

THE OTLA: A 'FREE SPACE' IN BALKRISHNA DOSHI'S ARANYA SETTLEMENT

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Abstract

An Otla is a vernacular element that occurs in some traditional Gujarati homes. It has many variations known by many names in other parts of India, but generally performs the same function: it marks the transition from street to house, usually with a change in elevation, and often with a change in material. According to architect Balkrishna Doshi, it serves as the meeting place of the sacred (house) and the profane (street). It serves as a space where neighbors meet informally, and completes the street and the house, bestowing upon each a unique character.

This paper will discuss Dr. Doshi's Aranya housing settlement in Indore, India, focusing on the otla of the Economically Weak Sectors (EWS) houses. The paper will analyze and compare examples of EWS otla to determine the extent to which design and functional diversity pervade this common element. It will examine the extent to which Aranya's otla introduce new ideas, uses, and forms to a traditional element. The paper will also discuss the role of the otla within the context of the larger settlement, particularly the way in which it creates a unique street character for the EWS neighborhoods.

In examining these issues, I will consider Dr. Doshi's Aranya settlement to be an unusual instance of 'designed vernacular'. While his

EWS demonstration housing constitutes a fine example of an architect-designed vernacular infused with modernity, the majority of EWS houses were built without the involvement of an architect. Builders constructed them according to resident's needs and the spatial and programmatic restrictions of the site. Because Aranya is a sites-and-services settlement, some amount of freedom was granted to residents within the tight control of its master plan. This freedom, I will argue, manifests itself most intensely within the small space of the otla.

Keywords: Doshi, Aranya, Otla, Vernacular

The role of ota in traditional settlements

Madhavi Desai, in her study of the house form of the Islamic Bohra community in Gujarat, states:

The entrance space as a transitional zone is an important concept in the cultural study of any traditional house form. A transitional space, open or semi-enclosed, is an essential component of the dwelling in the Indian context. It should be viewed in its plurality. At one level, it is an architectural solution to the problem of connecting the dwelling to the street. At another level, it is full of social meanings symbolizing welcome, auspiciousness and status. This necessary in-between realm is also an indirect form of passive control that shapes peoples behaviour on a day to day basis (Desai 2007, 70)

One particular response to this necessity for

transition in the Indian context is the ota (also called otta or otlo), an architectural element that occurs in some traditional Gujarati homes. The ota has many variations known by many names in other parts of India, but generally performs the same function: it marks the transition from street to house, usually with a change in elevation, and often with a change in material (see Diagram 1). Architect Mohit Keni describes the ota as...

differentiated from the street by its elevation and terracotta colour. It is the element of transition between the public (street) and the private (house) domains considered to be profane and sacred, respectively. It is the first point of contact of the house...Visitors are asked to remove their footwear...here before advancing into the interior of the house. It becomes a centre for informal gatherings of small groups adding life to the street (Keni 1994, 33).

Diagram 1: Ota in Jhetnabhai ni pol (Ahmedabad) house (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1997, 59-62).

