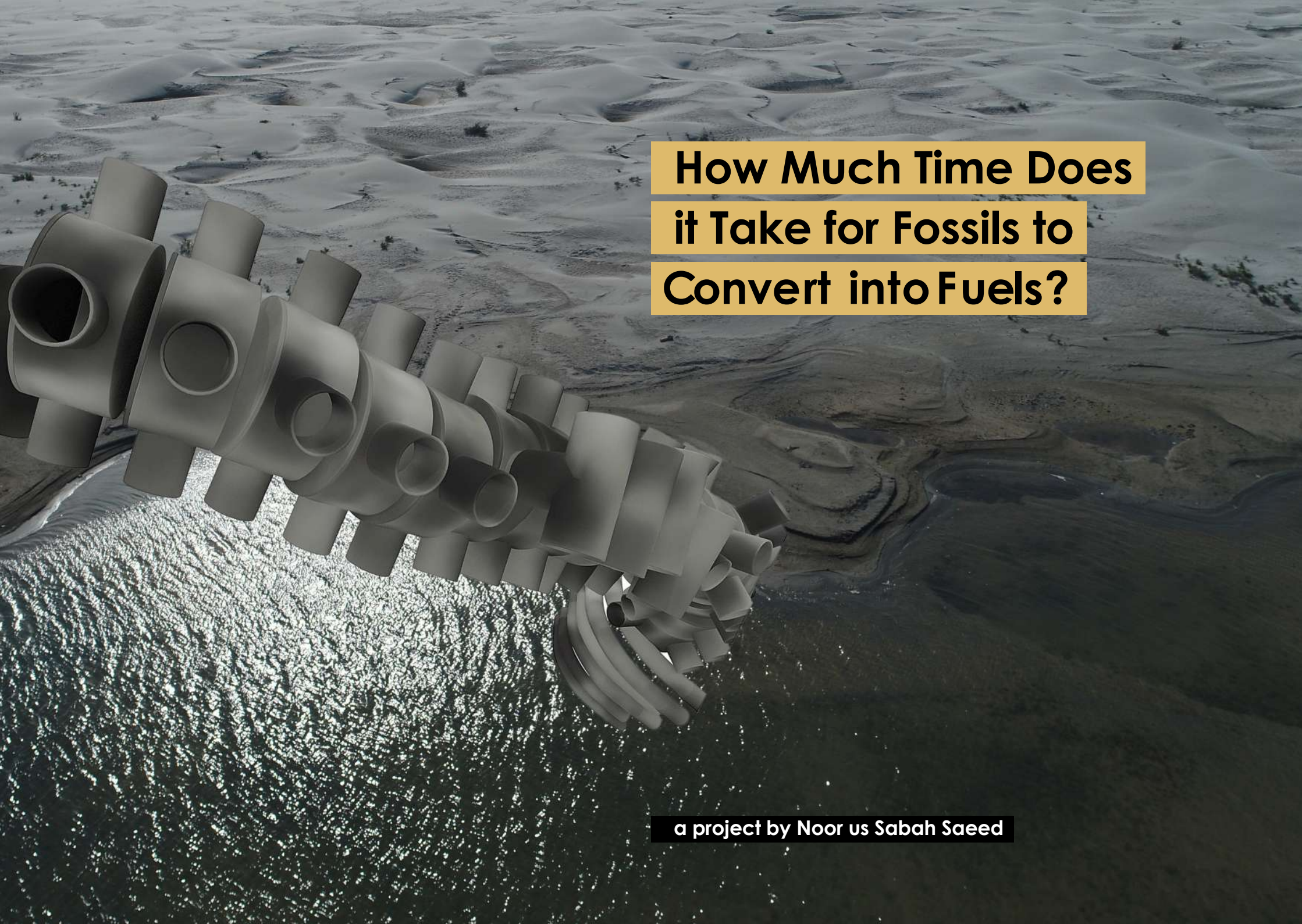

How Much Time Does it Take for Fossils to Convert into Fuels?

a project by Noor us Sabah Saeed

Project by
Noor us Sabah Saeed

Adviser
Naiza Khan

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Supporting partners

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"and when we speak we are afraid
our words will not be heard
nor welcomed
but when we are silent
we are still afraid

So it is better to speak
remembering
we were never meant to survive.

they reduce survival to mere existence and that is not survival no it is certainly not, that's right, implicit in survival is joy, mobility and effectiveness and effectiveness is always relative. I mean none of us are going to move the earth one millimeter from its axis but if we do what we need to be doing then we will leave something that continues beyond ourselves and that is a survival" [1]

ABSTRACT

Climate change and the concept of Anthropocene are major issues under discussion in academia, artistic discourses and global policy making. The exercise to put in place a sustainable model demands a radical systematic change, as the current capitalist system, on which the larger world economy is based, heavily relies on the fossil fuel industry. This research will take post-humanist position to analyze the border where the human, nonhuman and nature separate and where they unite. As a climate activist's campaign suggests, "*We are not defending nature - we are nature defending itself*".[2]

The primary question is about resistance and adaptability, where/when to resist and where/when to adapt to survive? This question is for survival of human, nonhuman (nature, animals and machines) in relation to current extreme climate conditions. Secondly, Water which is a basis for life on Earth and known for its resistant nature – is it able to sustain its own form in constant rising atmospheric temperatures? How can we visualize and re-imagine human and its possible forms in a post-water situation? Can a human body and other living forms evolve to survive with very little or no water, or resist its current form?

Keywords: Climate Change, Marginalized Communities, Water Scarcity, Artistic Strategies, Resistance, Adaptability, Fossil Fuels, Memory, Mythology, Endangered River

Part 1: Story of (two) Rivers [Indus & Sarasvati]
Part 2: Story of a Fossil

Part 1:

Story of (two) Rivers [Indus & Sarasvati]

BACKGROUND

Water crisis: Why is Pakistan running dry? [3]

Pakistan could "run dry" by 2025 as its water shortage is reaching an alarming level

The Indus, the Nile, the Murray-Darling, the Colorado... these were once mighty rivers that now struggle to touch their oceans and seas.[4]

Sarasvati, the mightiest of Rigvedic Rivers and the sacred deity in Hindu scriptures and folklores, exists as a legend, myth and as a poetic imagination. However, historical texts and scientific researchers suggest

that the river did exist once. The geologists are speculating that climatic changes could be an important factor for its disappearance. It is believed that Vedic people were living on the banks of River Sarasvati around 6000-3000 BC[5]. Another significant mystical river is the Sindhu, considered to be the present day River Indus. Sindhu is seen as a 'male' (strong) warrior contrary to other rivers, including Sarasvati, which are considered feminine and seen as goddesses. River Indus, which is one of the largest rivers in Asia and flows 2900km through China, Afghanistan, India and largely Pakistan is on the Wildlife Foundation's (WWF) list of top ten rivers at risk (WWF:2007)[6]. The year 2025 is marked as one of extreme water scarcity on its basins.

Basin Characteristics

Length: 2,900 Km (Encyclopædia Britannica 2006)
Basin size: 1,081,718 Km² (WRI 2003)
Population: 178,483,470 people (WRI 2003)
Population density: 165 people/ Km² (WRI 2003)
Key economic activity: agriculture
Key threat: climate change
Other threats: water extraction[47], agricultural pollution, water infrastructure, 6 proposed large dams (WWF 2004)

IMAGE 1 [7]

"Water scarcity of the River Indus [Basin] is institutional, cultural, and political." (Daanish Mustafa, Reader, King's College London)[8]

Six major rivers flow from India into Pakistan. The country's irrigation system relies on them entirely. In 1960, with the help of World Bank's mediation, Pakistan and India signed the Indus Waters Treaty, which gave both India and Pakistan rights over three rivers each. Since then, both countries are managing well to share the water from their designated rivers but as water flows in from India, geographically, Pakistan is in a more vulnerable situation. It fears that in case of conflict between the countries, the potential water blockade from India can cause droughts and famine in Pakistan. On the issue of water specifically, there are long-standing disputes over construction of dams and hydro-power projects. The River Indus is a very crucial water body, which supports the irrigation system in Pakistan, India, and Indian occupied Kashmir. The Indus water resource directly impacts the economies of both countries: livelihood of more than 180 million[9] people which is directly linked to the changes in quantity of water in the river.

This is a story of a river that disappeared in the desert sand.

THIS IS A STORY OF A RIVER THAT DISAPPEARD IN THE DESERT SAND

The river Sarasvati is described in the Rigveda as "*Ambitame–Naditame–Devitame–the greatest of Mothers, greatest of Goddesses and greatest of the Rivers"*[10]. The mention of such an ancient river raises questions, if Sarasvati ever existed, what could be its possible location, its link to the Harrapan civilization and its slow decline.

Michel Danino the author of, '*The Lost River: On the Trail of the Sarasvati'* (2010) supported the century old argument that the dried-up riverbed of the Ghaggar-Hakra is the location of the legendary Sarasvati River.

"*Why else would they recount the location of the river such as in NadiStuti verse10 or later talk about its slow disappearance, in repeated references in the later Vedas, Mahabharat, and other Vedic texts?*"[11](Danino, IIT Kanpur 2015)

The image taken from Michel Danino's lecture shows the excerpt of Nadistuti Verse, where Sarasvati is mentioned among the 19 rivers listed with reference to their actual geographical locations from east to west. According to this sequence, Sarasvati comes between Sutlej and Yamuna rivers and flows in parallel to the Indus River.

