Graphic Readings on Bressanone:
Models and Schemes

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Abstract

The paper deals with the morphologic and urban analysis of Bressanone through the digital modeling of the territory and the building layout with the aim of defining a mode of observation from the landscape to the city, able to provide the tools for the knowledge of the historical and architectural heritage of Bressanone, through the elaboration of new images. The symbolic values, given back by the images produced, decline the orographic and urban complexity in the language of representation, which translates the analytical process into a digital iconographic apparatus. The views realised from the 16th century onwards are integrated with the new graphic elaborations, tracing the spatial relationships of the territorial and building fabric.

Keywords: graphic analysis, digital modeling, Bressanone, digital iconography, historic-urban reconstruction.

Introduction

The essay deals with a graphic study on the urban evolution of Bressanone through a transversal reading between historical and iconographic sources, with the aim of providing a story by images of the urban events that have determined its current configuration together with the perception that many travelers had of the city centre.

The topographical elements that characterize the city of Bressanone, on the one hand the river that surrounds the urban expansion and on the other the mountains, constitute the values of identity of the bishopric city. A *locus asperrimus* [Flachenecker, Heiss, Obermair 2000, p. 115] whose urbanization process is significantly intertwined with the social and religious history of the South Tyrolean region and with a urbanistic connotation geographically defined by the expansionist-political tendencies of the bishopric principality, which also owned the cities of Brunico and Chiusa. The characterization of the urban context can be considered as the result of a process of oscillation between the municipal social control and the strategies of the ecclesiastical power that determined the socio-cultural consolidation of the building stratification. The presence of the convents of the Poor Clares and Franciscans within the pilgrimage routes that crossed Bressanone, the cathedral, the market square, the Bishop's Palace, are only some of the focal points of the *civitas* memory, whose first settlements are placed around the twelfth century [Flachenecker, Heiss, Obermair 2000, p. 13]. Cartography and travel drawings synthesize the process of evolution of the

Fig. 1. Above, the urban centre of Bressanone with the identification of the two original nuclei of Piazza Duomo and Stufles; below left, the Bishop's Palace with the Chinese pavilion in a view of Kravogl (1850 ca.); right, view of Bressanone made by Gatt around 1895.
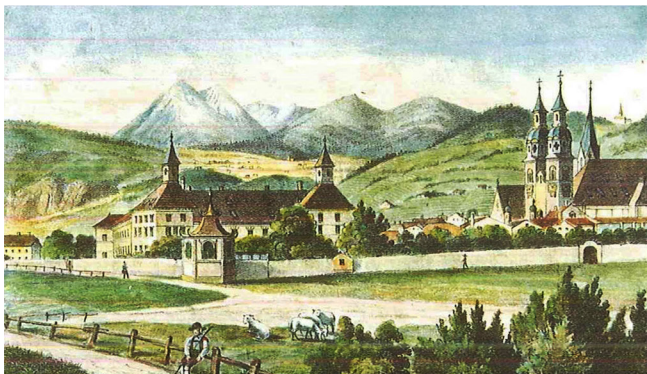
city starting from the architectural and urban characteristics: the river, on the one hand, the mountains, on the other. These two elements, narrated in the landscape representations of Braun and Hogenberg, Marian, Burglechner and Gatt, together with the buildings of the original nucleus, constitute the physical margins of the urban layout.

