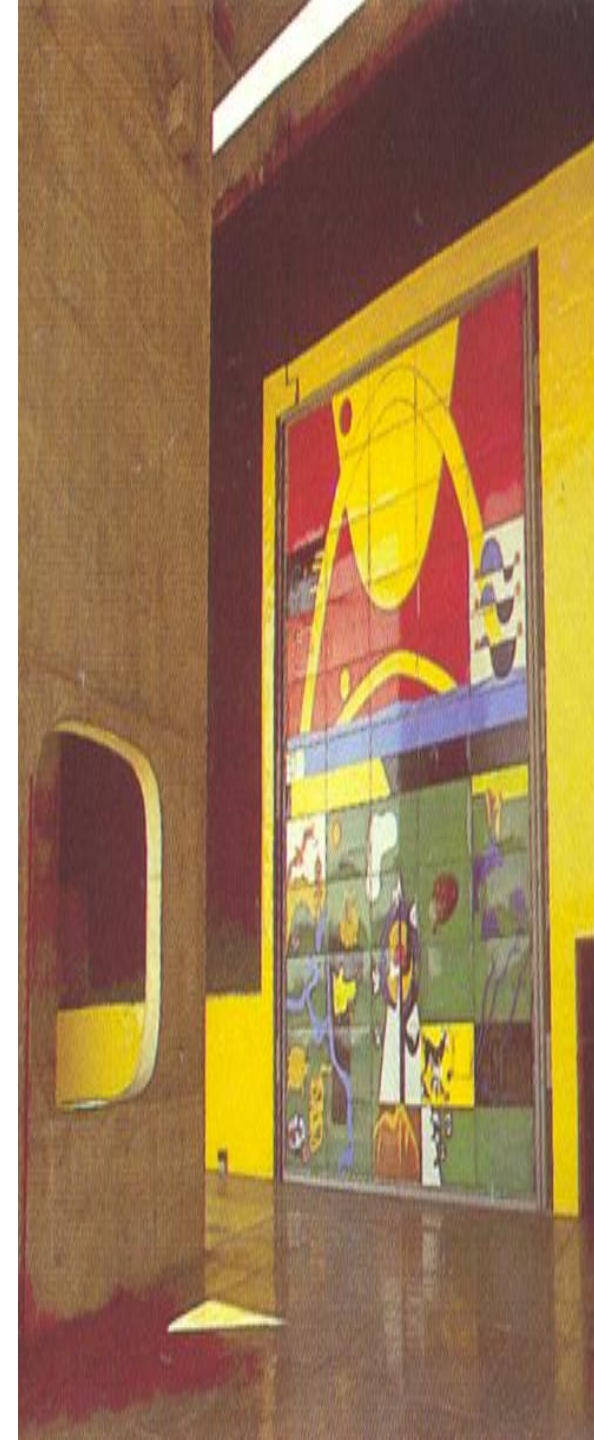


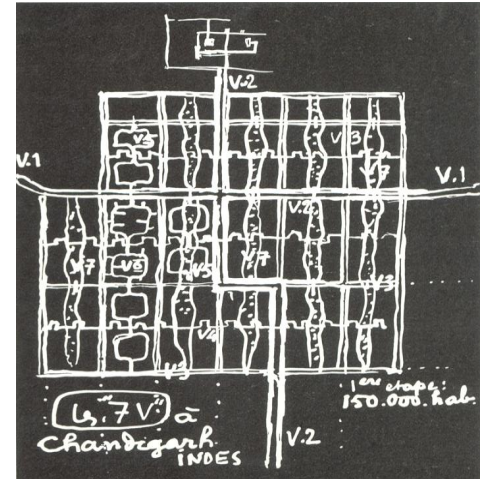
Redefining Development Controls & Chandigarh Periphery

Ar. Jit Kumar Gupta



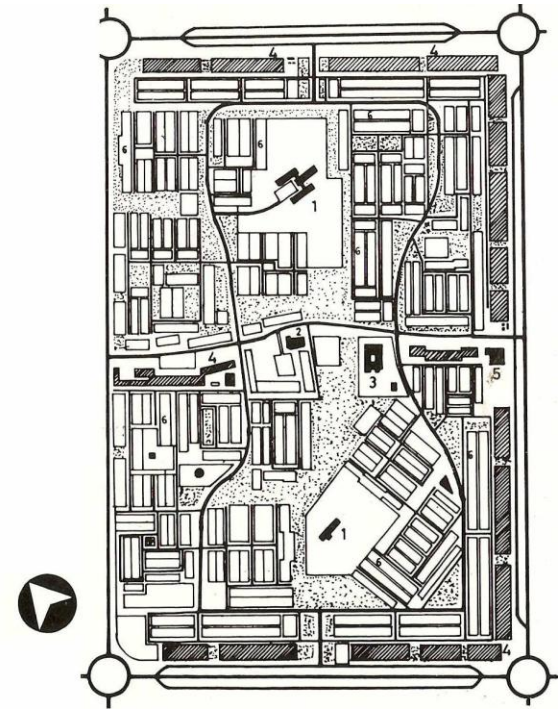
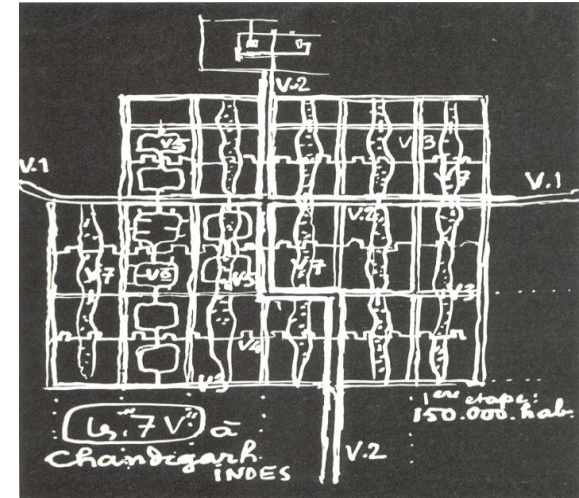
Development Controls

