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Received: May 7, 2014 Revised: June 22, 2014 Accepted: July 4, 2014

Published online: July 25, 2014

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Abstract: From the Greek Agora till today, market places have always been an important component of a city's public realm. These are the community's 'open-air living rooms' which, while contributing to the city's economic growth, are platforms for unhindered social and cultural public interaction, and, even serve to encourage upward mobility in society. However, concepts of the public space in planned cities, especially the utopian productions of the 20th Century, are more focused on the physical and visual aspects of public space, and activity patterns regulated by the designer's vision of ideal societal behavior. Time, on the other hand, has shown that most of such planned spaces have performed differently, transforming in response to market forces and users' predilections, thus highlighting the indispensable need for inclusiveness in urban design.

Chandigarh, India's iconic 20th century planned city, is no exception. While many elements of the original plan had proved to be fairly robust till recently, one of the first ones to defy and demolish the planners' perceptions was the 'Neighbourhood Market'. Over the years, the cumulative effect of several 'unplanned' (and, thus, unforeseen) user groups, activities, societal and technological advancements has transformed each of the markets in distinctive manners. Today, the challenge of accommodating various socio-cultural and economic groups, creating inviting and safe public spaces, satisfying the highend retailer, and supporting small-scale, informal commerce, while adhering to the "Chandigarh Edict", continues to confront planners and administrators.

Clearly, some critical re-thinking is in order. This paper is based on an academic exercise undertaken by the author in 2011. Taking the particular case of 'Sector 15', the objective was to understand the nature and causes of various transformations of the neighbourhood markets of Chandigarh, and, to explore pragmatic design possibilities of creating a stimulating and comfortable urban centre which, while respecting the intent, spirit and framework of the original urban concept, would give due credence to the present-day needs of its multiple sets of stakeholders.

Creative Space Vol. 2, No. 1, July 2014 pp. 105–125



Jigyasu, N. 1. THE CONTEXT – THE CHANDIGARH PLAN

The first step was to understand the ethos of the original design of the market chosen for study. This design, in turn, is linked to that of Sector 15, its neighbourhood, as well as of Chandigarh, the city in which it is located. It, thus, becomes pertinent to recapitulate here the generic principles of the city's Master Plan, as made by Le Corbusier in February-March 1951.²

As Le Corbusier, the author of the Plan, was to state: "The Plan is based on the main features of the '7 V Rule,' determining an essential function: the creation of the 'Sectors.' The 'Sector' is *the container of family life...*," having "a ratio of harmonious dimensions", 800 m x 1200m (Le Corbusier, 1961, p.6). The sector, enclosed on all four sides by fast-traffic roads (the V3s), was planned as a self-sufficient unit that along with housing had schools, health centres, places of recreations and worship and a market place. It was, however, connected to the adjacent ones in the vertical (NE-SW) direction by pedestrian green belts, and those in the same horizontal row by the market streets, the V4s (Fig. 1a, 1b).

"The sector is crossed through inside, in its half, by its shopping street, reassembling on a line the functions which are necessary to daily life (24 hours): food supply, artisans, police, fire-brigade, circulating library, cinema, restaurants, stores or co-operatives, etc. These services are set up in a line of 800 meters on one side (facing the North) to avoid dispersion and frequent

¹ Chandigarh was a result of India's Independence and the division of the province of Punjab, with Lahore, its erstwhile capital awarded to Pakistan. The city was planned not only as the political, economic and cultural capital of the newly formed state, a home for thousands of refugees from Pakistan, but also as a visible symbol of India's march to Modernism and rationality. "Unfettered by the traditions of the past", Chandigarh was the first post-colonial city in India, envisioned to provide a generous cultural and social infrastructure and equitable opportunities for a dignified, healthy living even for the "poorest of the poor."

² The Chandigarh Plan also has its roots in urban principles propagated by CIAM (Congres Internationaux d'Architecture Moderne), an avant-garde and elite group that sought to revolutionize architecture to serve the interests of society. Its members included some of the best-known architects of the 20th century, including the Chandigarh team of Le Corbusier, Jane Drew and Maxwell Fry. A horizontal garden city, no slums, easy and noiseless traffic flow, hygiene and well being, family life, were some of the CIAM doctrines put into reality in Chandigarh, and translated as axial planning, hierarchy of roads, strict zoning, segregation of uses, and bringing nature into the city to ensure health and peace.

