Urbanization and Environment
Prof. Jenia Mukherjee
Department of Humanities and Social Sciences
Indian Institute of Technology, Kharagpur

Module - 05 Urban environmental social sciences frameworks Lecture - 20

Urban Environmental History: The US Part I: Context and Themes

So, hello everyone and with this we now enter into Module 4, which is Urban Environmental Social sciences Frameworks and I think in my previous lectures I had repeatedly mentioned about why it is important for us to understand urban problems or more specifically urban environmental problems from comprehensive and inclusive perspectives.

And I think, I also discussed that how urban environmental social sciences frameworks and approaches can be considered as you know primary or very significant paradigms through which urban environmental challenges as well as urban environmental potentials can be rigorously mapped and understood.

So, with this we enter into this particular chunk and the first lecture so far as this particular model is concerned would be on Urban Environmental History. And again when I discuss urban environmental history, first I would like to shed light on the United States the history of you know the emergence of this particular domain itself within the context of North America and why North America because North America can be considered as a continent where urban environmental history it emerged as a very formal discipline.

And like if you see the words, by different North American urban environmental historians you will see that how their I mean, this scholarship it is having a very profound influence on the research of environmental historians pursuing urban history in several other parts of the world most importantly Europe and South Asia.

So, with this we would now you know discuss Urban Environmental History and the United States, North America as the context and again I have divided this into two parts, part 1 and part 2.

CONCEPTS COVERED/ ROUTE MAP

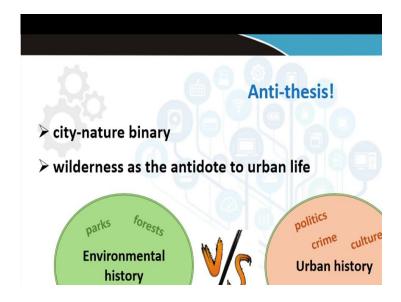
- > the context
- > themes in North American UEH
- > state of the art review

So, in part 1 I would basically be talking about the context that led to the emergence of urban environmental history in North America, then I would discuss the themes the various themes you know, in North American urban environmental history by presenting a detailed state of the art review or a detailed analysis of the literature that exist in this particular domain.

And once we finish this particular lecture then we will we would move into the second part of this lecture on urban environmental history and the United States context. And there I would be shedding light on you know more thematic variations of the present times and also be discussing a bit about you know like whether there is a scope for kind of coming up with a more global you know comparative urban environmental trajectory by learning lessons from the so called quote unquote multiple elsewhere's.

So, that part, I would take up in the next lecture which would be lecture 22, but for now we will be concentrating on the context, the historical context facilitating the emergence of urban environmental history North America the various themes you know in, so far as this particular genre is concerned and I would be presenting a detailed state of the art review or the scholarship that exist in this particular field.

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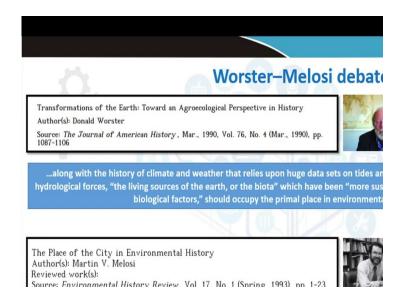


So, from I mean from the very beginning we can trace a kind of a city-nature binary prevalent in both environmental history and also in urban history. So, maybe I would elaborate this a bit more. So, for example, people or the scholars who started writing environmental history they were mainly concerned about so called quote, unquote natural resources. So, like the history of parks the history of forest history of farming etcetera, on the other hand urban historians only concentrated on politics, crime, culture, infrastructure.

So, they I mean, city and nature or environmental history and urban history it emerged as you know as kind of contradictory domains or contradictory subjects. So, city was always understood as an antithesis of nature. So, there you can you will be able to trace a kind of a city-nature binary you know so far as both urban history and environmental history are concern, are concerned.

So, if you know wilderness was not perceived as an anti-thesis to urban life, but at least wilderness was explained and understood as the antidote to urban life. So, these kind of a binary and you know this antithetical formulation it kind of swept the scenes of both environmental history and urban history in the United States for a long period of time.

