civilization.

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Understanding Creativity and Creative Writing

Hind Swaraj: Preface

"Replying to a question whether he was against *all* machinery, Gandhiji said:

"How can I be when I know that even this body is a most delicate piece of machinery? The spinning wheel is a machine; a little toothpick is a machine. What I object to is the craze for machinery [...]. The craze is for what they call labour-saving machinery. Men go on 'saving labour' till thousands are without work and thrown on the open street to die of starvation.

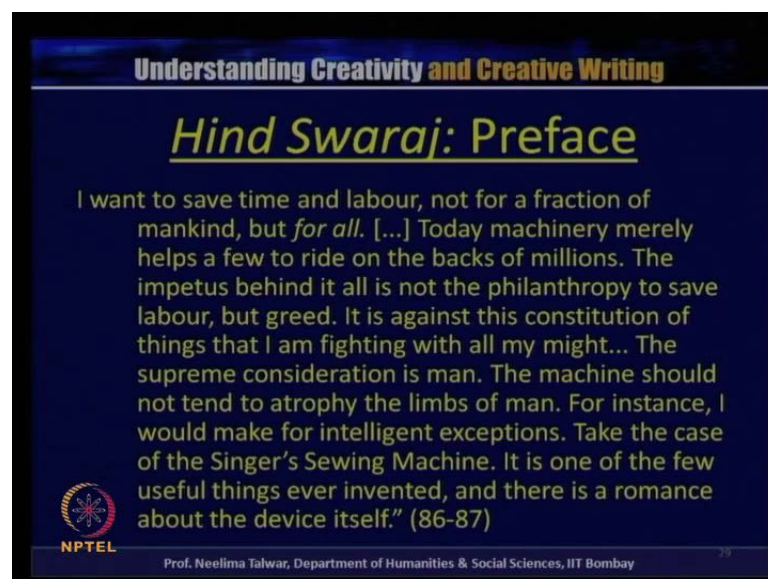
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And, this is what Gandhiji had to say while replying to a question whether he was against all machinery. He says how can I be when I know that even this body is a most delicate piece of machinery; the spinning wheel is a machine, a little toothpick is a machine. What I object to is the craze for machinery? The craze is for what they call labor saving machinery; men go on saving labor till thousands are without work and thrown on the open street to die of starvation.

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Understanding Creativity and Creative Writing

Hind Swaraj: Preface

I want to save time and labour, not for a fraction of mankind, but *for all*. [...] Today machinery merely helps a few to ride on the backs of millions. The impetus behind it all is not the philanthropy to save labour, but greed. It is against this constitution of things that I am fighting with all my might... The supreme consideration is man. The machine should not tend to atrophy the limbs of man. For instance, I would make for intelligent exceptions. Take the case of the Singer's Sewing Machine. It is one of the few useful things ever invented, and there is a romance about the device itself." (86-87)

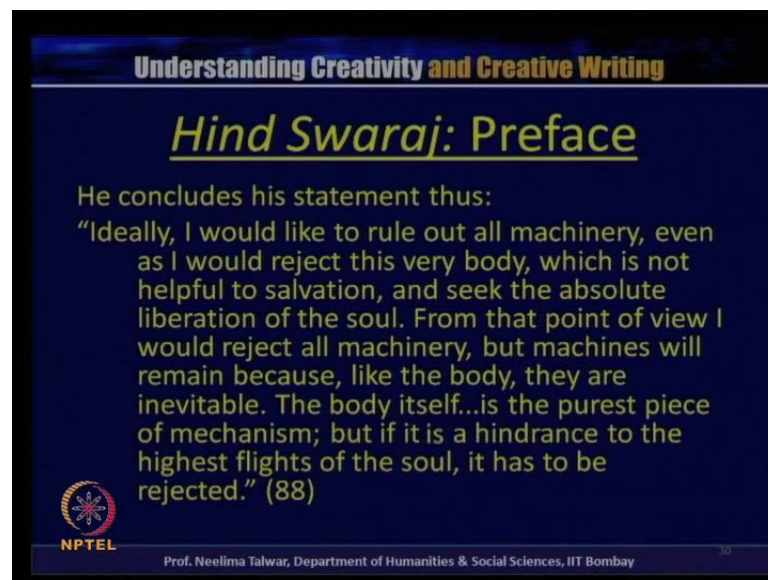
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I want to save time and labor, not for a fraction of mankind but for all. Today machinery mainly helps a few to write on the backs of millions. The impetus behind it all is not the philanthropy to save labor, but greed. It is against this constitution of things that I am fighting with all my might. The supreme consideration is man. The machine should not tend to a trophy the limbs of man. For instance, I would make for intelligent exceptions. Take the case of the Singer sewing machine. It is one of the few useful things ever invented, and there is a romance about the device itself. Actually this conversation goes on and I think it would be very beneficial to read Hind Swaraj and also these further clarifications that Gandhiji provided to Mahadev Desai. Now, all over this is available in very cheap editions so do read it sometime.