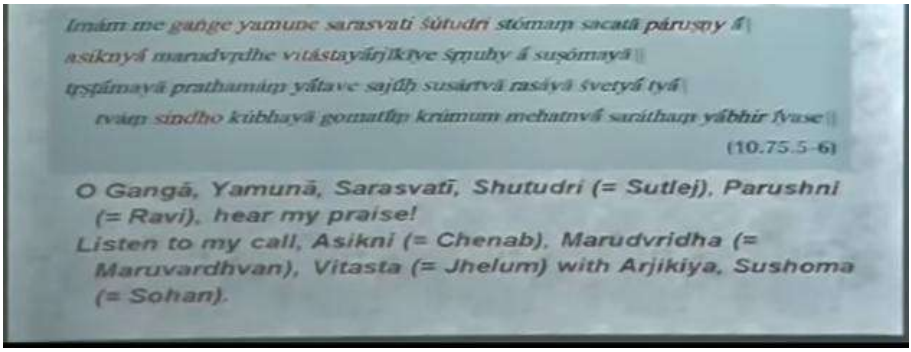


IMAGE 2 [12]

The Ghaggar-Hakra palaeochannel (Punjab, Haryana and Rajasthan in India, and Cholistan in Pakistan) was first identified during the topographic surveys of colonial India in early 19th Century. The French geographer Louis Viven de Saint-Martin was the first in 1855 to identify the Vedic Sarasvati. River Sarasvati is mentioned in all the earliest maps with slightly different pronunciations drawn of this region during colonial times, through land surveys of British and French geographers. All the maps are present in the book *The Lost River* and in the lecture by Michel Danino.

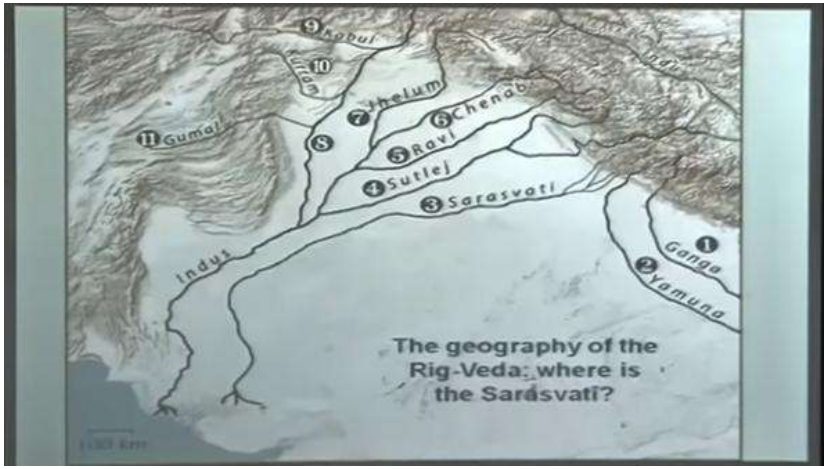


IMAGE 3 [13]

The Indian geologists, who argue in favor of Ghaggar-Hakra as Sarasvati River, used three major discoveries to defend their argument.

1. The mention of the geographical location of Sarasvati in Rig-Veda
2. The Discoveries of hundreds of Harappan archeological sites on the Ghaggar-Hakra dried river bed.
3. Satellite images of the Ghaggar-Hakra riverbed taken in 1970s, helped to trace the river's lower part in Cholistan, Thar and its delta in the Great Ran of Kuch region, Pakistan.

Mentioned below are the selected excerpts from the last 20 years of archaeological, geological and climatic studies, discoveries, and debates on the Ghaggar-Hakkra as the origin of the Sarasvati River. The research papers are mainly focused on: the new discovered Harrapan Sites on Ghaggar Hakra, the actual time period of active years and slow

This caused the abandonment of urban settlements, migration and the decline of the civilization.

disappearance of the river, the reasons of disconnection from its tributaries, and its impact on the decline of Indus Valley / Harrapan Civilization, Aryan migration and time period of Vedic people. India has been the most active country to conduct research on Ghaggar Hakra since partition in 1947. The selection of excerpts has been chosen to provide an overview of research that took place after partition in India and Pakistan by local and international research institutions.

- **2004**

The Palaeo-Ghaggar must have been a mighty river with broad channels once flowing through the Thar region, when the climate favored abundant monsoon precipitation in the Sub-Himalayan region.

The latest increase in monsoon activity in this region was reported [13]around 8000–3500 BC and its waning period also coincides with the Harappans (3500–1900 BC). Since the drying was gradual [29] in terms of time and space from circa 3500 BC, the run-off of the river shrank towards the north gradually.

The cultural collapse of Harappans during 1700–1900 BC has been thought to be due to desiccation in the Thar [35]. However, others suggested that the river became ephemeral due to tectonically induced river piracy [9-11]. Here, we suggest, unlike these theories, that the Ghaggar-Harappan Civilization was a 'true river valley civilization' supported by monsoonal rainfall in the Sub-Himalayan catchment, the reduction of which was responsible for the extinction of the river and the associated civilization.

Tripathi, Jayant & Bock, Barbara & Rajamani, V. & Eisenhauer, Anton. (2004)[14]

- **2010**

After the 1947 Partition, Indian archaeologists, beginning with A. Ghosh, conducted a number of surveys further east, and ended up discovering hundreds of Harappan sites in the Ghaggar's basin. Meanwhile, in 1974, the Pakistani archaeologist M. Rafique Mughal (1993, 1997) identified in Cholistan 171 sites of the Mature Harappan phase. All these surveys put together established that the Sarasvati basin was home to at least 360 sites of the Mature phase—almost a third of the nearly 1,200 known such sites in the totality of the Harappan sphere. Among the larger Harappan cities found in the Ghaggar–Hakra basin are Bhirrana, Rakhigarhi, Banawali (all in Haryana), Kalibangan (Rajasthan) and Ganweriwala (Cholistan) (Fig. 4 and Table 1; recent surveys have added many sites since this table was prepared).

Danino(2010)[15]


Can Technology change the past?

Background Image: Animation Still, Google Earth Studio

- **2011**

Remote sensing to confirm the course of the Saraswati River

Clear signatures of PCs on the satellite imagery in the form of a strong and continuous drainage pattern ~10 km wide in the Indo-Pak region, and its parallelism with the Indus River, indicate beyond doubt the existence of a mighty palaeo-river in this region. (pg. 5214)

Using satellite imagery to reveal the course of an extinct river below the Thar Desert in the Indo-Pak region

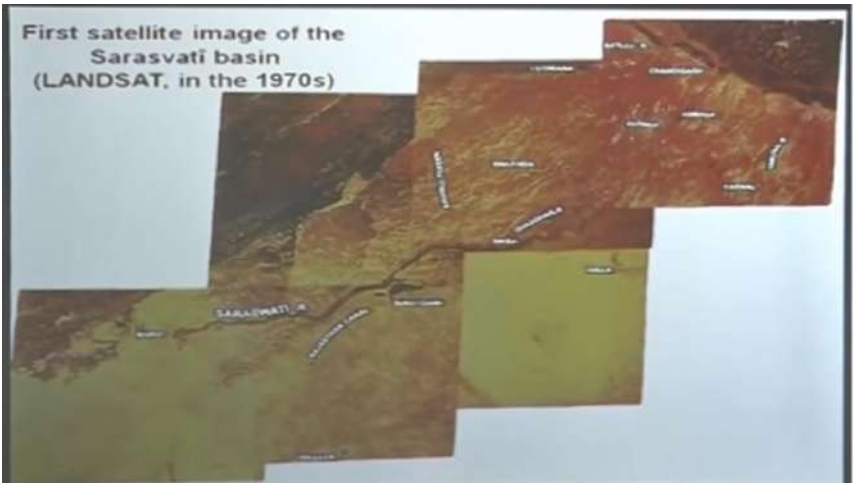


IMAGE 4[17]

A. K. Gupta, J. R. Sharma & G. Sreenivasan (2011)[16]

- **2012 January**

In our conclusions, we argue that the Ghaggar was not a large river as "the mighty Sarasvati" has been described at least during the Mature Harappan period. Satellite imagery shows that the present floodplain of the Ghaggar is at most 8 km wide in Rajasthan [Yashpal et al., 1984]. One of the reasons why the Ghaggar is thought to have been a glacial-fed mighty river is that the width of its floodplain was assumed to be larger than present flows would justify [Yashpal et al., 1980]. Sridhar et al. [1999], however, suggested that ephemeral rivers often have wider floodplains because they can be flooded easily due to their shallow riverbed. The Ghaggar River experienced severe floods in 1988, 1993, and 1995 as marked on the pier of Sirsa Bridge, although it usually shows dry except for the summer monsoon season.

We conclude that the Vedic Sarasvati cannot be equated with a larger Ghaggar River similar to the Indus or its Himalayan tributaries at least since the beginning of the Holocene.

Maemoku, H., Shitaoka, Y., Nagatomo, T. and Yagi, H. (2013*).*[18]

Due to the change in the climatic cycle, monsoon rains or tectonic shift in earth plates, the river got disconnected from its tributaries.

Background Image: Animation Still, Google Earth Studio

- **2012 March (Research conducted by a group of geologists, including American, Pakistani and Indian)**

Numerous speculations have advanced the idea that the Ghaggar-Hakra fluvial system, at times identified with the lost mythical river of Sarasvati (e.g., 4, 5, 7, 19), was a large glacier-fed Himalayan river. Potential sources for this river include the Yamuna River, the Sutlej River, or both rivers. However, the lack of large-scale incision on the interfluve demonstrates that large, glacier-fed rivers did not flow across the Ghaggar-Hakra region during the Holocene.

Giosan, Liviu & Clift, Peter & Macklin, Mark & Fuller, Dorian & Constantinescu, Stefan & Durcan, Julie & Stevens, Thomas & Duller, Geoff & Tabrez, Ali & Gangal, Kavita & Adhikari, Ronojoy & Alizai, Anwar & Florin, Filip & VanLaningham, Sam & Syvitski, James. (2012).[19]

- **2013 January**

If Giosan et al. 1 can speculate (p. 5) on the basis of their 10-year work, mostly in Pakistan, what is wrong with the hundreds of Indian geologists working for over 50 years in putting forth their findings and deductions or perceptions?

The archaeological sites found in the study area belong to the Late Harappan period, suggesting that the buried sand bodies at different places have the same historical time in terms of age. (Pg. 37)

Although one would be skeptical of the worth of the epic Mahabharat penned by Krishna Dwaipayan Vyas sometime after 3500 years BP (ref. 41), it does describe the Saraswati drying up and vanishing for long stretches under the desert sands (Mahabharat, Van Parv, Chapter 25; Shalya Parv, Chapter 37) and occurrence of waterlogged terrain adjoining a pool, swarming with snakes (Mahabharat, Shalya Parv, Chapter 37). In other words, the Mahabharat clearly states the Saraswati started declining before it was written 3500 years BP.

