

WELL BUKSH STORYTELLING MUSEUM RESTORATION ANALYSIS PROJECT ANALYSIS SURVEY ANALYSIS PROJECT ANALYSIS SURVEY ANALYSIS PROJECT ANALYSIS ^{*} Fieldtrip 1. Fieldtrip 2. Fieldtrip 3. Fieldtrip 4. Fieldtrip 5. March -April -May 2014 September -November 2014 November -October -December 2012 April 2013 December 2013



Contents

Research Intentions prior to the fieldtrip	7
Surveys and Interviews:	
Actions	12
Resistance and Accommodation	14
Measured Wells Survey and restoration design report:	
Actions	24
Resistance and Accommodation	26
Reflections on Method	28
Photographs, Drawings	32
Discoveries about the Urban Order	38
Appendix 01: Well Survey Report (sample)	47

KEY

Red text

= indicates changes made to the research intentions after the previous fieldtrip

Strikethrough text

= indicates items completed during previous fieldtrip (most objectives are never considered 'complete' and can always be improved upon. However, a few are not considered worth repeating / refining and this is indicated by the strikethrough text).

Intentions for Fieldtrip 2

These intentions were modified during each fieldtrip: refer to the front of each field trip diary to see the progression of ideas.

Question 1. What are the relationships between architectural remains and culture at the scale of building, neighbourhood and Tajganj? (consider construction, maintenance, use, over time and cyclical time, symbolic value, archive of understanding).

1a. How does this build up depth in the urban order?

Intention formed from desktop study and reflection on previous fieldwork:

Through conducting collaborative surveys, interviews and making exercises (taking time, building up slowly, building trust, starting with

many informal 'on the spot' conversations):

- 1. Record the ways that the existence of a listed 'monument' affects its surrounding area.
- 2. Record the ways that the existence of an unlisted 'monument' affects its surrounding area.
- Investigate how and why specific buildings have been repaired and modified over time - record ownership + role of owner.
- 4. Find out which local buildings are important to residents.
- 5. Engage in conversations about the history of the area generally, how people imagine that history and in what ways it is important (progress, renewal or fate?)

6. Engage in conversations about Mughal and Colonial times - do these feature in current identity stories?

Produce:

- 1. Conservation "vocabulary" set of available materials and techniques in the area (come at this sideways, more openly: how and why do people make particular things out of particular materials?)
- 2. Maps of Tajganj at different scales, picking out 'historic' fragments of importance.
- 3. Building studies (plan, section) of listed and unlisted buildings relating to community activity.

Question 2. Compare ASI, CURE/RAY, local opinions about important culture and the architecture underpinning it, or vice versa.

Intention formed from desktop study and reflection on previous fieldwork:

Through conducting collaborative surveys, interviews and making exercises:

- 1. Investigate conflicts between the slumupgrading programme and Agra's heritage protection programme for Tajganj.
- 2. Find important memories and stories of local residents and compare these to what the 'official' heritage protection policies endeavour to protect.

Produce:

- 1. Comparative drawings of instances where architecture has perceived 'heritage' value at area/ building scale.
- 2. Guidance documents for repair of unlisted sites with perceived 'heritage value'.

Through desktop research:

Look further into area's history and why it is/could be valued by external 'experts' eg Mughal water technology

Question 3. What are local/collective understandings of the conflicts between various interpretations of 'heritage value'?

Intention formed from desktop study and reflection on previous fieldwork:

Through holding conservation skills workshops with residents:

Gauge understanding and develop it.

Through holding activities relating to the topic which engage people with different interests and enthusiasms - provide multiple ways to get involved:

- Build collective involvement/understanding in relation to sites of contention due to conflicting 'heritage' values.
- hold open ended activities where residents can bring in information they feel is relevant.

 Aim for truthful (less polite) discussion, which will take trust-building first.

Produce:

Records of event: both material outcome of making and interviews/ discussions with participants.

Surveys and Interviews: Actions

Instead of 'selecting' participants, a more exploratory method was decided upon where people are encountered during survey work and approached in informal conversation. The intention is to allow the interviews to snowball, as trust and enthusiasm increases.

Mapping historic change with resident groups

'Heritage houses' on the chowk were visited. I asked to look round, take pictures, especially from the rooftop, leading to discussions about the surrounding area with various family member groups. I aimed to be introduced to more people, as a snowball sampling method.

Semi-formal interviews after rapport building conversations were conducted with:

- raj mistry
- youth group (male)
- youth group (female)
- families hwo own heritage houses



Informal interview with Buksh family

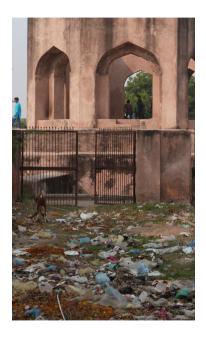
Surveys and Interviews: Notes on Resistance and Accommodation

Patchy historical information has been given to me by residents, a lot of conflicting stories, vague stories. However, there is a much better understanding of ritual, myth, & change of use over the last 30 years.

Most information has come from people over 60 years old, and i have often been redirected by other residents to go and ask these people.

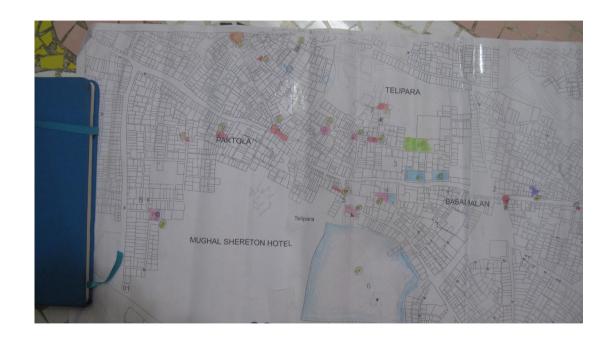
Lack of water in wells creates tension between religious past and the immediate problems of spatial scarcity. At different horizons the topic changes completely: ritual site, rubbish dump, nuisance, heritage structure.... I have realised that 'heritage structures' are being added to and changed quite frequently and dramatically - the wall around the tomb has been pulled down 'by drunks' according to some residents underlying, but I ask whether there could be a resentment of 'monumentization'? People are reluctant to own up to making changes to 'heritage structures'.

Surveying typical settings (houses, wells) has helped me to identify anomalous and recent changes/ construction techniques from different times and also the "typical" materials and techniques from different times. Slowly understanding was built up this way, alongside verbal interview.





This fieldtrip, the wall previously around the Tomb of Diwani Begum had been taken down, and steps had been made out of the rubble up to the tomb. The ASI were reportedly making plans to rebuild the wall, condemning these actions.