³ The Seven types of roads in Le Corbusier's Plan are defined as follows: V1—Cross continents, arrive in town; V2 – go to essential public service; V3 – cross at full speed, without interruption, the territory of the town; V4 – dispose of immediate accesses to daily needs; V5 & V6 – reach the door of his dwellings; V7 – send youth to the green areas of each sector where schools and sports grounds are located (Le Corbusier, 1961, p.9).

⁴ These continuous "green bands... permit the dwellers of the Sector to walk safely in the green and enjoy nature... give a clear view of the Himalayas and contain the educational and recreational features of daily life... the idea being that within a quarter of a mile of the dwelling there should be green so that the children can come and go to school without travelling long distances." (Drew, 1961, p. 22)

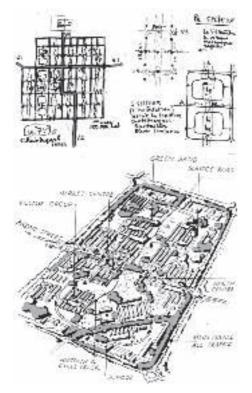
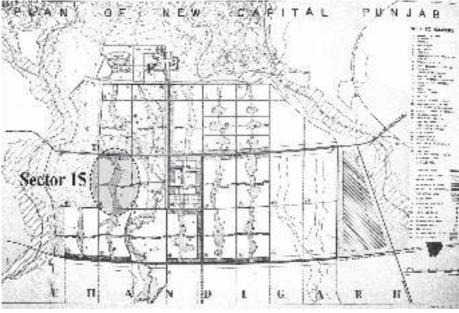


Figure 1a (Left): Le Corbusier's original concepts of the 7Vs and the generic Sector.

Figure 1b (Below): Location of Sector 15 (see shaded ellipse) in the context of the original Master Plan of Chandigarh.

(Graphics source: Joshi, 2009, adapted from Le Corbusier, 1961 and Drew 1961)



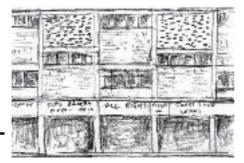






Figure 3: Original Façades of 'Booths' with the prescribed signage panels.

road-crossings as well as sun heat.⁵ The cars can take this road at a reduced speed and park there."⁶ Each market by virtue of its location along the V4, was structured into the city's matrix and thus became a catalyst for sociocultural interaction within the neighbourhood. "This shop-street continues in the neighbouring sectors on the right and the left: in this way is realized a continuity of the needs and resources of daily life and a connection through the whole town from East to West (Le Corbusier, 1961, p.9).

2. PLANNED MORPHOLOGY OF THE SECTOR MARKET

The layout of the Sector Market was designed to accommodate various economic levels of commercial establishments and, included a variety of built forms in terms of scale, typology and trade. Though dubbing the Sector as a "small world", Jane Drew – who played a significant role in the planning of the initial sectors -- also compared it to a big town and the sector market as its functional and visual "hub". In order to proclaim its central status, it was decided that commercial buildings "had to dominate a little over the housing areas" (Drew, 1961, p. 22). This objective was achieved by allowing the height of the larger shops of this zone to go up to three storeys, as compared to the single and two-storeyed construction in the rest of the Sector. Considering the tradition of the Indian shop owners to stay above their shops, most buildings in

⁵ While the V4 has the linearity of a traditional Indian bazaar, there is a marked change in that the latter has shops on either side of narrow pedestrian streets. Other public and religious buildings -- banks, post office, community hall, temples, etc., were also located along this street. Markets in Sectors 22 and 23 are the earliest establishments on the above approach.

⁶ The V4 road cuts across the sector and follows a slightly irregular path. This is in contrast to the other roads for the fact that this street was supposed to accommodate slow moving traffic owing to the commercial function.

the neighbourhood market were designed as 'shop-cum-flats', with two floors of living quarters above the ground floor shops.

