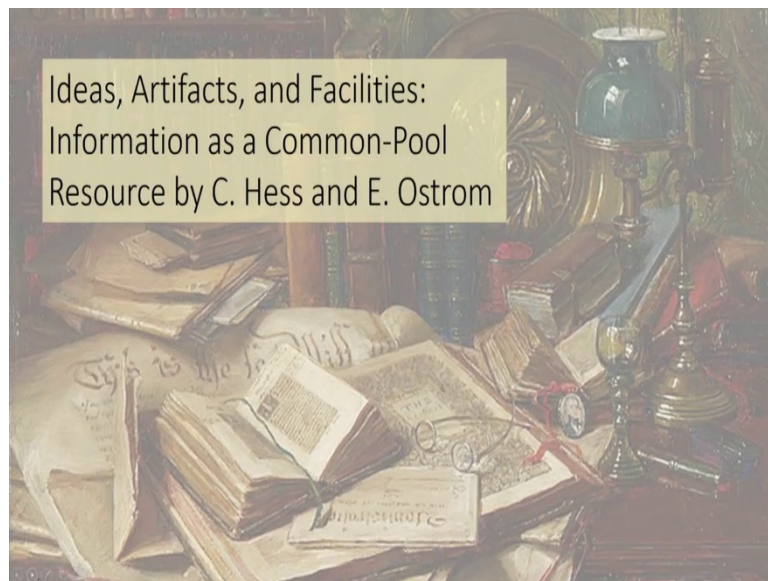


Sociology and Resource Management
Prof. Archana Patnaik
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Indian Institute of Technology, Kharagpur

Module - 02
Community control of natural and man-made resources
Lecture - 07
Cases of Community-Based Management of Man-Made Resources

A warm welcome to all of you, in the last class we discussed about the four cases related to the management of natural resources by different resource communities. In today's class, I am going to focus on the Community-Based Management of Man-Made Resources.

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I will be sharing two case studies with you. The first one is based on an article named “Ideas, Artifacts, and Facilities: Information as a Common-Pool Resource” by Charlotte Hess and Elinor Ostrom.

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Information as a Resource

- ❖ Multiple actors
- ❖ Conflicting interests
- ❖ Widespread technological changes
- ❖ Gap in understanding of resource
- ❖ Conflict between local and global

In this article, the authors treat information as a resource and discussed how the arrangements around it are gradually changing with the advent of digital knowledge. The domain of knowledge or information as a common-pool resource is complicated by the fact that there are multiple resource-users, a lot of interests that are in conflict with each other, unprecedented changes in technology, gap in understanding of the resource, and conflict between local and global locations.

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The authors argue that “collective action and new institutional design play as large a part in the shaping of scholarly information as do legal restrictions and market forces”. To understand the institutional arrangement, they have distinguished between the concepts

of artifact, facility, and ideas. So what do these concepts mean? According to Hess and Ostrom, “an artifact is a discreet, observable, nameable representation of an idea or set of ideas”.

Now, artifacts be both physical such as books, articles, files, notes, and so on, or they can be digital, which will include digital versions of the same items. While the physical versions cannot be used by multiple users at the same time, the digital ones can. Artifacts are, thus, flow units that users can be excluded from using depending on whether they are physical or digital in nature. The latter makes exclusion a difficult process.

Let us now explore the concept of ideas. Ideas are derived from artifacts and in the words of Hess and Ostrom can refer to the “creative vision, the intangible content, innovative information, and knowledge”. Unlike artifacts which are physical flow units, ideas are intangible flow units. As a result, nobody has copyright to an idea. Two people can have the same idea at the same time.

So now you know what artifacts and ideas are. But where are these stored? This is where the need for facility arises. They are storage spaces for artifacts and ideas. Moreover, they make these artifacts and ideas available to the users. Earlier, there were physical facilities such as libraries and archives which had an upper limit for the number of resources that could be stored.

Most libraries and archives also have rules to regulate the number of users as well as monitor the number of hours their resources are being accessed by the users. The facilities also have the right to regulate the users’ behaviour within its walls. However, when it comes to digital artifacts, these rules are no longer applicable.