Map of area in the 1980s made collaboratively with resident groups

There is a bias to the information gathered, due to some people being much more confident and eloquent than others in conversation, drawing and mapping. Also only certain people would come up and introduce themselves or make enquiries when I was surveying. So the encounter and snowball technique was effective at taking steps towards a better understanding of the area, but also flawed.

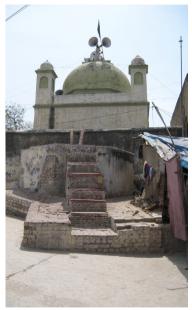
To a certain extent, visiting so many wells (20) shows that visiting several examples of a 'typical' of place can be a useful way of reaching out into a variety of social structures, and showing up some differences between them. It is still an encounter and snowball technique, but repeated again and again for 20 sites that are in some way comparable.

This turned out to be a good way to start talking about what "basti" means to people, as the wells are spread across several bastis.

Looking at typical structures has allowed a certain amount of trust to be built with residents, as people find it to be a believable task - ie. "I am studying Mughal wells" has more legitimacy than "I am looking at construction techniques" - perhaps investigations by art historians have been taking place in the area since colonial times so there is a knowledge of that type of study in Agra.

I branched out from 'well chowks' to study other kinds of chowk (temple, mosque, tree, panchayat) to further the area survey, and understanding





Mughal wells in temple chowk (left) and mosque chowk (right)

of "shared space" in Tajganj. It became obvious through interviews with families that Tajgani is extremely gendered. Young women do not regularly use "shared space", except for religious events, and socialise inside the house with other close female friends and family. This makes it even harder to get unbiased interview information from the 'encounter and snowball' technique: meeting young women to introduce us to more of the group is not easy if they mainly stay inside their houses - which relies on meeting somebody who will then introduce us to the young women in that house (great opportunity for missing out groups of women).

I made a point of looking for social structures (clubs,

hobbies) or potential social structures (shared interest) among women to try to counteract the bias of female opinion that might come from only meeting women in the houses we were invited into. There were still rumours travelling between residents regarding my purpose - some people still believed my information was going back to tax/planning departments. Others believed that I had personal funds to spend on charitable causes (expectations were raised).

I didn't want to raise false expectations, so I just discussed case study wells in a hypothetical way with small groups. This had disadvantages, as most answers remained vague. In small groups, people were more honest, and conflicts between groups'



Meetings with womens' craft groups took place within their homes



points of view were better exposed - which also told me more about 'bastis'.

Over this survey trip, the young men sent with me as translators, who were being trained as tour guides for CURE's heritage walks slowly revealed their very deep understanding of the area. As translators, this created a few problems at first because they added to other people's answers and also my questions with their own opinions.

I interviewed the guides about Tajganj. From this moment on, they became researchers with me, rather than translators.





Tour Animators became crucial co-collaborators

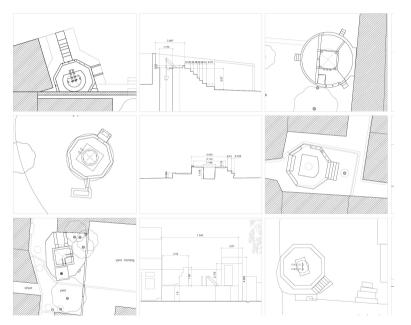
Measured Wells Survey and Restoration Design Report: Actions

It is decided to survey each Mughal and colonial well in Tajganj, starting with the wells on the heritage walk, and moving out from there, time allowing. This is due to the fact that the wells tend to be known about by a lot of people - they feature in people's memory of Tajganj. It is also because the wells tend to be in a communally used place, whether religious or publicly owned - hopefully this will mean there are less issues with trust as tax evasion/lack of planning permission are less ikely to apply.

'Heritage structures' and the chowk around them were measured, photographed, and mapped.

CURE asked for restoration design options to be drawn up for each well as part of a groundwater

recharging programme which will use some of the dried up wells (see end of boklet for sample report).



Well survey examples

Measured Wells Survey: Notes on Resistance and Accommodation

Some wells are surrounded by residents with strong opinions, while others are disregarded or considered a mild nuisance. It was harder to get an idea of how a well should be treated if there are no strong opinions.

There were particular cases of resistance for surveying and doing interviews for each well. There were also common resistances. For example, there was an uncomfortable relationship with ownership and getting planning permission and owner permission. It was very difficult to get permission for anything other than 'invisible' repair. Wells owned by individuals created situations where only one person's opinion needs taken into account (ultimately) and so actually the most fruitful

conversations with real possibilities of dialogue about 'heritage'. These are when a well was privately owned by a collective group of some kind with a wider user group/constituency that they wished to please. This always seems to be religious. There was also sometimes confusion of ownership with more than one group claiming ownership.

For this reason, the Shiv temple well became the main case study well at first, as there was no issue with me spending all day there, measuring and mapping use and time cycles.



Informal conversation at a well during survey

Measured Wells Survey: Reflections on Method

Broaching complex subject matter (heritage, memory, authenticity). History is a reconstruction, it matters if the information given is patchy or in conflict. This reconstructed information is the context for interpretation that makes Tajganj what it is: am I writing off the exact thing I should be taking very seriously through being a 'stickler' for historical facts?

Theme: Heritage Value and Contentious Space

Certain houses demonstrate conflicts within heritage protection.

Theme: Relationship to the city/local vs state politics

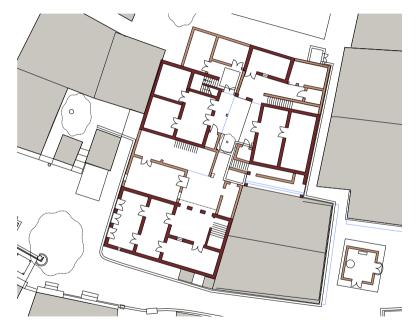
HUGE CONFLICT was found between institutions of collective effort and new expectations of state-

delivered services. The wells have dried out. The Taj East Drain floods regularly. These things are perpetuated by local residents, but they expect the state to sort the problem, rather than feeling that they should change their behaviour generally speaking.

Theme: Role of objects in building understanding

The wells themselves can be interpreted to get extra information about the past town.

Theme: Thoroughness/inclusion: There is a need to develop the idea of 'inclusion' from "inclusion-through-selecting-a-cross-section" to creating openness. I need to try out different techniques of



An example of a house that has been adapted over time to suit its current purpose

including people in interviews and meetings and also methods of identifying 'gaps' where people are being left out.