The architects, "who had a better sense of the importance of physical environment than administrators" also decreed that these buildings be "strictly architecturally controlled" (Drew, 1961, p. 22). The architectural idioms, established by Corbusier and his team, had already been consolidated into a series of visual regulations and aesthetic controls for purposes of obviating visual anarchy in the construction of Chandigarh's built masses (Bakshi, 2006 and Prakash, 1961). The "Full Architectural Control" was devised for the commercial and even the residential belt along the shopping street, thus leading to a planned uniformity in streetscape (Fig. 2, 3). ^{7,8} While all constructions adhered to the unique "Chandigarh Style" of exposed brickwork, white limewashed, plastered trim, small windows and a variety of sun-breakers, the detailed design of the control, however, varied from sector to sector, as did the arrangement of buildings and open / parking spaces along the linear stretch, lending each sector a distinct imageability.

Re-Planning 'Planned' Public Spaces: The Neigbourhood Market Of Sector 15 In Chandigarh

3. SECTOR MARKETS TODAY

63 years after the inception of its iconic Master Plan, the impact of rapid modernisation, changing demographics and suchlike phenomena on the planned growth of Chandigarh appears to have assumed unmanageable proportions. Nowhere else are the signs of this more obvious than the commercial buildings. The Sector Markets too have undergone various transformations driven, both by localized or general issues. Better access to motorised transportation has facilitated people to go farther than their individual sector limits. As a result the choice of product and not the proximity is the main criteria for shopping. Some markets have become product-based, depending on their proximity to particular activities or clientele benefits. The market in Sector 16, for example, is a home to various medical related products due to its proximity to the important government hospital that was established early in the history of the city. Though such a concentration of a particular trade has offered a wider range of choice within the same market for the consumer, it has disturbed the

⁷ Because Chandigarh was to be a planned city, all commercial buildings were placed under architectural controls under the Capital of Punjab (Development and Regulation) Act, 1952 (Prakash, 1961 and Kalia, 1999)

⁸ The *Full Architectural Control* was applicable to all the commercial and residential buildings along the V4. For houses, standard designs were prepared in which the interior could be altered as long as the exterior was not vitally affected. However, shop owners were required to adhere to a prescribed complete design (Prakash, 1961, p.40)

⁹ This trend is also seen in markets on V3, e.g., Sectors 28 and 20 that have become specialised markets for vehicle spare parts and computer software & hardware respectively.

concept of a self-sufficient neighbourhood, with the sector residents forced to go elsewhere for their daily shopping. Also, the retail business relies a lot on branding and explicit economic segments. Depending on the clientele, most markets have also got segregated into medium (Sector 22) and low price and budget (Sector 15) segments. Since a lot has changed in terms of user's needs and their perception, even more pressure is added to the existing setup.

As regards the original Modernist image, what may have been accepted in 1950s-60s is being resisted and threatened by the users' demands -- both for additional space by the now well-established shops, and, for unbridled freedom to advertise their ware in a more visible manner than the Controls allow. People want glitz, their taste runs to the ornate. Over time, Chandigarh Administration has permitted 'need-based changes' into the original closely regulated urban regime. "And, as encroachments and violations of the byelaws multiply, along with the numbers of their perpetrators, the rules by which the city was built begin to lose their sanctity" (Sagar, 2002, p.374).

In the Indian scenario, the public space is not just an exercise in methodical planning but a reflection of the everyday needs of the various stakeholders, as these, often, get appropriated by the people themselves. The large informal market and temporary stalls put up during festivities are two such drivers that affect the public realm. The concept of a temporary retail set up in makeshift structures, sometimes just a table sheltered by an umbrella, located in front of formal shops is an acknowledged reality. Considering that their existence is symbiotic with the users, makes them carve their own place and adapt to the planned spaces. Also, the numerous Indian festivities have become increasingly elaborate over the years, involving large-scale sale of specialized items by hawkers, and leading to further encroachment of the roads, streets and pedestrian zones. The heavy influx of vehicles and people into the same space compounds the problem. All these factors lead to a visible change in streetscape and create management challenges for the city administration.

