



# Starting from a Story Map for the enhancement of historical landscapes. A case study in the earthquake crater of L'Aquila 2009 (Italy): the village of Collarmele

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## Abstract

This research focuses on a spatial enhancement proposal in the Italian earthquake crater of L'Aquila 2009, in the Abruzzo region. In particular, the work focused on the village of Collarmele, starting from the creation of a Story Map presented at last year's ESRI Conference (10-11 May 2023) and studied more in-depth within the research proposals of the "GIS Day" ([https://corsidilaurea.uniroma1.it/sites/default/files/brochure\\_gis\\_day\\_dicembre\\_2023.pdf](https://corsidilaurea.uniroma1.it/sites/default/files/brochure_gis_day_dicembre_2023.pdf)) organised by the Geography Section of the Department of Letters and Modern Cultures at Sapienza University of Rome (December 2023). The analysis highlights the importance of the contribution of geographic studies in post-earthquake reconstruction policies, an issue that is emblematically represented by the lack of correspondence between the boundaries of the Reconstruction Plan and the actual limits of the historic housing fabric. After presenting the contents and functionalities applied to the introductory part of the Story Map, the work returns the results of a mapping of geo-historical points of interest identified within the settlement through field research. The identification of the points is the result of an integrated source study methodology, combining historical cartography, scholarly literature, archaeology and oral memory. Moreover, this proposal was tested through a use of the Story Map at community participation events, showing the importance of geoproducts of this kind in participatory processes and territorial education: a potential focal point for local development in inland Italian areas.

**Keywords:** Story Map, Earthquake, Italy, Abruzzo, Apennines, Enhancement of the Territory, Internal Areas

## 1. Introduction

The present research starts from a Story Map realised within the GeoCartographic Laboratory of the Department of Letters and Modern Cultures of Sapienza University of Rome and presented at the ESRI Italy Conference (10-11

May 2023, Auditorium del Massimo, Rome). The geotechnological product focuses on the post-earthquake reconstruction process of the village of Collarmele, a village included in the 2009 earthquake crater of L'Aquila (Alexander, 2010). Among the multiple components of the redevelopment process, it is a crucial key point

to share the salient phases with the population, so that territorial planning policies are characterised by a mutual relationship between technical personnel, municipal administration and citizens. This dynamic of concertation between local and external knowledge in fact proves to be particularly useful in decoding the latent potential of a historic landscape in the long term, where a role of primary importance must be played by an educative approach attentive to the territory and the involvement of the new generations. In this direction, the research is part of a more extensive reference literature concerning the solid link between GIS applications, education and the active involvement of citizens (Pesaresi, 2007; Azzari et al., 2013; Pesaresi and Lombardi, 2014; Strachan et al., 2014; Pesaresi and Pavia, 2017; Zamperlin and Azzari, 2017), since the wide range of tools available in the ArcGIS StoryMap platform was conceived by ESRI precisely to provide an easy mapmaker for users, and involve students and communities “in asking questions, about the changes occurring and about the possible actions to undertake” (Marta and Osso, 2014, p. 67). Moreover, the potential offered by the combination of geotechnology and heritage protection has already been tested and proven by research conducted in several territorial contexts, oriented towards the creation of geographical narratives that play a “strategic role in defining the identity of a region to drive its promotional processes in tourism” (Mauro et al., 2021, p. 25), by providing residents with critical observation, planning and communication (Albanese and Rossetti, 2023).