Methodological approach

With the aim of reconstructing the urban development of Bressanone, the graphic elaboration involved, in the first phase, the retrieval of the iconographic sources of the city. The modeling of the territory was followed by the digitization of the urban layout, on the basis of the cartography retrieved from the GeoPortal Alto Adige [1]. The synthetic model of the city has been used to cross-reference data
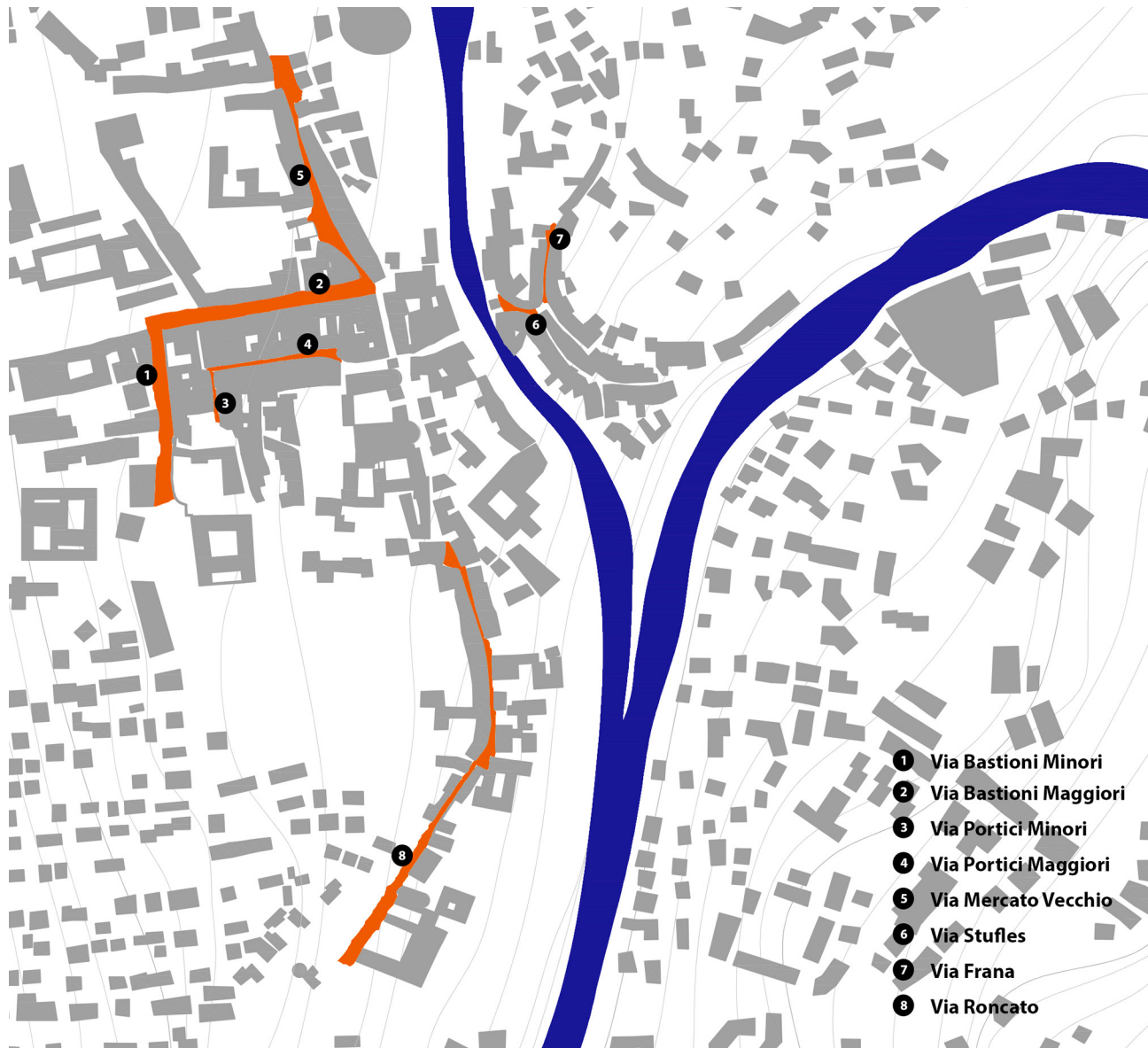
with historical sources related to urban evolution. In this sense, graphic studies have been produced that allow the identification and chromatic isolation of the original nuclei (fig. 1). The two-dimensional representations are followed by the three-dimensional ones in which the buildings of the clergy and of the major convent complexes that have assumed a decisive role in the subsequent expansion of the city have been inserted (fig. 2). These readings have been integrated with the graphic isolation of the main axes that shape the urban fabric of Bressanone (fig. 3), taking into account the construction of the Cathedral, the Major Seminary, the Bishop's Palace and the convents of the Franciscans and Poor Clares along the pilgrims routes of the thirteenth century, which configured the image of the city over time (fig. 4).
A second phase of graphic interpretation concerned the integration of several drawings made by travellers betwe-

Fig. 2. Digital model of the orography and urban texture of Bressanone with the identification, in yellow, of the first two nuclei of the city and, in red, of the buildings of the clergy.