4. CASE STUDY – THE NEIGBOURHOOD MARKET OF SECTOR 15

The Sector 15 market is one of the oldest neighbourhoods of Chandigarh, with a large mass of middle class residents (Fig. 1b). It is located adjacent to the low-density "Educational Zone" of the city, "I as also other similar 'specialised'

¹⁰ The loosening is received with a sense of liberation: 'The faces of residential houses in the city and its outskirts have changed a lot and seem to be getting better. Grandeur is the watchword today.' Chandigarh Tribune. August 31, 2001 in Sagar. 2002.

watchword today. *Chandigarh Tribune*, August 31, 2001 in Sagar, 2002.

11 The "Educational Zone" comprises the Panjab University in Sector 14 and institutes for medical, engineering and architecture education in Sector 12. In addition are the Government Colleges for Men and Women located across the Sector's northern V3.

zones on its S-E (Sector 16) and its S-W (Sector 24) and has, over the years become a popular destination for a very large mass of students and young professionals seeking 'paying guest' accommodation. Consequently, over the years, the sector's market has transformed from a limited neighbourhood utility to an popular and vibrant hub, serving not only the daily and specialised needs of the surrounding sectors but also those of a varied strata of youngsters whose cultural and behavioural propensities, have led to a marked difference in the typology and range of both the formal and the informal trade activities¹².

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5. STUDY AND ANALYSIS

For the analysis, the entire commercial street was divided into 5 zones based on the physical grouping of shops existing on the site. Attributes of each zone, such as typology of commercial units (formal and informal), available trades/services, nature of built form and open spaces, vehicular and pedestrian circulation, parking requirements, needs of various stakeholder groups, usage patterns, encroachments, violations, etc. were meticulously mapped to undertake a SWOT analysis and, subsequently, formulate strategies for future design interventions.

5.1 Shops and Trades

The market consists of 4 types of formal, permanent groups. The original three include the 3-storeyed shop-cum-flat, single-storeyed shops, and the 'booths'. The fourth category, the *Rehri* Market, was not part of the original plan. ¹³ The shop-cum-flats, forming the bulk of the built mass, aligned in rows parallel to the V4, are set behind a continuous verandah providing a shaded walkway for the customers. The facade treatment is restricted to two basic options, red facing bricks with white trim and, a cream-painted, plastered surface with brick *jalis* masking the balconies of the flats on the upper floors (Fig. 2, 3).

The formal market offers a wide range of products and services including readymade clothes, fashion accessories, hair salons, eateries, etc. especially targeting the young generation (Fig. 4). The products cover a wide price range, from well known, expensive brands to their locally mass-produced cheaper copies. In addition to these, shops catering to the basic amenities like medicines, groceries, vegetables and fruits, home accessories are also

¹² There has been a considerable rise in street food outlets and shops that sell affordable but trendy range of clothes.

¹³ The term *Rehri* means a wheeled cart, generally used by mobile vendors for doorstep supply of fresh vegetables, fruit and suchlike ware. The vendors also station themselves at busy marketplaces at during peak traffic hours to catch more business. As in the other Indian cities, the *Rehri* is an integral part of Chandigarh also.

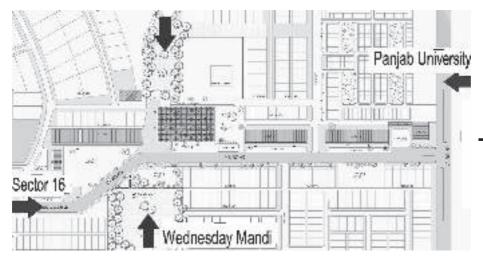


Figure 4: Unregulated bold hoardings changing the image of the original facades

present. The street includes a post office, a few banks and ATMs, temples and a community hall. It is also home to a very dense clustering of pavement hawkers – *mehndi* (henna) artists and others selling small household goods, fashion accessories, street food -- who station themselves in and around the shop verandahs. Of special mention are the numerous fruit *rehris*, who occupy pavements along the entire stretch, targeting vehicles and pedestrians using the road, causing traffic jams during peak office hours. ¹⁴ The problem assumes a huge and almost unmanageable magnitude on Wednesdays, when a farmers' market (*Mandi*) is organized across the green belt (Fig. 5). The numbers of such *rehris* and pavement peddlers increases manifold during the festival season.