## **2. The territory of Collarmele (AQ). On the southern borders of L’Aquila’s earthquake crater**

The area of study refers to the village of Collarmele (AQ), in eastern Marsica, a sub-region of the Abruzzo hinterland and part of the province of L’Aquila. Like many other municipalities of the Abruzzo hinterland, the locality is experiencing a dynamic of progressive depopulation (Kercuku et al., 2023). Considering the population trend over the 2011-2023 period, the data shows a variation of -16% with 798 inhabitants compared to 950 a decade

earlier (Istat, 2024). The village is situated 835 mt above sea level, on the southern slope of the Sirente mountain range, and its historic urban fabric has almost completely disappeared due to the Avezzano earthquake of 1915, followed by the construction of the new village further north. At the conclusion of what has been called “a century of destruction and reconstruction” (Galadini and Varagnoli, 2017, p. 11), was the damage caused by the more recent earthquake in L’Aquila (Galli and Camassi, 2009), following which the town was included in the perimeter of the earthquake crater (Pesaresi, 2012), within which the reconstruction of historical centres – as established by Law No. 77 of 24 June 2009, converting Decree-Law No. 39 of 28 April 2009, art. 14, para.5-bis – took place through the preparation of the Reconstruction Plans (PdR), subordinated to a preliminary investigation process concerning the technical and financial aspects conducted by the Special Office for the Reconstruction of the Municipalities of the Crater (USRC) (Figure 1). Regarding the municipality of Collarmele, the plan presents a total cost for the reconstruction of the historical centre of approximately €3.9m, of which €2.9m for private reconstruction and approximately €1m for public interventions. With regard to the plan, the research question merged into the Story Map focuses on the problem of the perimeter of the old part illustrated in the document, since it differs substantially from the real extension of the historical urban core deduced from the study of its territorial evolution.

More specifically, on the basis of the preliminary studies for the PdR, the summit area of the ancient village gravitated around the 14<sup>th</sup> century tower, a datum that is historically correct but not exhaustive in describing the perimeter of the built-up area in the modern and late modern age. Nevertheless, that portion of the territory – as can be seen from the plan drawn up by USRC – outlines the entire historical centre perpetuating and the erroneous spatial perception according to which the railway line delimited the boundary between the village before and after 1915: “the town was rebuilt, larger and on a road layout consisting of wide avenues, further upstream, beyond the railway line” (Continenza, 2012, p. 110).

Although the research behind the drafting of the plan also carried out an accurate piece of work on the historic investigation front, recent study proposals on the fortified centre conducted with integrated sources, as well as in the field, have revealed a more extensive perimeter of the settlement starting even from the erudite literary production of the Modern Age, onto which a significant amount of manuscript sources have been grafted (Ciaglia, 2021). To give a few examples, we may consider the entry on the village in the *Dizionario geografico-ragionato del Regno di Napoli* (Geographical-Reasoned Dictionary of the Kingdom of Naples), published at the turn of the 18<sup>th</sup> and 19<sup>th</sup> centuries by the biographer Lorenzo Giustiniani, where we read that “la di lei situazione, parte è in luogo montuoso e parte è in luogo piano” (Giustiniani, 1802, p. 81). The Author was most probably referring to the buildings located in the vicinity of today’s Fonte del Colle (in particular, Via Pozzillo and Via Cerfennia in the direction of the Strada Statale Tiburtina Valeria) and the streets near the railway station, towards which urban expansion developed from the late Middle Ages. Regarding the area of Fonte del Colle, more useful data come from the consultation of the 18<sup>th</sup> Century Cadastre of Collaramele, formed in 1747, where several owners appear with their families in “houses” and “palatial houses” near the “Borgo Fonte del Colle” (State Archives of Naples, 1747).

The toponym “Borgo” could define, as is often the case, the part of the built-up area immediately outside the *Castrum*, referring to the urban expansion of the Modern Age. As additional information, it must be considered that in the preliminary studies this western area was also indicated as a further zone to be redeveloped, as they identified “the peculiarities of urban layout, typical of rural villages at the turn of the century” (Continenza, 2014, p. 38). Nevertheless, the final perimeter of the plan did not take into account this area of the village.

In order to focus on the perimeter, which clearly represents a crucial issue in the territorial planning, the use of the tools offered by the ArcGIS StoryMap platform made it possible to share the results of the multi-source contribution at the basis of the research, which, starting from the historical-territorial framework of the built-

up area, culminated in a mapping of the valuable elements functional for the valorisation of the cultural assets of the village, considered in its historically determined delimitation, and future tourist use. Going into the details of the geotechnological product, the analysis will focus on a first part conceived as a critical introduction and problematisation of the research theme and finally in a second part will concern a mapping proposal for the fruition of the places of interest in the historical centre of Collaramele.