1 **Stufles**

2 **Centro urbano**

Fig. 3. Identification of the main axes of Bressanone starting to which the first two nuclei of the city were developed.

1 Via Bastioni Minori
2 Via Bastioni Maggiori
3 Via Portici Minori
4 Via Portici Maggiori
5 Via Mercato Vecchio
6 Via Stufles
7 Via Frana
8 Via Roncato

en the 16th and 20th centuries into the digital model. In this way it was possible to establish a series of immediate relationships between the historical cartography and the digital model of the current urban layout through the identification of the same architectural elements in the two representations (fig. 6). By observing the cartography and the model in a single representation, it is possible to gather the urban transformations that the city has undergone, the expansions of the blocks and the relationship between the buildings in the views and their landscape context (figs. 7, 8).

The elaboration of schematic drawings together with the digital reconstruction of the urban settlement of Bressanone provide categories of observation through which to read, recognize and arrange the elements of the city that from the textual narration of historical sources are transferred to the graphic plan of the drawing and then, in the other quality of digital objects, to observe within the model space.

The axonometric representations provide information on the layout of the urban system, the two-dimensional layout organizes a road taxonomy that defines a reading order for the recognition of city sections: the aligned buildings make visible the main routes and the large urban voids establish relations between parts.

Digital documentation and historical iconography intersect each others in the operation of observing and restoring, building a new physiognomy of memory aimed at understanding the change in configuration. It is a critical classification that during the visual analysis of the architectural and urban apparatus formulates visual judgments, verifying each time the traces on the plan and formulating a real design action.

A reading on the historical-urbanistic evolution of Bressanone

The name *Pressena* probably referred to Bressanone appears in 828, the Germanization of the name *Brixina* of pre-Roman origin in *Prishna*, in ancient German "place of loud noise", occurred in 901 alluding to the confluence of the two rivers, Isarco and Rienza. Probably it was a large area, where there were some buildings belonging to the Royal Farm, property and rights attached to the church of Sabiona (now Chiusa), which occupied today's Via Roncato and extended to the upper part of Stufles [2].