Theme: Time and Iteration: Gaining trust, buildiing understanding - building commitment to understanding/involvement

I investigated cyclical time - the day/week/year - more carefully, mapping activity within the place, looking at exactly who and how this relates to commitment (or confusion of ownership).

Theme: Thoroughness / inclusion: use women's friendship ties but also use shared interests between women who have not met for groups.

Theme: Active Involvement

Rapport building/trust building is not about CONVINCING residents into doing what you want. It is about building up enough trust for both sides to be honest. Part of this is for participants to trust each other to be honest too. There will be shades of involvement from different people. Guides built up knowledge during the research and found the best ways to explain the difficult topic to different groups in a relevant way.



Meeting with male youth group in Diwanji ka Mohalla

Photographs, Drawings









Visit to Akbar's Church (1598) and St Mary's Church (1865). Both structures are being repaired with paints and techniques that work against ASI guidance: these structures are not in identified 'slum' areas - lack of respect for ASI guidance is not related to income level / class.









Visit to Mughal Heritage Walk in Kachhpura (a neighbourhood in Agra in the north east of the city)









Visit to Ahmedabad Heritage Walk and stay in 'heritage haveli'

Discoveries about Urban Order

Conflicting horizons of heritage values were found. through studying typical settings & conducting informal interviews.

A HUGE CONFLICT was found between institutions of collective effort and new expectations of state-delivered services. These things are perpetuated by local residents, but they expect the state to sort the problem, rather than feeling that they should change their behaviour (generally speaking).

By creating surveys of old houses - more of an urban pattern is starting to become visible, gives clues towards the evolution of differentiation of space.

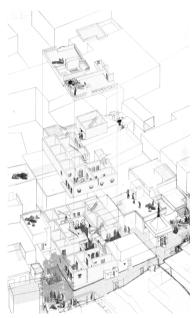
I have realised that restoration with contemporary

materials is popular - not just in 'slums' but by a lot of institutions eg Akbar's church. No obvious precedents of the 'good practice' that CURE/INTACH etc refer to were found anywhere... a bigger cultural conflict with ASI than just 'slum' culture.

The intentions & limitations of the ASI's protection of monuments.

A pattern of many shared 'chowks' becomes much more clear through mapping. These places were differentiated in accordance with religious use and appropriateness. (nothing else is strong enough to stop encroachment?). This makes the bazaar street: a non-religious institution seem all the more significant.





Additions are being made to identified architectural heritage, and some of these additions are low quality / damaging to the existing material / unsafe. However, they also allow the buildings to continue to serve their purpose as homes.

There is no obvious change passing from 'slum' to areas not considered to be 'slum': while 'slum' and 'not slum' are binary, in actual fact where the line is drawn appears to be guite subjective.

There is another kind of place in Agra: gated colonies for rich people. Given that the labelling of 'slums' just referred to the very worst examples of quite typical urban environments in the city, it is unclear whether any ungated urban areas are something different to slum settlements - no such place was fine.

Many of the old chowks have adapted to suit certain cyclical events, such as weddings or rituals. An interview with youth groups revealed the gendered use of urban areas, highlighting the importance of religious practice in the reproduction of social structure. There is an aspiration for "open green space": parks/gardens.

An interview with mistries showed a lot of talent and understanding of conservation of historic buildings locally, however these people are employed to repair the tourist-visited sites that make money, out-pricing any local ventures wanting to use the same people. Mistries work for citywide contractors on protected buildings and hotels/ university buildings - another way that monument protection causes harm.

Involvement with "heritage" is varied. There





Chowks in different bastis are usually linked to religious practices, and this is why people commit to maintaining them.

are some people in the area with a deep wisdom of place, understanding of architectural order, decorum.

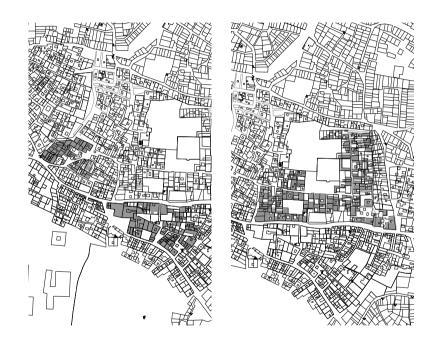




Left: a home-owner describing the historical architecture of his house in great detail, and how he repairs it.

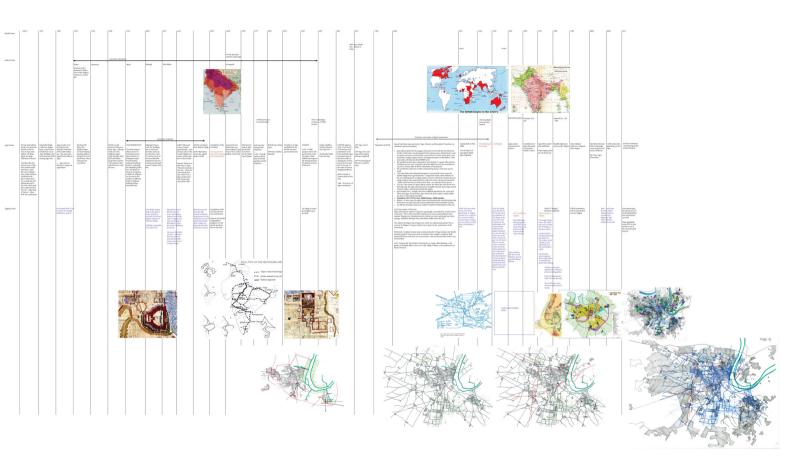
Right: the UNESCO protected Red Fort

Post-Independence bastis (opposite page) have been planned in a very different way that pre-Independence bastis (this page). The Post-Independence bastis were sold in plots along straight streets, creating completely different shared spaces (streets mediate between houses instead of chowks)





Shared spaces observed in the Study Area



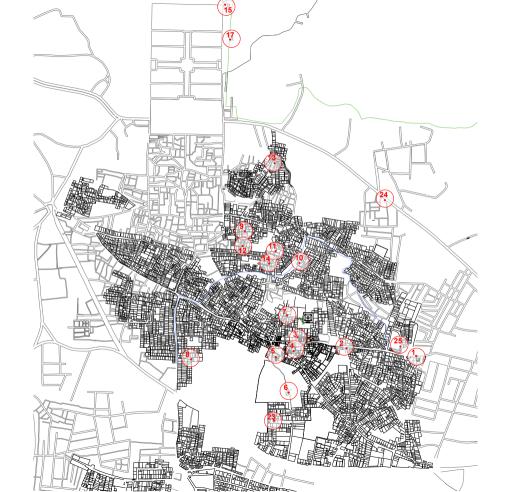
Appendix 01:

Well Survey Report: Sample



Suggested strategy for the conservation, repair and renewed purpose of historic dug wells in Tajganj, and the public/shared spaces that they occupy

Report compiled by Rachel O'Grady (LMU) to accompany the Pilot Project under RAY for In-situ Upgradation of Slums in the Tajganj, Agra



Contents

Principles	2
Livelihood Opportunities	4
Community Empowerment	5
Wells and the Tajganj: Understanding the historic context	6
Wells and the Tajganj: Understanding the cultural context	9
Inspiration/Materials Study	1
Arriving at Principles for Well Conservation - detailed guide	1
Conservation Strategy by Well	2

Principles

Over the following pages, the concepts behind the conservation and renewal of the Tajganj wells are explored in detail. This research led to the principles below:

- 1. Many of the remaining wells constribute in some way to culture. Sometimes this is local culture - the well has value to the neighbourhood in which is situated, and sometimes they contribute to a wider culture as well, giving useful information to historians and academics, for example.
- The nature of the conservation technique depends on the decision as to whether the well is to be primarily a historic record, or whether another facet of its cultural contribution is more important.
- 3. The well can either be repaired and preserved in its ruinous state, restored based on historic records, or conjecturally restored by local craftsmen. As all of these methods would benefit the Tajganj community in different ways, a mixture of the above techniques could be employed.

For example, perhaps when a well is on the heritage trail, it may be left closer to its ruinous state to show the historic fabric, and when it is far back in a temple complex or it has little ornament or detail remaining, it can be used for restoration craftsmen to practice their trade.

Three particular groups can be taken into account when planning the work.

The first group is the **cluster of communities** that makes up the Tajganj. Conserving the wells may strengthen community by bringing people together for discussion and to learn skills. It may also strengthen community by becoming a historical record, educating visitors as well as residents about the area for hundreds of years to come, contributing to civic pride and creating livelihood opportunities such as tour-quiding.

The second group are the **experts**/enthusiasts who may have a particular interest in Mughal architecture and could be drawn to

the site as tourists, so it is important to conserve in a way that they will appreciate.

The final group would be **tourists** who do not necessarily have prior knowledge about the area or the architecture, but who are site-seeing, most probably paying to participate in the heritage walk. This group will not necessarily be able to learn much from the wells in their present state, but could find restoration, murals or plaques helpful.

Using the wells for recharge

At the moment, the wells cannot be restored completely because they are dry. They can be restored as memorials of wells, but not as wells. This redundancy in many cases stops them being meaningful to the community. Sometimes, they are ornamental and interesting enough to be educational, and the fact that they are redundant does not matter. But in some cases the lack of purpose means that they are a hindrance to the community and will probably be destroyed in the near future.

This would be a shame, because these wells are feats of engineering - huge containers in the ground, that would be very expensive to build anew. This kind of robust underground container is perfect for addressing a new desperate need in Tajganj - the need to recharge the rapidly disappearing ground water. It could be argued that groundwater is as much Agra's heritage as its monuments are, and it needs conserving too.

In some cases, it is possible that the physical changes required to convert the well into a recharging instrument would damage its educational role/place on the heritage walk too much, and erase its cultural contribution. However, with careful detailing and a respect for appropriate surface treatments this new purpose for the wells could encourage the community groups to care for the wells once again, increasing their cultural value in different ways.

Livelihood Opportunities

Existing Local Builders and Craftsmen/women

- · repair and renew the historic structures
- decorate and add detail
- needed for the construction of additional street furniture, plaques and statues
- · teach younger local people these traditional techniques

Skills for Young People and People Without Employment

- · learn skills from local masons and craftsmen
- earn the techniques in making the new components needed for water collection and recharge
- livelihoods created in gardening and maintenance of the spaces and water collection

The Heritage Walk

By conserving historic parts of the neighbourhood, and marking out a route between them, the heritage walk is more likely to become popular with visitors. This could lead to:

- · local young people trained in leading tours of the area.
- market stalls and shops have new buyers if visitors are passing through, and there could be a demand for other products such as local crafts
- if the area becomes very popular with visitors, there
 is an opportunity for local people to put on shows and
 performances drawing on cultural heritage such as dance,
 dove fights and music
- · increased demand for restaurants, cooking classes, tea
- opportunity for people to open museums/galleries/heritage house, art classes (eg marble inlay)
- in turn this increases demand for building maintenance, facade painting, interior decoration









Community Empowerment

Mothers and children

Currently it has been identified that there are very few parks in the area, and most of the public spaces are used by the village's community of older gentlemen, or groups of teenagers and young adults.

There are hardly any playparks and places for mothers - this could be changed in this project.

Group Endeavour, and Decision Making

Asking community members to come together to discuss and decide upon the changes made to their physical environment is a strong model for how they can maintain their environment from now on.

Education

Everybody involved has the opportunity to learn about the history of the area, the skills involved in historical analysis and conservation, as well as construction methods.

Reliable Water Source

Working together to create their own reliable water source through rainwater collection could give people the power to better look after their family's health. The convenience of the system could enable people to concentrate on more important things such as education and livelihoods.

Civic Pride

Learning about the history of their area and restoring it to a cleaner and more attractive state should boost civic pride, and inspire further efforts to improve and maintain the physical environment.



Wells and the Tajganj: Understanding the historic context

The area that we now know as Tajganj was made up not only of the grand market just below the Taj Mahal but also the cluster of villages that tended the land here right up until Agra's extreme densification around the 1980s. Many of these villages were made up of people with special artisan skills - brought to the capital of Mughal India from as far as central Asia by the emperor himself.

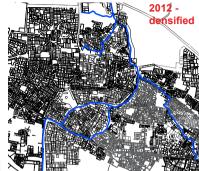
These villages were largely made up of earthen buildings. Now, with the popularity of development and modern construction techniques, few physical clues remain to tell us about the cluster of villages and traditional village life that the present Tajganj grew out of.

One clue that does remain is a scattering of village wells and the chowks that have often formed around them. Where there is a well for drinking water purposes there must have been a community at the time of its construction. The scale and frequency of the wells and spaces give us an idea about the size and distribution of these communities. The haphazard shapes of the chowks tell us about the rapid growth of these places - they were not designed to be urban or dense, unlike the Taj market itself - and this haphazard growth gives the area its character.

From looking at historic maps, and talking to local residents, we can be confident that the historic wells in the Tajganj were built in the Mughal and following Colonial era.