- **Developmental Controls**
- Entire growth of the city is subjected to developmental controls
- Each area of the city zoned to be used/develop for specific purpose.
- Entire built environment under strict control comprising of following
 - defining edges of buildings
 - setbacks
 - maximum height
 - use of materials and
 - size of doors and windows on façade
- Different set of controls applicable to different area depending upon importance.
- All commercial areas under the city are under architectural control.
- All plots following on V4 are subjected to prescribed design with freedom to change interiors.



Development Controls

- Large plots along V2 follow prescribed system of development and construction with no change permitted on the façade.
- All residential plots subjected to zoning controls.
- Plots up to 250 sq. yards, planned as terraced housing, subjected to frame controls.
- Plots above 250 sq. yards, subjected to zoning controls defining the building edges, height, FAR, ground coverage, projections, boundary wall and gate etc.
- All buildings in residential area to have front court yard and back court yard.



Developmental Control

- **Two sets of controls applicable**
 - Within city
 - Outside city
- **Within City**
 - Zoning control
 - Full architectural control
 - System of construction & architectural treatment.
 - Design control.
 - Architectural controls
 - Frame controls.
 - Gates and Boundary walls.
 - Advertisement control.
 - Tree preservation order.
- **Outside city**
 - Periphery control



Development Controls – Within City

- **Full architectural controls**
 - Applicable to all commercial buildings and
 - Residential houses along shopping street V4
- Controls related to houses include
 - Defining building lines
 - Height of buildings
 - Building materials
- For commercial area
 - Complete standard design provided including the detailed design.
- **System of construction & architectural treatment.**
 - Applicable to all the buildings in city centre.
 - All commercial buildings along V2 Avenues
- Control in city centre include
 - A grid of columns
 - Fixed floor height
 - Shuttering pattern on concrete
 - System of glazing/screen wall behind columns
 - Interior left the discretion of the owner.
- For buildings along V2 in addition to the principles of city centre, the control includes façade treatment.





CHANDIGARH MASTERPLAN

CHANDIGARH



INDIAN OCEAN

PUNJAB

PHASE II DETAIL OF KINROSS AND THE SOUTHERN HALF OF THE INDUSTRIAL AREA WAS STARTED IN 1960 AND IS STILL NOT COMPLETE. A MAJOR DIFFERENCE WAS THE PLANNING, BECAUSE TO LEAVE THE FOUR VILLAGES OF BANGA, BANGA, BANGA & BANGA IN PLACE. PHASE II, NOT YET DEVELOPED, WAS NOT PART OF THE ORIGINAL PLAN.

Development Controls

- **Design control**
 - For special buildings in architectural controlled area, schematic design is prepared on the basis of which the architect evolves design in consultation with the Chief Architects.
 - System applies to cinemas/petrol stations etc.
- **Architectural controls**
 - Applicable to residential buildings along the important areas like Uttar Marg and along the leisure valley.
 - Design is to be prepared by a qualified Architect in consultation with the Chief Architect to maintain architectural standard in the area.
- **Frame controls**
 - Most important control followed in residential plots upto 250 sq. yards.
 - Bulk of houses in smaller category of 250 sq. yards and below.
 - Followed where the housing is to be terraced housing.
 - Introduced due to lack of control which led to extremely poor/substandard kind of architects.
 - No prediction of what neighbour would do.
 - Achieving good street picture became impossible.
- **Control comprises of**
 - Fixing the extent and height of the party walls.
 - A top connecting course making the frame.
 - Standards size of doors and windows.
 - Harmony provided by the frame and variety by the individual treatment of building.