Other sources derive the name *Brixen* from the Indo-Germanic root *bergh*, i.e. "settlement in a high place" and just in Stufles, the oldest part of the city situated between the two
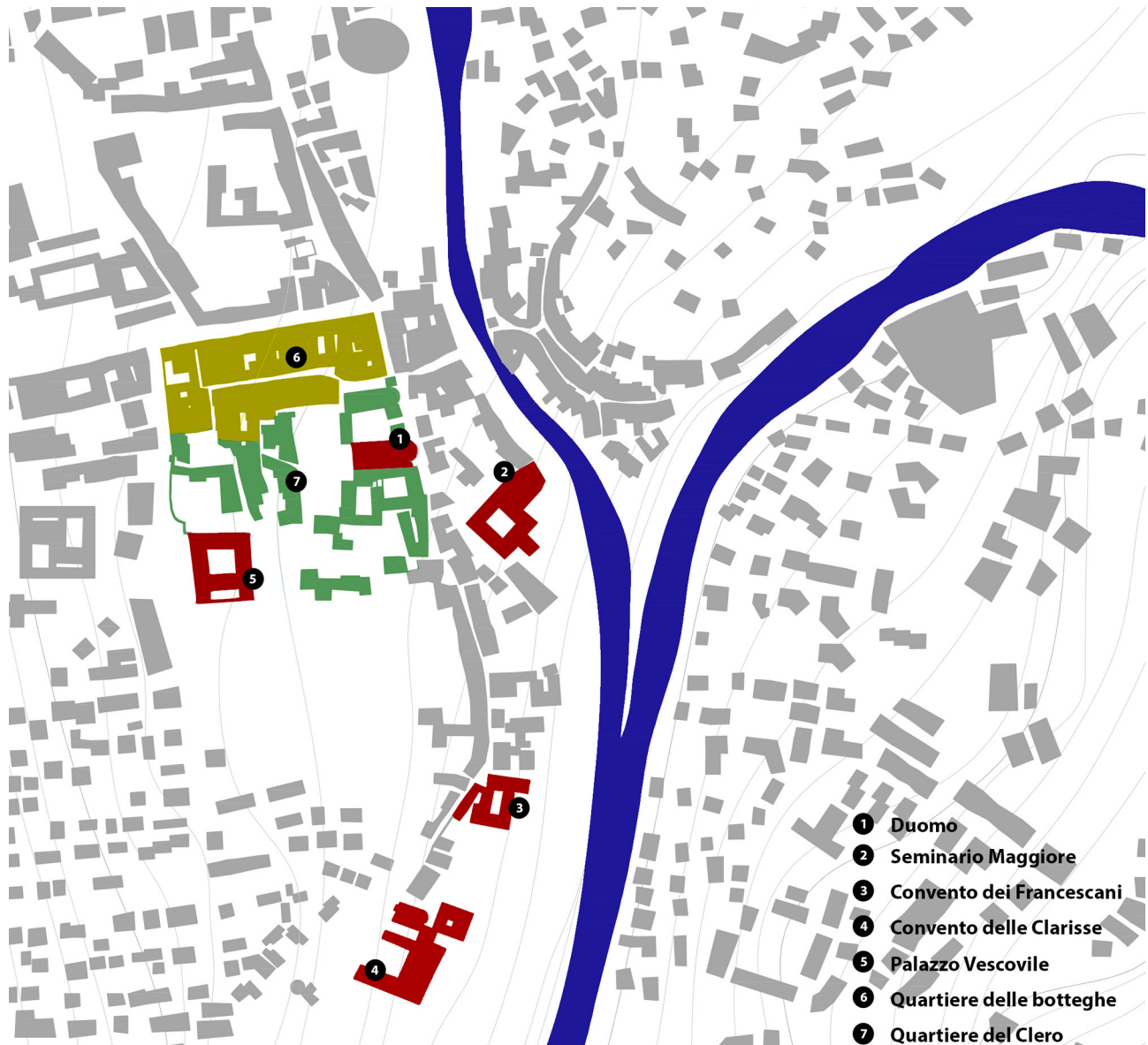
rivers, there is the first urban settlement, in the highest part at the edge of the basin (fig. 1). Historical sources identify in the period called *La Tène* (400 BC) evident traces of Celtic tribes and later also Roman.

In 1909 the remains of some settlements dating back to the Iron Age were found; subsequent excavations brought to light traces of a Christian settlement dating back to the fourth century and other Rhaetian settlements in the current Piazza Duomo, dating back to the fourth and fifth centuries AD. It was probably in the second half of the tenth century, following the transfer from the diocesan seat of Sabiona to Bressanone, that the cathedral, the cloister and the adjoining buildings were built, even if the historical sources date back, in addition to the buildings of the clergy, the existence of the district of Stufles and the buildings outside the walls as early as the eleventh century.

These first buildings were protected by the walls built around the cathedral complex, extended in the late Middle Ages to include the current via Bastioni Maggiori and via Bastioni Minori. A differentiation between the city and the old market took place when in 1050 Bressanone was defined for the first time *urbs* in an official document. Starting from the 12th century, as was happening in many other cities included in the pilgrimage routes to reach the Holy Land, the hospital of Santa Croce was established, strategically located along the Brennero road to welcome pilgrims and built on an island between the course of the Isarco and an artificial canal. Only later, in 1764, in the place where the hospital stood, the Seminario Maggiore was built. Following the pilgrims route, around 1229 Bressanone became the seat of a convent of Franciscan nuns of San Damiano who had built a small church. A few decades later, in 1268, the Prince-Bishop's residence was transferred from the fortified castle attached to the cathedral to the *castrum novum*, in the south-west of the city, where today is the Bishop's Palace and was surrounded by a moat with a canal with three drawbridges, walls and defensive towers (fig. 2).