### 3. Structure and functionalities of the Story Map

Before moving onto a qualitative analysis of the individual sections of the Story Map, it is important to illustrate the features chosen in the work. The storytelling first opens with an analytical index that follows the title, designed to offer users an immediate selection of each of the parts that compose the work. The sidecar option has then been used for the section entitled “Inquadramento geostorico e storico-cartografico”. The functionality is an immersive block that guarantees an impactful reading experience by combining textual narrative and media. In detail, it develops a layout useful to put in place a diachronic view of the territorial evolution of the built-up area, juxtaposing a textual window on the left and, on the right, a panel reserved for photographs, videos, graphics or cartographic representations. The scrolling of the representations only takes place when one has finished reading the individual textual panel. In order to expose the path of the urban evolution since the 1915 earthquake, the time sequence option has been chosen in the section entitled “Da terremoto a terremoto. Una cronistoria necessaria”. This functionality makes it possible to construct a chronological narrative through three layout possibilities, from which the single-sided one was selected. In order to achieve this, for each stage on the left-hand side there are historical photographs, the periodisation of the event – with a big bold font – and finally a short textual part (Figure 2).

Subsequently, the storytelling continues with a section dedicated to an in-depth paragraph on the research problem that prompted its

realisation: namely the disagreement between the extension of the historical centre delimited by the 2009 Post Earthquake Reconstruction Plan and the delimitation of the historic fabric as determined by a multi-source historical-geographical study. This part of the work, entitled “Quale centro storico? Considerazioni sulla perimetrazione operata dal Piano di Ricostruzione: una riflessione geografica” culminates in the juxtaposition of two cartographies, one prior to the 1915 earthquake and the other pertaining to the Reconstruction Plan, using the Swipe feature. This option was chosen because it represents an impactful mode to see two maps at the same time, allowing users to observe and interpret the changes that have occurred over time in a given territory (Figure 3). This mode facilitates for users an immediate reflection of the spatial evolution of a specific location.

The last section of the Story Map, entitled “Mappare gli elementi di pregio per ‘tornare al centro storico’” focuses on the mapping of

Collarmele’s elements of geographical, historical and artistic interest, and was created using the Tour Map function. This is a popular block that allows the creation of a real virtual itinerary with the possibility of choosing between the two modes of guided tour or explorer tour. Opting for the first mode the interface is centred on the map, which serves as a background to panels relating to individual places of interest, positioned on the left-hand side. The panels are characterised by an image, a textual part and a window concerning the location. The identification of the points of interest led to the compilation of 13 panels for the itinerary (Figure 4), with the possibility of expanding the tour in the future. In addition, in order to guarantee an immersive visualisation, there is a satellite map configured in 3D mode with a customised initial zoom level dropped onto the single building (Figures 5 and 6).