If the Indus, which was and is a Himalayan river, stopped incising and stopped depositing following 'intensification of aridification' after 5000 years BP, the other Himalayan rivers like the Saraswati must have also done the same. (Pg 49)

Giosan states that 'we studied quite a few material over the 10 years of project but considered seriously only the papers and authors presenting reliable data and facts'. In other words, most of the works of Indian workers (archaeologists and geologists) who have worked in the Saraswati Basin are not worthy of being cited by them – are not reliable. I wonder what criteria they considered to test or adjudge the reliability of evidence adduced by the Indians. (Pg 52)

Giosan et al. 1 accuse us (Indians) of having a dogmatic approach in constructing a narration on the Saraswati prompted purely 'on emotional appeal'. It may be pointed out that the first geologists to write about it – in quite detail – in the Journal of the Royal Asiatic Society of London and Journal of the Asiatic Society of Bengal were two British stalwarts of the Geological Survey of India in 1886–1893 (refs 65 and 66). Surely they would not have been swayed by emotion on the 'cultural evolution in northwest India'. (Pg. 53)

Valdiya, K.S. (2013)[20]

- **2017**

To test the hypotheses that (1) the Ghaggar–Hakra palaeochannel hosted a major Himalayan river, and (2) that its abandonment coincided with Indus urban settlement decline, (pg. 6)

In conclusion, our results firmly rule out the existence of a Himalayan-fed river that nourished Indus Civilisation settlements along the Ghaggar–Hakra palaeochannel (conclusion, pg. 12)

Singh, A., Thomsen, K.J., Sinha (2017)[21]

Hi Ali,

I cannot help with satellite images myself - I had a collaborator who helped me with such but he retired.

There are no close similarities in my opinion between Indus and Ghaggar/Hakra system. That is because Indus is still fed by glaciers and snowmelt in addition to rain while GH was only fed by rain and possibly snowmelt, sp it was much more vulnerable. If the glaciers disappear Indus will still be fed by snowmelt and rain. A similarity in such scenario will come due to strong evaporation, which is great in both cases, and can lead to drying before reaching the sea for a snowmelt-rain-only Indus.

Liviu

IMAGE: Scanned Email, Liviu Giosan to & Dr. Ali Tabrez, July 2019

After even thousands of years have passed it is in the memory of people through the rituals, folklores and hymns.

"Time and temporality as explored through BQF [Black Quantum Futurism] consists of multiple dimensions; not just mechanical, linear, clock time, or other conventional and historic measures of time. From a young age, we are taught to map out major events, world history, and even our own lives on a timeline that runs from past to present to future. The timeline typically looks something like a straight line, with major events representing points on the timeline, where time comes from behind us and moves forward. From a BQF perspective, however, causal order is not presupposed or inferred. BQF believes that the future, both near and far, impacts the present, now, reaching back to meet the past and create our experiences of the present. The future can alter the present and the present can alter the past."[22]

"we humans are tied to our own perspective of time whereas the nature and the landscape have a more extensive multi-level memory"[23]

"All Water has a perfect Memory and is forever trying to get back to where it was"[24]

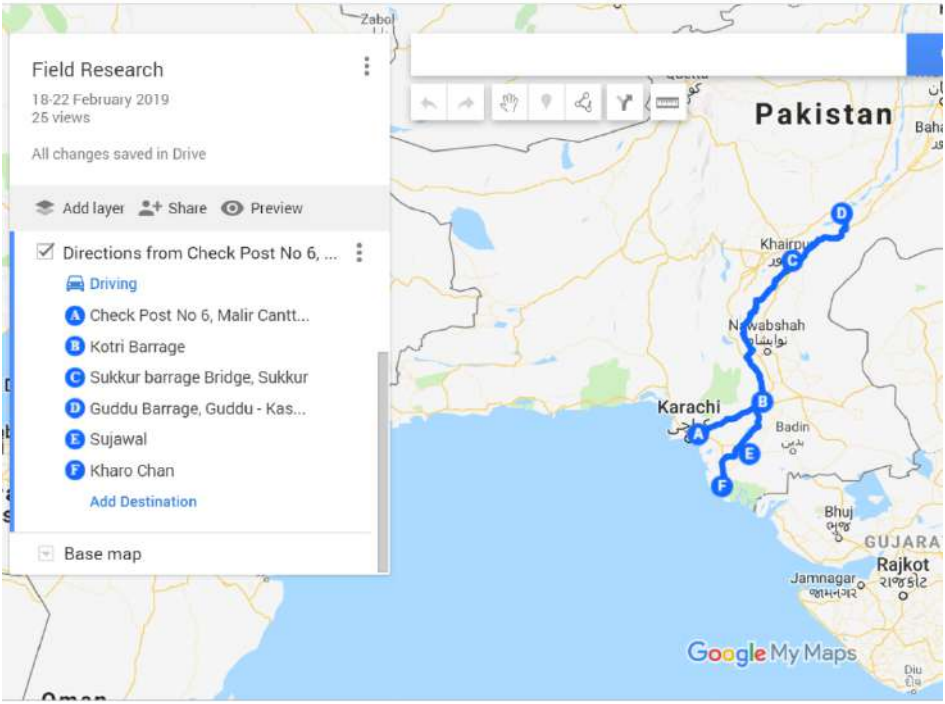
ARTISTIC STRATEGIES

IMAGE: Noor us Sabah Saeed, Sadhu Bela, Sukkur, 19 Februray 2019

As reference for my field research, I took the work of Antti Tenetz, Theun Karelse and Rasheeda Phillip -'TRACING'[25], 'Machine Wilderness'[26] and 'Community Futurisms: Time and Memory'[27]. I am looking at this body of work as an ongoing project that will unfold over time. The year 2025 is predicted as an important year to observe changes in the river and its ecosystem. In the province of Sindh, the Indus River is the backbone of culture and tradition as well as to the livelihood of the people who live on its banks. I got a lot of support in my field research / interviews because the local community was invested in the cause and they wanted their voice to be heard.

FIELD RESEARCH

18-22 February 2019
DAYS: 05 (MONDAY-FRIDAY)



Indus River, Sindh Pakistan (RIVER'S DELTA)

Kotri Barrage, Kotri, 18 February 2019
Sukkur Barrage, 19 February 2019
Guddu Barrage, 20 February 2019
Kharo Chan, 21 February 2019
Sajawal, 22 February 2019

Distance covered: 1228 km approx.
Karachi-Kotri-Sukkur-Guddu-Kharo Chan-Sajawal-Karachi

Field Research Team

In-charge Drone Camera: Shahzaib Ghulam Nabi
In-charge Interviews and On-ground Documentation: Shazhar Hashmi
Travel Coordinator: Adil Jadoon [Khanabadosh]
Muhammad Saeed [Father]

On-ground Facilitators:

Kotri Barrage: Ghulam Sarwar [Deputy Conservator Wildlife]
Sukkur Barrage: Syed Amir Hussain [Divisional Forest Officer]
Guddu Barrage: Abdul Jabbar Mirani [Inspector Wildlife Officer]
Kharo Chan: Abdul Ghani, Nabi Bakhash [Govt. Employees / Farmers]

Special Thanks:

Sindh Wildlife Head Office Karachi
Maher Javed [Head Conservator Sindh]
Dr. Ali Rasheed Tabrez (Geologist)
WWF Regional Office Karachi
Hamera Aisha
Dr. Babar Khan
Muhammad Ali Wasan

Will Recalling Memories Recover the Lost?

To understand this complex situation, I took help from Rasheeda Phillip's Community Futurisms: Time and Memory and created a questionnaire for interviews on selected sites.

QUESTIONAIRE:

Person's name, age & place (where reside)

Q1 Did you observe the change in the river in your lifetime?
A. Yes
B. NO

My father/ mother observed
My grandfather/ grandmother observed
Would you like to share a memory/story/poetry related to the river

Q2 What kind of changes you observed?
A. Shrinking
B. Expanding
C. Receiving less or more freshwater flow from the top

A/B/C what is your stand on it?

Q3 Are you worried about the situation and for your future?
A. It doesn't make sense to worry about the future since there is nothing that I can do about it anyway
B. I am worried about this situation because our livelihood is based on water in the river

Q4 What are the possibilities you think you have for your future? And what kind of planning you are doing for your future?

Q5 Do you think any kind of work / actions in the past could have an impact on the present?
A. Yes
B. No,
C. Our life path is controlled by forces I cannot influence

Incase answer is:

A. What changes do you want to do in the past? If you can
C. What kind of forces?
Climate change/ water management system / political powers (state)

I am 60 years old and around 1970s I was in school and college, so I saw Indus River overflowing from its levees as you might know that a significant amount of flooding happened in 1972-73. River Indus was destroyed badly. I think, what I am trying to tell you is that there used to be a lot of water that used to come in the river and during that time whenever we used to come to this place, towards, Jamshoro, we never saw this place, where we are sitting right now, this is the downstream. Here, the boats used to start coming from 6am onwards. Every boat will have at least 10 - 15 kilos of 'Palla' fish, but we never saw the soil of the river. After 1970, we have floods every three years and in between we have to survive in famine. Areas which are closer to the river, get water but water doesn't reach to the far flung plain areas. So, I tell you, our water has reduced from about 60% now.

Now, the water has become even less. Currently, approx. 40% of the water comes in comparison to how much it used to be 5 years ago. So, now the cycle of flooding, which used to be every 3 years, has stretched to every 5 years. So for 15-20 days when the flow of water is extreme, you can see water here, otherwise, after that it will again be sand and some idle sailors, nothing else is here.