Tajganj, at the south-eastern edge of the Mughal city, was also the route into Agra (then capital city) for many visitors and traders. Wells were therefore built for agricultural use, for garden irrigation, to quench the thirst of travellers and their animals, and to supply the growing residential neighbourhoods with drinking water too.







The following extracts are taken from the paper *Re-imagining Agra: Fluvial Geographies of Historic Cities* by Kahn S. and Mishra S.

Mughal Era

"Dependence on ground water was high and wells were the most important sources of water supply in Mughal Agra. Depending on the local geology and hydrology, the construction material varied between brick / stone masonry, earth and hewn stone (gadawali). The typology of the wells depended on the investment and expected returns apart from the geology and hydrology. Gazetteer of India (1884) records the presence of as many as 70,622 wells in Agra district for irrigation, and 4991 wells for drinking purposes of which 87 % were earthen1. These, having a short life span of 10-15 years, were mostly dug for irrigation purposes by the landlords themselves. The brick / stone masonry wells were mostly constructed by the Emperor for the people and were maintained by the community using it. There were some large wells in the city like that of Kamal Khan and Ladli Begum Garden which were built as part of a large garden residence, but later were used for irrigation. It is said that water from these wells was drawn using as many as 32 Persian wheel system and could easily cater to 20,000 people62".

"On the management front, land revenue became one of the tools that helped the rulers develop immense foresightedness about fluvial resources. It being one of the most important sources of revenue for the State, the rulers ensured that all possible facilities were extended to the peasantry for a good harvest. Several large water structures such as tanks, baolis, and wells were constructed by the Emperor and managed by the community using it. However, there were many others built and managed completely by the communities – the State playing a role of no more than a facilitator in such cases. The partnership between the Citizens and the State, cemented by a thorough understanding of the available resources, nurtured life and culture, and facilitated agrarian development and trade

and commerce. Together it combined to make Agra one of the grandest of all the pre-modern cities".

Colonial Era

"One of the major problems faced in the country and city during the 19th century was famines. Large irrigation projects were developed by the British to tackle this problem. Agra and Rohta canals came into being around this time. Opened in 1874, Agra Canal originated from the Okhla barrage, south of Delhi by creating a weir at river Yamuna. In the beginning, it was available for navigation in Agra district apart from Delhi and Mathura: later it was used solely for irrigation. Rohta canal flowed south of the city towards Taj Mahal irrigating the area around it which included the Circuit House and the Elizabeth Garden (now known as Shahjahan Park). Canal irrigation in Agra mostly catered to the villages in the west and south-west of the city. The traditional wells continued to supply water in other parts of the city. 1891 saw the introduction of piped water supply which finally destroyed whatever had remained of the water systems that had evolved during the Mughal era".

Historic Stories Told by the Wells in Tajganj:

Mughal Ingenuity

The evidence of persian water wheel and rehant technology (a system of using animals to move the wheel) can be seen in the design of the Mughal wells. Although the wheels are no longer in place because the wood has rotted away, the stone pegs and brackets used to hold the wheels remain. The fact that wells are positioned at points along the aquifer are proof that the Mughals had a great knowledge of fluvial technology.

The technology was not just applied to provide water for basic needs, but also to irrigate the paradise gardens, funerary gardens and to fill the tanks of important mosques. This can be seen in Tajganj: a well can still be found next to the mosque of Diwani ji Begum that is located just slightly higher than the tank inside the mosque grounds: water would have flowed through a channel from this well and into the tank.

Civic Activity/cooperative neighbourhood

In Mughal times, wells were not repaired and looked after by a state, but largely by their surrounding communities. This required collective decision making and cooperation: respect for the wells was crucial to having access to clean drinking water, and most importantly this inspired trust between community members. The necessity of gathering water from the wells brought people together at certain times of day, gathering around the well. This created civic activity in the public spaces, and can be assumed was a key factor in many of these public spaces surviving encroachment and remaining today.

TajGanj was an important route into the city

A surprisingly large number of wells have lasted for hundreds of years, partly due to the respect and care of the community, and partly because they were built skillfully from grand materials. Landlords and the emperor invested in these wells. This was partly because they supported livelihoods and agriculture, which

created revenue. However, some of these grander wells, such as the colonial-era well along the bazaar street in Bilochpura, were built for providing only drinking water. This tells us that it was important for the residents to feel that a grand impression had been made to passers by, and so this route into Agra was well used and important.

Tajganj as a place of fine craftsmen

Many crafsmen: masons, stone carvers, inlay artists moved to the TajGanj area during the construction of the Taj Mahal. The very high level of masonry skills can be seen in the remaining wells: a time without cement mortars, the well aprons were carefully crafted to catch water and then drain it to troughs and containers through stone channels. Decorative techniques such as the use of carved bricks to create curved surfaces can be seen, as well as arch construction techniques.

A place of religious cooperation

Wells of very similar design can be found in front of mosques and temples in Tajganj indicating that the same group of masons and craftsmen would have worked in either place at around the same time. There was at least some level of cooperation and agreement that all community members of different religions should have access to water.

Agriculture

The remains of irrigation channels and rehant systems (which would have drawn gallons of water - far more than would have been necessary for drinking purposes at the time when these villages were not overly populous - clearly indicate the use for irrigation.

Wells and the Tajganj: Understanding the cultural context

Sense of Place - Landmarks

The wells were used up until the 1980s and 1990s when they dried up. This meant that while the area was densifying and there was much encroachment, a space around many of the wells has been protected so that people could continue to gather and get water. In this very dense neighbourhood, there are not many open spaces for the community and these well spaces are extremely valuable to their community.

Because the spaces grew haphazardly around the wells, they are each a unique shape and give the villages their character. Because of this well and space together are local landmarks and are often the location of something else like a streetfood vendor.

Religion and Prayer

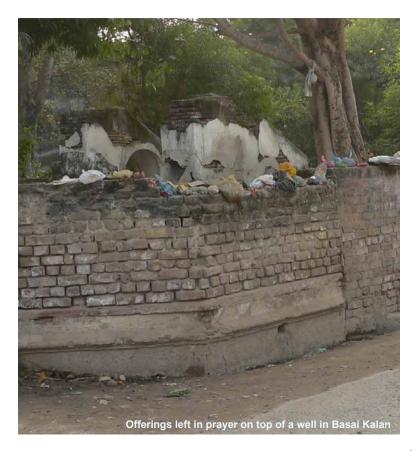
Wells are valued by both Hindu and Muslim communities because in both religions water is sacred. The Hindu communities leave flowers and offerings at the wells to pray for new marriages and new babies. When a well is associated with a mosque, water from it is often believed to have special healing or strengthening powers. Wells are often found in temple complexes or next to mosques.