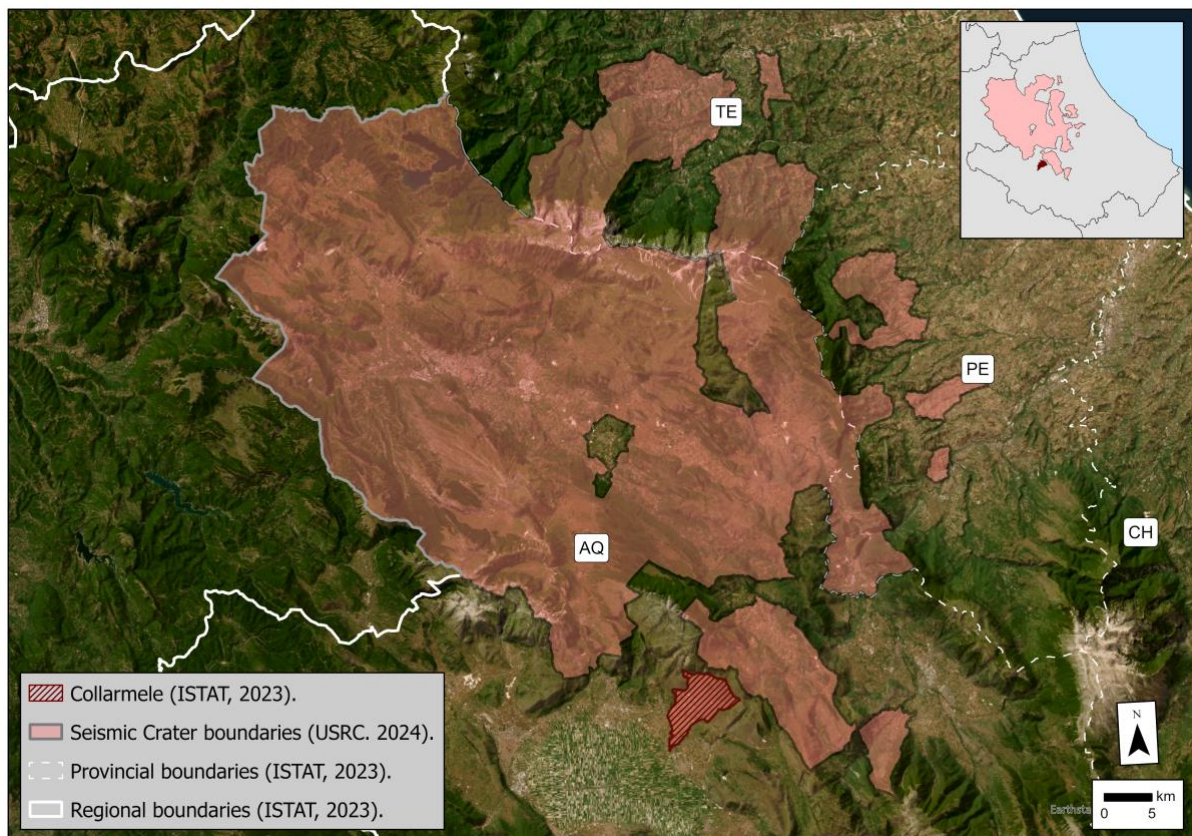


Figure 1. The municipality of Collarmele in the seismic crater of L’Aquila. Source: Author’s elaboration.



Figure 2. Detail of the Time Sequence section of the Story Map. Source: Author's elaboration.



Figure 3. The swipe overlay of the two maps: on the left the plan of Collarmele produced by the USRC and on the right an excerpt of IGM cartography from 1907. Source: Author's elaboration.



Figure 4. Overview of points of interest mapping in the Map Tour section. Source: Author's elaboration.