The Rehri Market of Sector 15 began around 1965 as an informal collection of stationary *rehris* under a cluster of existing trees near the NW end of the V4. It was relocated in 1985 to its present site (within the sector green prescribed in the Master Plan), to become a part of the planned linear movement of shoppers, but disrupting the continuity of the vertical green. The year 1992 saw the temporary, mobile structures converted into permanent booths. Subsequently, in 2004, the owners were allowed to convert their tin roofs to *pucca* RCC ones,

¹⁴ Interestingly, some of the fruit sellers, who have permanent shops within the *Rehri* Market, also sell their ware from the carts stationed at this strategic location. Very often, the produce available on the roadside is of much better quality than that inside the *Rehri* Market.



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Figure 5 (Top): Sector 15 Market also serves the Panjab University, Sectors 16 & 24 as well as the pedestrian and vehicular traffic generated by the Wednesday Mandi



Figure 6 (Above): Courtyards of Rehri Market overspilling with various types of display

Figure 7 (Right): Small-scale tailors in the Rehri Market work in the corridors in contrast to expensive decorative work on the ceilings.



while drainage lines were provided in 2010.¹⁵ Today this comprises 264 booths of 2.4m x 2.4m, connected by covered corridors, with intermittent open-to-sky courts (Fig. 6). Notwithstanding its humble scale, the Rehri Market has a huge clientele base and caters to a wide range of customer needs from minor repairs to fancy clothes and accessories. Visually, it oscillates between well-done ornate ceiling to manual workers sitting in the corridor with cheap machines (Fig.7). The public areas of the Rehri Market are also encroached by a large number of informal establishments, including handcarts, small stalls or footpath outlets of fruit, small accessories, and eateries. In fact, the instances and scale of encroachments here far surpass those in the larger groups of Shopcum-flats (Fig. 8, 9a, 9b).

5.2 Issues and Challenges

The key issues that were identified are listed as follows:

Encroachments on Public Space: Encroachments are always the major side effects of any unregulated commercial precinct. Analysis of this market shows considerable number of shops encroaching upon the corridors with their products and display areas. In addition to those mentioned in the preceding paragraphs, these also include some food establishments that have put up stalls in the corridor meant for pedestrian movement (Fig. 10, 10b). In the Rehri market, considering the overflowing clientele, they have a lot more merchandise than physically possible within its allotted space. With the shopkeepers using the circulation areas for display, about half of the original 8' wide circulation corridor is left from that provided in the original planning (Fig. 8, 9a, 9b). The open to sky courts planned for light and ventilation (See Fig. 6) are being covered by the shop keepers to avoid rain, but also causing heat traps. The eatery areas at the rear have encroached upon the entire common space to create seating for their customers (Fig. 11). It also needs to be mentioned that the initial planning does not have clearly marked entry and exits. This and the modifications made by the users have led to dark and confused movement corridors as well as a high risk fire hazard. 16 The pavement has lot of encroachment from the informal sector, leading to huge inconvenience to other shoppers.

¹⁵ Chandigarh Administration officially recognizes Rehri Markets in Sectors 7, 15, 18, 19, 20, 22, 23, 24, 27, 28, 29, 29, 37, 39, and 44.

¹⁶ This market has recorded a fire incident due to short circuit in October, 1998. Though major disaster was avoided with timely intervention of the residents, no management or planning strategies have been considered for the future. Reference to article in Indian express on Friday, May 21, 1999, "City's Rehri markets are virtual fire traps" by C.B.Singh



Figure 8: Encroachments on corridor and pavement in the Rehri Market leading to loss of pedestrian circulation area





Figure 9a, 9b: Obstruction of pedestrian movement due to stacking and display of goods in the corridors

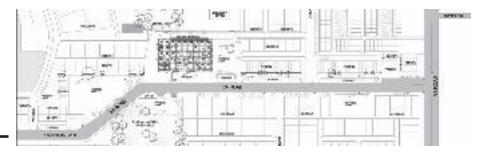


Figure 10: Outdoor public areas used for seating by popular eateries.