Historical sources do not report any trace of a single urban project with respect to which the building fabric has developed, while it is believed that as regards the complex of the cathedral, consisting of the episcopal basilica, the bishop's palace and the canons, the baptistery and the cathedral school, all grouped around the cloister once used as a cemetery by the clergy, we can refer to a single project. The expansion of the city took on a quadrangular shape over time, delimited by the thickening of the buildings between the Bastioni Maggiori and the Bastioni

Fig. 4. *Identification of the cathedral, the Bishop's Palace and two Franciscan and Poor Clares convents on the axis of Via Roncato, in red, and of the two clergy quarters and commercial activities, in green.*

1. **Duomo**
2. **Seminario Maggiore**
3. **Convento dei Francescani**
4. **Convento delle Clarisse**
5. **Palazzo Vescovile**
6. **Quartiere delle botteghe**
7. **Quartiere del Clero**

Minori, towards outside and by the axis formed by the Via Portici Minori and Via Portici Maggiori, towards inside. In fact, only from the fourteenth century were included in the defensive complex of the city also Via Mercato Vecchio and Via Roncato, along which articulated the convents of the Franciscan and Poor Clares and the streets Stufles and Frana, on the other side of Isarco in the ancient settlement located on the upper part of the city (fig. 3).

In 1570, the city was divided into two parts, the northern part where the citizens' houses were located and the district of the shops built by the wealthy citizens between the sixteenth and seventeenth centuries, whose main axis were the streets Portici Minori and Maggiori, and the southern part that included the Cathedral Square, the Bishop's Palace and the streets Bruno and Hartwig, along with the streets Roncato and Gries, where the clergy resided. Within this building fabric, the Piazza Duomo, where the main buildings of the city were located, was to constitute a real urban and social hinge.

Soon it was necessary to build new neighborhoods outside the city center, in fact, developed an area used for the market, which later took the name of Via del Mercato Vecchio moved in 1273 in the current Piazza Duomo, while further south along Via Roncato rose the convents of the Poor Clares and Franciscans with the adjoining cultivated fields. The configuration of the new *Prishna* at the beginning of the fifteenth century was defined by six districts: the center, Gries, Stufles, Mercato Vecchio, Tratten and Roncato (fig. 4). The bishop's castle and another castle that belonged to the lords of Rodengo, later razed to the ground, were two of the fortified buildings built in the early Middle Ages. The residence of the Lords of Sabiona dates back to the same period, to which was attached a Gothic tower, the Porta Sabiona, also known as Porta Fienili, which served as access to the Hospital of the Holy Spirit. The Sun Gate, formerly known as the Erardo gate and even before the Cross gate, was the other gate of the city and represented the access for those arriving from Bolzano to the center of social and commercial activities in Bressanone [Gelmi 2004]. Around 1260 the city walls were moved further south to obtain even more space for the construction of houses for the clergy together with large gardens and the square in front of the bishop's palace. Another gate, Mercato Vecchio, stood at Via Torre Bianca, but was demolished in 1779, following the collapse of the Mercato Vecchio tower, also to facilitate the road network to and from Brennero and the connections between southern Germany and Italy.