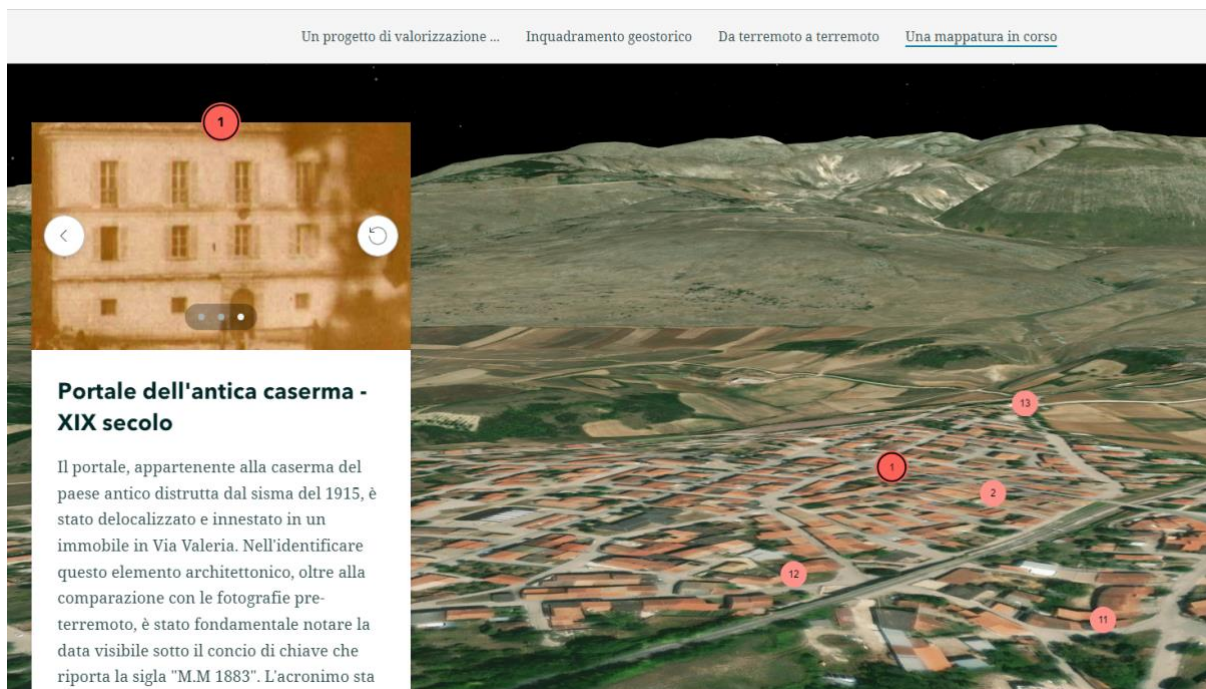


Figure 5. Detail of the map tour section with a perspective that enhances the geomorphology of the area. Source: Author's elaboration.



Figure 6. Detail of the Map Tour section focusing on a drawing of the village made by a traveller at the time of the Grand Tour. Source: Author's elaboration.

#### 4. Geohistorical framework and post-earthquake reconstruction

The Story Map starts from the geo-historical introduction of the territory as an essential basis for the decodification of its historical urban landscape. The first part focuses on the territorial evolution of the village starting from the historical cartography, with the visualisation of the cartographic representations that alternate with the specific textual contents. The settlement of Cerfennia, which developed in ancient times in this territory, was of some importance from a demographic and strategic point of view, as the toponym appears in the famous *Tabula Peutingeriana* in the vicinity of the city of Marruvium and at the foot of Mount Imeo (Zenodocchio, 2008, p. 82; Dionisio, 2016, p. 11). In terms of location, the site represented one of the stations on the ancient *Via Valeria* from which Emperor Claudius undertook the work of continuation of the *Tiburina Valeria* to the coastal town of Ostia Aterni, today's Pescara. While little is known about the actual location of the village, less is known about its abandonment, except that the event incentivised the formation

of rural villages in the early Middle Ages that later merged into the centralised settlement of Collarmele, which, like other centres in the Marsica area, completed its fortification and urbanisation of the surrounding villages in the second half of the 15th century (Piccioni, 1999). With regard to the configuration of the fortified centre, the map drawn up by an anonymous surveyor in 1720, entitled “*Pianta e veduta dello stato di Celano ne' Marsi*” remains emblematic and illuminating (Figure 7).

The commissioner must have been interested only in the representation of the County of Celano (Piccioni, 1986), given the clear demarcation to the west with respect to the territory subordinate to the Colonna family. In the map, the settlement of “Colle” appears to the east of the *Via Tiburtina*, with a partial walled enclosure and at least one entrance gate facing south – both architectural elements cancelled by the earthquake of 1915 –, confirmed by archival manuscripts pertaining to the 17<sup>th</sup> century notarial production in that village (Ciaglia, 2021).