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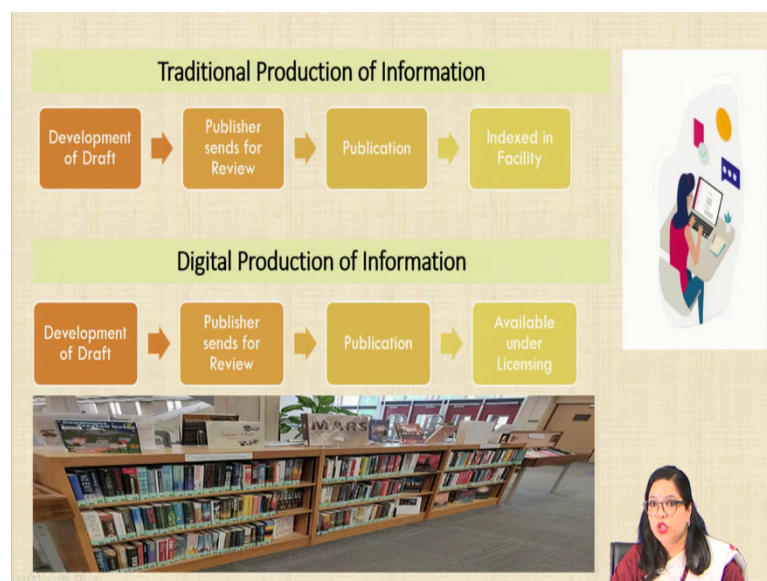
Characteristics of Information

- Information “has complex tangible and intangible attributes” (Hess & Ostrom, p. 132)
 - ✓ Unclear boundaries
 - ✓ Multiple users in different locations
 - ✓ Rule-making bodies at different levels



Keeping the three dimensions in mind, the authors argue that information as a resource not only has cultural importance but also economic, political, and intellectual functions. Moreover, as a flow resource, it must be shared among individuals to remain relevant. Additionally, according to Hess and Ostrom, information “has complex tangible and intangible attributes: fuzzy boundaries, a diverse community of users on local, regional, national, and international levels, and multiple layers of rule-making institutions”.

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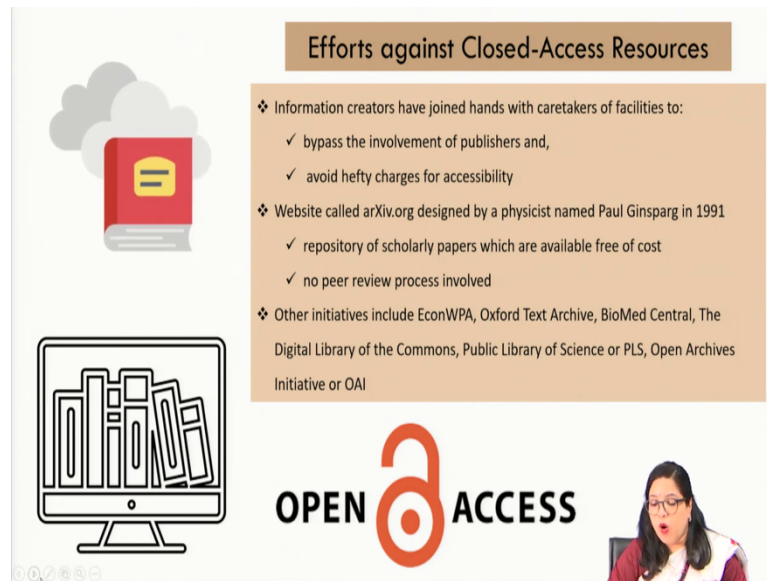
The traditional way of producing an information resource requires the following steps: the writer comes up with a draft containing ideas and artifacts, which they then send to the publishers, who then send it to the reviewers. Once the draft has been reviewed, it gets published as a book or article. It is then indexed in a facility such as a library. The user can access the said book or journal by using the library's database. In this case, the writer retains the copyright to their work, while the publishing house can reproduce the artifact and sell copies of it to facilities. These facilities then take charge of the artifact, maintain it, preserve it, and make it accessible to users under certain terms and conditions.

The arrangement is different when it comes to digital information. Since these kinds of information do not have any physical or tangible attribute, it is difficult to draw boundaries around it. For this reason, it is more likely that digital information will be licensed than sold. The matter becomes more complex in case of the internet which is not only digital but also shared among multiple users. However, unlike natural resources, it does not deteriorate.

