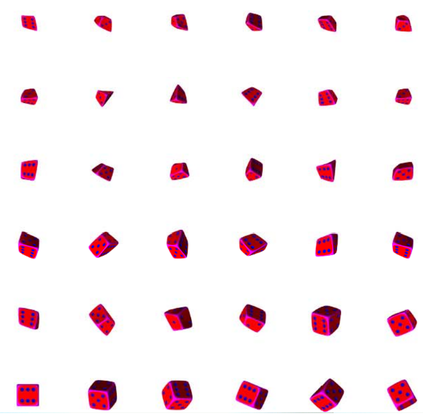
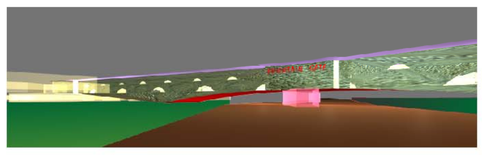
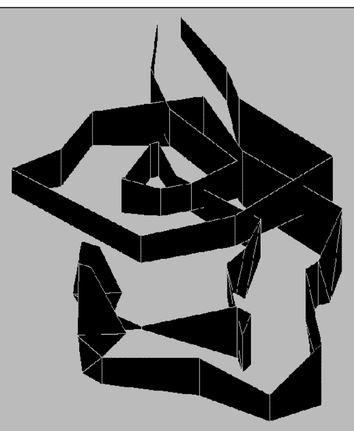
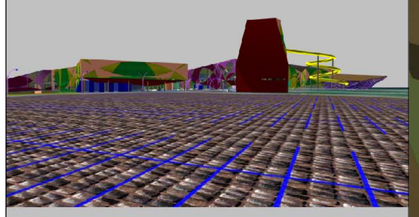
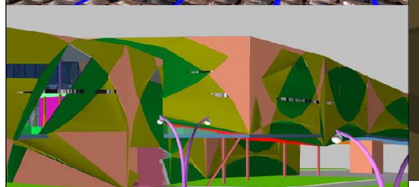
PREMAJOR STUDIES