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And this is a like there is a famous debate the Worster, I mean Worster - Melosi debate. So, Worster Donald, Worster the very renowned environmental historian the American environmental historian who had published seminal works including the Dust Bowl and Ends of the Earth.

So, Worster who was very much influenced you know, by the crisis of agriculture during his times due to the prevalence of you know mono cultural practices. So, he considered so, he wrote an article called, 'Transformations of the Earth: Toward an Agroecological Perspective in History'. So, you can understand from the very title of the article itself which actually he was published in the journal of American history in 1990 that what was Worster trying to say. So, his whole emphasis was on the agro ecological perspective.

So, he argued Worster argued that you know so far as environmental history is concerned along with a history of climate and weather that relies upon huge data sets on tides and winds, ocean currents, geological and hydrological forces, the living sources of the earth or the biota which have been more susceptible to human manipulation.

And this is the argument which is which he provides that why you know historians should be more bothered with the living sources of the earth or biota. Because the living sources of the earth have been altered you know the earth systems, for that matter have been altered by human beings by human activities. So, as these are more susceptible

these to human manipulation than non biological factors. So, they should occupy the primal place in environmental history.

So, the key argument was that you know agriculture or farmlands, pasture lands, forest etcetera should be, I mean according to Worster should get a kind of a significant place so far as the limits or the boundary of environmental history is concerned. So, that is what he said in this particular article in 1990.

And 3 years after, this Martin Melosi he published a seminal article called 'The Place of City in Environmental History', and this is I like I would request all of you to go through this article. And if you go through this article, you will be able to kind of understand Martin Melosis point of view, where he kind of countered you know Donald Worster argument about this whole lot of emphasis on agro ecological perspective and pointed out that urban environmental history should combine "the study of natural history of the city with the study of the history of city building and the possible intersections or their interactions.

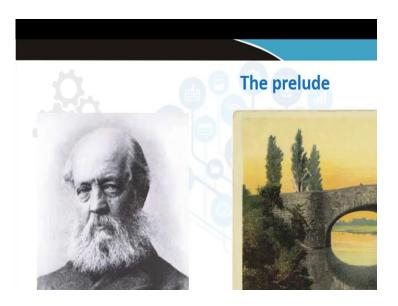
So, according to Melosi city you know or urban is very much a part and parcel of its larger environment. And the comment or the argument which he made, "cities are derived from the natural world and they interact and blend within", the just see this you know this quote, "the which is on the right hand side cities are derived from the natural wall and they interact and blend with it."

So, why should you know urban and environment be antithetical to each other because one must understand that from the very beginning they are actually integrated these concepts urban and environment this the this you know these special entities they are not separate from each other.

So, they are inseparable entities, they are not disparate categories they cannot be disparate why because you know from the very beginning cities for example, they evolve through their interaction with the natural space. So, cities are derived from the natural world in that sense and they continuously interact and blend with it. So, how can or and why should not the city or the urban, why should not it have a place in the larger purview of the of environmental history.

So, according to Melosi urban or city itself should comprise a very significant component or part of environmental history.

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So, yes, but I would also like to provide a brief prelude before I provide, I mean before I expose you directly to the works by urban environmental historians. So, before you know there was this rising or this emerging scholarship in urban environmental history in the United States, we find that is there were some urban reformers you know, so there were mainly urban architects or urban planners, who were talking about you know the a kind of an organic relationship between the city and it is larger ecological infrastructure or it is hinterland you know for that matter.

So, I would briefly mention some of them and I put this section as the prelude to the, you know to the particular section or to the scholarship which emerged little later mainly from the 1990s, you know when the city nature interconnection could be established or people became more interested about the ecological footprints of the city or about you know the different ways through which cities keep interacting with nature and vice versa.

And how it kind of impacted you know the larger environmental dynamics, but before that scholarship you know emerge, we find several reformers, American urban reformers mainly architects, landscape planners, who were propagating and who were also promoting the need to incorporate larger city nature interconnections understanding within the urban rubric right.