The effects of the wells drying up

The dry wells are often filled with rubbish, which makes the surrounding space less pleasant - an indication of poor waste disposal systems in the area. Many wells remain uncovered, making the space highly unsuitable for young children to play in.

The cultural effects of a change in water supply

Wells and well spaces used to be a place where women would gather at certain times of day to collect water. Although it is highly advantageous nowadays for water to be supplied directly to the home, the effect is that only a few spaces (with shrines) are seen to be places where women want to gather, and most of the shared/public spaces in Taiqani are used mainly by men.



Inspiration







58 Van Eyck

Arriving at Principles for Well Conservation

In his essay of Modern Cult of Monuments: its Character and its Origins, Alois Reigl wrote that 'rubble alone reveals no trace of the original creation.' At the moment of discovery of a ruin, (for now I shall describe this as a building or artifact yet to undergo conservation or repair), the conservationist decides whether or not this object has value, and then may choose to bring out this value in order for it to be read and understood by any visitors thereafter. This process of 'bringing out' a certain perceived 'truth' by the conservationist usually focusses on what the original intent of the object's creators would have been, leading to an attempt to preserve or restore the object to an 'original state'. Thus it is hoped by the conservationist that future visitors will read the creator's intention through the conserved work, rather than the intention of the conservationist themself.

A ruin however, holds copious 'truths' or values that can be brought out or even applied through conservation practice, and as it is likely that one value brought out will compromise another, the conservationist must decide which to prioritise. Once 'brought out', these truths can be interpreted in any number of ways by the future onlookers, and the place between 'truth told' and 'truth read' is the span that conservationists try to bridge. Of course, the onlookers are not extracting meaning purely from the object itself: the truth that they read in the object will be as reliant on the background of relevant knowledge that they have built up as it is on the information brought out and provided by the conservationist. The background of knowledge that the conservationist believes onlookers are likely to possess will affect the way in which he/she brings out his/her chosen values in the object.

The conservationist is therefore much more than just a facilitator allowing a truth to be transmitted from the object to the viewer. They are a story-teller, and also curator: for they must select the ways in which this story is to be told, and perhaps to some extent the ways in which it is heard too.

In this essay I use the term conservationist to mean any person who chooses to bring out a truth or value of an historic building in order to convey meaning to further viewers. This

includes craftsmen, building contractors, architects and property owners as well as those who describe themselves as qualified conservation professionals.

Why do we Conserve?

1. Historic Record

Alois Riegl suggested that monuments are most often identified as such because of their 'historical' value. That since the European enlightenment period, an object that contributed to the viewer's knowledge of history, (and to national and international historical discourse) was considered necessary to conserve as a monument. It was the monument's role as a record of part of a chronology of important events now past - history - that gave it value to people.

Riegl also suggested that the monument's role as "evidence that time passes" gave it value. However, a monument's role as a historical record is seen more widely in western discourse, (the discourse that forms the basis for the conservation principles of the Archaeological Survey of India), as the reason why we should conserve. For example, many principles of international bodies such as ICOMOS and UNESCO came out of the writing of John Ruskin:

"And if indeed there be any profit in our knowledge of the past, or any joy in the thought of being remembered hereafter, which can give strength to present exertion, or patience to present endurance, there are two duties respecting national architecture whose importance it is impossible to overrate: the first, to render the architecture of the day, historical; and, the second, to preserve, as the most precious of inheritance, that of the past ages".

- Ruskin , Lamp of Memory

2. Contribution to Culture

Now international discourse on conservation has moved away from being 'monument focussed' in favour of the preservation of cultural heritage, both tangible and intangible. It would now appear that a monument or site's contribution to culture, (and history may be a part of that culture), is the driver for its conservation.

"It is obvious that culture in itself is our most precious heritage. The monuments and sites are material expressions of this".

 - Jukka Jokilehto The Idea of Conservation. An Overview - from Proceedings of the International Conference of the ICOMOS ISC for the theory and the philosophy of conservation and restoration held in Vienna, Austria, on April 23-27, 2008

Politics, aesthetics, religious value, and cultural symbolism have all been used as reasons to conserve and restore, and they are still clearly used as reasons today. For example, although both the Taj Mahal and Robben Island are rich as historical records alone, it is the Taj Mahal's fulfillment of UNESCO Criterion 1, representing "a masterpiece of human creative genius" that earns it a place on the UNESCO World Heritage List, while Robben Island is given its listing due to symbolism -"its prison buildings symbolize the triumph of human spirit, of freedom, and of democracy over oppression5".

Conservation has frequently been used politically, because of its power to reinterpret history to future viewers, and because it can be used to contribute to public architecture, the civic, and therefore collective pride. For example, the restoration of bomb-damaged buildings such as the Frauenkirche of Dresden, Naumberg Cathedral or Warsaw city centre were deliberate postwar actions to raise morale.

It is perhaps interesting to note that 'use' in almost all discourse on criteria for conservation plays a secondary role to values such as historical record, cultural symbol, or work of art, (see opposite).

UNESCO World Heritage Sites - Selection criteria:

- · to represent a masterpiece of human creative genius;
- to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- to be outstanding examples representing major stages of earth's history, including the record of life, significant ongoing geological processes in the development of landforms, or significant geomorphic or physiographic features;
- to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals:
- to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

Conservation in India

Informed Restoration

Although the first national conservation principles were framed under colonial rule in the late 19th century, conservation and restoration practice at least with regard to religious buildings have a much longer tradition in India, and favour restoration and rebuilding at the hands of knowledgable craftsmen. There is an entire chapter devoted to restoration in the 6th century Indian treatise on architecture, the Mayamatha.

Those temples whose characteristics are still (perceptible) in their principal and secondary elements (are to be restored) with their own materials. If they are lacking in anything or have some similar type of flaw, the sage wishing to restore them must proceed in such a way that they regain their integrity and are pleasantly arranged (anew); this (is to be done) with the dimensions – height and width – which were theirs and with decoration consisting of corner, elongated and other areas, without anything being added (to what originally existed) and always in conformity with the initial appearance (of the building) and with the advice of the knowledgeable.'

Material Preservation

In contrast, the colonial Asiatic Society, which became the Archaeological Survey of India, (the body which dictates today's conservation practice in India relating to listed monuments), is based upon western Ruskinian conservation principles, promoting minimal restoration and the protection of original fabric.

India therefore inherits two (sometimes opposing) sets of conservation principles. Any building or site listed by the Archaeological Survey of India is subject to legislation inherited from colonial decision-makers. However, at present only 4000 monuments are officially listed in India. The rest are subject to a mixture of conservation principles and methods.