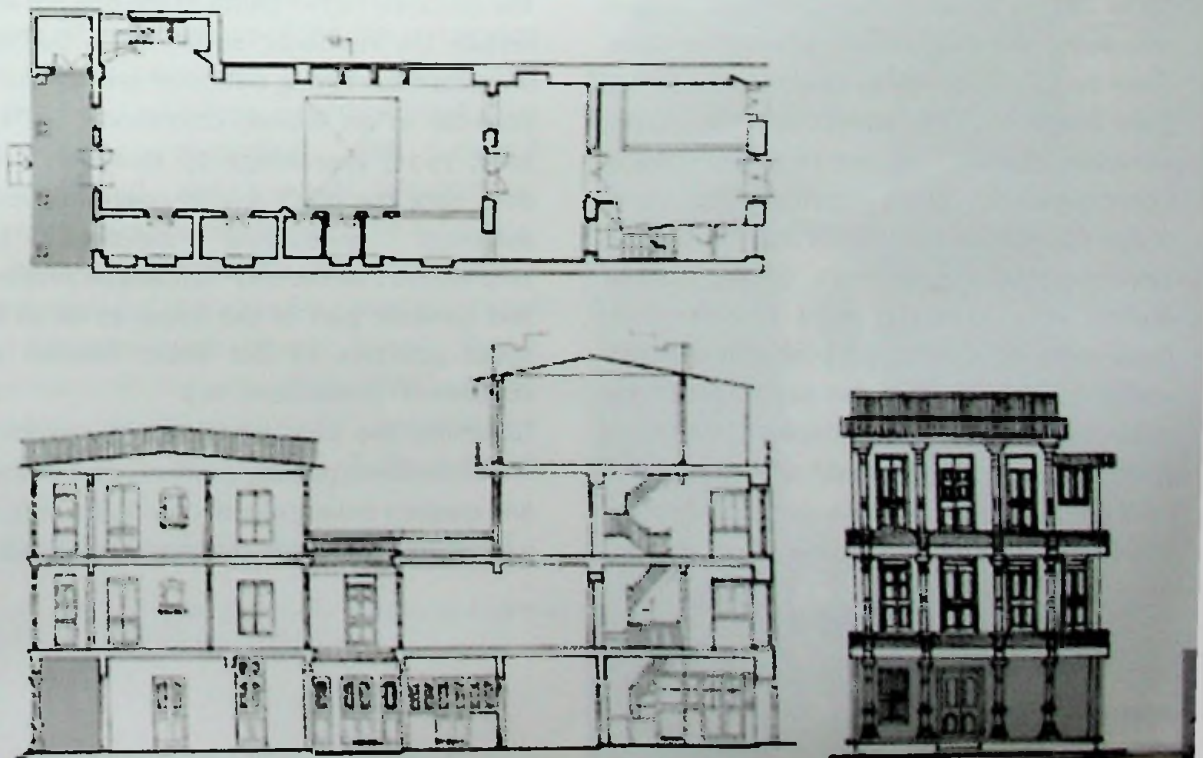




Image 1: A typical *otla* in an Ahmedabad pol (photo: Vineeta Nair*)



Image 2: The high *otla* of the Bohra dwelling (Desai 2007, 44).

In Ahmedabad, Gujarat, *otla* are a common element in houses located in *pols* - dense, traditional neighbourhoods consisting of a single, usually dead-end, street and protected by a gate.

The *otla* serves an important social function in these neighbourhoods. The Vastu Shilpa Foundation for Studies and Research in Environmental Design (VSF) states that the *otla* "acts as a transitional element where socializing and neighbourly interaction takes place on [a] day-to-day basis across the street (See Image 1). Thus streets are not simply vehicular conduits but are in essence linear open spaces for group activities¹ (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1997, 27)." Pratima Mehta, who grew up in a *pol* house in Desai-ni-Pol in Khadia, part of Ahmedabad's walled city, emphasizes this social role of the *otla* in daily life. In her story booklet "Memories of My Pol in Old Ahmedabad," she states, "Our elder grandmother, Jadavba, used to sit on the *otlo* in the evening and women from the *pol*

would come to discuss with her their personal and social problems, seeking solutions" (Mehta 2009, 17).

Not all *otla*, however, served as social meeting places. Madhavi Desai states, in her study of Muslim Bohra dwellings, "Unlike the Hindu *otla* that becomes a physical extension of the house/street, the *otla* in Bohra dwellings is seldom used as an activity or interaction space. The relatively higher plinth of the *otla* not only reveals the residents' social status but also protects their strong notion of privacy that is essential in an Islamic community"² (Desai 2007, 73-74) (see Image 2). However, Desai does note the *otla*'s role in conveying social meanings symbolizing welcome, and emphasizes that the *otla* "remains an aesthetic and symbolic part of the house as far as the social activities of the Bohra families are concerned" (Desai 2007, 70).

Generally, the *otla* constitutes the space in which residents publicly express cultural values and create a unique identity for their home. As a result, the *otla* often contains a great deal of

personalization and decoration.

In traditional houses the ota contains a great deal of highly ornate woodcarving (See Image 3).

Madhavi Desai states:

The main entrance door... forms an important element in the composition of the façade in Islamic (and other) cultures. Intricately carved in wood, one often finds inscriptions from the Quran engraved on its wooden lintel or frame. In traditional Hindu houses of Gujarat the lintel at the entrance has auspicious motifs and a God or a Goddess' image. This wooden lintel is often called Ganeshpatti, after God Ganesh. The symbolic importance of the entrance of the Bohra house is also often emphasized by the construction of a highly decorated doorway (Desai 2007, 74).

The ota serves as an important site for religious activities in Hindu households. According to Desai, "In a Hindu community, the traditional street is a social space and primarily an area of communication and social exchange. It is an extension of the house to be used during different periods of the day and season for various purposes" (Desai, 94). During festivals and weddings, neighbourhood ota are richly decorated with rangoli (sandpainting) and symbolic decorations, many of which are considered to be auspicious. In Ahmedabad pols, the ota establishes a coherent social character for a neighbourhood and mitigates harsh climactic factors. Kanika Agarwal notes the close relationship between social considerations, climactic considerations and the urban morphology of the pols. He states:

The character of the pol itself is defined by

Image 3: Bohra house ota: visual richness as a form of cultural expression (Desai 2007, 44).

the transitional spaces called ota.... Individual houses have a deep plan with the small side facing the street. A pol would get organised generally by people of the same social group or community. Thus the city characteristically grew very organically into a dense built fabric, reflecting not only the culture of the local people but also the climate it was set in (Agarwal 2009, 1).