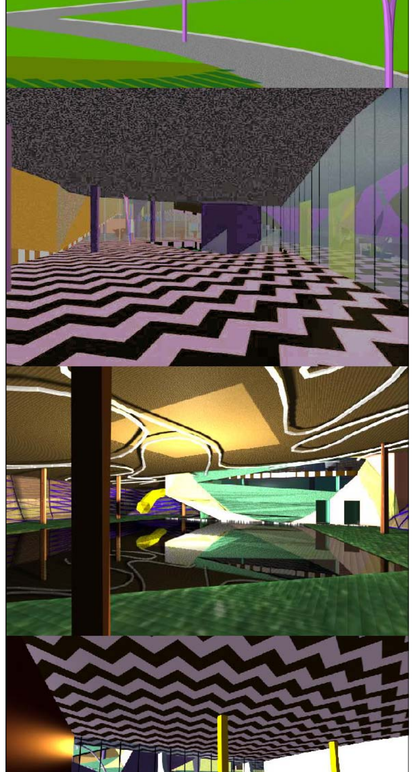


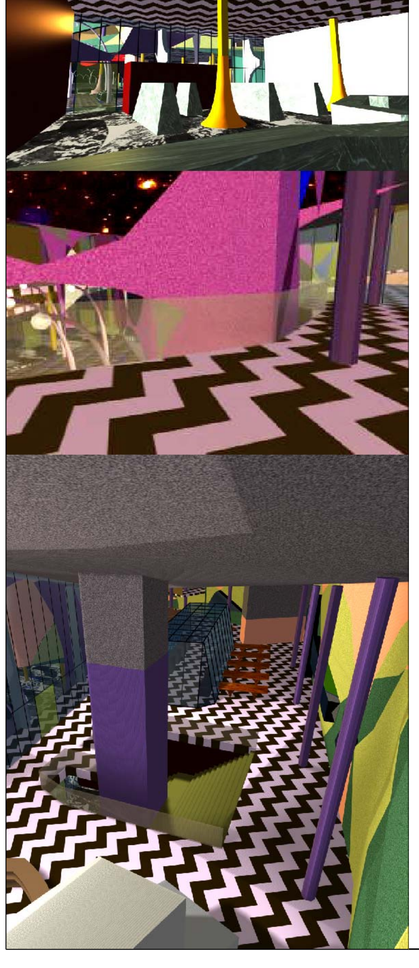


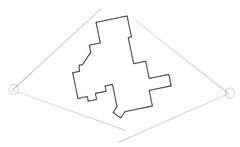


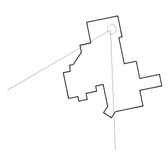


AERIAL VIEW



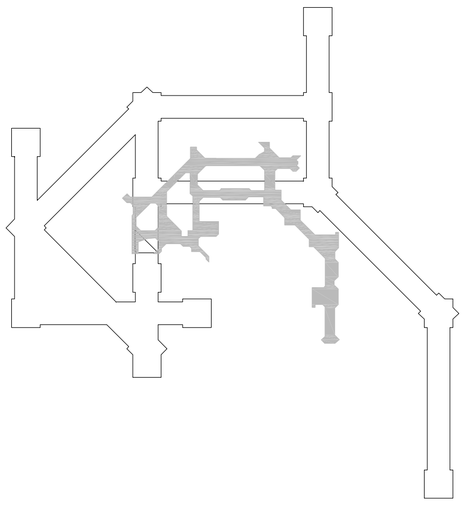


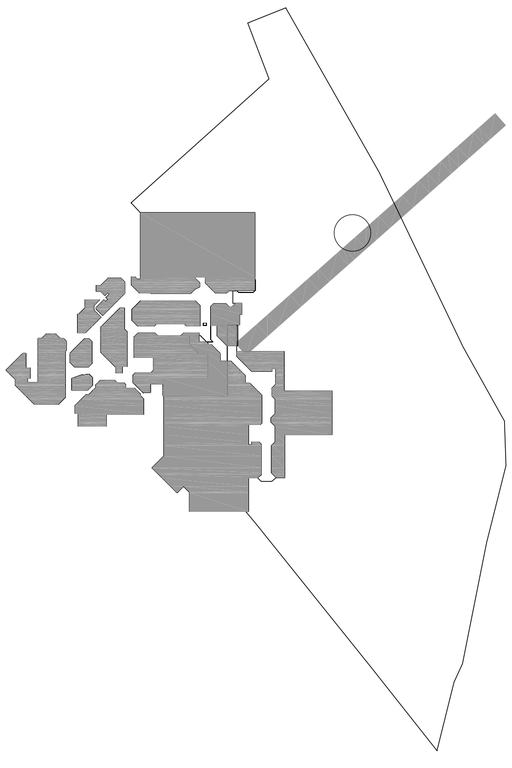


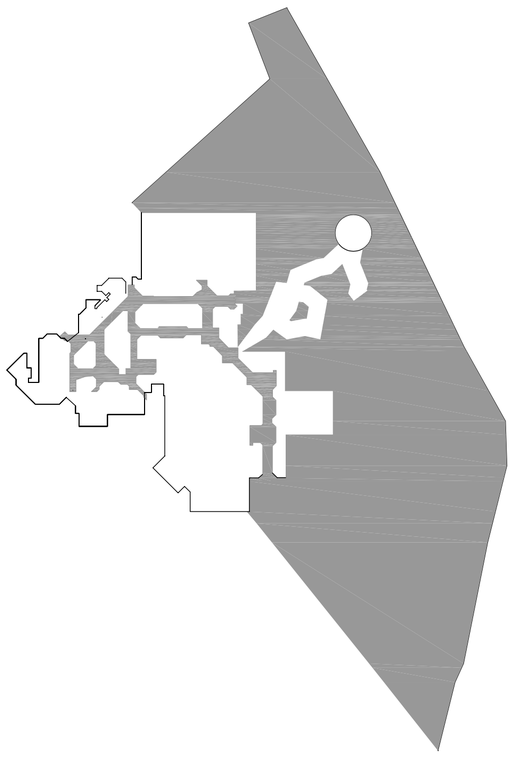


THE PERIMETER OF THE SHOPPING CENTRE ALWAYS RECEEDS AWAY FROM EXTERNAL VIEWER, NEVER ENCLOSES.

BY INVERTING THIS CONDITION THE EXTERIOR CONDITION ENCLOSES, DEFINES, AND VALIDATES THE USE OF EXTERNAL SPACE, A COURT-PLAZA.







THE DEVELOPMENT OF FORM

AN OPTIMUM MODEL FOR THE SHOPPING MALL, AS DESCRIBED IN THE ABOVE TEXT, WHEN RELATED TO THE FOUNTAIN GATE SHOPPING CENTRE CONFIGURATION IS APPROXIMATELY TWICE THE SCALE OF THE ACTUAL CONDITION.