So, for example, I would like to talk about Frederick Law Olmstead, I think some of you have heard about Frederick Law Olmstead and like he is a very renowned landscape architect and this particular diagram or the picture that you see here this is of the back bay fens in Boston. So, Olmstead, Olmstead's name and his design of course, is associated with this back bay fens. And so, Olmstead designed it in a way that it could actually function you know as an as a wetland to kind of receive and filter sewage and west water from the city of Boston.

So, and Olmstead also you know for Olmstead nature was actually not pristine nature it was not wild quote unquote, you know wild nature, but it was actually you know nature was very much rooted in the everydayness, in everyday lives and livelihoods of people.

And Olmstead for example, his name is also associated with some you know some very important parks including central park and also in the Chicago street car club and as I also mentioned this back bay fens and Olmstead argued that, you know nature or cityscapes should not be very plasi docile and timid in that sense, but cities should be planned and designed in such a way that the democratic essence can also be nurtured.

So, there they should also evolve you know as special sites of recreational commons for that matter. So, the democratic idea the democratic idols and essence there has to be scope, there has to be opportunity through which these idols you know this idols could have been nurtured in cityscapes. So, then the city would kind of infiltrate a true sense of spirit as true sense of freedom to its inhabitants.

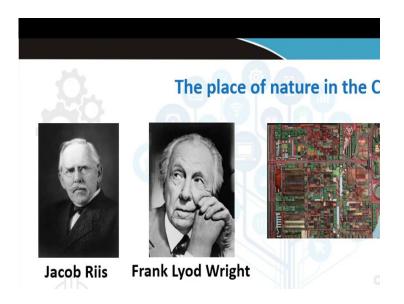
So, but very unfortunately like when this back bay fens or the back bay fens was actually restored in the late 20th century people forward Olmsteads original ideas and only the aesthetic component of restoration remain and it absolutely kind of replace you know the functional component of the wetlands.

And same goes with central park because after a particular point of time there were a whole lot of restrictions even to enter the central park. So, alcoholism and several other things were restricted and you know through those laws and regulations the picnics were also restricted for that matter and the Irish and German immigrants who were quite I mean who were strongly associated with the construction of the central park, they were absolutely not allowed to enter this park anymore. So, it became a site for the

wealthier class, for the elite class who and it became a prominent for this elite class who could see this could enter here and who wanted themselves to be seen.

So, yes so, this is the sad part of it, but yeah I am discussing Frederick Law Olmstead here in order to discuss, how you know this reformers actually understood this inherent relationship between city and its larger you know ecological dynamics.

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Then we have Jacob Riis and Frank Lyod Wright. So, Jacob Riis again he talked about playgrounds and he provided a whole lot of importance to playground in cities. So, for you know following Jacob Riis we find you know cities like Chicago and Los Angeles I think for the first time they came up with, they came up with municipal departments which entirely, which were entirely dedicated you know to the cause of playgrounds.

So, we also have Frank Lyod Wright and Flank Lyod Wright is very renowned for you know coming up with very innovative house buildings you know house housing plans. So, to him you know a particular house should actually speak to it is the surrounding landscape and vice versa.

And Frank Lyod Wright is also a famous you know if you see this mosaic here the illustration in red you would understand this is actually in you know an illustration done by Wright. So, far as the broad acre in city is concerned, but unfortunately, the plan was never implemented. But still I think you know later the sprawling, the sprawling

patchwork development of this sun belt cities in you know that made way to make way to (Refer Time 16:34) can be considered as indirect years, you know to the planning ideals of Frank Lyod Wright.

And it also you know those, those patchworks could also kind of project and display the cultural sentiments embodied in the ideas of Frank Lyod Wright.

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So, yes. So, before we move into the major component of urban environmental scholarship or urban environmental historical scholarship in the United States, I would like to discuss two other and two major figures without discussing whom the prelude would otherwise remain incomplete.

So, these two figures are Lewis Mumford and Jane Jacobs. So, Lewis Mumford again he is the person who you know who wrote this particular book called "The City in History" its origins, its transformation and its prospects and he connected you know the growth of city to the rise of civilizations. And so, Mumford uttered that you know cities were places where natural and built environments, nature, culture, technology coexisted in a complex balance. So, he could you know actually, I mean understand this particular coexistence.