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Understanding Creativity and Creative Writing

Hind Swaraj: Preface

He concludes his statement thus:

"Ideally, I would like to rule out all machinery, even as I would reject this very body, which is not helpful to salvation, and seek the absolute liberation of the soul. From that point of view I would reject all machinery, but machines will remain because, like the body, they are inevitable. The body itself...is the purest piece of mechanism; but if it is a hindrance to the highest flights of the soul, it has to be rejected." (88)

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He concludes this statement by saying ideally, I would like to rule out all machinery, even as I would reject this very body, which is not helpful to salvation and seek the absolute liberation of the soul. From that point of view, I would reject all machinery, but machines will remain because like the body they are inevitable. The body itself is the purest piece of mechanism, but if it is a hindrance to the highest flights of the soul it has to be rejected.

So, it is sort of takes a very, very different philosophical turn. And, as I as we find in Tagore also that is this strong desire to maintain philosophical outlook. And, the growing reality slips out of control because the two really are very, very contrasting events. But at

the same time they really show the cute nature and intense nature of the dialogue that unfolded during this period. The other very short piece that I want to refer to is a letter that Pandit Nehru wrote to his daughter.

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Understanding Creativity and Creative Writing

Language, Science & Modernity


1. From 1920s onwards a sense of deep reflection to shape the nation.
2. From Pandit Nehru's letters to his daughter to his Scientific Policy Resolution, 1958
3. This letter: a classic narrative as it represents typical parental advice to their children in modern India.

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And, the reason I have chosen this letter as against his you know autobiography or also his speeches or his other public statements. Although I have touched on 1 or 2 briefly, but that letter seems to be of at most importance. Because I can actually see this as a classic narrative; as it represents typical parental advice to their children in modern India. So, let me read from this letter that Pandit Nehru. So, very lovingly wrote to his daughter in the era. In this letter let me also just add that he tries to show the importance of science in education of the individual; and also the role of science in economic development. So, that sense of the cell and the sense of the society at large the nation at large he connects it to scientific learning. And, this is what we are also interested in understanding the these relationships or the (()) also.

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Understanding Creativity and Creative Writing

- ❖ “But art and general culture without anything else are apt to make us rather helpless persons in the present-day world. To understand it we have to possess technical knowledge, for the modern world is based on science and technical appliances. No person can call himself educated today unless he or she knows something of science and economics and technology...
- ❖ It was because of this reason I suggested your taking up two science subjects – chemistry and another...Physics is the oldest of sciences, the basic one. Then comes chemistry and then biology which is popular now. We should know something of all three of these... It is my belief that a person who does not know something about science is incomplete in the modern world.”

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So, this is what Pandit Nehru has to say to his daughter? But art and general culture without anything else are apt to make us rather helpless persons in the present day world. To understand it we have to possess technical knowledge, for the modern world is based on science and technical appliances. No person can call himself educated today unless he or she knows something of science and economics and technology goes on to say. It was because of this reason I suggested your taking up two science subjects; chemistry and another physics is the oldest of sciences the basic one. Then, comes chemistry and then biology which is popular now. We should know something of all 3 of these. It is my belief that a person who does not know something about science is in complete in the modern world is incomplete in the modern world very strong intense fascinate statement that. And, the fashion is very clear in the public documentation or public statements and Autorens's also. Especially what catches one's attention is the 1958 presentation to the parliament.

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Understanding Creativity and Creative Writing

Nehru's Letters to Policy Documents

- Personal to public utterances establish the longings of an emerging nation which get linked to the grand narrative of modern Western science.
- The eloquent title of Nehru's presentation to the Parliament in 1958 "Nation's Declaration of Faith in Science: The Scientific Policy Resolution".

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And, this is titled nations declaration of faith in science. Not only Pandit Nehru but nations declaration of faith in science the scientific policy resolutions and fascinating document. And, it also you know the eloquence of this is really unmatched. And, also you know the believe in scientific systems and he is also tried to enumerate different aspects of it; for the purpose of policy and its implementation. So, of course I am not going to look at that right now. But what concerns one is the institutionalization of Nehruvian vision which has also let to the formation of IIT's.

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Understanding Creativity and Creative Writing