Fig. 5. Above, the Elephant Hotel in 1879; in the centre, the Hotel alla Mara, in a view of Gatt; below, the Elephant Hotel in 1830.
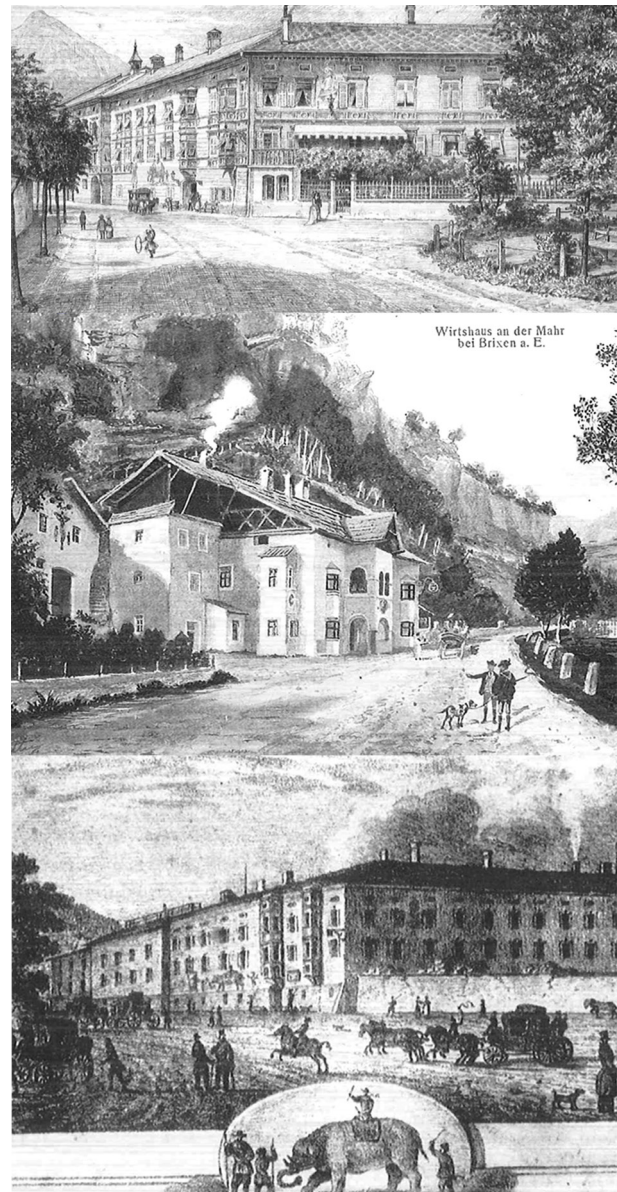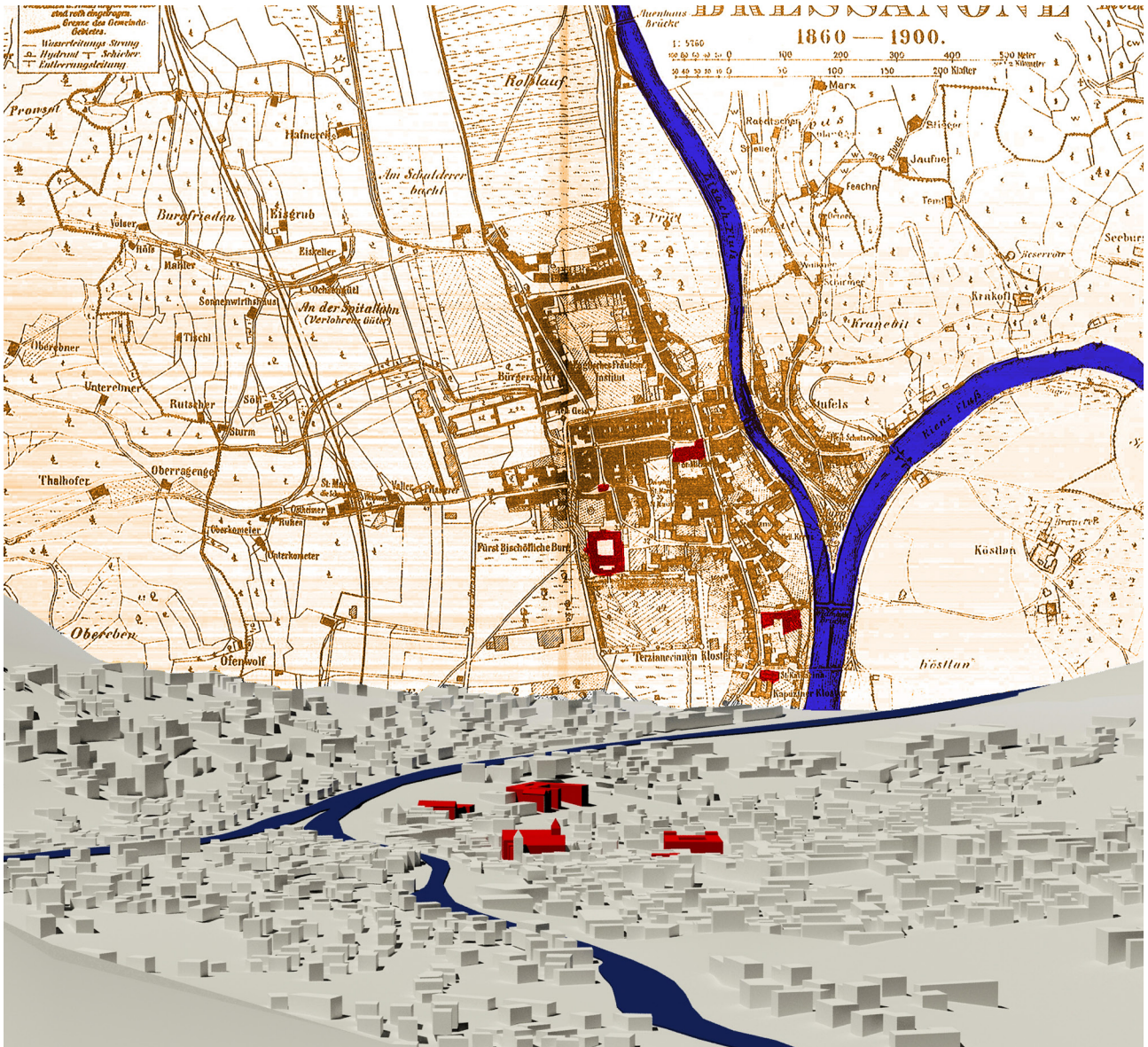
Fig. 6 . Planimetry of Bressanone realized in 1860 ca. inserted in the digital model in which the Cathedral, the Episcopal palace, the church of Sant'Erardo and the two convents of the Franciscans and the Poor Clares have been identified.