So, if you see, if you go through his books you will also get a detailed hint of the organic relationship or rather I would say that you know the kind of urban metabolism that exist,

Lewis Mumford was quite conscious about you know the prevalence of this metabolism. And he pointed out that any urban plan or design for that matter, should consider this urban metabolism as a key component you know before that design particularly is actually made and you know gets consolidated before its implementation.

So, yes, Mumford I think he is also like I mean Mumford should be read extensively and widely because I think Mumford talk about this city nature and technology he address the city, city nature and technology intersections.

And I mean he can be regarded as a very significant urban scholar cum reformer who provide, I mean gave whole lot of emphasis on or on cities and you know urban, the urban form and why and how you know urban form was actually not devoid of its larger social, economic, political and environmental dynamics.

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So, and the last figure whom I would like to mention here in this prelude section is Jane Jacobs. And Jane Jacobs, like I mean like Mumford she also provided whole lot of you know agency to human existence in this urban form and in this distinct you know urbanism distinct form of you know American urbanism and Jane Jacobs published number of works, very famous works and he was never trained in urban planning or urban design, but I think there is no course in urban design or urban architecture, I mean in the whole world that does not teach Jane Jacobs.

So, Jacobs she wrote this particular book called "The death and life of great American cities" and in this particular book if you go through these pages you can also understand that why she was you know he she was not at all happy with urban planners and urban designers like Robert Moses of a times because you know during that time there was a revolution which was going on in terms of city redevelopment initiatives.

And Jane Jacobs was not at all happy so far as those redevelopment programs were concerned, because they were actually you know kind of replacing the vibrant community life in American cities and these, this redevelopment initiatives were also trying to kind of demolish you know the so called quote unquote blighted neighborhoods, which Jane Jacobs you know, never Jane Jacobs you know never supported.

So, to her, to Jane Jacobs cities were of course, integrated systems and they promoted higher density in cities she talked about short blocks, local economies and mixed uses and of course, you know she through her works and through her activism she invigorated you know neighborhood activism. And this book, you know Lawrence Culver whom we will mention when we discuss urban environmental history scholarship in the united, in the United States.

So, Culver is an important name she also wrote a book on South California we will discuss that, but Culver talks about you know, Culver, so far as Culver's remark about the death and life of great American cities is concerned to her this book is "a manifesto a in the favor of the messy, but vital living communities."

And here you know Jane Jacobs come out as a luminary figure because she kind of criticized people like Moses and all because they did not pay much their plans did not pay much recognition and reverence you know to the vital living communities which were I mean, which were so very important so far as urban planning laid out by Jane Jacobs was concerned.

Similar contexts, divergent dire

> 1960s and 1970s

- urban history
- environmental history

common vantage point of crises

- riots, declining downtowns, suburbanization, etc.
- nollution toving from nature in a national nark to natu

So, yes with this now, I think we entered into the more into the more you know hardcore component of this particular topic. So, if you see 60's and 70's you still find that you know urban history and environmental history as I mentioned, they developed you know as separate streams they did not converge with each other. So, the urban history in America during 60's and 90's historians were the urban historians were trying to address you know their own sets of problems.

So, for example, if you see the context the historical context the political context of United States during that time, then you know you will see that there are civic activism, civil society movements and gender movements for that matter whole lot of issues in terms of immigration.

And one very interesting thing that was taking place during that time is that the historians were no more interested to kind of portray and project top down a chronological narrative of political history being concerned about you know the rise and fall of empires and political leaders, etcetera.

But they were more interested you know in quantitative history because there was also the development of cliometrics for that matter. So, data induced in the history and historians were very interested, they were quite interested about you know social history themes including race, gender, ethnicity, etcetera and they were also like a writing a lot on crime, criminality and the implications of urban sprawl, right. Because one needs to remember that you know if you see post second World War America, post World War II, America it was a period of reconstruction, but more it was also period of like urban sprawl and mass you know, mass suburbia. So, the urban historians they were writing on those themes.