Conjectural Restoration

On top of this, the only widely published Indian guidance on the conservation of unlisted monuments is written by INTACH, the Indian National Trust for Art and Cultural Heritage. INTACH suggest that there is a place for conjectural restoration where an ASI listing is not in effect:

"Local master builders build, rebuild, restore, renew and make additions/ alterations to historic buildings in response to contemporary exigencies or evolving local needs of the community; they must be encouraged to follow their traditions even when there is no available evidence in the form of documentation, oral histories or physical remains of previous structures".

Advantages of Material Preservation vs. Conjectural Restoration

Material Preservation and Informed Restoration (ASI)

Contributes to Community Engagement because residents are able to interpret the history of their neighbourhood, and tell others about it - can encourage civic prode and related livelihoods such as tour-guiding.

Residents can engage with international historic and conservation discourse, changing the opeinion of the authorities that they cannot be responsible for their own environment

Conjectural Restoration (INTACH)

The activity and group decision making strengthens sense of community

Taking part in the building process contributes to shared knowledge of traditional crafts and construction techniques

Creates work for craftsmen and keeps their knowledge alive

Conservation Agendas: A Balancing Act

International Relevance:

When it comes to hisotrical buildings, **Agra is on the world stage** and we must not forget this.

If a community repaints a mural, it may no longer be considered relevant to international historical discourse on art history. This is an important consideration, because at the moment, authorities are not giving more control to communities because they do not feel that they understand this international discourse, or its importance. We need to make sure that through this project, local understanding of this kind of historical discourse grows, in order to demonstrate that the community do deserve to be part of the discussion.

Local Relevance

It it obvious when conducting interviews with local residents that a knowledge of the area's history is rapidly being lost. This erodes civic pride and sense of community. It also reduces the chance for people to contribute to the built environment with regard for the historic context.

Monuments in the area have stories. They are used for local religious practice as well as forming the centre of public spaces and contributing to festivals. It must be a priority to keep this cultural relevance to the local communities.

The Heritage Walk

Many of the wells in Tajganj will have a place on the heritage walk. They will therefore become talking points for guides, and however they are protected or restored, we must think about how they will contribute to this tour. For example, if completely plastered, the community will have learnt plastering skills, but the visitor might be less interested in this finished product compared to the ruin that was there before

How can conservation benefit community?

The way that conservation can contribute to local culture can be divided into two themes:

Bringing people together

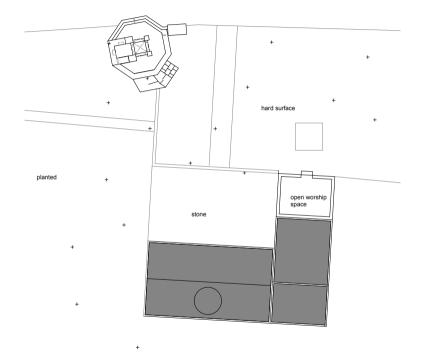
creating a forum for discussion and knowledge exchange. Restoring the monument's role in the town results in the revival of practices, livelihoods and activity: it is something to be cared for, something that acts as a centre point in festivals, something that people have to discuss because they collectively share it.

Ability to educate

The conserved object can contribute to a historic discourse. If done badly, this will not be truly educative and can dictate a story: forcing a point of view upon people. However, if done well, it can add to community members' knowledge of (and pride in) their area and give them the tools to form their own opinions about the changes they wish to see in their environment.

Conservation Strategy by Well

Well 1: Shiv Temple Complex



Notes

Educational Value of Existing Material

- The structure above ground has now been repaired and replastered by traidtional masons in a conservation skills workshop.
- The octagonal shape of the red sandstone apron, the form of the structure (with arched window and niches), are interesting historically the fact that the same shapes are used across may of the wells in Tajganj show a certain amount of cooperation across religious or community boundaries as obviously the same craftsmen have been used for the Shiv temple as have been used for other spaces such as outside masjids.
- The stone and concrete chute coming from the side of the apron tells us that this well was used until even quite recently for irrigating the temple garden an integral part of the temple complex and its cultural heritage and practice.
- At the moment, the well looks 'half finished' as the structure is completely renewed, and the apron still looks old and broken.
 This will be addressed in the next stage of work in the Shiv temple complex.

Existing Associated Cultural Practice

- Recently the well was used for a conservation skills workshop, showing members of the community how to repair historic structures with traditional techniques.
- People still leave flowers and idols at the well for prayer
- When weddings take place in the complex, people pray at this well

Surrounding Space

- The temple complex contains a Shiv temple and open worship space from mughal times (around the 1630s, when the Taj Mahl was built, we are tid by the community). There is a large garden/orchard which once grew the fruits for the offerings used in worship.
- There are plans to use this space for recharge, and community activities such as a vegetable garden.
- At the moment, the shady and not overlooked \$\frac{\pmathbf{s}}{3}\text{ace} is not used much by women.







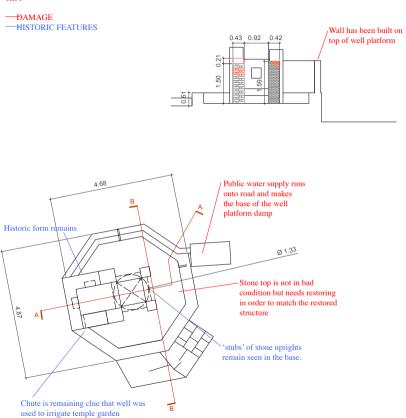
Potential for encouraging Skills and Livelihoods

The construction skills workshop has shown that there is potential to use the skills of local traditional craftsmen and masons and at the same time educate community members about these skills.

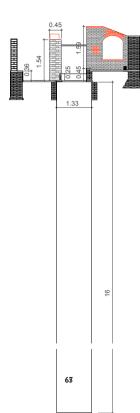
This would be a good location to integrate and showcase as many local crafts and artwork as possible, because it is the starting point of the Taj Heritage Walk. This could include the new floor surface, plaques, furniture making, and marble work.