Figure 11: Covering of open courts by the eatereries leading to risk of fire

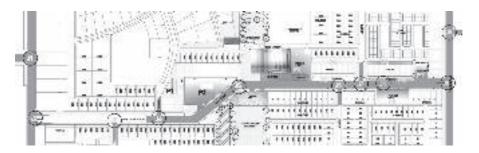


Figure 12: Parking zones and the identified junctions





Figure 13: Parked vehicles encroaching upon ongoing road

Figure 14: Unregulated parking leading to chaos and dearth of parking space

Disorganised Vehicular Movement and Parking: The entire stretch consists of 8 designated parking areas. On-site study showed that the required parking at peak time is approximately 215 four wheelers and 313 two wheelers as against the available 350 ECS in the designated zones. Thus, the issue here is not of deficient capacity, but more of inconveniently located, segregated, ill-defined, ill-planned and unmanned parking (Fig. 12). This leads to badly parked vehicles encroaching onto the road, obstructing the traffic flow (Fig. 13, 14). With increase in the volume of vehicular activity, some of the junctions leading to the inner sector roads too have become problematic, especially as these too have become favoured spots for hawkers selling fruits and street food.

Weak Pedestrian Linkages:With a major influx from Panjab University during the day and, of the 'paying guests' and other sector residents during the evenings, this market has to contend with a large volume of pedestrians. Since the trans-sector linkages along the V4 as well as the vertical green belts

-- as indicated by in Le Corbusier's plans (Fig. 1a, 1b) – were never realised, pedestrians entering the market from Panjab University, Sector 16 and the green belt have to negotiate through heavy traffic (Fig. 12). Since linkages are weak and illegible, the envisaged continuity of movement and safety has not been realised, posing inconvenience and risk to pedestrian. Since this market has also gained popularity as a major shopping destination for festivals, it undergoes a considerable increase in temporary stalls, with vehicles, pedestrians, hawkers all clashing into each other's zone, resulting in chaos and heightened risk.

Lack of Pedestrian-friendly Spaces: The entire stretch is provided with two sets of pedestrian movement area, a 3m wide covered corridor and 5m uncovered pavement. Today, this market street has become a hang out spot for youngsters, with some of the juice shops, and eating joints being their favourite hubs. This has led to many of the eating joints encroaching upon the covered corridor as well as the adjacent pavement, causing hindrance for the passerby. Also, many hawkers have established their territory on the pavement, and this has lead to reduced pedestrian movement area (Fig. 15, 16). Evenings also find the sector residents coming to the market for a leisure walk. Considering that the entire stretch has only 4 benches, no open areas for social gathering and interaction, and very few trees providing shade to the pedestrian, it lacks the some of the key attributes of a pedestrian friendly urban space.¹⁷

Emerging Conflicts in Imageability: The public realm cannot be separated from the built forms that define it. The original architectural controls, with their set designs, prescribed building-use, and, austere modernist facades are being met with resistance by the shopkeepers. The grievance is against the absence of opportunity for individual expression, and the functional obsolescence of the original building designs. With the upper floors converted to commercial uses, billboards and hoardings are plastered all over the facades, hiding their original visual controls (Fig. 4). ¹⁸ Also, the set niche provided for the shop's signboard acts as a deterrent in this age of neon sign and bold advertisements. Maintaining the original external control, some establishments have now undergone major changes in the treatment of shop fronts (Fig. 17).

¹⁷ In fact the trees in the only contained parking area also are more of a hindrance for effective parking. It was also reported that the shopowners did not want trees in the payments fronting their shops as the foliage hides their hoardings from the potential customers.

¹⁸ While the administration has permitted the conversion of the upper residential floors for commercial use and change in the originally prescribed floor layouts, the shop owners are still expected to adhere to the original façade designs.