On the other hand environmental historians were also, they were becoming more and more interested or they were moving away from you know, from nature where nature was only understood as pristine and you know wild. So, they were more interested in ecology which was rooted in everyday lives.

So, they were interested or they were, they were working with more immediate and urgent environmental problems or challenges like pollutions, toxins and again implications of urban sprawl you know on ecology. So, they were moving away from nature in national parks to nature in ones backyard, if I put it like that.

But what was happening? Again was that though there were these common vantage points of crisis. So, you know mainly urban historians focusing on riots, declining downtown, suburbanization etcetera and the environmental historians talking about pollution, toxins, etcetera, but still these two fields did not converge with each other.

So, for example, the book by Roderick Nash, violence in the American city so there he, wilderness and American civilization sorry, so there he mentions about the urban or city only once right and you know so far as like very historians like Richard White, Donald Worster were concerned they were not at all focusing on urban issues. So, urban was still taking a back seat you know in their environmental analysis.

The "environmental" turn in urban histor

- ➤ UEH in the US 1990s
- as "a major subfield of both urban and environmental histo
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- Three major influences (Schott 2004)
 - research on urban technical infrastructures WATSAN [Martin Mel
 - Cronon's Nature's Metropolis (1991)

But if the environmental turn in urban history and vice versa actually occurred during the 1990s, when urban environmental history developed as a major subfield of both urban and environmental history and Dieter Schott in her in the article called "Urban Environmental History" published in the Boreal Environmental Research in 2004 sketches three or stresses three major influences that led to the emergence of urban environmental history in North America during the 1990s.

So, the first influence, I mean she says that the research was already going on, on urban technical infrastructures. So, people like Martin Melosi and Joel Tarr they were very fascinated with what they call invisible city. So, you know they were very interested about water in, water out system and about garbage disposal, sewage technologies, etcetera.

So, they were already focusing on you know the technical infrastructure and of course, one knows you know that garbage, sewage, these are the common contact points, through which one can understand city nature interactions. So, this can be this growing literature on you know technical urban technical infrastructures in the United States can be kind of considered as a significant factor you know that also that facilitated urban environmental history in the American scene.

Followed by a seminal publication in 1991 by William Cronon and the book is called "Nature's Metropolis", and it is on Chicago. So, we will discuss how you know this book

it till date, it has a profound and a long lasting influence on both urban and environmental historians.

And finally, you know this 1990s also important because all of us know about the publication of the you know sustainable or the formulation of the sustainable the concept of "sustainable development" by the United Nations, the Rio de Janeiro conference and the coming out of the Brundtland report.

So, when the sustainable development concept you know it was floated and whole lot of research was going on, by scholars and expert, across various level so and from different disciplinary backgrounds, the urban historians and environmental historians also asked you know questions like, how and where cities sustainable in the past.

So, if there had been qualitative ruptures in the relationship between city and nature why these ruptures had actually taken place? So, are there mechanisms through which these ruptures can actually be tackled?

So, in order to answer this question, I mean it was needed to look back, in order to look forward. So, these are the three influences that had you know dominated or that actually could facilitate the emergence of urban environmental history.

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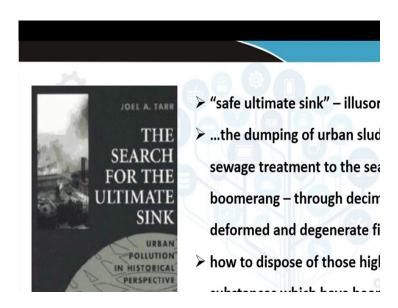


So, with this very quickly I would talk about you know this, the books or the works which are which are like very influential works, not only they influenced historians

within the American subcontinent, but of it these works also crafted like global influence, this works could have, I mean this works forge lot of interest about city nature interrelationship. So, far as you know environmental historians of other parts of the world you know are concerned.

So, these are the three major books by Martin Melosi "Garbage in the Cities", "The Sanitary City" and "Effluent America" and as I mentioned that you know Martin Melosi like Joel Tarr also focused on urban technical infrastructures and by focusing on the history of technical infrastructure could actually unfold the ,and unpack you know city nature relationship across long temporal scales.