This dense urban fabric with houses sharing party walls and set on long sections thus developed as a response to social, cultural and climatic factors. The ota establishes a coherent social character for a neighbourhood and mitigates harsh climactic effects. Agarwal later states, "All throughout the year, the 'ota' ... is one of the most comfortable urban areas due to the high degree of shade



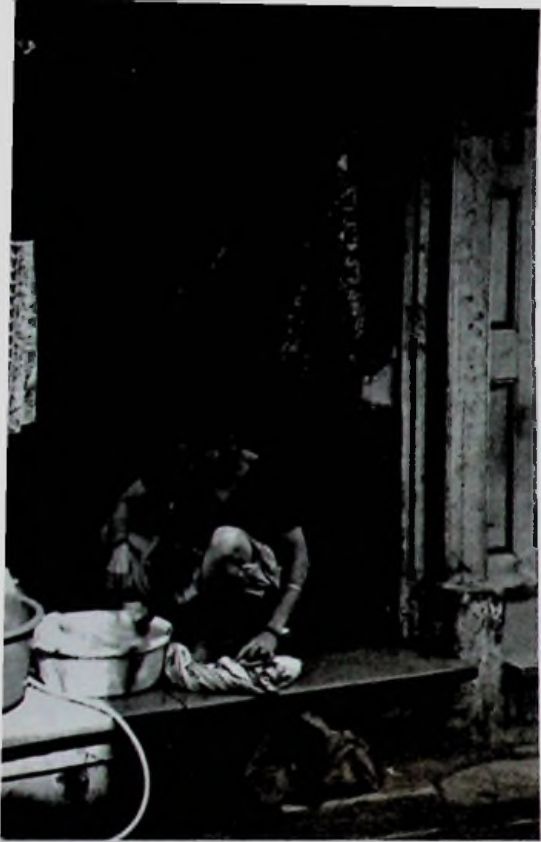


Image 4: Women washing clothes on an Ahmedabad pol house ota (photo: Namit Arora*).

drinking tea ... Occasionally young children are found playing on otta (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1997, 19).

In many pol houses the otta also contains, in a separate room and off to one side, the toilet and washing facilities for the house (see Diagram 2).

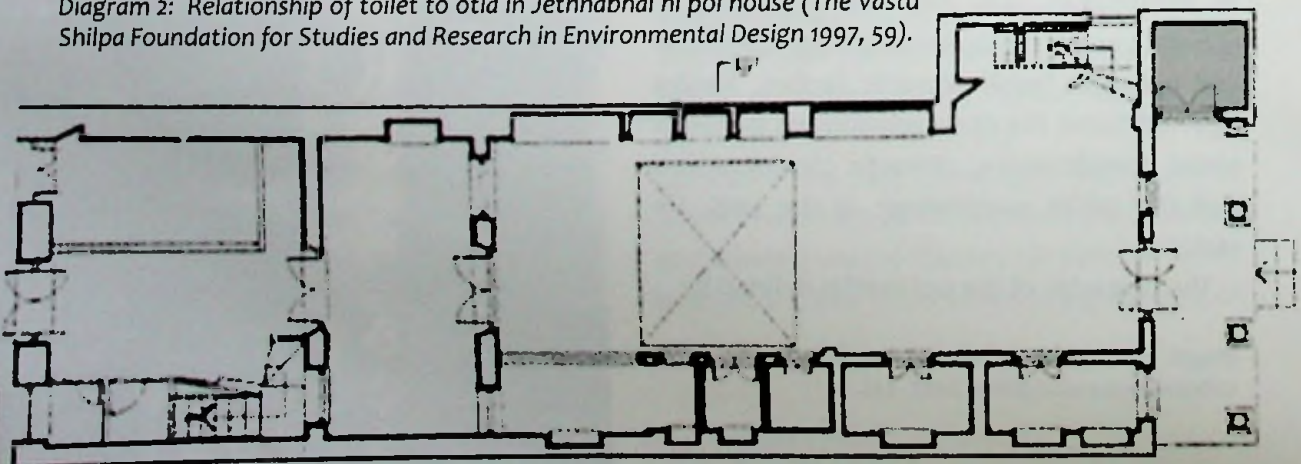
Aranya background

Aranya (which means 'forest') is a sites-and-services township for 40,000 people in Indore, Madhya Pradesh State. The Indore Development Authority (IDA) developed the settlement, with the World Bank and the Housing and Urban Development Corporation (HUDCO) providing part of the capital for the settlement as a loan. In 1981, the IDA hired the VSF to design the layout and infrastructure of Aranya. Balkrishna Doshi, who heads the VSF and founded it in 1978, worked with Le Corbusier on the master plan for the city of Chandigarh. Dr. Doshi is, therefore, an architect steeped in modern planning principles, but with a very strong interest in

on it throughout the day" (Agarwal 2009, 5). Partly because of these climactic considerations, many household activities take place on the otta of an Ahmedabad pol house (see Image 4). The VSF states:

[The] street comes alive right through the day break with washing, cleaning and water filling activities taking place on the front otta and street edges, where chowkdi (wash places), water taps and drainage connections are provided... Ottas get occupied by women washing clothes and utensils, filling water, while man [sic] brushing teeth, reading newspaper or

Diagram 2: Relationship of toilet to otta in Jethnabhai ni pol house (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1997, 59).