ARCHITECTURAL CONTROLS COMMERCIAL – SECTOR 17



ARCHITECTURAL CONTROLS COMMERCIAL – SECTOR 17

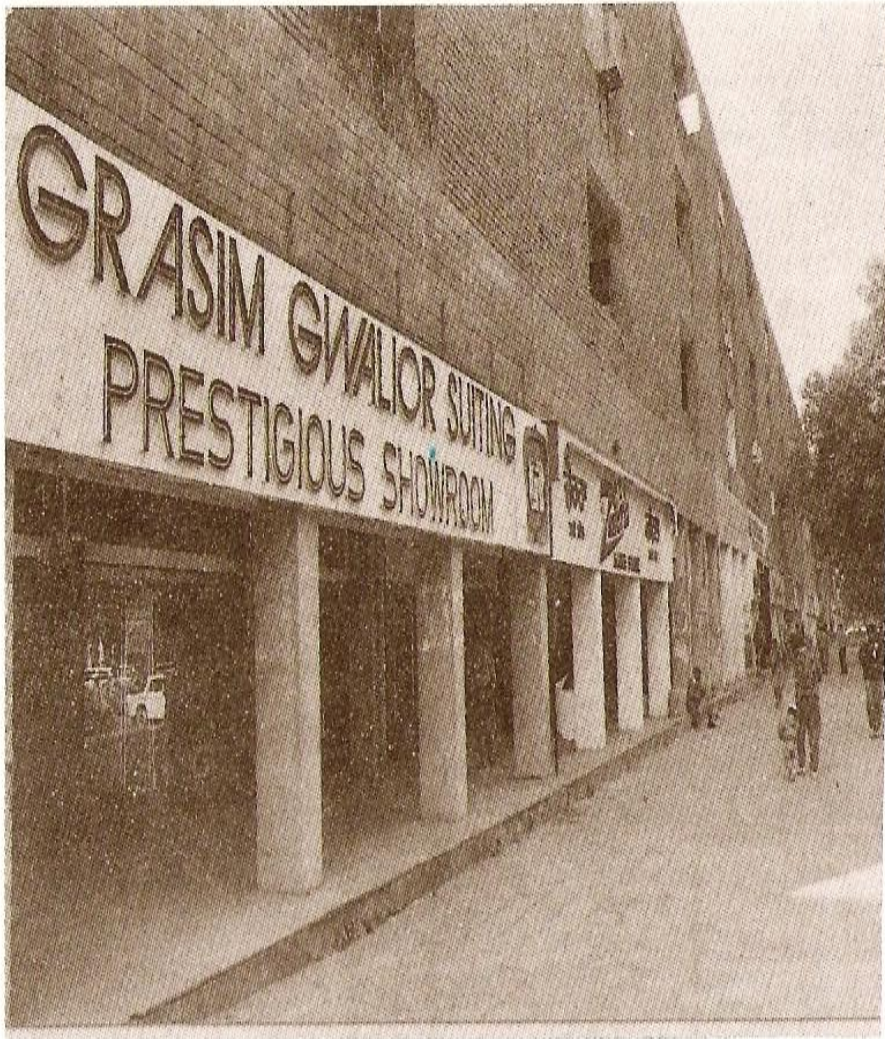


An unending view of RCC structures with uniform skyline in the city-centre.



Cinema buildings in the city centre are also designed within frame control (Jagat Cinema in Sector 17)

ARCHITECTURAL CONTROLS COMMERCIAL – SECTOR 17



Exposed back face shop-cum-flats along V4 road of the Sector 17.



Straight and uniform brick block with rectangular concrete column recessed balconies on upper floors.

ARCHITECTURAL CONTROLS COMMERCIAL – SECTOR 34



Upper floors are projecting over previous floors, increasing the depth of floor space.



Shop-cum-offices in the sub-city centre built in exposed RCC work without plastering or colour wash.

ARCHITECTURAL CONTROLS COMMERCIAL – SECTOR 26



Blank façade in exposed brick work without any decorations. Only concrete bands have been provided to break the monotony.