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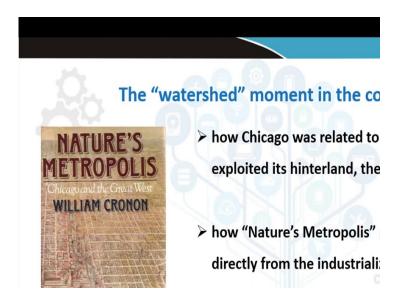


This is again a very significant publication from Joel Tarr and this book is called "The search for the ultimate sink" and here Joel Tarr says that you know, this safe ultimate sink it is an illusion, it is an illusory idea. Because like for example, if you think that you know the sewage treatment plants or the machines that you use for kind of filtering pollution or filtering waste through that you are actually kind of you are being able to follow safety measure, but that is an illusion, why because the treatment plants which actually filters waste, they also generate waste.

So, there cannot be anything like the safe ultimate sink because whatever we generate in the atmosphere or in the environment it finally, comes back to us. So, in this book he talks about this particular phenomena unfortunately. So, if I have cited this from the book itself that which we talked about the dumping of urban sludge from sewage treatment to the sea and the boomerang effect of it. So, how it comes back to us in I mean, through decimated, deformed and degenerate fish resources.

So, how to dispose of those highly toxic substances which have been filtered out is the mega question.

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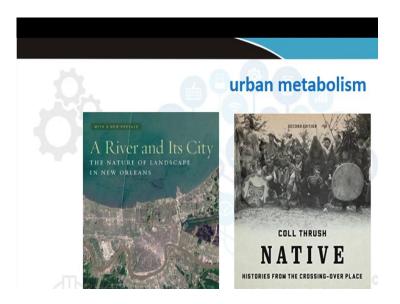


Then I talked about you know this particular book by William Cronon "Nature's Metropolis" and here in this book Cronon, he absolutely kind of not only blurred, but he dismantled the city nature or the city country division by focusing on the vape of you know functional relationships between the urban and its wider environment. So, he talks about here by focusing on commodity flows, commerce and you know for example, collection of meat and collection processing of meat animal products team, but etcetera he talks about how Chicago was related to and exploited its hinterland, the Great West.

So, Chicago, it was it was derived from the natural world, but at the same time it also impacted the natural world. So, how Chicago and its hinterland you know could shape and get shaped you know through this continuous interaction between the an urban and the environment. So, in this book Cronon talks about you know how the "Nature's Metropolis" Chicago profited directly from the industrialization of agriculture and mechanization of meat processing.

So, this is again a very significant book because you know this theoretical understanding on commodity flows that which could enable the rise and functioning of metropolitan cities like Chicago, this framework was borrowed by several other historians in the, you know, working with in the United States and also beyond.

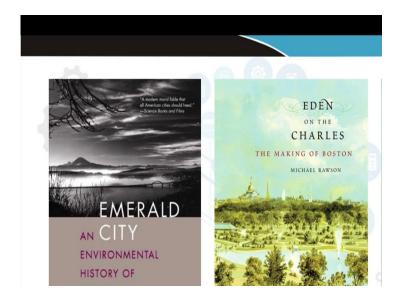
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Other books like this book by Ari Kelman on "River and City" it I mean there are several, I mean there are several chapters that discuss you know whole range of topics including yellow fever, hurricanes, cyclones, yellow fever, hurricanes, floods, etcetera and this is of course, on New Orleans. So, and New Orleans is a disaster prone city.

So, in our next lecture we would discuss a bit more on Ari Kelman and I will tell you that why I would again mention you know Ari Kelman. And you know with a different context that time. And then we have like, Coll Thrush who inserted the native Americans while he discussed you know this the making of Seattle and then we have David Stradling, who talked about you know this New York City and its cast skills as you know as, also he talked about the hinterland as a space of recreation right so, the recreational hinterland of the New York City.

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Then this award winning book by Matthew Klingle on Seattle again and he talks about how you know Seattle actually drew its identity from its spectacular surroundings, but again Seattle could also impact it is surrounding with you know long term ecological footprint implications.