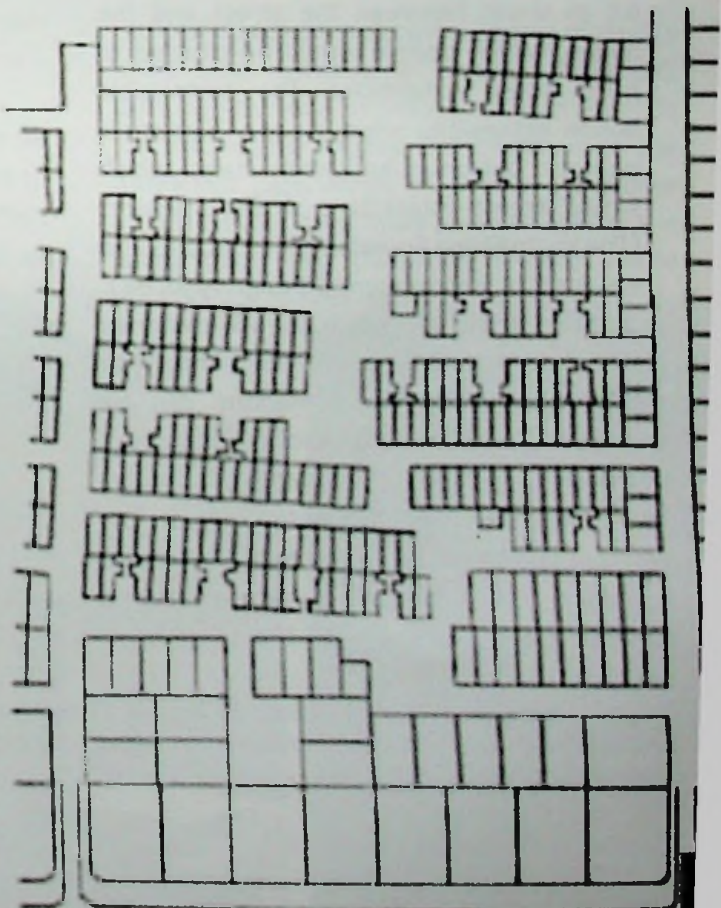
traditional Indian architecture and settlements.³ He established the VSF to initiate “research, studies and investigations relevant to the study and practice of architecture and planning in the Indian context, with a focus on the relationship between tradition, culture and lifestyles of people with architecture and planning” (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, iii-iv).

In a sites-and-services project like Aranya, the bulk of investment is spent on land and infrastructure. While the VSF designed the master plan for the settlement, residents were left to build their own houses incrementally. Aranya is also a mixed-income settlement, although most of the settlement’s plots are intended for the Economically Weaker Sector (EWS), or poorest sector, of the population. The 35.32 square meter EWS plots are all serviced to some degree: they contain a core sanitary unit, consisting of a washroom and toilet facilities, and some also contain a plinth and one room (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, 22). To maximize land use and limit incident solar radiation, EWS plots are long and narrow with houses sharing walls and facing North-South (See Diagram 3).

Due to the small size of plots, the VSF created a hierarchy of shared open spaces that ranges from semi-private to public.

Diagram 3: plan of EWS neighbourhood in Aranya’s Sector Four, showing small plot sizes, shared walls and North-South orientation of plots (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, 144).

The fabric of the EWS neighbourhoods therefore resembles the dense urban fabric of traditional neighbourhoods. Middle Income Group (MIG) and High Income Group (HIG) neighbourhoods⁴, however, resemble that of a colonial/modern fabric, with freestanding houses built on large, walled plots and few shared spaces (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, 68). The dense fabric of the EWS neighbourhoods, along with the small, long and narrow plots and the availability of water for a limited time each day, are key contributors to the unique environment created in the EWS neighbourhoods. This, in turn, contributes greatly to the development of traditional elements, such as *otlas*, in these neighbourhoods.



