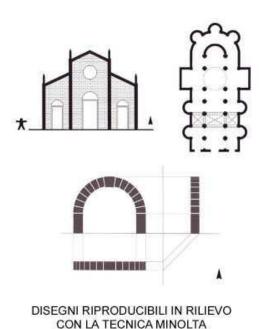
POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE Degree in Architecture Honors theses

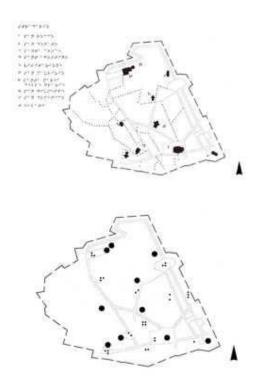
Space and drawing for the blind

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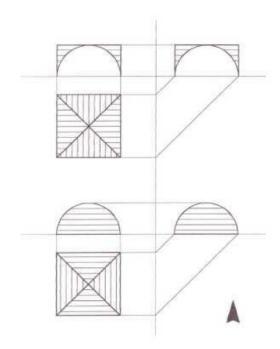
In the more recent years an always greater activity and interest are being manifested in many Italian cities, revolts to the valorization of the cultural, historical and architectonic resources presents on the territory: this comes true by means of the promotion of studies and searches, the organization of tourist visits, extensions, seminaries, conventions, publication of texts and pamphlets, recovery of historical buildings... In this context it is opportune to think next to as to render to an always greater user this patrimony accessible, pulling down not only the architectonic barriers, but also the perceptive. How to render fruibile to a blind person a building, a monument, a city, an object of large dimensions, such from not being able to explore it with the tact? For being able to touch usefully an object this must in the first place be near to hand capacity, and of the equal maximum dimensions to the amplitude of the two opened arms, otherwise the information, acquired with movements succeeded to you, must be processed with a remarkable effort. An oral description can be a solution of easy uses, but not always, however exaustive it is, it can't replace an image. The drawing can be considered like an effective instrument in order to describe the truth, universal used means of communication, following rules and norms. But what type of drawing does see a blind person? In what way can a person lacking in the sight read and comprise a language based on the images?



to represent an object through the drawing means to imagine a progressive crushing (but without lateral deformation) of this on a plan, the sheet. If we leave a thickness to the image, however it is being able to be perceived with the aid of the tact, we obtain a readable drawing for the blind. Several techniques exist in order to produce drawings in relief, that from the simple one collage made with various thickness and texture cards, the Minolta oven, that "swells" the ink on affixed sheets, and still the serigrafia, the Thermoform, the jolt in branch, etc. To describe a building through the drawing it is necessary to operate a careful selection of lines, a simplification, because is impossible to represent all on a sheet: we can resort to geometry, that it is one of the elements that constitute a shape (with materials, color, etc.)



In fact if we consider only geometric solids, that are the base of a constructed shape, we can describe the essence of the same shape. Observing a certain number of churches, that represent one of more numerous monuments on the territory, there can be found some common elements between the parts that compose them, first between all the cover by vault. to render comprehensible a complex object for succeeded steps, we can describe the shape of a church through the description of the type of cover that characterizes it.



The vault is a shape that can be described through the simple geometric element on which it rests its construction. The more numerous vaults (that we can describe through models and drawings) are the barrel vault, simple or articulated by groins and lunette, cross-vault, pavilion-vault, sail-vault, umbrella-vault, the dome (spherical, ellipsoidal, octagonal-pavilion). If we omit the dimensions and the materials and we only consider the schematic description of the type of cover, we can decompose a complex shape (the church) in minimal units (the spans), and considerevery of them like the ticket of a Puzzle that, assembled with the others by logical succession allows to represent the plant of the churches in schematic, but sufficiently precise

The product of my job, a didactic game, can be used in order to teach to blind children (but also to seeing people and adults to) which elements is formed a church. For being able to be used in profitable way the game it must be preceded from an activity of education to the drawing. Moreover the elements that compose a church (transept, nave, hall, apse, presbytery, chapels, etc.) have been described in a small illustrated dictionary (in relief), in order to better tell the building, accompanied from one short history of the evolution, in the centuries of its shape. As far as the city, is useful to produce maps in which indicating the essential information that regard mainly where the church is and how found it, while the shape can be described in successive cards.

These are single signals to the argument.

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