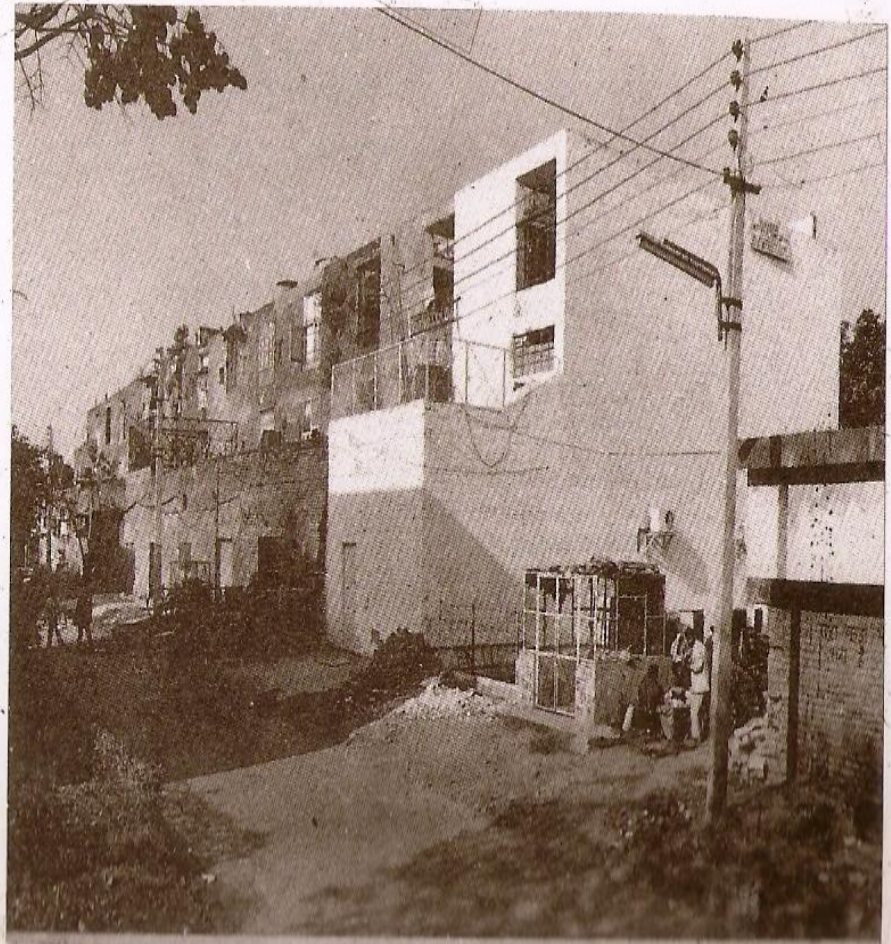


Side elevation of a showroom with courtyard boundary wall at the back

ARCHITECTURAL CONTROLS COMMERCIAL – V4

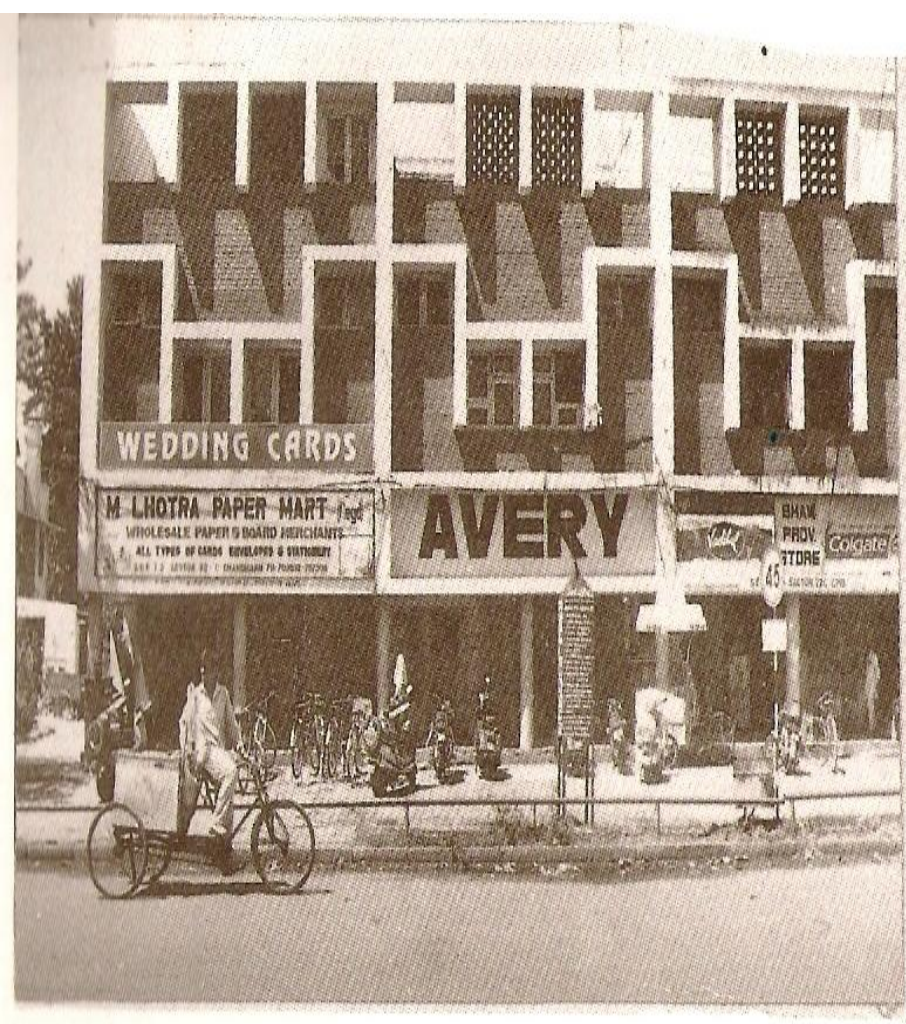


Front view of shop-cum-offices in exposed brick work and corbelling in the pillars.