We heard from our elders about the Indus River, before the British, used to flow freely across all the plain areas of Sindh. When there used to be a lot of water, it would get overflowed from its canal-like shape and would flow in all plain areas of Sindh. Then, we heard, our elders used to tell that the British came, and restricted the river levees. After that Indus (the river) was bounded. So, during the floods, crossing the river used to be very difficult, even with the boats, elders used to tell, there used to be only two bridges, the one is that 'Sukkur' bridge and the other is of railways which is at Kotri. Kotri Bridge was constructed later so during floods, if someone wanted to go to Larkana, they had to cross via Sukkur or if someone wanted to go to Dadu so they had to cross from Sukkur or Kotri.

Then, when the winters would come, only then a boat could cross and transport people from one end to the other. I can tell you that river used to be full of water and fish, as well as there used to be a huge forest where lions used to live. There are also reports that, in 1800s, even tigers were found living in the area which is now Rohri. And, (rumor has it) that a grandfather or father of a British Army General has also hunted them. It is written in history that this area used to have wide-spread and rich forests. Right now, you will find all of Indus (river) cultivated since there is no water, people are growing crops with the remaining water so there is a huge shortage of water now, since water doesn't go underground in Indus, it only happens when you have floods, that also for not more than 10-15 days.

Water should be managed according to the requirement. For instance, when Sindh needs water, it gets it, similarly Punjab can take the excess (water) according to their needs. It is out of this idea that these link canals were made so that the excess water can be utilized, it was a generous compromise on part of the people of Sindh. Now, the issue is that even when we need water, we don't get it as the water is not released. And, this whole conversation around dams, that more dams should be constructed, we also want dams to be constructed, but only when there is water in the first place, show me first where the water is. (As the common saying goes) 'You will only make extra crockery when you have excess food'. But, where is the water in Ravi (river)? Do you have water in Chenab (river), Indus (river) -- where is the water? If you would have had water, then we wouldn't have been sitting on the sand in the middle of Sindhu (Indus River) and talking about it.

Ghulam Sarwar, Deputy Conservator Wildlife Sindh
Kotri Barrage, Kotri, 18 February 2019


Let's make the Indus Dolphin


SWD

Research should not be biased. That is what I told you yesterday that you are at liberty (here) that you can go there and see from your own eyes. Now, what we have seen since we live here so I will show you its original shape how it is and (tell you) what people are doing, what our community is doing, and how no one is thinking about it and giving any importance to it.

'Sweet water' is a gift of God. Just imagine! If rivers would not exist, how will we survive then? We will not have 'sweet water' and because of the negligence our 'ground water' is also being affected. The (ground) water is rapidly turning brackish and the level of arsenic is also increasing.

When we were younger, there used to be thousands of boats. Using that water, people used to harvest at the 'Kacho areas' (river bed which has water only during floods) of Indus river, and then they used to supply the crop to the city by transporting it on the boats. Now, there are not even 100 boats, you can see that for yourself. You can even gauge it from this (example) how things have changed. These turtles in the river, when I was younger, there used to be many, they used to sit next to river's edges, their population were huge. I am talking about Sukkur. You can use Sukkur as a reference (to the changing situation), since it (Sukkur) is the main stream of the river.

If we won't stop deforestation in mountainous areas, in Khyber-Pakhtunkhwa, in Gilgit Baltistan, then, floods like the one came in 2010 will become frequent. These 'silt' in rivers only came due to rain, that's how much rain there was in those (mountainous) areas that it took the shape of flash floods and when it reached here, it caused major destruction - both in Punjab and Sindh. So, we do need to think about it.

So, if we look at how people intervened and improvised and the incident (that) occurred at Thori (particularly), was also happened due to mismanagement. We did not even anticipated that something like this could happen, we did not analyze the situation appropriately and then when the dam broke, the destruction it brought, believe me! It was too devastating to redeem from.

All the infiltration in this (the river) needs to be checked, and needs to be kept functional, in its natural form, at any cost. We need to check any human intervention in this. We need to balance it, so that this equilibrium of ecosystem is maintained, so it won't get misbalanced, as if it gets misbalanced, then, all this natural disasters that you (we) are witnessing are because of this misbalance. And, the developed countries, how many pollutants they have added to the environment and how many pollutants less-developed countries have added. And this oxytocin, when you inject them, they become part of the food chain, and when it gets dissolved in the food chain, and then its waste is eaten by vultures

which cause kidney failure and other diseases which became a major cause of their (vultures) extinction.

And, if you look at all of our industrial areas, all of them are connected to this river (Indus) through the canals. Unfortunately, we need industries too, similarly as we need energy, since we are not a rich or an emerging country so we need industry to survive. But, we have to maintain our ecosystem too, but it should not be at the cost of human lives.

Syed Amir Hussain, Divisional Forest Officer
Sukkur Barrage, 19 February 2019


MOTRE DAME

Sister, I am Abdul Jabbar Meeyani. I am the Wildlife Inspector for district Kashmore. Right now, where we are sitting for the interview, it is 'Wildlife Guddu Dolphin Center'. I was born in a village, 'Sohrab Khan Mari', neighboring Ghospur.

When 2010 floods occurred, we did surveys from Guddu to Kothri. From Sukkur to 'here (Kothri)' the number of dolphins was about 940.

Previously, before 2010, the number (of dolphins) was 17, but then we surveyed in 2012 till Kotri, it was 34. Here (Kotri), water is less, that's why there are lesser number of Dolphins. Recently, the survey we did in 2016 by ourselves, Alhamdullilah! It took us about 30-35 days till Sukkur, maximum number of Dolphins that we found in Indus River are from Guddu to Sukkur. The water (in the river) was more before, now it has decreased by at least a lakh or 1.5 lakh Cusec meter. The water is definitely lesser from last year now. Now, we will check the situation of water in June. Right now, it is in front of you, you can see (the water level) in Guddu barrage is still good, Alhamdulilah!. It's alright, let's see what happens in the future. All I can say is that there is less water now than before.

If the water comes between the ranges of 5 lakh to 7-8 lakh Cusec, it is manageable. It fertile our land, but more than 10 lakh Cusec can be dangerous. In that case, the floods come, just like the one that came in 2010 which caused Thori Dam incident, from that many districts, approximately 20 districts were affected. The damage of public property was huge; the damage to poor people's assets was huge. But, now everything is better, the system is in place. Situation is getting back to normal slowly.

There (in Kotri), water is an issue, towards the South, the water is very less. South from Kotri, no one has even heard of blind dolphins, they are rare, they are blind, they are mammals and they live and reproduce in the Indus River. They are found only until Kotri, though the number is very less from Sukkur to Kotri, most of them are found between Sukkur and Guddu, there are some in Punjab but very less. We are unsure about the reasons, though, may be fishing (of them) there (in Punjab) is more common or may be the irrigation system there is nonconductive (for the dolphins), but the number of dolphins is less.

Recently, the survey we did in 2017, from 'Chasma' to 'Kondiyan', there was not even a single dolphin found, in 2002, there were four dolphins. Now there is not even a single one, all four of them disappeared, we don't know what the reason was, may be water...but we are not sure.

For the future, we suggest that Bhasha dam is constructed but that is not what is in our control. Ah! We are praying to Allah that it keeps the river

(Indus) running, only if the river survives, there will be water for forestation and dolphins to survive (otherwise, their species will not survive).

There is an issue of climate change as well, but now we are starting the cleaning of barrages (which helps flow of water) Descon's (the company responsible of cleaning) team is already here. Our boss, Deputy Wildlife, Ejaz Sahib Talpur, is Alhamdulilah, a progressive thinking man, he is also working, I am also working in his team, Javed sahib is our Sindh's Wildlife Conservator, and he is also a very concerned man.

There is government, of course! They must be thinking (about Climate Change) it is government's concern.

Abdul Jabbar Mirani, Inspector Wildlife Officer
Guddu Barrage, 20 February 2019

My name is Nabi Baksh. I live in this area. Right now, where we are standing is a delta. From here, the river merges into the ocean, the fresh water from the river makes our lands fertile, and right now our lands are barren (since) there is no fresh water reaching until this point.

As our elders tell us, we are native of this land, we have been living here even before the (Indo-Pak) partition, even 100 years before that..I don't know how long we have been living on this land.

When there is water in the river, then our area is fertile, there are vegetables, wheat, rice being cultivated, there are other crops.. But now there is no water and our land turned barren for that reason.. Even many people have migrated from here to other places.

Question: What is the time period are you talking about? Since when do you think the water is getting lesser?

Answer: Aaaa.. I think it is after 80s and 90s.. It is my guess.. Since I was born in 1982 so after 90s and 80s there is lesser and lesser water in River Indus.

Assalam-o-Alikum, my name is Abdul Ghani, I live here in the neighborhood. Right now, where we are sitting is also considered as Kharochan. Actually Kharochan is an island about 3km from here. Our elders tell us that, MashaAllah! back then when there used to be 'sweet water' in the (Indus) river, there used to be all types of crops, especially vegetables and rice in big quantities, then also wheat and bananas etc. Then, when the water quantity reduced, the hard water (from the ocean) started to come. The 'hard water' from the sea, which is eating (destroying) about 35 to 40 acres of land every day. Apart from that, now the orchards have disappeared too. It was around here in 1980s, then the water became less frequent, but the condition is not favorable since then, many people have migrated to other areas like, Karachi, Gharo, etc.… life is difficult here. When River Indus rises to such levels that it flows to fall in the sea around in August, September, then people stock water and make canals. Those canals lasts for about a month, then following that, comes the same problem, there is no water left. People then fill up water containers from here and carry them to their places for use.

Question: And, what do you think, when did the water start to get lesser?

Answer: It is around 1982, 1985, after that the water quantity reduced significantly. Before that people here used to be well-resourced.

This is underground water. We extract water with the help of hand pump for drinking. Since the ocean is approaching from both sides: above and below, even this (ground water) is becoming hard water. If it is coming 1km from above, it is about 10 kms from below (underground). This is the reason our land is becoming barren by every passing day. This is our request that water should be released in our river so that our children, our future can survive.

Question: Do you know, as you said, so many communities have migrated from here, do you have any idea where they might have immigrated to?