Bressanone became a place of passage during the conflicts in which the Emperor Charles V was involved. At the end of the 18th century there were about 30 hotels in the city, but already in 1640 the new road built to cross the area of Rosslauf Tiniga, in the direction of Novacella, allowed to lighten the traffic to the Val Pusteria, also providing a significant advantage for trade (fig. 5).

However, when the construction of the Brennero railway began in 1867, the choice of Fortezza as the central junction between the railway lines from Germany, Italy and Carinthia, caused a period of recession for the city, once a place of transit for travelers and merchants.

A few years later, the river regulation completed in 1896, allowed Bressanone an efficient modernization of the urban system and infrastructure. From the early years of the 20th century, work was carried out to improve public gardens and public building activity also encouraged an increase in private building: between 1900 and 1910 about fifty villas were built on Fallmerayer Street, including the so-called *Kienerhäuser*, i.e. the oldest tall houses in Brixen.

Later, the city would also extend beyond Isarco; in fact, between 1927 and 1941, with the advent of the fascist regime, the rural municipalities of Monteponente, Millan-Sarnes, Albes, Elvas, Sant'Andrea and Eores were annexed to Bressanone.

Bressanone told through travel iconography

Because of its geographical position, a junction between the main roads of communication between Germany and Italy, the city of Bressanone was affected by numerous historical events that led craftsmen, emperors, merchants and crusaders to stay within its walls.

From a morphological point of view, the urban settlement develops among mountain ranges that, precisely in the deployment of the city, give life to the course of the Isarco, between the mountain of Fortezza and Chiusa. The urban layout is entirely crossed by the Isarco, a natural barrier in the old town centre, together with the system of buildings that thickened compactly on the Via Bastioni Maggiori, defining the other walled border of Bressanone. These are the urban and landscape elements that are identified at a first level of reading in the travel iconography.

The original urban fabric, in the historical maps, is traced within a quadrangular area bordered on the north side by the stream Scaleres, corresponding to the Via Bastioni Maggiori, to the west by the Via Bastioni Minori, to the south by the garden of the Bishop's Palace and to the east by the Via della Torre bianca (fig. 6).