Design of Aranya settlement

Overall, the design of Aranya might be considered a tightly controlled master plan with a certain amount of freedom built into it. The layout of the settlement, the hierarchy of open spaces and streets, and the services infrastructure are all highly controlled elements of the design.⁵ The VSF intended, however, to build a degree of flexibility into the planning of EWS neighbourhoods. It states:

House extensions not only help to expand a small house, but in the process, they also enhance the quality of public spaces. Such an important, but often neglected, aspect of habitat planning was given due recognition in the Aranya project...Changes in the conventional building and zoning regulations envisaged the creation of a transition zone of 0.5 m width between the street and the house, where people would be allowed to build house extensions. The permissible house extensions were stoops, platforms, porches, balconies and open stairs, which would create interesting street character (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, 66). In addition to this allowance, the VSF designed eighty demonstration houses (See Image 5) to show "how interesting variations can be created by house extensions, staircases, balconies and projections... [using] interchangeable components which in different combinations would each time create a unique house in the same overall plot dimension and starting with the same basic

core" (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, 70). These houses, although intended to be merely exemplary, constitute a designed vernacular unique to Aranya, whereas local builders built the remainder of EWS houses, with strong design input from the residents.⁶



Image 5: Balkrishna Doshi's vision of Aranya demonstration housing streetscape – note the important role that opla play in shaping the street.

Aranya ota design

Ota design in Aranya is greatly varied.⁷ Although an ota generally consists of a platform across the entire front of the house, one finds a multitude of variations within this basic form. The depth of the ota often relates inversely to the size of the house: a smaller house will have space for a deep ota in front, and a larger house will have a narrower ota.⁸ The ota may be humble or elaborate, it may be a solid block or a thin slab: it may be highly decorated or quite plain (See Image 6). Ota design often depends on the house's location within the larger cluster plan. A house on a corner plot, a plot next to a courtyard, or a plot next to a vacant site may have an ota that wraps around the house (See Diagram 4) and serves as the transitional space for more than one door (See Image 7). Similarly, a house with a vacant site or a courtyard behind it may have a rear ota serving as a transitional space for a rear door (See Diagram 5 & Image 8). As the ota generally creates a transition from public space to private space, it is important to consider how variations in ota design affect this transition in EWS houses. A gated or

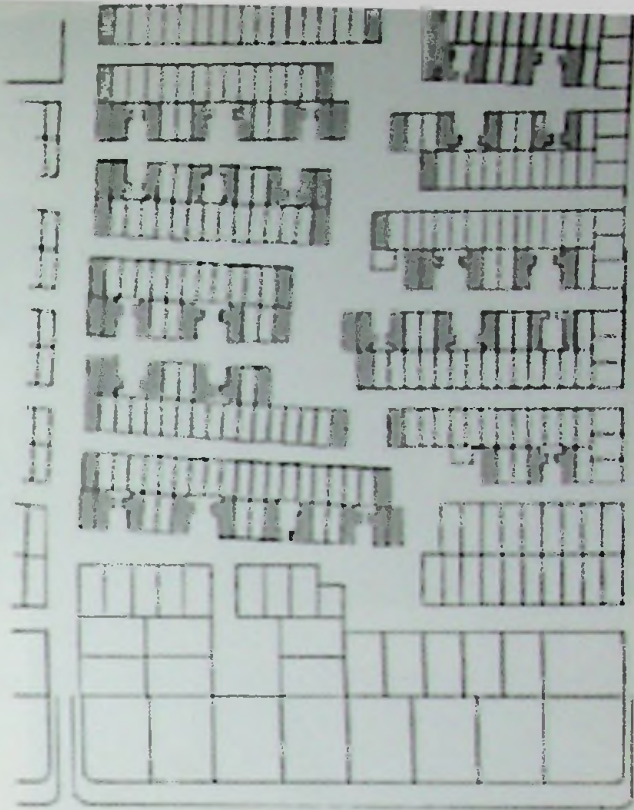


Diagram 4: EWS houses with potential for wraparound ota.

fenced ota creates a greater degree of privacy than one without a distinct threshold, although the level of privacy attained depends on the height, solidity and thickness of the threshold (See Image 9). Similarly, a higher ota separates itself more profoundly from the streetspace, and therefore becomes more



Image 6: A narrow ota (left), a large ota in front of a small house (right).