Some people migrated to Gharo, some moved to cities such as Karachi or Thatta or Hyderabad. When water comes, they come back, they have some remaining land here. Whenever there is flood, it comes as a good news for us. Since our land (otherwise) absorb sea water, but if the floods come, they don't let the sea water enter our lands for a few months and the underground water will turn 'soft' again. This is the reason that the water of Indus River is our life, if the river won't exist then these areas of Thatta district such as Keti Bander, Kharochan and Shah Bander will disappear too.

Our livelihood is mostly dependent on fishery now, agriculture has reduced to less than half, it's not even 50% now, 90% of it has become fisheries. If the river expands further, then we can go ahead with it, we will continue fish hunting, but our lands will be completely destroyed, our agriculture system will be destroyed completely.

Our tragedy is that it is not only a problem for Keti Bander, Shah Bander, Kharo Chan, it is a problem for our entire Indus Delta which is from Karachi to Keti Bander, Shah Bander, Badin, even Saakro is also included in it as well as Gharo. If the 'soft water' will not be released in the river then our whole delta is on the verge of destruction. We only have two livelihoods: fishery and agriculture. If there won't be sufficient water then the species of fish will be destroyed, especially our 'Pallo' fish, which is very popular and prawns, they don't survive since there is no soft water, so from an economical point of view, fishermen are very worried, and it is a huge financial loss for us. Apart from this, it is a huge financial loss from agricultural point of view as well, as due to lack of water, river land is shrinking and agriculture is becoming less viable.

Abdul Ghani and Nabi Bakhash, Govt. Employees / Farmers
Kharo Chan, 21 February 2019

But is it possible that a river of this magnificence could disappear?

"We care about these places we are not only financially invested in these places. We also have memories there, you know going to the beach with your families, learning to swim, where you had your first kiss or caught your first fish. What we are losing is culture and its community and figuring ***out how we can acknowledge and process that together as an ocean is swallowing our memories is certainly we cannot deal unless we start to face what science is telling us what is coming that hasn't happened yet."***

Dr. Ayana Elizabeth Johnson, Marine Biologist/ Policy Expert, Strategist, Brooklyn NYC[28]

"I am coming from Chad. I am from Mbororo pastoralist community, living in Chad, in the middle of Sahel you see exactly the climate impact with your eyes.

Climate change is real and it's not about our future, it's about our present, because for us it's the issue of survival, it's not the issue of economy or power, it's the issue of lives of hundreds of millions of people that depend on it. We need solutions, we don't have time. It's now time for action and immediate action for those peoples who are getting impacted who didn't create this climate change. ***Around the world we have all these young people going out on the street asking for injustice, asking to save their futures, but I am going to tell you the young people in my community are asking for present."***

Hindou Qumarou Ibrahim, President, Association for Indigenous Women and Peoples of Chad (AFPAT)[29]

If so, we might be losing another mighty river.

Research on the Sarasvati River is still ongoing. It seems the research outcome of evidence will take time to be established as fact, which is acceptable to everyone. After partition in 1947, a major part of the Indus River as well as the excavated cities of Harappa and Moenjo-Daro; part of the great Indus Valley civilization, came to sit within present-day Pakistan.

However, the discovery of new cities at the bank of the half dried-seasonal river of Ghaggar-Hakra gave hope to Indian historians and archaeologists to take back ownership of its glorious past. If scientific evidence proves this to be the site of the Sarasvati River, the new found cities have already been described by them as more sophistically designed than Mohenjo-Daro and Harappa. In this case, the importance of the Indus Valley civilization could be overshadowed or fall in comparison with the Sarasvati Civilization. This is one reason why Indian researchers have been accused of bias on this issue, even while their intentions are purely scientific. However, their efforts seem to be directed to critically analyse the written history of Indian sub-continent in the colonial era.

My understanding through study of on-going research on Sarasvati suggests that the interest to re-define the past lies in the fact that there is an urge to reconnect with another narrative of our ancestors and the glorious past, which is hidden from us. There is a fear amongst (Indian) academics that it could be erased, or never documented, and perhaps may only be written through a colonial lens. They also fear that if the Sarasvati exists in the form of memory, oral history and hymns and lacks scientific evidence it will always be considered a myth. This also encompasses the fact that if the knowledge is not backed by scientific evidence then it will never become a part of the official, historical narrative.

Through my research as an artist over the last one-year, I have worked with a number of methods to examine scientific as well as empirical data. Each process has its own temporality and spatial dynamic. I have worked with drone footage, satellite imagery, historical accounts, drawing methods and field research. The tactic which I found essential to my practice is to physically intervene into the selected sites. I travelled continuously for five days, which occurred to me in itself a performative action while completing five days and five locations with all the hurdles that came into the way. I also chose specific points on each site where

the individuals volunteered to share their stories and those of their ancestors in relation to the sites. I listened to these stories and documented them with the video as well. The other important tool I used was drone camera. To intervene on the sites with drone camera was a political act, which I realized while discussing and organizing a person who can operate a drone camera during my field visit. Aerial technologies are allowing us to experience another perspective also raising critical questions: who can and how to intervene in the aerial space? While thinking in terms of borders, boundaries, spying and providing security etc. A week after I completed my field visit, on 28 February 2019 an incident happened where Indian Goverment claimed to destroy the madrasa in Pakistan; the claim became controversial. A few days after, an international newspaper published an article with the high-resolution images taken by satellite inside Pakistan "*the images produced by Planet Labs Inc, a San Francisco - based private satellite operator, shows at least six buildings on the madrasa site on March 4, six days after the airstrike*"[30]. On the other hand I am supposing that Indian intelligence also used aerial technologies to plan their strike. In December 2018, I started working on my field visit. I was concerned that I would need permission from multiple authorities to use the drone camera and if I do it without any permission it might be considered as a criminal or unethical act. After all these concerns, I managed to use the camera but, in the end, I had to ensure the production house which provided me with a camera and a technical operator that this footage will not be used in any terrorist activities.

I found it crucial for my work to capture the change through a bird's-eye view that has already occurred and to document, archive and represent it as visual evidence. As a media artist and naturalist Antti Tenetz explains "*New technologies such as underwater and aerial cameras, global positioning and drones make it possible to create new aesthetics; new ways of creating artistic and scientific expression that can break and expand the present view of the nature and time*"[31]. In the case of Sarasvati the aerial technologies, especially satellite images played an important role as a breakthrough in a hundred years of ground research.

My interest to intervene in the narrative of Sarasvati is to take this story from the past and to think of possible futures of the Indus. Could the story of the Indus be different from the story of Sarasvati? And what could be

If the past is repeating itself, is it possible to reverse the cycle?

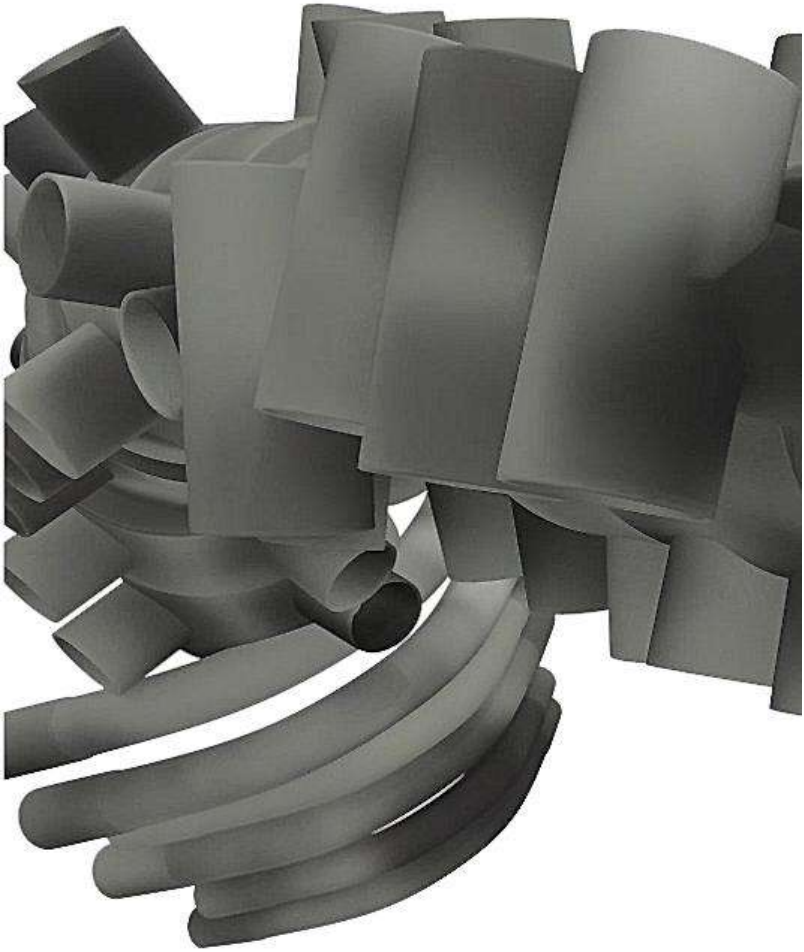
the artistic strategies and tools of resistance to survive? Especially when we are living in the middle of the global climate crisis and we know the effects of climate change are unjust. The Climate Justice Movement suggests that climate change and global warming will affect the marginalized communities the most; those that did not cause the climate crisis and at the same time are more prone to be affected by it, as they have the inadequate resources to deal with it.

After thousands of years, the existence of a disappeared river even in the form of a memory is in itself an effective tool of resistance. Listening to the stories of residents along the bank of Indus, their recollections & memories and its archiving could help us to understand what we are losing. In this case the river transforms into a collective site of memory: where culture is connected to its existence for the people who are living on its banks for generations. The account of Dr. Ayana Elizabeth Johnson (Pg. no. 61), she defines land not only as a site of financial investment of residents but at the same time, as a site of emotional investment as well. If the ocean water floods the land, it will not only affect residents financially but emotionally as well. These land pieces become sites of a community's collective memory. ***"What we are losing is culture and its community and figuring out how we can acknowledge and process that together as an ocean is swallowing our memories is certainly what we cannot deal with unless we start to face what science is telling us, what is coming that hasn't happened yet."*** Dr. Ayana Elizabeth is trying to warn community about the upcoming challenges of the future. In another account Hindou Qumarou Ibrahim, an activist from Chad (Pg. no. 62) draws global attention to the fact that the bleak future for communities in the Global North is a present crisis for her community now. This is something significant to consider - the time-space relationship from center to margin – especially when we talk about any specific region in relation to climate and its impact. We have to take into account the geographical location, economy, history and culture to find the right tools and tactics/methods for survival. At the same time we could learn from each other's examples.