The last cartographic representations that help us have some insight into something of the layout of the town in its medieval and modern structure are those related to the maps produced by the Military Geographic Institute between the end of the 19<sup>th</sup> and the early 20<sup>th</sup> centuries. The map returns the typical shape of the fortified settlement, with the cross of the mother church in the apex of the centre and the signs of the other religious buildings further north, where the cemetery built in the 1880s also stands out. The source also shows the presence of buildings in the western direction, which highlights the trajectory of urban expansion.

The territorial discontinuity induced by the earthquake of 13 January 1915 broke down the relations between the community and the ancient settlement, precluding a long and troubled period of reconstruction up to today's works following the L'Aquila earthquake of 2009. In order to give a quick summary and at the same time try to restore the events that explain this long journey, it was decided to use the tool of the temporal sequence and focus the next section of the storytelling on this topic. Starting with the Marsica earthquake of 13 January 1915, a magnitude of 7.1 and a macroseismic intensity between the 10<sup>th</sup> and 11<sup>th</sup> degree were estimated. The Catalogue of Strong Earthquakes in Italy (CFTI) attests that the seismic event almost completely destroyed the village and caused the collapse of the church of Santa Felicita (Guidoboni et al., 2018, at locality; Ciaglia, 2021). The disaster was followed by the customary construction of the barracks, which involved the choice of an area to the north-west of the historical centre with a typical urban layout of wide orthogonal axes that developed along the Tiburtina Valeria road. The location of the new site has reconfigured the semantic value of the historic centre. Most of the buildings that survived the earthquake, and which were once used for residential purposes, were largely converted to agricultural and livestock use. The consequent de-sematization can also be deduced from the toponymic discourse, if one considers that from the identification of the "Borgo Fonte del Colle" the historical centre was denoted as "Area Stalle" in the technical-administrative documentation.



Figure 7. Detail of the map with the village of Collarmeale. Source: Piccioni, 1986.

During the 2009 L'Aquila earthquake – of a magnitude of 6.3 (Wilkinson et al., 2012) –, as mentioned, Collarmeale was included in the seismic crater because of the serious damage recorded. On the basis of the reports carried out by the Civil Protection technicians, significant damage was found to the churches of Santa Felicita (20<sup>th</sup> century) and Madonna delle Grazie (15<sup>th</sup> century), both of which were closed to the inhabitants, and to the municipal building. Several houses and buildings were declared unfit for habitation and resident families were evacuated, and temporary housing modules were set up. We then come to the reconstruction plan, approved in 2014, which is discussed in more detail in the next section of the Story Map with regard to its historical inconsistency in relation to the questionability of the boundaries established for the historic center, and finally, the time sequence ends with the two most recent references to the protection of the historic centre. Firstly, it is necessary to mention the start of the structural consolidation of the aggregates defined in the Reconstruction Plan during the summer of 2020 and, secondly, the parallel redevelopment process made possible by the Complementary National Plan (PNC), approved by the Italian government as an integration of the PNRR for financing specific interventions, which pays particular attention to the municipalities in the earthquake craters of central Italy. For Collarmeale the plan provides a series of funds, among which the "Project for the



urban regeneration of the historical centre of Collarmele” with a sum of 580,873,71 euros (Commissario Straordinario Ricostruzione Sisma 2016, 2022). The works related to this intervention are currently in progress and aim to enhance the road system adjacent to the 14th-century tower, through the creation of a porphyry pavement and the improvement of underground utilities.

The penultimate section of the Story Map represents a final in-depth examination of the nodal issue related to the discontinuity between the perimeter of the historical centre operated by the PdR and the real boundaries of the built-up area in its pre-earthquake urban fabric. An initial simple juxtaposition of text and images that unravels the issue of the two limitations is followed by the application of the swipe function to overlap the map of the historical centre drawn up by the USRC with the urban fabric rendered by the IGM cartography of 1907. The presence of buildings to the west of the railway line clearly emerges, with an overall extension of the pre-earthquake settlement that considerably exceeds the delimitation proposed in 2014. This last discussion proved useful to arrive at the conclusion of the Story Map, which elaborates a proposal for mapping the valuable elements of the historical centre by combining direct observation of the buildings and historical-geographical research. The resulting dislocation of points of historical-artistic interest confirms the historicity of a substantial portion of the urban fabric perceived as the result of post-earthquake reconstruction work and far from the boundaries established by the PdR, reiterating the need for a more accurate study of the geo-historical implications of the damage within the built-up area and an analysis of its urban fabric. Indeed, in several circumstances, the collapse of the third, second and sometimes first floors of structures due to the disaster did not jeopardise the survival of ground floors with portals, portal elements and heraldic coats of arms, often removed without authorisation and installed elsewhere.