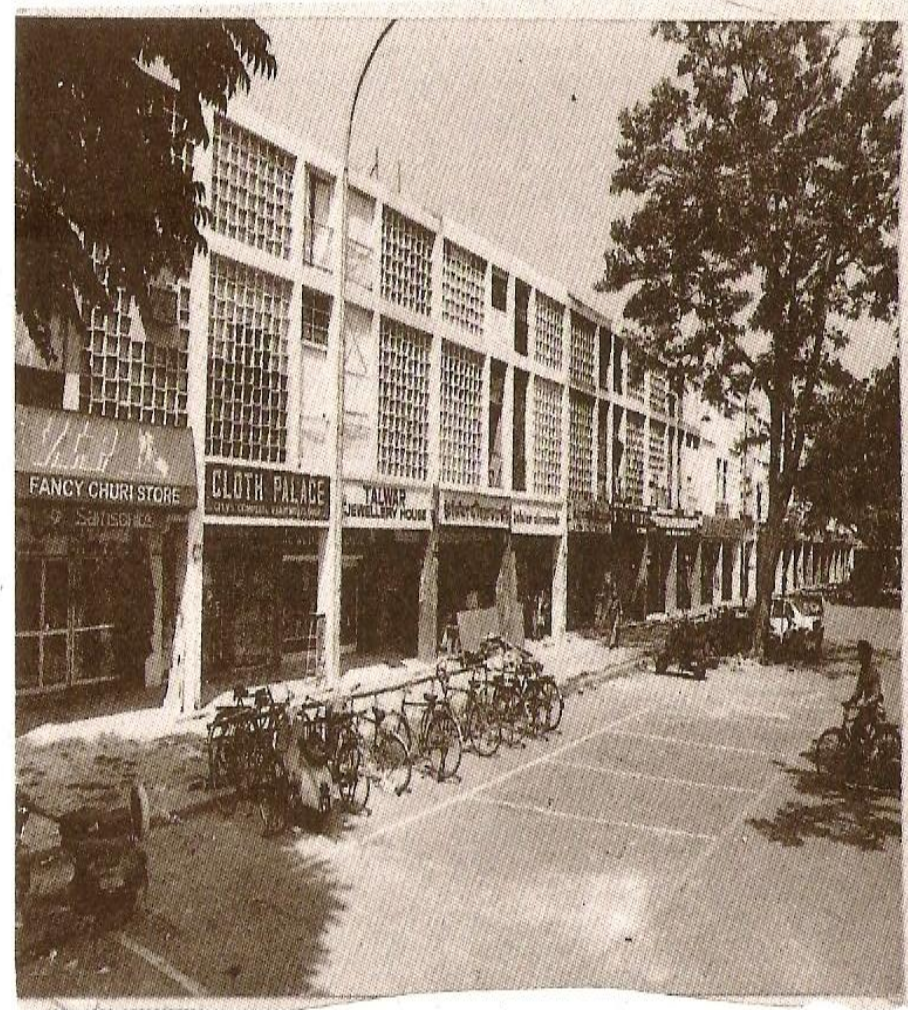


Rear Courtyends of shop-cum-offices.

ARCHITECTURAL CONTROLS COMMERCIAL – V4



Front view of Semi-Industrial type of shops adjoining Aroma Hotel. (Zone-1)



Front view of shops adjoining Kiran Cinema (Zone-2)

ARCHITECTURAL CONTROLS COMMERCIAL – V4



ARCHITECTURAL CONTROLS COMMERCIAL – V4



CONTROLS - MADHYA MARG



A general view of Madhya Marg from a round about showing commercial establishments on the right and identical institutional buildings on the left.

ZONING CONTROL RESIDENTIAL



One kanal houses in phase I of the city with fixed set backs and height regulations. The size and design of



Private houses in phase I of the city under full architectural control

FRAME CONTROL RESIDENTIAL



A street picture of 10-Marla houses under frame control.



Rear view of 10-marla houses with standard design of brick jallis (New control has relaxed this control)

FRAME CONTROL RESIDENTIAL



FRAME CONTROL RESIDENTIAL



Marla houses in Phase-I of the city with uneven projecting balconies built before frame controls were applied (Sector 22)



Marla house development within frame control.

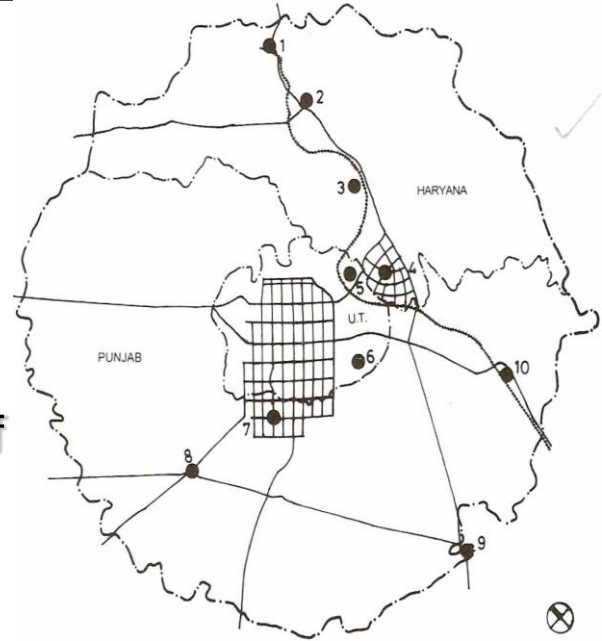
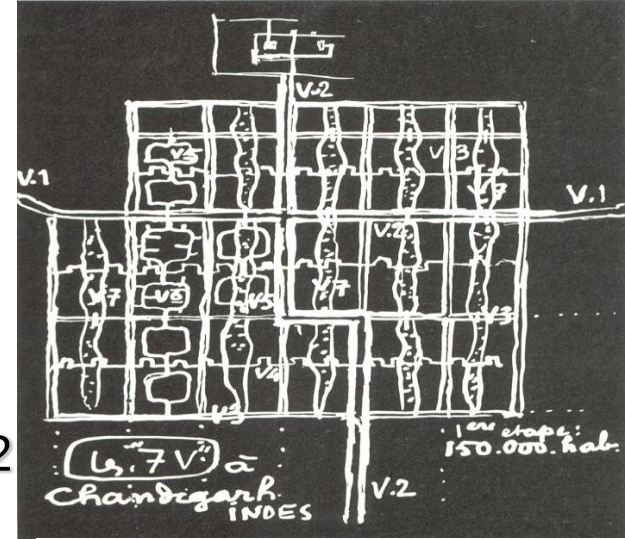
Development Controls