Since the end of the 20th century, digital facilities have increasingly replaced physical ones. As a result, the flow of information has drastically changed. The author's draft still goes through the publisher and the reviewers before getting published. However, the newly published book or article is now under the publisher's control as it is no longer sold to the facility but provided under a license. As a result, the users may have to shell out money every time they want to access the resources.

Even the cataloguing at the facility is licensed out to the publisher. Think about all the times you have tried to access an online article for your research work, only to find that it is either available through your institutional server or through the payment of a hefty fee. Your experiences have been a direct result of the change in how digital information is stored, managed, and made available to users.

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Efforts against Closed-Access Resources

- ❖ Information creators have joined hands with caretakers of facilities to:
 - ✓ bypass the involvement of publishers and,
 - ✓ avoid hefty charges for accessibility
- ❖ Website called arXiv.org designed by a physicist named Paul Ginsparg in 1991
 - ✓ repository of scholarly papers which are available free of cost
 - ✓ no peer review process involved
- ❖ Other initiatives include EconWPA, Oxford Text Archive, BioMed Central, The Digital Library of the Commons, Public Library of Science or PLS, Open Archives Initiative or OAI

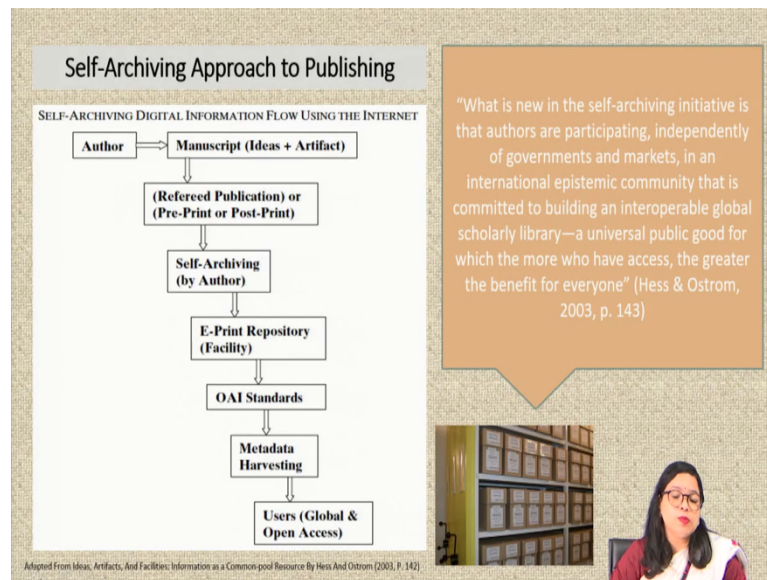
OPEN ACCESS

As a way out of this conundrum, creators of information have joined hands with caretakers of facility to bypass the involvement of publishers and avoid the hefty charge for accessibility. This has revolutionized the field of digital artifacts and has embodied the fight against the copyright restriction. The movement has its own root in the website called arXiv.org, arVix.org was designed by a physicist named Paul Ginsparg in 1991.

The website is a repository of scholarly published papers which are available free of cost. Since, there is no peer reviewed involved, scholars have to themselves gauge the quality of the papers. However, the website has a footfall of over 60000 to 130000 per day. Some other similar initiatives are Oxford Text Archive, BioMed Central, The Digital Library of the Commons and so on.

Public library or the science or PLS grassroots approach taken by a group of scientists striving to make global scientific, medical literature accessible to everyone for the advancement of science and technology. The open archives or OAI created by a group of information scholars to facilitate distribution of scholarly work through the establishment of digital archives. They treat artifact as a record accessible through their servers.

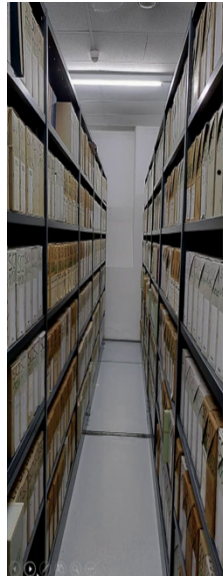
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Let us now look at the flow chart for this particular approach of publishing. The writer produces the manuscript, the reviewed version of which is self-archived by the writer themselves in a digital repository. In this case, it is the facility that facilitates further dissemination of the manuscript after following the OAI standards.


In Hess and Ostrom’s words, “What is new in the self-archiving initiative is that authors are participating, independently of governments and markets, in an international epistemic community that is committed to building an interoperable global scholarly library—a universal public good for which the more who have access, the greater the benefit for everyone”.