The travel stories retrace the ancient axes of the medieval city, via Portici Minori and Maggiori, which were accessed from the Porta Croce, now known as Porta Sole and Sabiona, both characterized by massive watchtowers, as often reported in the views (figs. 7, 8).

The first representations of Bressanone date back to the sixteenth century, in a view of Braun in 1578 the massive White Tower, the bell tower of the cathedral and the tower of the Porta Croce mark the space through a decreasing verticality from left to right, contrasting with the horizontality of the buildings that are arranged compact almost to become one with the vegetation. In a wider view of Burglechner from 1590, it is the vegetation that fills the scene. The architecture alternates with the careful graphic story characterized by the close relationship between the course of the river Isarco, which laps the city, and the morphology of the soil with the identification of the land properties and the main routes. It is possible to perceive a hint of differentiation between the building fabric of the buildings attested on the northern part of the city, that of the commercial activities and residences of the citizens and that to the south characterized by ecclesiastical architecture whose fulcrum can be immediately read by the urban void in correspondence with the Piazza Duomo.

More detail in the treatment of the relationship between nature and architecture is provided in the view created by Braun and Hogenberg in 1599, which arrange on the left side the natural furrow of Isarco and Rienza beyond which the morphological complexity of the soil is the element of characterization of the landscape and on the right side the clear break obtained by the terraced buildings that define the trace of the Via Bastioni Maggiori, one of the boundaries of the original quadrangular core of the urban settlement. In the central part, once again, the high bodies of the towers in correspondence with the urban gates, the White Tower and the bell towers of the cathedral, bring the gaze back to the architecture of the city.

On the basis of a view of Bressanone's Castle (*Hofburg*) already built in 1649, Matthias Merian described the urban core of the *castrum novum* in a 1656 representation by identifying the most important building and urban elements of the city: the legend written by the author lists the clergy buildings, churches, towers, the castle, the convents of the Poor Clares and Franciscan, and finally the bridges. Compared

Fig. 7. Digital model of Bressanone with the insertion of three views identified in the plan at the bottom. From the left, the Poor Clares church around 1900; the Piazza Duomo in a view from 1830; the Stufles district in a watercolour by Gatt around 1890.

Fig. 8. Digital model of Bressanone with three views identified in the plan at the bottom. From the left, the Guggenberg house in the Stufles district, portrayed in 1908; view of Brixen by J. Erler 19th century; view of the Fornai alley by Gatt around 1900.

to the previous views, more graphic space is dedicated to the oldest part of the city beyond the Isarco, the Stufles district, which is detailed access via the Aquila bridge (fig. 7). From 1800 the iconography of the city shifted the attention from landscape views to descriptions of urban pieces: the Cathedral Square, the main seat of ecclesiastical power; the intersections between the districts, as junctions often characterized by wells or fountains; the arcades, places of commerce in the city; the most important buildings in Bressanone, such as the Bishop's Palace and the *Hofburg*; the hotels Aquila and Elephant; the city gates (fig. 8).

Conclusions

The spatial relationships revealed through the observation of urban transformations return images of cities

that establish a further relational dimension between the physicality of the architectural-urban object and the incorporeality of the image produced by looking-perceive-process. The relevant operation that implements the gaze in the categorization of the elements and their arrangement within the grid of the plane accumulates, recognizes, orders and graphicizes the historical process of urban evolution, focusing on the coding of signs for the rendering of the digital model. Taking into account those historical-documentary and synthetic-legal values that, as Vittorio Ugo states, denote the meaning of "representation", the graphic elaborations produced assume the sense of "model", in its autonomous dimension with respect to the represented object and of "scheme", in the hermeneutic relationship established between the drawing and its object [Ugo 1994, p. 12].

Notes

[1]<http://geocatalogo.retecivica.bz.it/geokatalog/#!home&layer=p_z%3A3440 39a4-cb12-4dd9-abb0-0c0e771d8635> (consultato il 19 ottobre 2019).

[2] For further information on the historical-urbanistic evolution of the city of Bressanone, please refer to the text: Gufler 1976.

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