Nehru's Letters to Policy Documents

Formation of IITs in within this confluence of ideas

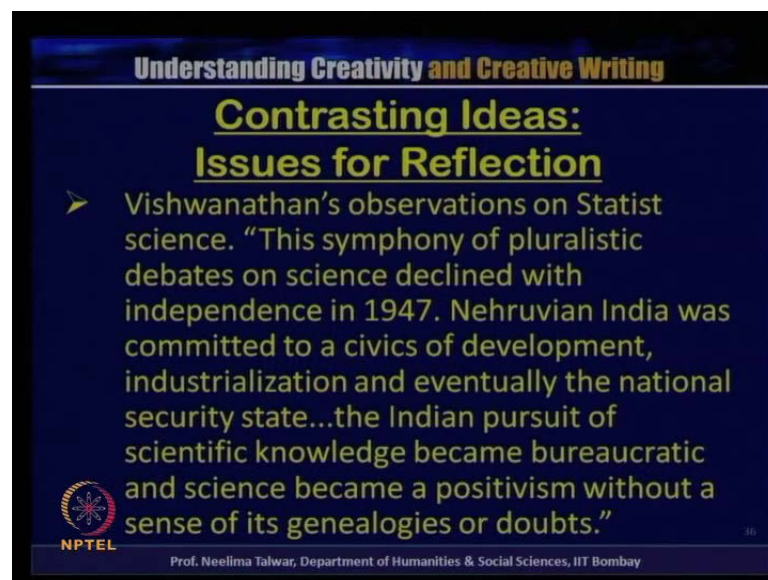
- On 15 September 1956, the Parliament passed an act known as the *Indian Institute of Technology (Kharagpur) Act* declaring it as an Institute of National Importance.
- Nehru, in the first convocation address of IIT Kharagpur, said: "Here in the place of that Hijli Detention Camp stands the fine monument of India, representing India's urges, India's future in the making. This picture seems to me symbolical of the changes that are coming to India."

http://www.iitkgp.ac.in/nehru_museum/index.html

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For example, in the you know 1956 act of parliament the Indian institute of technology was given the status of institutes of national importance. And, in the convocation address of IIT Kharagpur, this is what Pandit Nehru said. Here, in the place of that Hijlli detention camp stands the fine monument of India representing India's urges, India's future in the making. This picture seems to me symbolical of the changes that are coming to India. We taken this statement from the IIT Khargpur website. Now, I want to place this eloquence and this fashioned with what Vishwanathan; has to say about the institutionalization process in post independence India which he describes as statist science.

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Understanding Creativity and Creative Writing

Contrasting Ideas:
Issues for Reflection

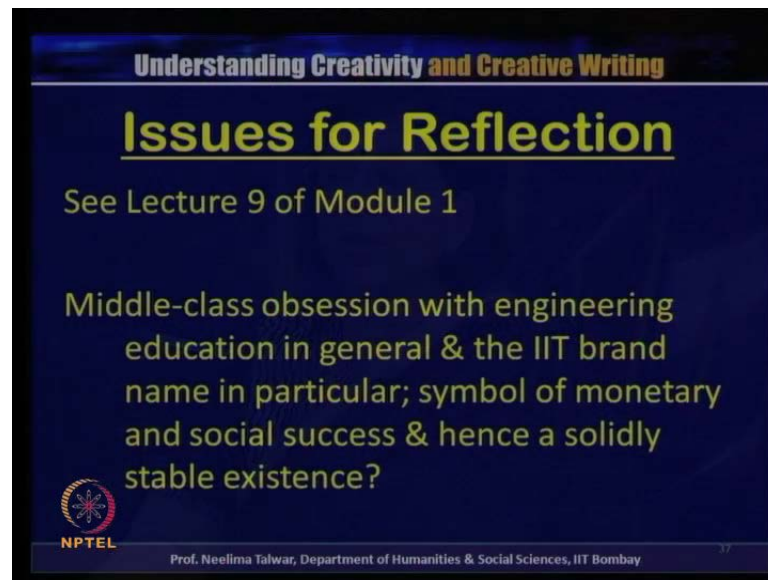
- Vishwanathan's observations on Statist science. "This symphony of pluralistic debates on science declined with independence in 1947. Nehruvian India was committed to a civics of development, industrialization and eventually the national security state...the Indian pursuit of scientific knowledge became bureaucratic and science became a positivism without a sense of its genealogies or doubts."

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He says that the symphony of pluralistic debates on science decline with independence in 1947. Nehruvian India was committed to a civics of development, industrialization and eventually the national security state. The Indian pursuit of scientific knowledge became bureaucratic and science became a positivism without a sense of his genealogies or doubts. Each statement of Vishwanathan is very weighty and I really think we need to think a lot about it.

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Understanding Creativity and Creative Writing

Issues for Reflection

See Lecture 9 of Module 1

Middle-class obsession with engineering education in general & the IIT brand name in particular; symbol of monetary and social success & hence a solidly stable existence?

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I like to bring back our earlier discussion regarding middle class obsession with engineering education in general and the IIT brand in particular; for your reflection.

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Understanding Creativity and Creative Writing

Issues for Reflection

- Tech transitions from Industrial Age to the Information Age brought about by communication and biological technologies. Survival of societies tied to technological applications.
- The imaginative pursuit of science and technology becomes even more acute.
- The representational, aesthetic challenges multiply

The search continues

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I would also like to acknowledge the work of manual castles which we have also referred to early away. We do recognize that when we locate ourselves in the present day world. We do have to understand the technological transitions from industrial age to the information age brought about by communication and biological technologies.

And, according to castles, these technologies and how (()) deals with it? It does show the survival potential of those societies, because it is tied to technological applications. So, we do understand it is importance, but at the same time I think what is important is the imaginative pursuit of science and technology. And, I think that issue becomes even more acute today. And, therefore also the representational anesthetic challenges multiply our search continues.

Thank you.