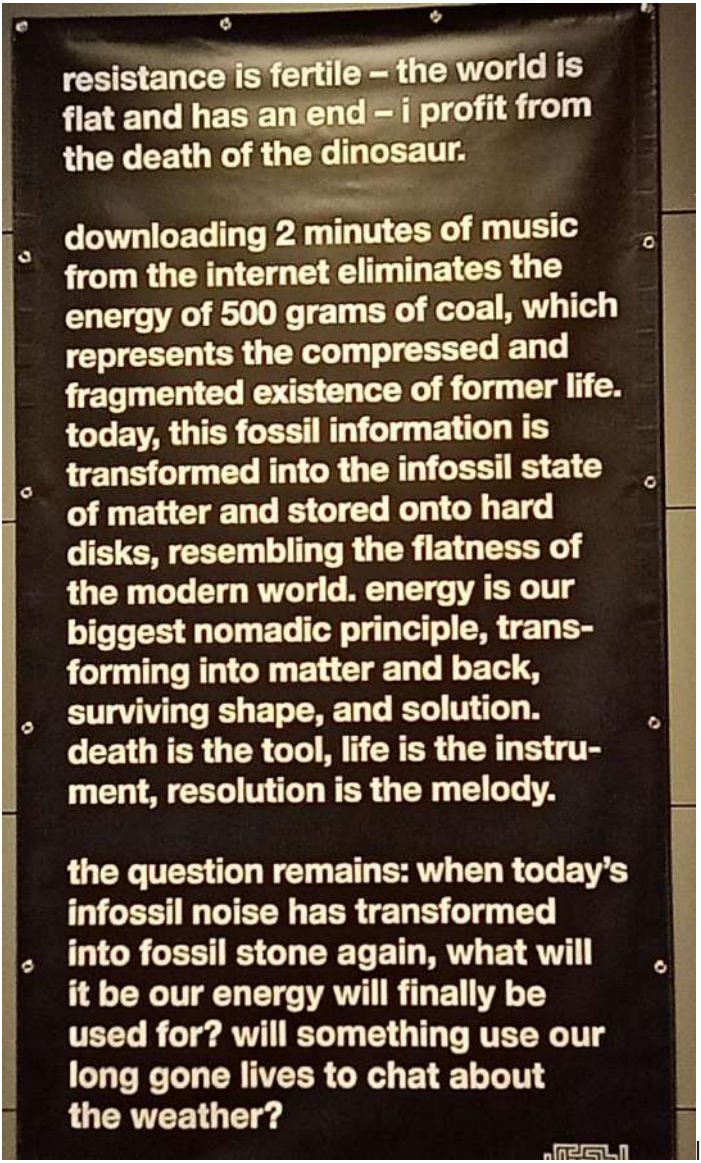
Rasheeda Philips in '***Organize Your Own Temporality'***[32] explains that the way to find your survival in the past creates hope for survival in the present and to envision an alternative future. This is different than what is envisioned for us, especially for communities, which lie on the margin with an undocumented past. Audre Lorde offers an alternative explanation of 'SURVIVAL' (Interview, 1982) that does not reduce survival

to mere existence - '***that is not survival no it is certainly not, implicit in survival is JOY, MOBILITY, EFFECTIVENESS and EFFECTIVENESS is always relative'***[33]**.**

It is not only important that we survive and exist in the present, but tend to be able to survive in the future. However, it is useful to think how effectively we survived in the past, and if we could envision that for our future generations. In the case of the Indus River, its endangered status and its shrinking from the bottom upwards could be a sign for us to take an urgent action without any delay.



Part 2: Story of a Fossil


resistance is fertile – the world is flat and has an end – i profit from the death of the dinosaur.
downloading 2 minutes of music from the internet eliminates the energy of 500 grams of coal, which represents the compressed and fragmented existence of former life. today, this fossil information is transformed into the infossil state of matter and stored onto hard disks, resembling the flatness of the modern world. energy is our biggest nomadic principle, transforming into matter and back, surviving shape, and solution. death is the tool, life is the instrument, resolution is the melody.
the question remains: when today's infossil noise has transformed into fossil stone again, what will it be our energy will finally be used for? will something use our long gone lives to chat about the weather?

MAGE 5 [33]

STORY OF A FOSSIL

"Noting that many recipient countries have lower environmental standards and are highly motivated to take investment in any form."[34]

At this time when climate scientists and activists are protesting worldwide to divest from fossil fuels to keep the rest underground to sustain temperature below 1.5 °C (350.org)[35]. At the same time, developing countries are receiving off shore investments because of lower environmental standards in these countries and to fulfill their energy needs for progress and development. One such collaboration is happening between China and Pakistan in the building of coal power projects. *"The port would include a bulk liquid handling facility, a jetty for off-loading coal. Part of the development of the port would be the construction of a 1320 MW coal plant that would initially use imported coal. The power station and coal jetty are to be part of the China-Pakistan Economic Zone".*[36]

The proposed plan includes a coal power plant which will be constructed at the site of Keti Bandar. The site has a wildlife sanctuary and a complex system of swamps, streams and mangrove forests. This is a part of the Indus delta and a meeting point of the Indus River with the Arabian Sea. It provides a mix of fresh water and salt water that nourishes flora and fauna which need both types of waters to survive, furthermore, indigenous fishermen communities have lived on these islands from many generations. The delta ecosystem is already under threat; the Indus River's fresh water is not reaching the sea because of water scarcity in its lower basin. Only in times of flood, residents experience the flow of fresh water from the top.

"The sites of production, people and nature which is getting destroyed for the progress which is elsewhere and they are outside of it".[37]

The proposed coal power plant will receive coal from Thar Coalfield, in the Thar Desert, Tharparkar District of Sindh. The 16th largest coal reserves were discovered here during the 1991 geological survey[38]. The coal mining and coal power plant in Thar is also part of the China-Pakistan Economic Corridor. In my recent conversation / interview with Dr. Babar Khan, Regional Head of Word Wildlife Foundation (WWF, Sindh-Balochistan) in Karachi (Sindh, Pakistan) about the environmental impact of these projects, and he admitted that he could not openly comment

The lack of fresh water from the river causes sea water to enter into the agricultural land ...

which has already destroyed acres of land causing migration of indigenous communities.

on this issue. On the contrary, the WWF in collaboration with the Sindh Wildlife department is working on the conservation of endangered flora and fauna of Indus River's delta and also acknowledges the threats of climate change on shrinking of the river itself other than water management issues.

"Like it or not – we are in the string figure game of caring for and with precarious by fossil-burning man making new fossils as rapidly as possible in orgies of the Anthropocene and Captilocence."[39]

Other than coal, the natural gas extraction and exploration for oil projects are also in process simultaneously. We are seeing the environmental impact of coal in India and China in the form of water and air pollution, as well as the destruction of land. Pollution and toxication of fresh water bodies is another threat to their existence and its ecosystem. In addition, the dumping of human and factory waste causing toxication of water bodies, which is directly affecting human, non-humans and the environment.

Federal Minister for Maritime Affairs Ali Haider Zaidi took to twitter to break the news, he wrote, *"supply ships transporting equipment to "Mother of All Rigs" docked 230 km off the Karachi coast for exploration of oil and gas arrived at KPT."*[40]

IMAGE 6 [41]

"We need governments to immediately halt the expansion of the fossil fuel industry and put a freeze on all new projects - we cannot afford to plant any more carbon bombs."[42]

The climate activist's occupation of Heathrow Airport against its expansion, 'Zone to Defend' La Zad in Western France against airport project at farm lands, and Hambach forest occupation Klimacamps in Germany against lignite mining are a few examples of artists, activists, and scientists coming together for civil disobedience direct actions. 350.Org and GreenPeace are working worldwide and conducting direct actions with local activists and communities to impact local policies against new fossil fuel projects. Some of these actions have resulted in wins which are encouraging artists-activists-scientists collaborations to organize more creative protests and online campaigns globally. I see these actions / spaces as sites of resistance.

"*We are producing this crazy kind of time that exists only because we keep consuming the evolutionary and decomposed matter that is many hundreds of thousands of years old. Oil is a kind of compressed time."*[43]

On one side the climate activists are suggesting civil disobedience and direct actions against government institutions and big corporations to resist the change. There are also voices in academic and artistic discourses that are suggesting spaces for more dialogue and to take responsibility for an already transformed environment. As Mary Maggic suggests in *From Molecular Colonization to Molecular Collaborations*, *What is natural and what is normal? Can we achieve something which has never existed?*[44] She is proposing that we might be glorifying 'Nature' as pure without toxicities, which could be destructive to finding the right solutions to the current crisis. Heather Davis's making kin with our Plastic progeny used an example of Pinar Yolda's work *An Ecosystem of Excess 'If life started today in our plastic debris filled oceans, what kinds of life forms would emerge out of this contemporary primordial ooze?*[45]

The story of fossil is important to address at this stage to emphasize the relation of drying up of a significant river in context of climate change and new fossil fuels projects to support country's economy. During my ground research while talking with Geologists and Environmentalists including Dr. Babar Khan (Regional Head WWF, Sindh / Balochistan), Dr. Tabrez (Geologist), and Syed Amir Hussain (Divisional Forest Officer, Sukkur, Sindh) supported the state narrative of need of fossil fuels industry because of developing status of Pakistan and limitation of its economy to directly shift to the green solution to fulfill the needs of energy. At the same time there are voices here in Pakistan against fossil fuels, which got some visibility in last year climate protests in various cities in Pakistan.