## **5. Mapping the geo-historical heritage to “return to the historical centre”.**

### **A proposal**

By no means exhaustive, the proposed identification and mapping of the valuable elements distributed in the historical centre of Collarmele, is in addition to the results of the census that was included in the General Catalogue of Cultural Heritage in the early 1990s by the Abruzzo Superintendence for the Environmental, Architectural, Artistic and Historical Heritage, which limited itself to cataloguing a few portals and a heraldic coat of arms, focusing largely on the historic-artistic heritage of the Renaissance church of Madonna delle Grazie.

The renewed focus on the cultural heritage of the centre, which is connected to recent research strands referable to the L’Aquila crater area (Di Vincenzo, 2018), has made it possible to broaden that primitive horizon and obtain a more substantial body of places of interest, with an approach oriented towards the valorisation of the territory that aims at overriding the orthodoxy of the single architectural asset or object in the name of a perspective vision that encompasses “the broader scale of towns, villages, natural landscapes and cultural routes” (Leonardi, 2021), emphasising the multiple connections of the built-up area to the surrounding territorial contexts from a historical and topical point of view. Citing a few examples in a diachronic key, it suffices to think of the Tratturo Celano-Foggia route and the importance of the transhumant road network in today’s territorial policies (Avram, 2009), the eastern border status of the County of Celano, the tangency of the centre with respect to the ancient Tiburtina Valeria consular artery (Van Essen, 1957; Zenodocchio, 2008), or the Franciscan itineraries, as well as the current territorial relevance of the centre within the protected area of the Sirente Velino Regional Park and the borders of the National Park of Abruzzo, Lazio and Molise. The objective of the mapping does not end with a proposal to enhance the value of individual elements, – since it would circumscribe the route to that “paradigm of patrimonialisation” that has all too often reduced planning, in Alpine and Apennine

contexts, to mere lists of assets as the keystone of local development (De Rossi and Mascino, 2018, 2022) – but aims at the creation of an itinerary that includes places of interest in the historical centre as the outcome of a study conducted with integrated sources from a multidisciplinary perspective and, at the same time, of a comparison with “the forms of local knowledge” as essential references in the “concrete research of the territory” (Rombai, 2021, p. 65), in the sign of a territorial planning that in the Italian mountains, as already widely underlined, cannot but be participated and shared in the community context, trying in addition not to exhaust itself to the exclusive dimension of the center and to “develop along horizontal lines” (Ciaschi and Pesaresi, 2007, p. 6). In the storytelling, the mapping is rendered through the Map Tour feature with emphasis on the morphology of the territory obtained with the aid of the 3D option, for which further development of the work would be desirable with the extension of the three-dimensionality to the inhabited fabric. In this first proposal, the visualisation of the inhabited centre presents 13 points of interest that allow inhabitants and tourists to take a cultural route to discover the historical fabric, with the aid of clear-cut in-depth studies that act as reading stops.