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Design Principles of Information as a Resource

- The design principles according to Research Libraries Group and OCLC (cited in Hess & Ostrom (2003, p. 143) are:
 - ✓ 1. audibility, security, and communication
 - ✓ 2. compliance and conscientiousness
 - ✓ 3. certification, copying controls, and following rules
 - ✓ 4. backup policies and avoiding, detecting, and restoring lost/corrupted information
 - ✓ 5. reputation and performance
 - ✓ 6. agreements between creators and providers
 - ✓ 7. open sharing of information about what it is preserving and for whom
 - ✓ 8. balanced risk, benefit, and cost
 - ✓ 9. complementarity, cost-effectiveness, scalability, and confidence
 - ✓ 10. evaluation of system components



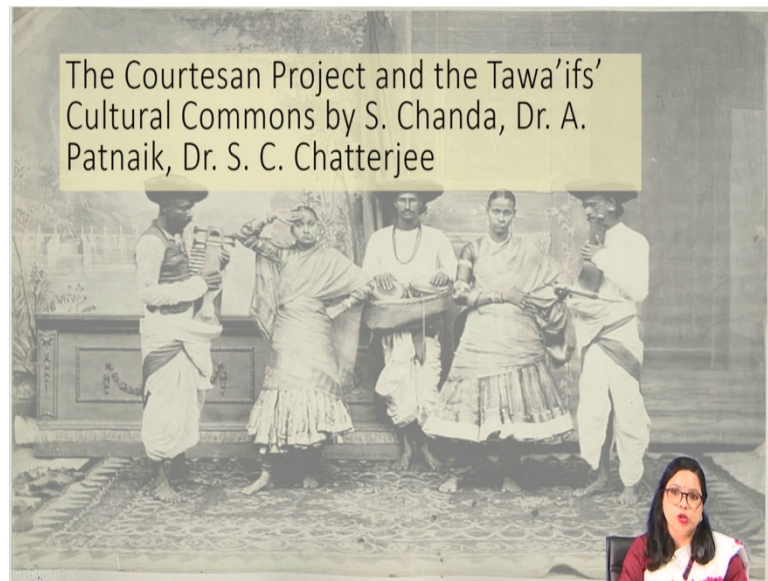
What are then the design principles for these new kinds of resources? (Slide Change)

According to the report published by Research Libraries Group and OCLC, arrangement in charge of governing these resources must have “1. audibility, security, and communication; 2. compliance and conscientiousness; 3. certification, copying controls, and following rules; 4. backup policies and avoiding, detecting, and restoring lost/corrupted information; 5. reputation and performance; 6. agreements between creators and providers; 7. open sharing of information about what it is preserving and for whom; 8. balanced risk, benefit, and cost; 9. complementarity, cost-effectiveness, scalability, and confidence; and 10. evaluation of system components”.

It is important to note that although digital resources are easily and widely accessible, they are not as stable as their traditional counterparts. Contributors have the right to retract any piece of digital information from online repositories, something that is not possible in case of physical artefacts. Digital artefacts are a completely novel kind of information resources given their virtual nature.

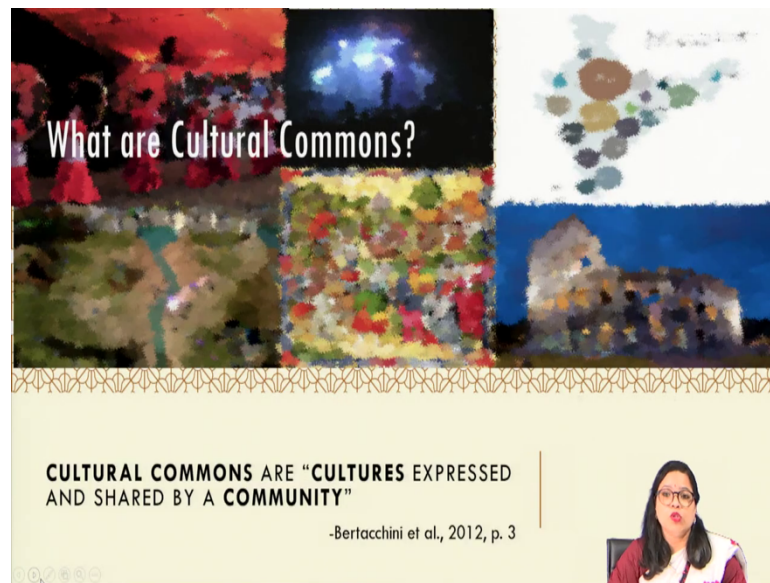
There has been a shift of scholars' tasks as inactive consumer of information to active producer of the same as they have realized the importance of collective action. Their aim is not just limited to the preservation of the digital information resource but also equitable access in all corners of the earth through implementation of rules and protocols at both local and global levels.