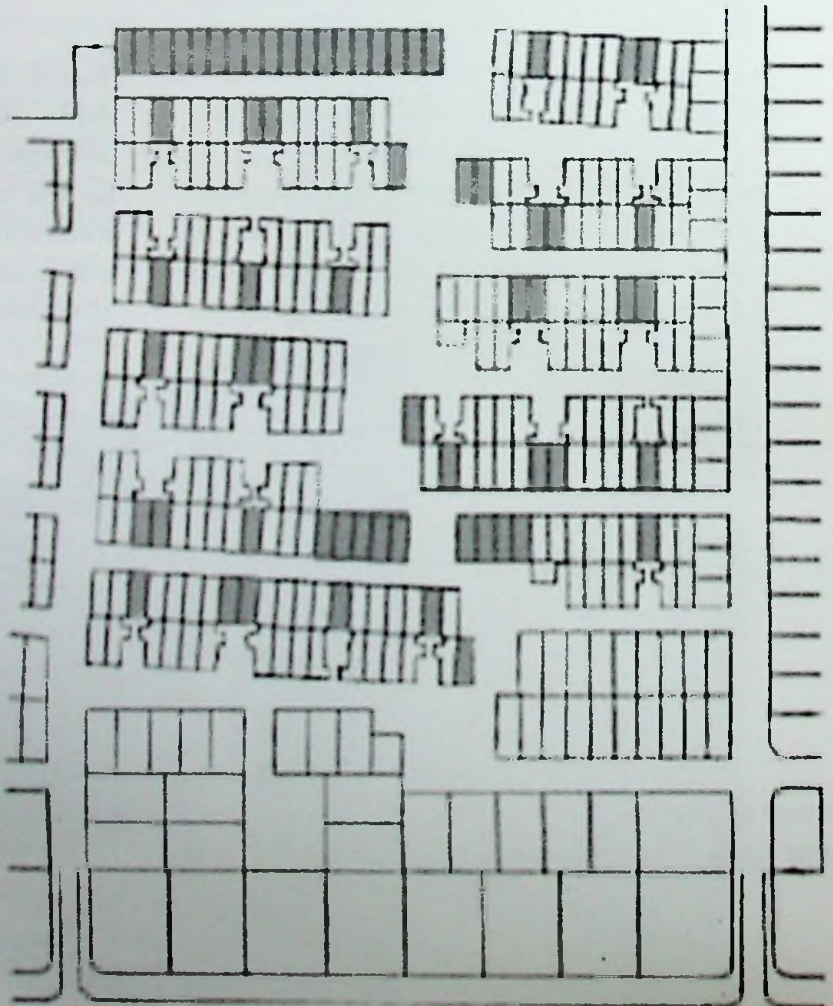


Image 7: Wraparound ota on courtyard house (left) and on corner house (right).



Image 8: Rear ota on EWS houses.

Diagram 5: Plots with potential for front and rear ota.



strongly associated with the private space of the house. A deep ota extends the transition from street to interior of the house, making the transition more gradual. Variations in a single ota may create a hierarchy of transitions for a single house. In one example (see Image 10), a courtyard house's side ota is lower than the front ota. This connects the interior of the house more strongly to the courtyard than to the street. Façade treatment reinforces this hierarchy: painted detail on the front of the house establishes a formal identity for the house, while the side façade remains undecorated and informal.



Image 10: The ota may create a hierarchy of transitions for a single house.

Functional role of Aranya's EWS ota

In discussing the function of the EWS ota, one may make a basic distinction between the residential ota and the commercial ota. Because most businesses in EWS neighbourhoods are located within houses, a single ota may serve a dual function. The distinction between residential ota and

commercial ota may be established explicitly or subtly, and may be reinforced with a painted façade or a sign (see Image 11). Often, business-related goods stored on the ota signify the presence of commercial

Image 9: Enclosed ota with thin wire fence (left) and with solid wall (right).





Image 11: Otla with no distinction between commercial/residential space (left) & with wall between commercial/residential space (right).



activity (See Image 12). While the residential otla creates a transition from public space to private space, the commercial otla serves primarily as a public space of service. By standing on a commercial otla, a person states his intention to purchase something or make use of services offered.

The Aranya otla also supports various daily household activities. In EWS neighbourhoods, taps in the street provide water for one hour in the morning and one hour in the evening. Prior to this time, residents line up buckets on otlas in preparation for water collection, and run hoses from street taps through doors in the otlas to underground water reservoirs (See Image 13). During water collection, the otla becomes a space of lively social interaction, with neighbours chatting to each other and mobile vendors selling everything from vegetables to jewellery. Shortly after water collection, women may be seen washing clothes, dishes and, sometimes, children on the otla (See Image 14).



Image 12: Goods stored on otla signify location and type of commercial activity, and, in photo on right, distinguish between residential and commercial use of otla.

Image 13: Water buckets stored on ota for water collection (left), water reservoir located in ota (right)



Ota are also used for storing family possessions. Ota steps often contain small ramps for wheeling bikes, mopeds and motorcycles onto the ota or into the house. Households with electric water coolers (a form of air-conditioning for the house) often locate these large appliances on the ota (See Image 15). Other household items that may occupy the space of the ota include drying laundry, shoes, beds, sewing machines, bird cages, television antennae and satellite dishes (See Image 16). Household or income-generating activities performed on the ota include purchasing food purchase from mobile vendors, preparing food, studying, reading, playing, sewing and even blacksmithing. Finally, utilizing the ota space to accommodate a staircase to the first floor constitutes an effective strategy for conserving space within the small EWS house (See Image 17).