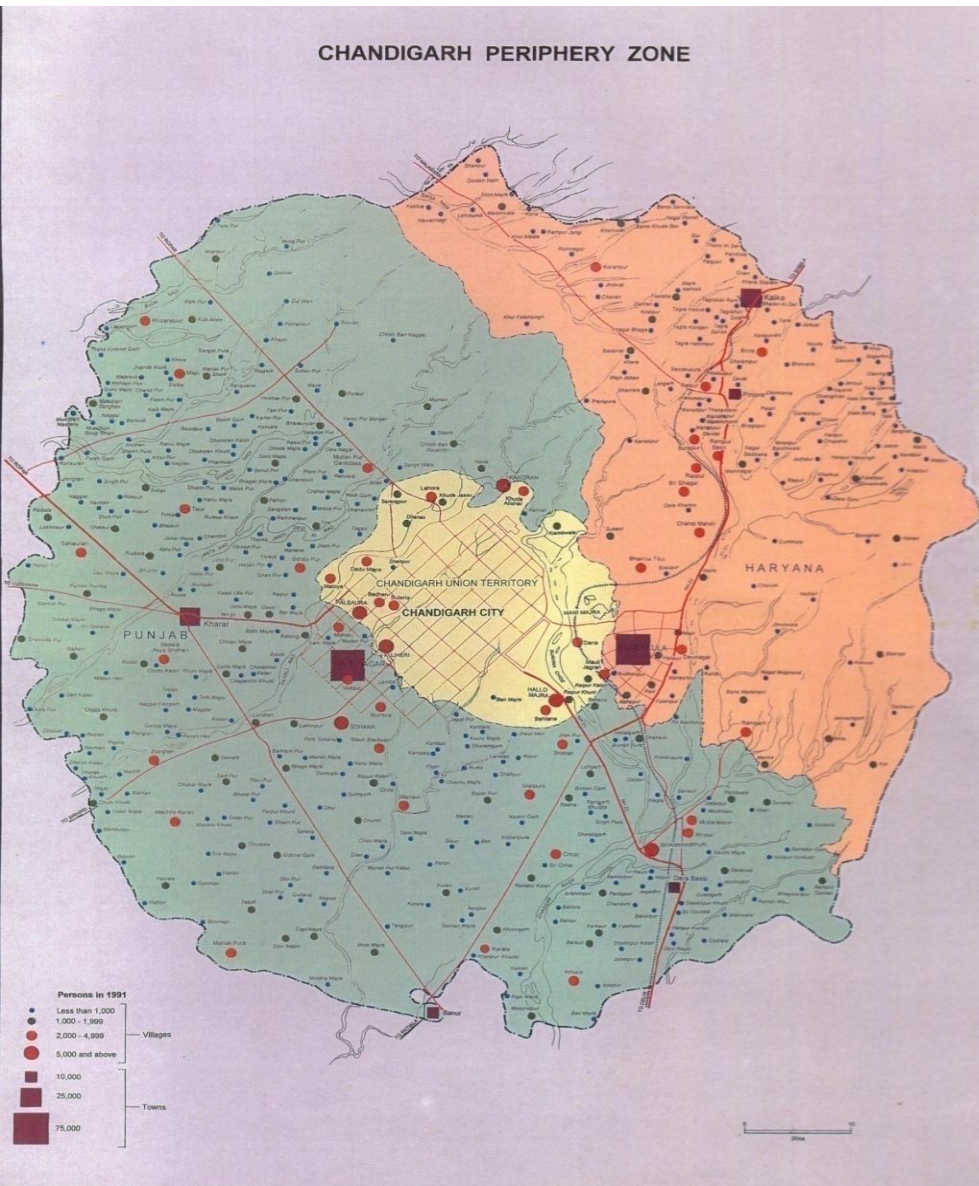
- **Gates and Boundary walls**
 - All gates and building walls to conform to standard designs adding unity to the street picture.
- **Advertisement control.**
 - Control to take care of visual pollution in the city
 - To regulate display of advertisements on the building and in the city.
 - To specify size, space, location and kind of display to be used in advertisement.
- **Tree preservation order**
 - All existing trees to be treated as preserved.
 - No removal of trees allowed without permission.
 - Sanction granted for removal in rare cases of extreme hardship
 - New trees to be planted in lieu of tree removed.
 - No hopping, lopping and chopping of trees allowed without permission.