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Figure 15: Pedestrian circulation areas encroached upon by hawkers

Figure 16: Entire pavement occupied by temporary stalls during festivals

Figure 17: Shops flaunting superior economic status with the distinct exterior facade treatment

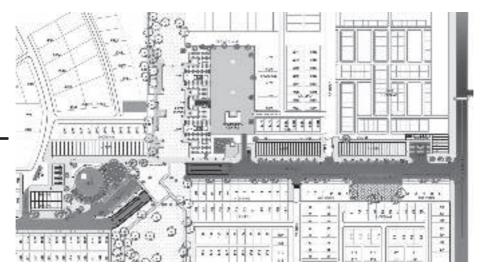


Figure 18: The Proposed Layout - the major concern here was the establishment of the envisaged continuous movement of the shopper, and continuity of the green belt.

Underused Community Centre: The Sector's Community Centre is a small structure built on a large plot at the rear of the Rehri Market. It has been present on the site since 1996, but hardly put to use due to poor access and non-visibility from the road. So, while the rest of the market area is badly overcrowded, this large public facility suffers from underutilisation and consequent neglect.

6. THE PROPOSAL

The Proposal was based on two fundamental objectives:

- 1. To retain and promote the cultural significance and spirit of the original design: The major concern here was the re-establishment of the originally envisaged safe and continuous movement of the pedestrian/shopper, both in terms of appropriate linkages between the presently segregated zones of the V4 and the adjoining sectors, as well as the continuity of the vertical green belt, presently disrupted by the vehicular traffic on the V4 and the insertion of the Rehri Market. Since the physical form and facade characteristics of surrounding built masses play a significant role in creating the visual quality of a public place, it was also considered equally important to maintain the visual form of the original shops and booths.
- 2. To recognise and accommodate the broad range of activities that have brought life and vibrancy to the market: In addition to creating a convenient and safe venue for the formal daily shopping, it was considered

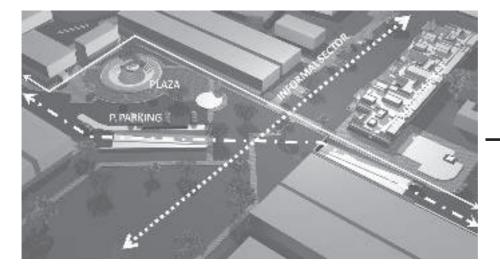


Figure 19: Distinct pedestrian linkages and vehicular circulation with a strong continuity of green belt

important to create a neighbourhood centre for shopping, dining and social interaction venues set within intimately scaled developments and quality public spaces. The target was to have a flexible and robust public place that would cater to needs of the students at university, the young 'paying guests', all residents of the neighbourhood as well as people from the adjacent sectors.

Thus, while the layout and design of the original formal shops (the 3-storeyed shop-cum-flats and the single-storeyed booths) was left untouched, the following design interventions were brought in:

- 1. Segregation of Vehicular and Pedestrian Paths: The V4 road was taken below ground for a stretch of around 150 metres, establishing continuity of the vertical green belt as well as safe pedestrian movement in the entire stretch of the shopping area (Fig. 18, 19).¹⁹
- 2. Centralised Underground Parking: The sub-terranean part of the road also led to a centralised parking located just below the Rehri market. Taking

¹⁹ Other pedestrian crossings were dealt with on case to case basis. A subway was proposed for pedestrians from the Panjab University while zebra crossings, inclusive of physical disability systems, were considered for some of the other junctions. Also, a detailed schematic possibility for traffic management during festivals, (such making the main spine one way and creating service road for the residences opposite the market) was worked out.