Then book by Michael Rawson and also these book particular book by Lawrence Culver and Lawrence Culver you know he was very much influenced by William Cronon and talks about you know, that those the whole book "The Frontier of Leisure" it is on how you know South California came up as a tourist wonderland and how it was reclaimed from the otherwise suppose it waste land. And in this book also talks about the growth of resorts like for example, Palm Spring and how you know these resorts will actually promote the cities like Los Angeles and also propagate you know this distinct form of American urbanism.

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REFERENCES

- Cronon, W. 1983. Changes In the Land: Indians, Colonists, and the Ecology of New Engl
- Cronon, W. 2009. Nature's metropolis: Chicago and the Great West. New York: WW No.
- Culver, L. 2010. The Frontier of Leisure: Southern California and the Shaping of Modern Press.
- · Jacobs, J., 2016. The death and life of great American cities. New York: Vintage.
- Kelman, A. 2003. A River and Its City: The Nature of. Landscape in New Orleans. Berkel
- Melosi, M.V. 1993. The place of the city in environmental history. Environmental History

So, yes these are the references on urban environmental history I would definitely encourage you to go through this third references which is by Culver. So, this is, no this is the book by Culver, but I would like you mainly to go through you know.

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REFERENCES

- White, R. 1980. Environment, and Social Change: The Shaping of Island County. W of Washington Press.
- · Worster, D. 1979. Dust Bowl: The Southern Plains in the 1930s. New York: Oxford
- Worster, D. 1990. Transformation of the Earth. Towards an agroecological perspect American History. 76: 1087-1106.

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REFERENCES

- Melosi, M.V. 2004. Garbage in the Cities: Refuse reform and the Environment. Pittsburg Pittsburgh Press.
- Mumford, L. 1961. The City in History: Its Origins, Its Transformations, and Its Prospect
- · Nash, R.F., 2014. Wilderness and the American mind. Yale University Press.
- · Runte, A. 1979. National Parks: The American Express. Lincoln, Nebraska: University of
- Schott, D. 2004. Urban environmental history: what lessons are there to be learnt. Bor pp.519-528.
- Stumbling, D. 2007. Making Mountains. Washington. Seattle: University of Washington
- Tarr, J.A. 1996. The search for the ultimate sink: urban pollution in historical perspective.
 Akron Press.
- . Tarr I A 2001 Urhan history and environmental history in the United States: Complen

This is another book chapter by Culver and maybe, I will insert the reference here. So, Culver wrote a book chapter which provides a historiographical account on nature culture confluence in North America. So, this book by Andrew Eisenberg on environmental history and chapter 19 by Culver is on you know urban environmental history.

So, I would definitely share the reading material with you and also if possible please go through the seminal writing by Melosi, 'the place of city in history'. So, other works if you can go through at least the introduction or the abstract of the journal articles that would be sufficient or that is fine with me, but at least I would encourage you to go through Culvers book chapter and also the work by Martin Melosi that is the place of city in environmental history.

CONCLUSION: Key highlights

- the context (1970s 1990s): from divergent to convergent dir
- the prelude nature-culture confluence in urban reforms and architecture before history
- > three major influences crafting the convergence possible

So, yes I would like to conclude by saying that in this lecture, we discuss the context 70s to 90s you know, that how urban and environmental history were absolutely contradictory the urban historians did not work I mean did not discuss environment and vice versa, but how you know gradually from divergence, convergence could be crafted. So, how there, the historians then could identify you know common vantage points and how they started addressing city nature intersections.

We discuss the prelude before we, where we discuss you know the works and ideas and perspectives of key urban reformers like Olmsted, Jane Jacobes, Lewis Mumford and others. And then we talked about the three major influences, which crafted, which you know actually made the convergence, urban environmental convergence possible and then we discussed the several themes and the key ideas in urban environmental history by discussing the key words or the key you know books and articles produced by American urban environmental historians since the 1990s.

So, thank you and the next part of urban environmental history again the United States, but with more thematic variations will be taken up.

Thank you.