Developmental Controls – Outside City

- **Periphery**
- City and periphery two distinct related but inter-dependent entities, with
 - different functions to perform
 - city providing services and periphery providing daily needs.
 - their functions must not inter-change
 - attempt to interchange functions would lead to anarchy.
- The Punjab New Capital (Periphery) Control Act, 1952 aims at:
 - Protecting Chandigarh against haphazard, unplanned development.
 - providing area for future expansion
 - eliminating growth of slums
 - meeting daily needs of the residents.
 - preserving the character of the area.
 - Harmonizing development of the city and periphery.
- 8 km belt around Chandigarh reserved as periphery
- Extended to 16 km in 1962 considering the pressure of development.





Periphery Control Act of 1952 was established to regulate development within a 16 Km limit beyond the city.

As per this act, "No person shall erect any building or lay out any means of access to a road, in the controlled area except such building as is required for purposes subservient to agriculture, poultry, dairy, etc.

**Periphery area around 1430 sq. km.
largest part with state of
Punjab (76%)
Haryana 21%
Chandigarh left with 3%,**

PERIPHERY CONTROL



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Harmonizing development of the city and periphery.

Periphery-Approach & Development

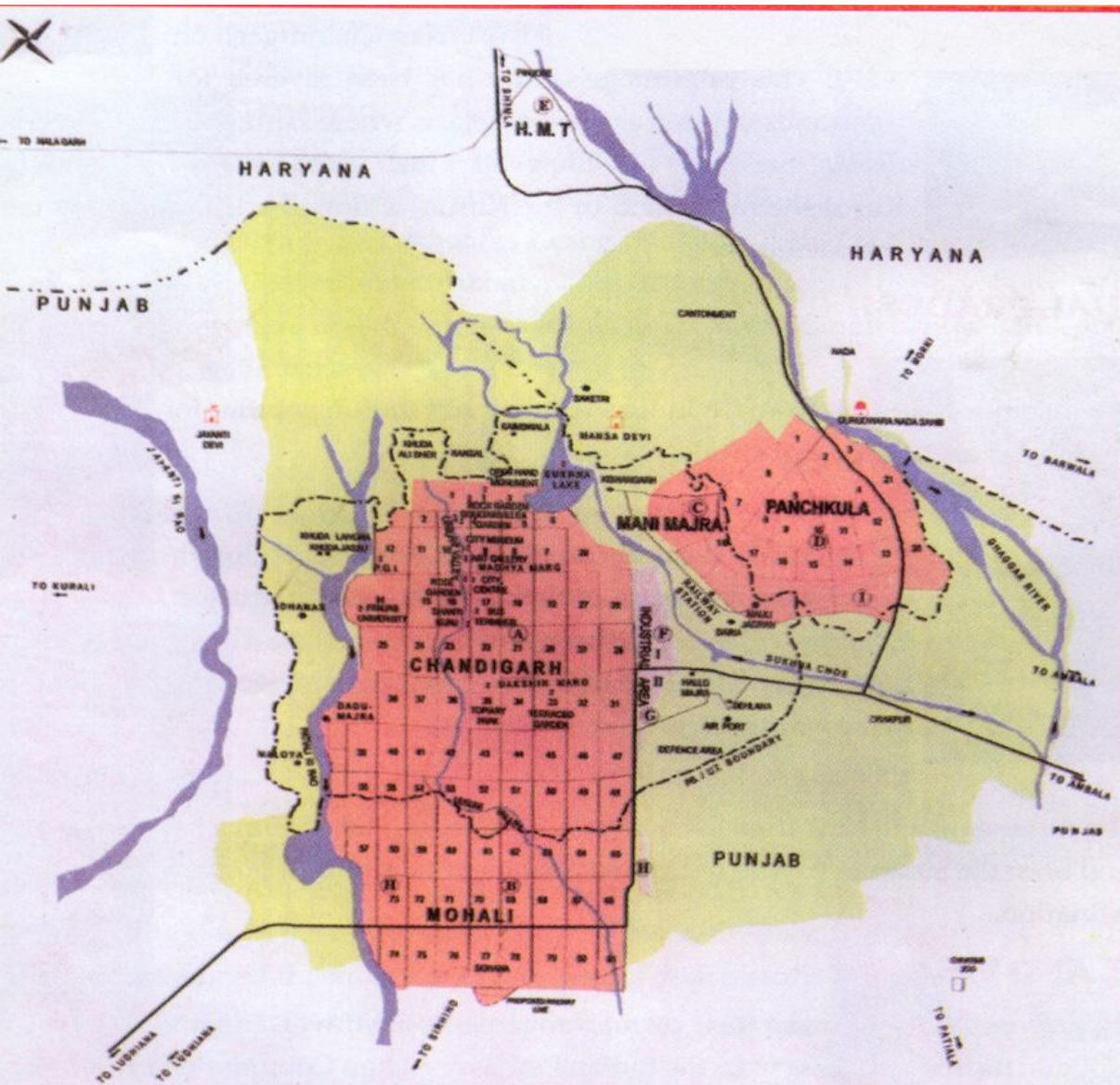
- City and periphery went well till 1966
 - growth of population was slow
 - developmental pressure had not built up.
 - The existence of a single agency - **Capital Project**
- The development plan prepared for the periphery provided for
 - freezing the area against urbanization; and
 - maintaining its character - essentially agricultural.
- Role and functions of city and periphery clearly defined-
 - the city providing basic/higher order services, infrastructures, and
 - the periphery performing the role of a sustainer and provider daily needs
- **ii) Post-Reorganization Scenario.**
- Reorganization of Punjab in 1966 marks watershed in city development.
- It changed the context of periphery
 - sub-division into three parts
 - largest part going to Punjab (76%) and
 - Haryana and Chandigarh left only with 21% and 3%, of the original area of around 1430 sq. km.