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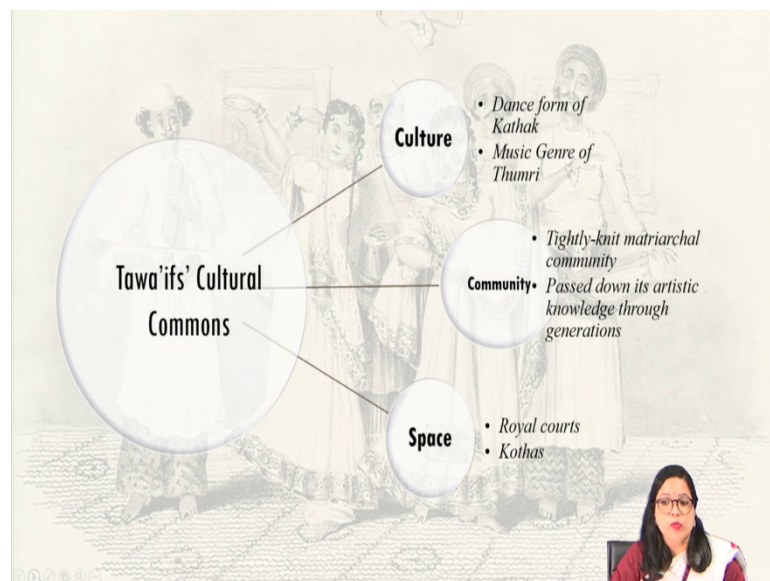


Now, let us look at the second case. Here, we will deal with culture as a common resource. The case is based on a study that was done by my PhD student, Sohini, who undertook that case and it was published as an article, The Courtesan Project and the Tawa'ifs' Cultural Commons. It is a case study on the performing community of tawa'ifs and an attempt to understand how they produced, managed, and reproduced their performing arts as cultural commons. We had discussed what cultural commons are in the first class.

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However, just to remind you again about what Bertacchini meant by cultural commons is that cultural commons refers to cultures expressed and shared by a community in a given space and time. The case that I will be discussing understands the performing group of Tawa'ifs as the community, the dance form of kathak, the singing genre of Thumri, and the detailed dressing regime, they produced, shared, and passed down intergenerationally as the cultural resources. And finally, the kothas they resided and performed in as the spaces of cultural production.

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CHARACTERISTICS OF CULTURAL COMMONS

- Cultural Commons are characterized by (Bertacchini et al., 2012):
 - ✓ Their distinct nature
 - ✓ Origin in contextually entrenched communities that
 - ✓ Must be transmitted inter-generationally to ensure sustainability

The slide features a green header with the title. Below it, a green box contains a list of characteristics. To the right, an illustration shows two people playing acoustic guitars, one seated and one standing, with a small fire and a plant in the background. A small purple figure is also visible in the bottom left of the illustration area. A video feed of a woman is in the bottom right corner.

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SOCIAL DILEMMAS

Free-rider's problem

Some individuals can benefit from a well-established culture without contributing to its welfare. Such people are known as free-riders.

Struggle between innovators and traditionalists

This dilemma arises when some members of the producer community want to modernize certain aspects of the cultural product to be reproduced, while others hold on to the traditional aspects.