IMAGE 7[46]

Through my research I tried to find artistic strategies which could be effective to address the current crisis in the local-global context while thinking about strategies of resistance and adaptability. I took the river as a site to visualize and represent the nature of climate change and its impact. In my art practice I occupy sites for certain amount of time as an act to resist, to disrupt and also to have an outsider view of it. During my field research, I chose to sit and listen while occupying the space. The active listening of those who are directly observing the change and are getting affected by it – listening to them became the most important tool for me to understand the loss, not just economical but personal and emotional. And I learnt through their stories and narrations about how we are interconnected through our water, air and earth – damage in a form of adding pollutants or over extraction of natural resources in one place will affect all of us sooner or later.

The outcome of my artistic research has been exhibited in the form of an installation Art at Uqbar, Project Space Berlin and The Research and Publication Center Lahore. The video titled **'How Much Time Does It Take for Fossils to Convert into Fuels?'** is also a part of the outcome of the research, which is under post-production.

How were the climatic changes which caused the decline of Sarasvati during late Harappan phase different from Indus and its threat to Climate Change?

IMAGE: Audio piece, at Uqbar, Berlin Photo: Hira Nabi

EXHIBITIONS

***A VITAL PIECE OF INFORMATION, FRAGMENTS OF GREATER CONTEXT,* 2019**
Oct 18, 2019 – Oct 27, 2019
Uqbar, Berlin
Curator: Thomas Heidtmann

INSTALLATION

Will Recalling Memories Recover the Lost?
Selected Accounts from Field Research

Print on paper,

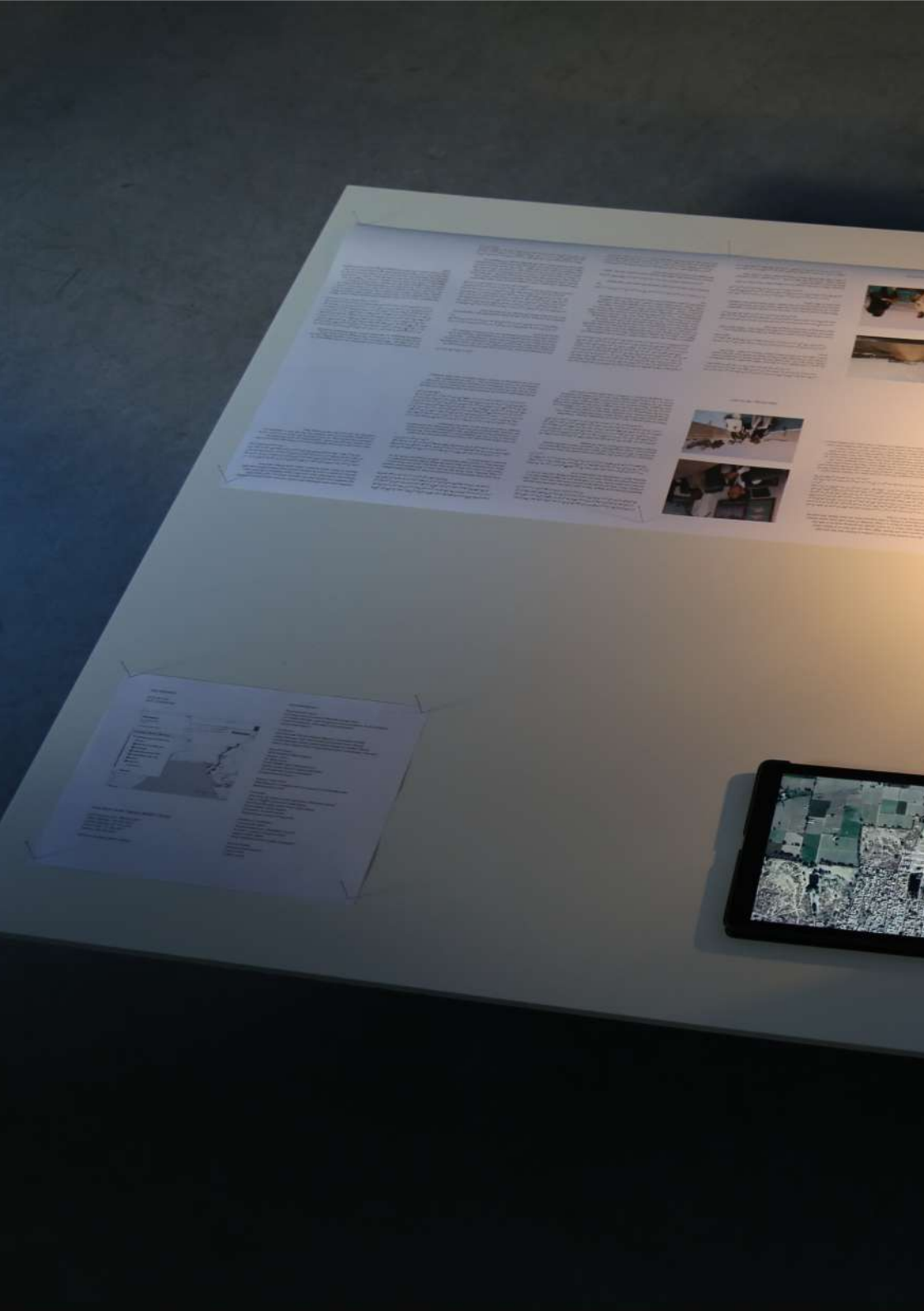
Video I, Screen
Video II, Projector
Video III, Tab
Audio, Headphones

UNMAKING HISTORY, 2019
Oct 30, 2019 – Nov 12, 2019
Research & Publication Center, Lahore, Pakistan
Curators: Natasha Malik, Saher Sohail and Laila Rahman

INSTALLATION

Can technology change the Past?

Video I, Screen
Video III, Tab
Questionnaire, printed on A4 size papers




civilization on the banks of dried Ghaggar-Ha
Indus River
Kotri Barrage, 18.02.2019, 9:41 Am


ra river gave more weight

IMAGE: Exhibition Opening, Uqbar, Berlin, Photo: Rubab Paracha

IMAGE: Exhibition Opening, Uqbar, Berlin, Photo: Rubab Paracha

IMAGE: Exhibition Opening, Publication and Research Center Lahore, Photo: Faraz Amar Khan

TALKS

Thursday, 12 September, 2019
SCOPE, artist talks & media salon
SESSION #85
Noor us Sabah Saeed, Linda Havenstein
SomoS Gallery, Berlin

Sunday, 27 October, 2019
Uqbar – Gesellschaft für Repräsantationsforschung e.V.
Schwedenstraße 16, 13357 Berlin-Wedding

Friday, 28 February, 2020
What's Your Mantiq?
A conversation with the artist Noor us Sabah Saeed
Mantiq of the Mantis, Lahore Pakistan

Wednesday, 19 February, 2020 [Postponed]
Indus Valley School of Art & Architecture
Karachi, Pakistan

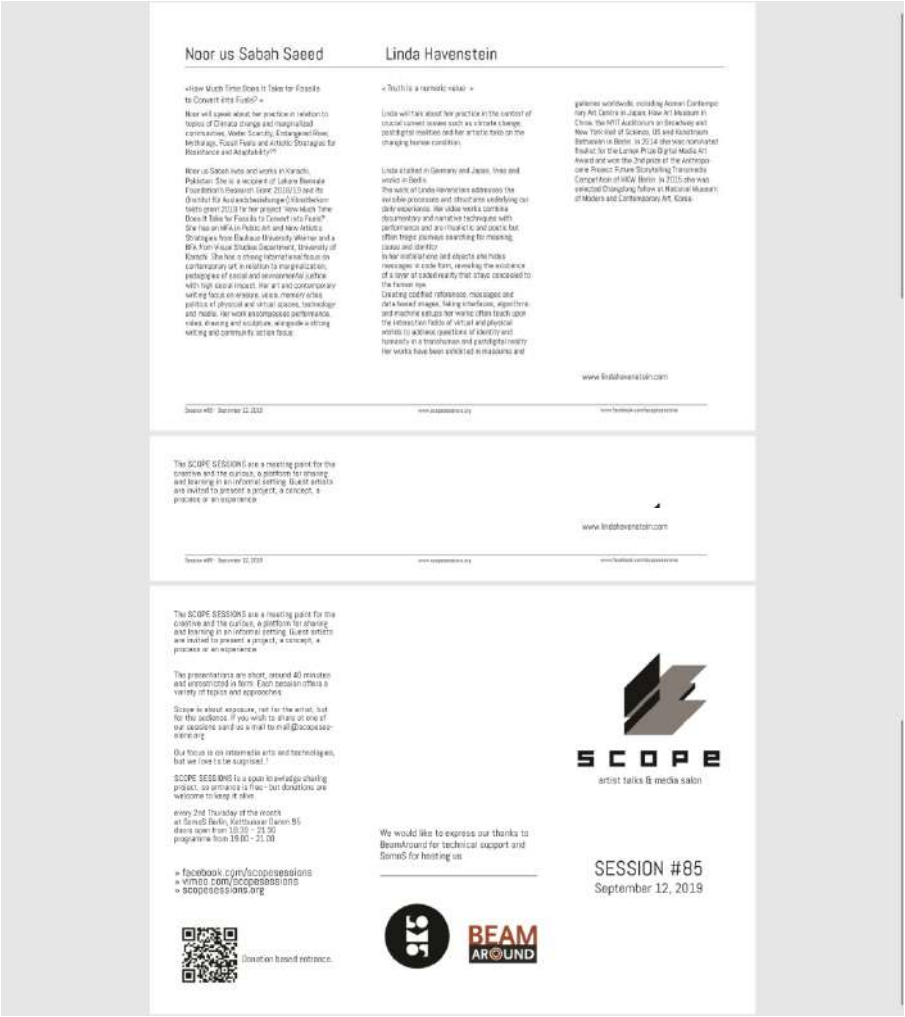
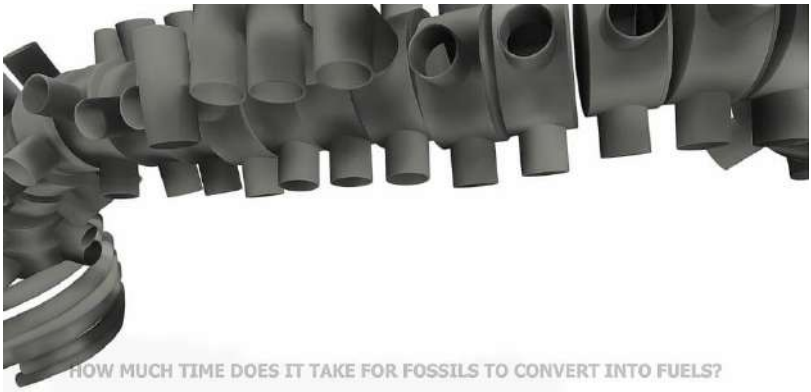