Periphery-Approach & Development

- States of Punjab and Haryana used periphery by
 - creating S.A.S. Nagar (Mohali) and Panchkula,
 - defeating the main objective of periphery.
- Since the establishment of S.A.S. Nagar (Mohali) and Panchkula from 1967, periphery never rested
- peripheral area witnessed rapid growth and development, faster than the core cities of Chandigarh, Panchkula and Mohali.
- By 2001, S.A.S. Nagar attained population of 123,284 and Panchkula 140, 925.
- S.A.S. Nagar grown by more than 50% of its size.
- Panchkula has more than doubled.





- States of Punjab and Haryana used periphery by creating S.A.S. Nagar (Mohali) and Panchkula, defeating the main objective of periphery
- Since the establishment of S.A.S. Nagar (Mohali) and Panchkula from 1967, periphery never rested and
- underwent enormous development, both planned and unplanned but largely unplanned

Periphery-Approach & Development

- What are the options to protect the periphery.
- Should the periphery be allowed to go unregulated and uncared?
 - Should it be allowed to be misused, mutilated, manipulated, speculated and subjected to human greed?
 - Has the Periphery Act lost its relevance and should be scrapped?
 - Should the area be frozen against all development or allowed to be used for development in a planned or unplanned manner?
 - If allowed, what should be the development imperatives?
 - These questions would require answer by professionals and stakeholders.
- Considering the ground reality,
 - Periphery has attained high volatility and growth potential,
 - any effort to stop these developmental forces is likely to prove counter-productive.
 - The best option is to channelise these forces to achieve objectives of the Act.
 - A coordinated approach meeting all the conflicting interests would be critical.



Periphery-Approach & Development

- A fallacy to consider periphery as a static concept against the dynamism of the urban system.
- If city out-grown its defined limits over shadowed Periphery, then such area must give way for catering to the growing needs and treated as an integral part of the city.
- Approach would help in maintaining balance between city and periphery. Accordingly,
 - area ripe for development to be identified and
 - used for promoting planned development
 - approach would help in not only using a smaller portion of periphery for urban purposes but
 - Would preserve major portion in its natural form.
 - Area identified for urbanization should permit integrated development of Chandigarh, Panchkula and S.A.S Nagar (Mohali) as a single urban complex
 - which would help putting in a place
 - an effective and efficient system of inter-city mass transportation,
 - integration of urban services and infrastructures
 - avoiding duplication and overlapping.



Periphery-Approach & Development

- To ensure
 - planned growth within a pre-defined planning framework,
 - redraw the development plan for the periphery
 - clearly identifying the area proposed for development,
 - area proposed for protection and
 - Plan evolved by an Expert Group by involving all the partner states.
- The proposed developmental framework based on the principles of
 - equity and self-sustenance
 - production of essential nutrients;
 - recycling of all wastes-organic and water; utilization of natural sources of energy (Sun, Wind and Bio);
 - improving productivity
 - making available optimum clean environment;
 - ensuring unobstructed movement of pedestrians, motorized and non-motorized traffic



Conclusions

- Stakeholders should respect the law i.e Periphery Control Act
- Adopting a co-ordinated approach by all states
- Prepare the controlled area plan
 - To achieve the defined objectives
 - Preserve the character of the remaining area
 - Putting end to uncontrolled urbanization
 - Maintaining the bio-diversity of the area (EFZ)
 - Preserving the character of villages
 - Adopting PURA for rural infrastructure
 - Eliminating commercialization of villages
 - Creating unified law and unified agency for planning and development-creating Chandigarh Capital Regional Planning Board
 - Putting end to creating urban local bodies to regularise un-authorised constructions



Conclusions

- Creating an effective and efficient machinery for checking violations.
- Creation of fast track courts for dealing exclusively with violations within periphery
- Chandigarh to confine all developments within the Master Plan area
- 44 kms. of periphery to be preserved without commercialization
- Chandigarh to review the bye-laws framed for villages to eliminate commercialization
- Building Bye-Laws for the rural areas to be framed by states of Punjab and Haryana
- Plans prepared by states of Punjab, Haryana and by Chandigarh to be objectively reviewed for assessing their environmental/development implication