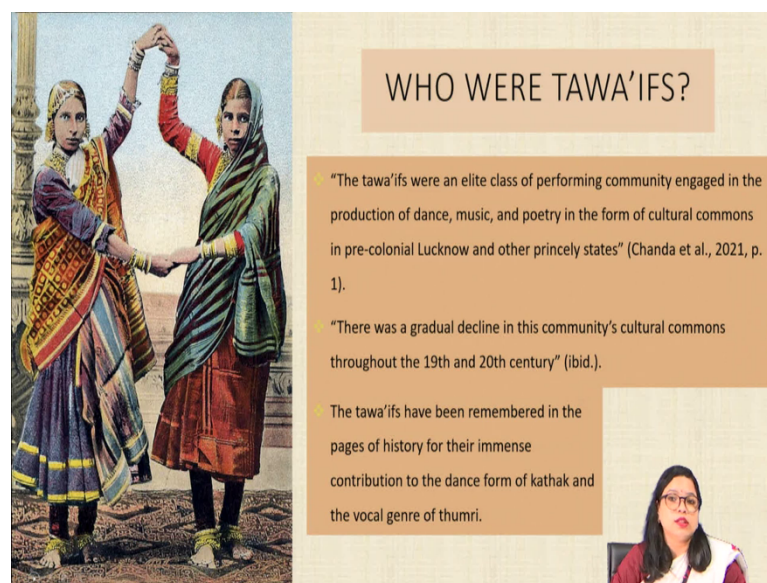
The slide has a light blue background. The title is in a grey box. The two sub-sections are in grey boxes with white text. To the right, an illustration shows a person sitting at a desk, looking at a graph with a red line and a red exclamation mark, with a potted plant next to them. A video feed of a woman is in the bottom right corner.

Cultural commons in their material and non-material manifestations are products of human interaction and must be passed down from one generation to another. Although they are non-rival in nature, they have unlimited carrying capacity. Bertacchini et al have identified two classes of social dilemmas associated with the management and production. In the first dilemma, the users appropriate the resource without giving back to it leading to a free-riding problem.

The second dilemma is an uncertainty in the process of cultural transmission as the traditionalists and the innovators within the community are unable to reach a consensus on the best course of evolution for the commons resource.

The case study at hand argues that these social dilemmas capture problem related to the interaction structures. However, they fail to take the socio-cultural embeddedness of the commons resource into account, which is quintessential to the discussion of tawa'ifs' traditional performing arts as cultural commons.

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WHO WERE TAWA'IFS?

"The tawa'ifs were an elite class of performing community engaged in the production of dance, music, and poetry in the form of cultural commons in pre-colonial Lucknow and other princely states" (Chanda et al., 2021, p. 1).

"There was a gradual decline in this community's cultural commons throughout the 19th and 20th century" (ibid.).

The tawa'ifs have been remembered in the pages of history for their immense contribution to the dance form of kathak and the vocal genre of thumri.

Let me first introduce you to the community of Tawa'ifs before discussing further. The community under study was a group of elite performing artists based in Lucknow which was the capital of Oudh in British India. The census report of 1891 and 1911 estimate that there were 495 and 128 Tawa'ifs respectively in the city of Lucknow.

The community was socially cohesive and followed a form of matrilineal descent. The head was a matriarch and usually they were referred to as the Chaudharayan's. While there were both men and women in the community, their functions differed from each other's. The women received training from their predecessors in performing arts and etiquette from a very young age. They also inherited their mothers' properties. Men on the other hand were either born within the community or recruited from outside by the chaudharayan to play instruments, cook food, provide security services, and so on.

The tawa'ifs performed in several spaces such as court assemblies, private parties, and salons or kothas. No matter what the performance space was, the members had to engage in close interaction with each other to ensure uninterrupted production of cultural commons.

Through their process of production, a powerful performing identity was born that let them manage their performing arts for their own benefit. To ensure the survival of this particular identity, Tawa'ifs needed to access the performance spaces without any restrictions, regularly interact with each other, and continuously produce the idiosyncratic arts.

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WHAT HAPPENED TO THE TAWA'IFS' CULTURAL COMMONS?

- ❖ In the early 19th century, the British began to interfere with the space of kothas where the tawa'ifs performed.
- ❖ Further, the community identity was attacked by prevailing sentiments around the image of a respectable woman.
- ❖ The greatest harm was done by upper and middle class performers who denied tawa'ifs their status as performers. At the same time, they sanitized the tawa'ifs' repertoire and presented it as their own.