IMAGE: Invite, Scope Session 85, SomoS Gallery, Berlin

IMAGES: Talk, Uqbar, Berlin, Photos: Sofia Saeed



Indus Valley School of Art and Architecture
Department of Fine Art invites

Noor Us Sabah

Noor us Sabah lives and works in Karachi, Pakistan. She has strong International focus on contemporary art in relation to processes of marginalization and marginalized communities. Her community based projects; activism and interdisciplinary artist research has a strong theoretical and practical base. She has a range of significant exhibitions, residencies and participatory projects alongside artistic research training in Karachi, Weimar, Berlin, Copenhagen and Internationally. She has interest in pedagogies of social justice and projects with high social impact. Her art and contemporary writing focuses on erasure and voice, presence and emergence, exclusion and inclusion in relation to specific sites. Her work encompasses performance, video, drawing and sculpture, alongside a strong writing and community action focus.

She is a recipient of 9 months Fellowship Award at Künstlerhaus Schloss Balmoral 2020-2021. Noor us Sabah has an MFA in Public Art and New Artistic Strategies from Bauhaus-University Weimar and a BFA from the Visual Studies Department, University of Karachi.

Wednesday, 19th feburary, 2020, from 11:30 to 12 :30 at **Chroma room, FTV studio.**

IMAGE: Invite, Indus Valley School of Art & architecture, Karachi

IMAGE: Invite, Matiq of the Mantis, Lahore

Press

Exhibition*: A VITAL PIECE OF INFORMATION, FRAGMENTS OF GREATER CONTEXT,* 2019

*Article: **Algorithmus und Indus*** by Lorina Speder, TAZ

Exhibition*: UNMAKING HISTORY*

Articles:

*"You sit on a small chair in front of a laptop. You put on the headphones so carefully laid out for you. The title reads, 'Can technology change the past? The story of a disappeared river.' You are transported back to high school. **Noor us Sabah Saeed** has collected research material and transformed it into a video worthy of National Geographic. Her work is an attempt to understand the inclusion of recent findings and their impact on our collective history in the context of Pakistan."*

COLONIALISM ISN'T DEAD by Ameera Khan

Unmaking Histories by Saulat Ajmal, The Aleph Revi

Unmaking History by Ambereen Siddiqui, The Friday Times

Online Links[47]

IMAGE: Sent by Lorina Speder

END NOTES

1. Audre Lorde, "*A Litany for Survival.*" Copyright © 1978 *The Collected Poems of Audre Lorde by* Audre Lorde. Copyright © 1997 by the Audre Lorde Estate, Used by the permission of W. W. Norton & Company, Inc., Poetryfoundation.org, https://www.poetryfoundation.org/poems/147275/a-litany-for-survival

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"Saraswati is known as the holiest river of India, as much as it has retained its sacred character right from the Rigvedic age to the present day. The name`Saraswati' is frequently used most of the ancient literatures like Rigveda,Yajurveda, Mahabharatha and Puranas. The Rigveda is supposed to be the oldest text which was probably composed more than 8000 years ago. The river Saraswati is described in the Rigvedic literature as the 'Ambitame, Naditame, Devitame' that is the best of mothers, best of rivers and the best of Goddess. The river was one ofthe mightiest rivers of the Vedic period and must have been significantly broad andperennial. The Vedic Saraswati, a mighty and holy river of northwest India during6000-3000 B.C., originated from Bandarpunch glacier in Garhwal Himalayas andfinally discharged into the Gulf of Khambat in Gujarat coast and disappearedaround 3000 B.C. Several remnants of this river exist as palaeochannels (Ghose etal., 1979; Gupta, 1996; Mishra, 1995; Radhakrishna, 1999; Valdiya, 2002; Yash Palet al., 1980). Today the Vedic Saraswati River is represented by the Ghaggar Riverwhich flows on palaeochannel of Vedic Saraswati, located in the western part of the Haryana state (Bhadra et al., 2006). The Vedic Saraswati River has been flowingsub-parallel to the Indus River in NW India (Krishnan, 1952; Oldham, 1893; Pilgrim,1919; Stein, 1942; Wilhelmy, 1999)."

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Field Research Team
In-charge Drone Camera: Shahzaib Ghulam Nabi
In-charge Interviews and On-ground Documentation: Shazhar Hashmi
Travel Coordinator: Adil Jadoon (Khanabadosh)
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Facilitators:
Kotri Barrage: Ghulam Sarwar [Deputy Conservator Wildlife]
Sukkur Barrage: Syed Amir Hussain [Divisional Forest Officer]
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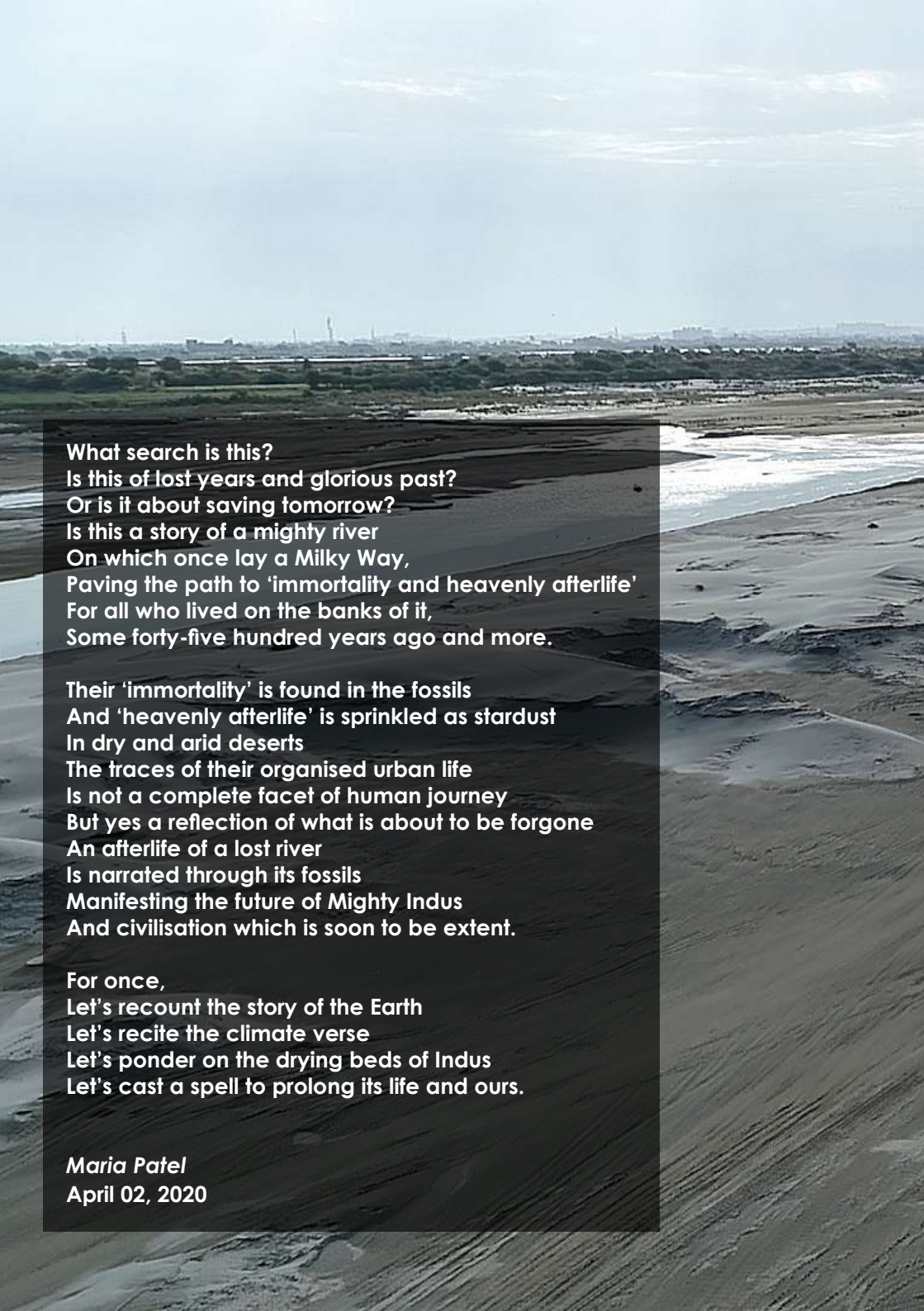

What search is this?
Is this of lost years and glorious past?
Or is it about saving tomorrow?
Is this a story of a mighty river
On which once lay a Milky Way,
Paving the path to 'immortality and heavenly afterlife'
For all who lived on the banks of it,
Some forty-five hundred years ago and more.

Their 'immortality' is found in the fossils
And 'heavenly afterlife' is sprinkled as stardust
In dry and arid deserts
The traces of their organised urban life
Is not a complete facet of human journey
But yes a reflection of what is about to be forgone
An afterlife of a lost river
Is narrated through its fossils
Manifesting the future of Mighty Indus
And civilisation which is soon to be extent.

For once,
Let's recount the story of the Earth
Let's recite the climate verse
Let's ponder on the drying beds of Indus
Let's cast a spell to prolong its life and ours.

Maria Patel
April 02, 2020

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