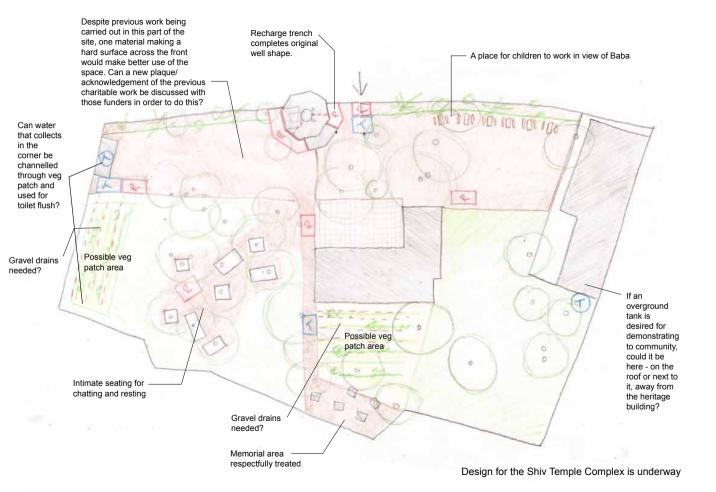
The space could be used for rainwater collection and recharge. Local people could be trained in the art of making recharge trenches and tanks.

KEY

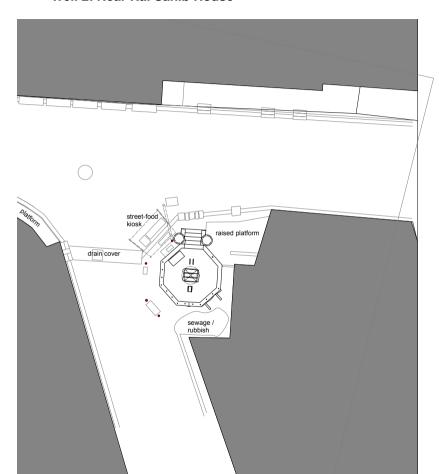


AA





Well 2: Near Rai Sahib House



Notes

Educational Value of Existing Material

- Located on heritage walk trail will have a wide reach to visitors, scholars and tourists as well as local community
- There are some interesting features: stone carving around the upper edge of the drum, carved dimples can still be seen at the top to hold water vessels. Three of the stone stands that once held bucket and chain remain, broken off and put over the well shaft for safety. The four 'stumps' where they were joined to the platform can still be seen. Impressive stone brackets behind still remain too. Rounded drums at either side of entrance steps are unique in the set of wells studied

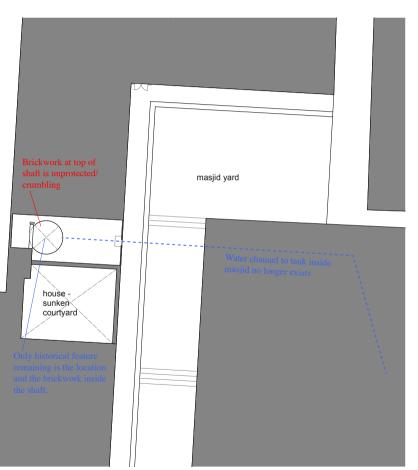
Existing Associated Cultural Practice

- People still leave offerings flowers, cowdung, and idols to pray for a new baby
- Well is used in this very lively space as somewhere to sit, play games. A very popular street food stand leans against the well and lamp posts here, and together, well and stand make a unique local landmark.

Surrounding Space

- The space is lively and popular there are plently of people around because of the location in the bazaar street. The location of the well here has meant that there is a slightly bigger open space at this road turning allowing for the street food stand. Thus the well is crucial in the making of this public space and activities here.
- However, the space is also quite dirty and run down. The well
 has been used as a point to put down many electricity poles,
 boxes and wires which are ugly and dangerous. A pool of
 sewage and rubbish behind the well is unhygienic.

Well 3: Behind Deewan ji Begum's Mosque



Notes

Educational Value of Existing Material

- There is not much historic material left of this well except the shaft itself, of which many other examples in the area can be seen. However:
- The position of this well is extremely important to the history of the area. This well is situated here because it is just higher than the tank in the neighbouring ASI listed masjid (Masjid of Diwani ji Begum), and a channel from this well to the tank would have been used to fill the tank. As well as this feature teaching people about the water engineering knowledge of the mughals, there are local myths associated with the water from this well the siants buried inside the masjid are believed to have cleaned this water for healing purposes.

Existing Associated Cultural Practice

· Some flowers and offererings left for worship and prayer

Surrounding Space

- The well sits in an empty plot at the side of the pathway. Directly next door is the sunken courtyard of a household, and their safety is a key consideration in any work to this well.
- The plot is quiet and not really used by people. It needs to remain fairly quiet due to its proximity to the Masjid of Diwani ji Begum.







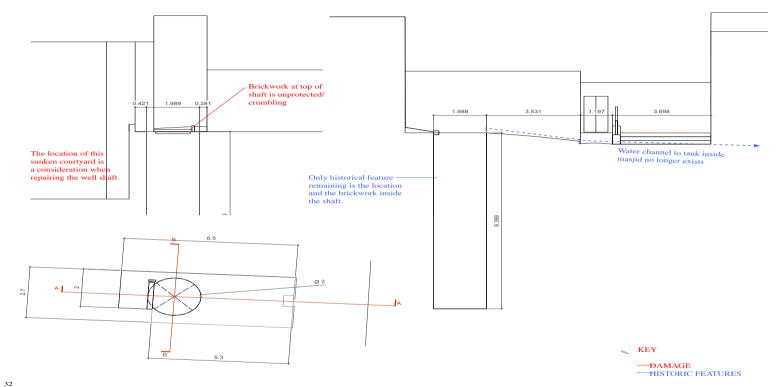
Potential for encouraging Skills and Livelihoods

This well could be made into a memorial of mughal skills with a plaque or diagram showing its relationship to the Masjid of Diwani ji Begum.

There is not very much potential to practice construction skills except in repairing the shaft.

The plot is not very big and slopes towards the path - it is not an ideal candidate for use as a recharging instrument unless surrounding households start to harvest their rooftop rainwater. In that case their overflow pipes from the collection tanks could recharge the ground through this well.

The plot could certainly be a lot more pleasant - perhaps a small garden or palyground for children (a cover would need to be put over the well in this case).



A: Immam's Heritage House B. Chowk C. Old Guest House (part ruin) broken roof tank not in view mended from chowk pipes BOXED IN on INSIDE WALL pipes BOXED IN~ on INSIDE WALL (not seen) (not seen) Hight Street/ Bazaar repair and tile floor to use courtyard runoff sewer recharge A: Immam's Heritage House SENSITIVE ROOFING FOR RAIN COLLECTION: sewer An example on heritage house in Ahmedabad Mosaic and grout technique accommodates uneven old surfaces. Creates smooth corners. POSSIBLE NEW SURFACES FOR COURT-APPROPRIATE PAVING FOR HERITAGE CHOWK ON HERITAGE WALK? YARDS IN HERITAGE HOUSES through stones above recharge pit C. Old Guest House (part ruin)

Heritage Design suggestions by Rachel O'Grady