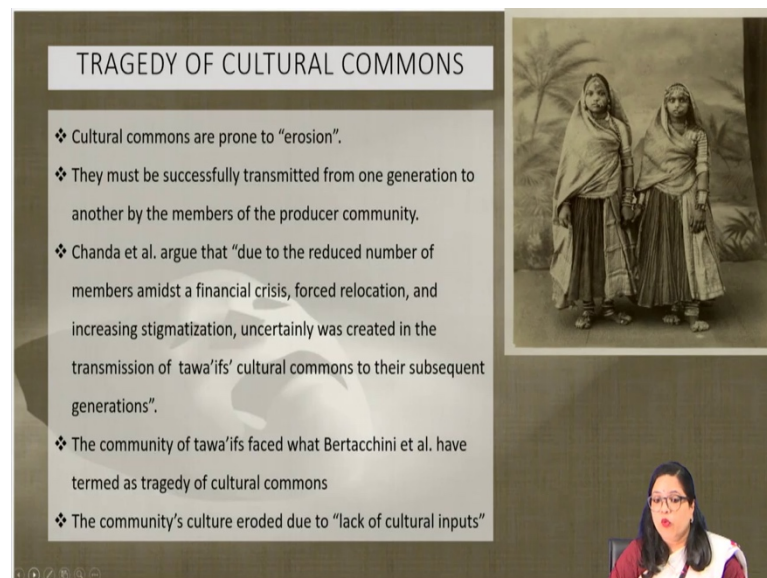
However, there were major factors that affected the Tawa'ifs production of cultural commons. Firstly, the East-India company began to question the extravagant nature of dance parties that were hosted by natives. For the former, these were indications of maladministration. The British government responded by seizing the salons or kothas which doubled up as the tawa'ifs' residence. The loss of performance space rendered a blow to the production process of tawa'ifs.

Secondly, an anti-nautch or anti-dance campaign was launched by Christian missionaries and Indian social reformers around the year 1892. This led to widescale banning of dance performances in front of an audience. Although, tawa'ifs were not regular dancing girls, the diaries and records left by European travelers obliterated all differences. As a result,

the tawa'ifs were not allowed to continue with their performances. By the 1900, their performance tradition had almost come to an end.

Thirdly, the community's performing arts were gradually stigmatized due to Victorian morality and the newly emerging nationalist sentiments. Purists and nationalists made attempts to appropriate the dance and music of tawa'ifs without acknowledging their contribution to the art forms.

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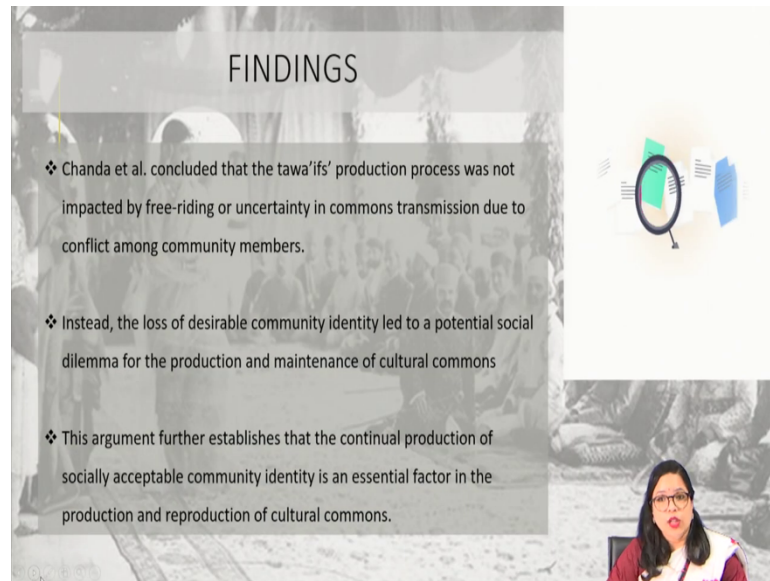
The slide is titled "TRAGEDY OF CULTURAL COMMONS" in a grey box at the top. Below the title is a list of six bullet points, each preceded by a purple diamond symbol. To the right of the text is a sepia-toned photograph of two women standing side-by-side, wearing traditional Indian saris and jewelry. In the bottom right corner of the slide, there is a small inset video of a woman with dark hair and glasses, wearing a red and white patterned top, who appears to be presenting the slide.