Image 14: Woman washing a small child on the ota (left), streets become active at water collection times, with neighbours chatting on ota and mobile vendors selling their wares (right).





Image 15: Small ramps contained in many otlas make it easy for two-wheelers to be stored on the otlas or inside the house (left), water cooler stored on otlas (right).



Social/cultural role of Aranya's EWS otlas

The otlas play an important role in a neighbourhood's social activities. As mentioned earlier, otlas become highly social spaces at times of water collection. During the day, women chat on the otlas while keeping an eye on children playing in the street. At times of festivals or other celebrations, an overhead canopy unifies the street and its otlas, turning both into a large outdoor room in which activities take place. Similarly, when itinerant performers visit an EWS neighbourhood, residents (especially women) watch the show from the otlas (See Image 18). In Hindu households, the otlas may serve as an important site for religious functions.⁸ During Diwali, the otlas are decorated with rangoli (sand paintings) to welcome Laxmi, the Goddess of wealth, into the home, and to symbolize warm hospitality to visitors who come to exchange greetings and sweets. Just as a Ganeshpatti would be carved into the lintel of

Image 16: Storage of bikes (left) and a small bed (right) on EWS otlas.



Image 17: Location of stairs within the space of the otlas conserves space inside the small EWS house (left), a blacksmith and his wife demonstrate how they use the otlas as a workspace (right).

Image 18: Residents watch itinerant performers from an otna (left), a street and its adjoining otnas are turned into an outdoor room in preparation for wedding festivities (right).

a traditional house, in Aranya they often take the form of tiles and statues embedded in the plaster above the door (See Image 19). Similarly, an image of Christ or a cross may hang above the door of a Christian household. Other doorway decorations include the toran or the bandhandwar, a garland that hangs in the doorway and conveys auspiciousness, happiness and welcome. Painted handprints next to the door are also considered auspicious. Many EWS otnas contain a tulsii, or holy basil, plant, which is sacred to Hindus and used in Ayurveda for its medicinal properties (See Image 20). Otna are also used for feeding



Image 19: A ganeshpatti consisting of a single tile and painting – note tulsii plant on adjoining otna wall (left), and one consisting of a small statue, three tiles and a painting (right).



Image 20: Tulsii plants growing in special planters built into otnas.





Image 21: A cow makes use of a demonstration house ota to request his dinner.

sacred cows that live in the streets and are looked after by residents of a neighbourhood (see Image 21). Finally, otlas often contain shrines. Some of these are very small, simple and personal, while others are quite large, colourful and elaborate and may be used by an entire neighbourhood (see Image 22).

Symbolic/identity role of Aranya's EWS ota

The ota in Aranya's EWS neighbourhoods play an important role in creating for each house, and for each street, an individual identity. This is achieved through distinctions



Image 22 - Two examples of temples contained within the space of the ota. Note the tulsi plant in front of the temple and the handprints painted next to roller door in image on right.

in ota form, and through variations in the colour, detailing and decoration of the ota. Variations in ota form from one house to the next combine to create quite sculptural street edges in many EWS neighbourhoods. This is especially true when



Image 23: Variations in ota stairs create visual interest along EWS streets.





Image 24: The use of colour on the opla, whether painted and bold (left), or subtle and achieved with a variety of materials (right), helps to build a unique identity for the house and the street.

subtle shifts in opla stair heights occur in adjacent houses (See Image 23). The use of colour, whether applied directly to the opla, or whether resulting from some combination of materials, also strengthens the unique identity of an individual house, as do the patterns found on opla tiles and door curtains (See Image 24).

More generally, however, the opla's role as a functional, social and symbolic space also makes it a visually fascinating space. Each opla's combination of stairs and ramps, stored bikes and buckets, water reservoir doors, water coolers, drying laundry, chatting neighbours, tulsi plants and shrines, allows it to communicate something about the people who live in each house, and, in a broader sense, the culture in which they live (See Image 25 & 26). Even the simplest opla will communicate something.

One may conclude that the EWS opla in Aranya greatly contributes to the spatial quality of EWS streets in terms of visual interest, functionality, social liveliness and cultural relevance (See Image 27). In order to further emphasize this point, one may compare an EWS street to a street in the low-income housing community just to the Northwest of Aranya (See Diagram 6). A simple visual comparison reveals the unique character of EWS streets. In the neighbouring low-income housing settlement, in which the Indore

Image 26 - Variations in colour, detail and use establish a unique identity for each EWS house.



Image 25: The opla's colour, detail, decoration, form and use communicate something about the inhabitants.





Diagram 6: Satellite image showing location of Aranya settlement (pink) in relation to the IDA's neighbouring low-income settlement (yellow). Image: Google Earth (highlighting by the author).