- future projections into account, the capacity of the new parking would accommdate 650 cars and 400 two wheelers. 6 out of the existing 8 parking lots were thus removed, permitting a better flow of through traffic and reducing clashes with pedestrians and hawkers. Two surface parking lots were retained at strategic positions as conveniences for the old and the physically challenged.
- 3. Redesigning the 'Market Core': A new design was prepared for the central area, integrating the *Rehri* Market, the Community Centre as also spaces for hawkers and small-scale artisans operating in the area. The major decisions taken here were as under:
 - a) A reallocation of sites was undertaken to improve the access and visibility of the Community Centre (which now is approached directly from the V4) and to make it an integral part of the 'market core' and create appropriate areas for indoor and outdoor functions (Fig. 19).
 - b) The new *Rehri* Market was aligned along the movement path of the pedestrians in the vertical green. The resultant plan has individual units arranged in open-ended cluster, with clearly defined entries and movement system, allowing heightened legibility and safety from hazards. Three service cores, equipped with stairs and ramps, lead to the parking below. The 'food court' has been taken to the terrace level, with outdoor seating that can be temporarily covered in inclement weather. It also allows a healthy segregation from other shops, prevention of fire accidents, etc. The building would be in brick to harmonise with the existing built mass on the site. Bold RCC frames in primary colours (peculiar to Chandigarh) highlight the entrances to this market (Fig. 20).
 - c) A continuous plinth opposite the rehri market caters to the informal market, including *rehris* offering fresh fruit juice to morning walkers frequenting the green belt. This design also allows additional spillover spaces for trades such as 'mattress makers'.
- 4. Creating Activity Spaces: With the vehicular road and most of the parking taken below ground, the large pavement and parking area adjoining the left cluster of shops (Fig. 18, 19) became free. This offered an opportunity for modification to a much-needed social space, both for passive and active recreation. accommodate seating, lighting and planters along the entire belt. The area was redesigned to include a small open air theatre to be used for informal and impromptu street performances, religious gatherings often organised by the shop-owners, a safe area for kids and the elderly, along with well-designed floorscape, seating, lighting and planters.

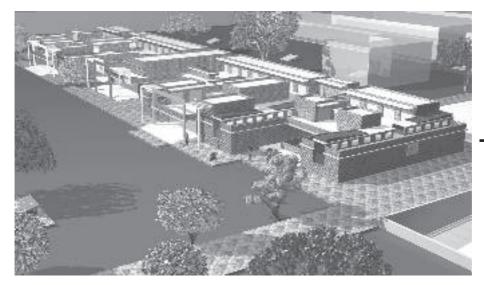


Figure 20: View of the Rehri Market, with clearly defined entries, allowing heightened legibility and safety from hazards. The 'food court' has been taken to the terrace level, with outdoor seating that can be temporarily covered in inclement weather.

7. CONCLUSION

Cities evolve over time, and even an iconic planned city like Chandigarh is subject to constant transformation. The neighbourhood markets have leaped beyond their boundaries in terms of their clientele reach, people's perception and its original design. Since change is bound to happen, it would be more advisable to address the issues and work towards an acceptable contemporary solution. Informal markets, or hawkers and peddlers, are very much a part of the Indian market culture, and cannot be wished away through 'visionary' policies of a 'City beautiful' – the tag attached to Chandigarh almost since its inception. Accepting their existence and making allowances for their needs in the design solution may well be the answer.

A comfortable and stimulating public realm requires detailed attention to the structure of a space and the elements within it. This involves hard and soft surfaces; appropriate planting; surfaces for pedestrians and surfaces for vehicles. Issues such as security, public art, street furniture, lighting and signage should also be considered at the same time. Attention to these details in the form of design and policies for future follow up will work towards maintaining the imageability of the street.

Analysis of successful communities increasingly point to a direct and quantifiable relationship between economic success and the quality of the public realm. Carefully designed, well-managed places are not merely a desirable outcome of successful economies; they can also be a significant driver of such success (English Heritage, 2006). A successful market is the one that is succeeds in its economic, environmental and social aspects and can sustain all three over the long term.

The design and re-design of the public realm involves many issues and challenges due to the multiple roles played by various stakeholders, often with conflicting interests. The neighbourhood market of Sector 15 in Chandigarh already has a major foothold in the economic sector and does not need any planning strategies to bolster this. But, working towards a solution that can address the present needs of the users and create a universally accessible, lively, attractive, comfortable and safe environment for all is the need of the hour, and has been (hopefully) addressed by the exercise presented in this paper. Iconic though it is, Chandigarh's Master Plan is static. What is important is that we do not allow it to distort our cognisance of the developing real-life city.

(Image sources: Except where mentioned, all graphics and photographs are by the Author)

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