- ❖ Cultural commons are prone to "erosion".
- ❖ They must be successfully transmitted from one generation to another by the members of the producer community.
- ❖ Chanda et al. argue that "due to the reduced number of members amidst a financial crisis, forced relocation, and increasing stigmatization, uncertainly was created in the transmission of tawa'ifs' cultural commons to their subsequent generations".
- ❖ The community of tawa'ifs faced what Bertacchini et al. have termed as tragedy of cultural commons
- ❖ The community's culture eroded due to "lack of cultural inputs"

The tawa'ifs' arts were gradually remodeled as classical arts with no significance for the tawa'if community. Hence, the identities of tawa'ifs degraded due to the shift of performing arts from kothas to proscenium stages, the modifications in their idiosyncratic repertoire, and finally, the denial of their status as an elite performing community. Thus we argue that "due to the reduced number of members amidst a financial crisis, forced relocation, and increasing stigmatization, uncertainly was created in the transmission of tawa'ifs' cultural commons to their subsequent generations".

The community of Tawa'ifs faced what Bertacchini and others have termed as a tragedy of the cultural common. It happens when community's culture erodes due to lack of cultural input.

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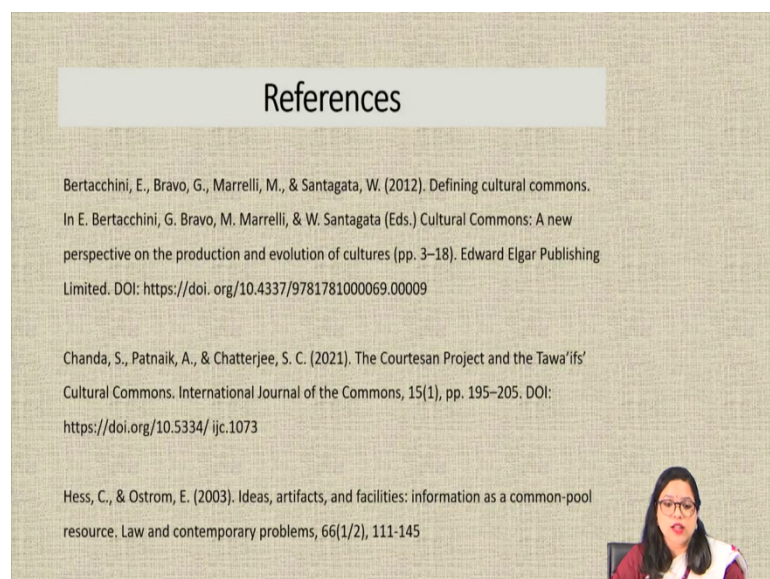
FINDINGS

- ❖ Chanda et al. concluded that the tawa'ifs' production process was not impacted by free-riding or uncertainty in commons transmission due to conflict among community members.
- ❖ Instead, the loss of desirable community identity led to a potential social dilemma for the production and maintenance of cultural commons
- ❖ This argument further establishes that the continual production of socially acceptable community identity is an essential factor in the production and reproduction of cultural commons.

The slide features a background image of a group of people in a community setting. To the right of the text is a graphic of a magnifying glass over a document. In the bottom right corner, there is a small video feed of a woman with glasses, wearing a red and white patterned top, who is presenting the slide.

Thus, through this case, we argue that through the introduction of socio-cultural context to the analysis of cultural commons that loss of desirable community identity, which results in a degraded social value of the community, can lead to a potential social dilemma for the production and maintenance of cultural commons and hence, can be added as the third dilemma in Bertacchini et al.'s categories. The discussion on these two man-made resources bring out new dimensions in the management of commons resources. They highlight the adjustments that need to be made in the management process keeping in mind the physical or virtual nature of the resource in question.

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References

Bertacchini, E., Bravo, G., Marrelli, M., & Santagata, W. (2012). Defining cultural commons. In E. Bertacchini, G. Bravo, M. Marrelli, & W. Santagata (Eds.) *Cultural Commons: A new perspective on the production and evolution of cultures* (pp. 3–18). Edward Elgar Publishing Limited. DOI: <https://doi.org/10.4337/9781781000069.00009>

Chanda, S., Patnaik, A., & Chatterjee, S. C. (2021). The Courtesan Project and the Tawa'ifs' Cultural Commons. *International Journal of the Commons*, 15(1), pp. 195–205. DOI: <https://doi.org/10.5334/ijc.1073>

Hess, C., & Ostrom, E. (2003). Ideas, artifacts, and facilities: information as a common-pool resource. *Law and contemporary problems*, 66(1/2), 111-145

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That's all for today's class. I will see you in the next one. Have a great day!