A NEW BUILDING ENVELOPE STRIP IS OBTAINED BY INVERTING THIS RELATIONSHIP, DOUBLING THE 180M OPTIMUM TO GIVE A 360M STRIP. THIS FORMS THE BASIS FOR ALL FORM MANIPULATIONS, THE STRIP OF CONSISTENT LENGTH.

THE WIDTH RELATIONSHIP WAS ALSO INVERTED TO GIVE A NEW DIMENSION OF 17M. THIS ALSO CONFORMS TO A MINIMAL WIDTH FOR PROGRAM, SUCH AS CINEMA BOXES WITH ACCESS, AND THE INDOOR LAP POOL.

THE SUBSEQUENT BENDING OF THIS STRIP WAS BASED ON SEVERAL CONCERNS. THE INTERIOR VOLUMES OF THE CINEMAS & POOL CONSTRAIN THE BENDING PROCESS, IN A SEGMENTED APPROXIMATION OF A SMOOTH LINE. IN ADDITION, THE BENDING PROCESS CONTINUALLY ATTEMPTS TO CREATE ENCLOSURES THAT ARE PARADOXICALLY OPEN AT THE SAME TIME, TO PREVENT THE NEW PUBLIC SPACE BECOMING INACCESSIBLE.

THE FORM TIES OVER ITSELF TO ENCLOSE A COURTYARD WHICH FORMS PART OF THE TRANSITION FROM THE INTERIOR OF THE SHOPPING CENTRE TO THE EXPANSE OF THE CARPARK. THIS SPACE IS OPEN TO THE NEXT AS THE FORM BECOMES RAISED CREATING A UNDERCROFT UNDERNEATH. THIS ALSO DEFINES A PORTE-COCHERE FOR A BUS STOP AND TAXI RANK.

THE LATTER PIECE OF THE STRIP FORMS AND OVERALL "U" SHAPE AROUND A PUBLIC SQUARE, WHICH FRONTS ONTO THE NEW CARPARK, THE BUILDING FORMING A BACKDROP TO THIS, THE LARGEST SPACE ON THE SITE.

The mall

Layout and dimensions

Based broadly on US experience the most successful layouts have been the simple ones – namely I-, T- and L-shaped layouts. Parallel malls and other more complex layouts have generally been unsuccessful, although a recent innovation has been a 'figure of eight' layout in the United States.

There are no firm criteria on maximum lengths – by developers' standards a mall is too long when the shopper passes the first unrented shop. But according to some US research the optimum length is 180m. with an absolute maximum of 240m. Probably the longest mall in the world is at the Cherry Hill Shopping Centre in Philadelphia. This measures 750m. Of course, the apparent length of a mall can be broken by squares, courts and offsets which can measure up to 30m. square. The main danger here, however, is that they may be made too large. One square in a US centre measures 90m. by 20m. with a height of 12m. and the developers are still trying to fill it up with furniture and features to create a satisfactory environment.

The width in relation to the height of the mall is important because the cross-sectional area has a strong psychological effect on shoppers. US malls are usually between 9m. and 15m. wide. In Britain they are narrower – between 7·5m. and 10·5m. – but are generally interspersed with wider sections. Narrower malls have been successful at Place Ville Marie and Place Victoria, both in Montreal. These malls are 6m. and 4m. wide respectively.

The rate of pedestrian flow is a vital factor in planning the width of a mall. This is particularly so, for example, where three malls converge or at access points to lifts, staircases, etc. Some research into pedestrian flows on pavements was carried out by the Ministry of Transport and the Road Research Laboratory, but it is not clear to what extent these results apply to shopping malls. The maximum capacity of a pavement without being overcrowded is thought to be 90 persons per metre width per minute. Where there are shop windows, however, a 'dead width' of 75cm. should be allowed. A 6m. wide mall having shops on either side should, therefore, have a capacity of 900 persons per minute.

Mall heights range between 7·5m. and 60m. with courts rising to 10m. or more. A change in ceiling level is often used to emphasize a break in the mall, for example, where the malls open out into a square. As far as changes in mall floor levels are concerned gradients should not be more than 1 in 20.

As a general guide, the total area of the mall, including courts and squares, should be about 10 per cent of the total floor area of the centre. Wherever possible, provision should be made in the design of the centre for future expansion. This is usually best achieved by extension of the malls. In the United States developers often lease certain areas of a centre on short- or medium-term leases (say, 10 years) so as to cater for such expansion at a later date.

Focal points

A principal court, acting as the focal point of the centre and measuring, say 18m. by 18m., is now a feature of most enclosed shopping centres. It can be used for various promotional activities including exhibitions,