Development Authority (IDA) designed and built multi-unit dwellings. no transitional space was provided at the street level, and entrances to individual units are separated from the street by a layer of internal circulation. High blank walls line a street that lacks colour and detail, and serves primarily as a vehicular and pedestrian route (See Image 28).

Image 28: In the low-income housing project to the Northwest of Aranya, stairwells serve as a transition only from public to semi-public space, and therefore provide little opportunity for personalisation, decoration, or usefulness in terms of daily activities.



Image 27: An Aranya EWS streetscape: dwelling units are separated from the street by the transitional space of the ota, variations in ota create visual interest and identity, and the street becomes a space of interaction.

Conclusion – the Aranya ota as a hybrid vernacular element

“The vernacular design process is one of typological models and of modifications and variations therein, where the individual unit and not the house type is adjusted, adapted or personalized. The vernacular urbanity has an underlying structure within its overall organic

Image 28: Blank walls define the public space of the street, which serves primarily as a conduit for vehicular circulation. Private balconies afford little opportunity for interaction with neighbours.



attitude that leaves room for human expression and creativity" (Desai 2007, 103). This quote from Madhavi Desai sheds an interesting light on Aranya's EWS neighbourhoods, which are unique in that their underlying order, rather than having developed organically over a long period of time, is imposed by the author(s) of the master plan. Yet, Aranya's master plan, for all of the control it imposes, also grants a certain amount of freedom –the freedom for residents to build as they see fit, and the 0.5 metre 'free space' at

the front of each house, which encouraged adaptation and variation. This small space serves as the site in which the social and cultural forces that shape traditional architecture could exert themselves on an otherwise highly planned settlement. As such, the EWS *otla* in Aranya constitute a unique hybrid vernacular element, and serve as evidence that 'human expression and creativity' will take root in even the smallest of spaces.

Endnotes

¹ Jethnabhai ni pol, according to the Vastu Shilpa Foundation Study, is 94.7% Hindu, 4% Jain, and 1.3% Christian (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1997, 3).

² Typically Bohra houses were 6-7 feet above the level of the street. Compare Diagrams 1 & 2, and Images 1 & 2, for *otla* heights in Hindu & Bohra houses, respectively.

³ In 1987 Doshi wrote, "I learned from Le Corbusier to observe and react to climate, to tradition, to function, to structure, to economy, and to the landscape. To an extent, I also understand how to build buildings and create spaces and forms. However, I have in the last two decades, gradually discovered that the buildings that I have designed seem somewhat foreign and out of milieu; they do not appear to have their roots in the soil. With the experience of my work over the years and my own observation, I am trying to understand a little about my people, their traditions, and social customs, and their philosophy of life" (Archnet 2010).

⁴ Lower Income Group (LIG) plots range from approximately 56-92 square meters, the Middle Income Group (MIG) plots range from 139-223 square meters, and High Income Group (HIG) plots range from 139-474 square meters (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, 68).

⁵ Doshi's list of drawings prepared for the project reveals the high level of planning involved in the design of Aranya: "Numerous drawings were prepared for the project. They included master plan, detail layout of each sector, all demonstration housing, public buildings, landscaping and infrastructures. They included miscellaneous drawings regarding details of landscape, stone paving on streets, etc. (The Vastu Shilpa Foundation for Studies and Research in Environmental Design 1990, 143)

⁶ Cynthia Davidson notes: "The 80 houses designed by Doshi and the streets that define those houses are noteworthy. The remaining plots have been developed by their owners, built and embellished in a personal manner that does not follow Doshi's models" (Davidson 1995, 70). It is interesting to note that *otla* in the demonstration houses are often deeper than those in the self-built houses. Also, they tend to be more private: many of them are partially walled off to create outdoor rooms. This may have something to do with the fact that the VSF originally envisaged EWS houses to have internal courtyards, like many traditional (including *pol*) houses do. In my documentation of Aranya, I found only a few EWS houses with internal courtyards in the 44 that I documented and approximately 20 that I visited informally. Many residents said they did not feel there was adequate space within their home for an internal courtyard.

⁷ Most of the information I present below with respect to Aranya comes from my personal observation and documentation. In 2003-2004 I spent nine months in India documenting Aranya on a Fulbright Grant. During that time, I completed a comprehensive survey of the entire settlement and documented, in plan, a cluster of forty-four houses. Although I came to know many of the residents well during this time, and although I had the services of a translator (Hindi & Marathi) for one week, my investigation was limited by my general inability to communicate. As a result, my focus in this paper is on elements of design that could be documented and aspects of life in EWS neighbourhoods that were directly observable.

⁸ Due to the placement of the core sanitary units at the rear of the EWS plots, almost all houses that are built incrementally are built from the back of the plot to the front. A small house will therefore have a large open space at the front of the plot.

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