Turning to some of the points, by way of example we can mention portals and elements of portals, sometimes lacking any indication of their value in the PdR, the highlighting of which has allowed for special protection by the companies that were awarded the contract for the structural adaptation of the buildings. This is the case of a Renaissance portal, decorated with floral motifs, dating from between the 15th and 16th centuries and located in Via Marruvio. Another relevant portal is that of the old municipal barracks, which is intact even though the building was destroyed in the 1915 earthquake and then installed in another dwelling. Only the dialogue with citizens, combined with the comparison with the very few historical photographs from the pre-earthquake period and the study of the dating found under the keystone, made it possible to reconstruct the vicissitudes of the architectural element before and after the disaster. With respect to heraldry, particular emphasis was placed on the two

Renaissance coats of arms recalling the Piccolomini d’Aragona family, rulers of the County of Celano from 1463 to 1591, one set (probably as a result of relocation) on the façade of a building and the other designed as an architrave in a window near the monumental railway viaduct. A further point of interest is the drawing by a British traveller in 1852, during his Grand Tour, which sketched an overview of the town from an eastern perspective and was only recently discovered near an antiquarian bookshop in Rome (Ciaglia, 2021). It was then purchased by the local administration, which kept the original copy in the municipal building and, in August 2020, printed a copy that can be seen inside a glass frame in the Piazza dell’Orologio. The location of the frame is not coincidental, as the site of the square housed the architecture of the apex of the ancient settlement, the same as that depicted in the drawing and obliterated by the 1915 earthquake. In the mapping, particular attention was paid to graffiti inscriptions and historical wall writings, understood in their sense as “exposed writings” and thus conceived by the creators for a “potentially mass contact” of the transmitted message (Petrucci, 1985, p. 88). In Collarmele, there is an interesting mural reading “W il Re” on the facade of a house in Via Pantano. The writing is evidently connected to the political conflicts dating back to the period of the referendum that decreed the end of the monarchical period and the advent of the Republic, following the fall of the fascist regime. The identification of the inscription and its inclusion in the storytelling aims to safeguard this graffiti, especially when the building undergoes renovation work. When the exterior walls are painted, it would indeed be desirable for the inscription not only to be spared, but even in some way restored for a more in-depth thematisation in the urban landscape. If you look at the state of preservation today, you can see the absence of the final “e” due to a concrete pour (Figure 8).

The last point of interest to mention is the Church of Madonna delle Grazie (15<sup>th</sup> century), closed to the public since the 2009 earthquake and soon to be reopened (MiC, 2021, p. 62). Recently visited by the regional governor as part of a wider trip to the most depopulated areas of

Abruzzo (Regione Abruzzo, 2023), it is the only religious building that survived the 1915 earthquake, a place not only rich in historical and artistic peculiarities – such as the facade in vitrified ceramics, unique in Italy in terms of location of the polychrome tiles (Casale, 1984; Donatone, 1994; Verrocchio, 2010) – but also for its geo-historical connotation (Ciaglia, Ramadori, in press). The church was an important stop on the ancient road network of the Regio Tratturo Celano-Foggia, a historical itinerary that today is once again central to territorial planning policies on the theme of slow mobility. In fact, the sheep-tracks represent, due to their “integration of natural and cultural heritage”, an element of great impact in landscape planning in an interregional dimension, oriented towards “an educational tourism, as well as for experts and enthusiasts” (Pesaresi, 2004, p. 181).

## **6. Conclusion. Story Maps, spatial education and participatory processes**

The use of the Story Map for the enjoyment of cultural heritage has already been tried out in Collarmente, during a number of events. In the summers of 2022 and 2023, for example, the population benefited from storytelling during a bicycle ride in the historical centre (Figure 9). The event, organised as part of the “Sports Week” promoted by a local association, involved participants viewing the Story Map at the start using a QR code and then reading the captions at points of geo-historical interest. At each stop, there was a moment of participatory reading and sharing, enhancing the storytelling of details offered by the historical memory of citizens.

Citizen participation showed how Story Maps can be a good basis for participatory processes of knowledge and sharing of geo-historical

heritage. In particular, a substantial rapprochement of the population with the places of the ancient settlement was noted. In fact, many of the valuable elements present in medieval and modern buildings were not known to people, since – as already underlined – this part of the town has progressively witnessed a change in its vocation, ending up being a mere passage area.

The census of places of interest, as conceived in the Story Map, will certainly be subject to constant expansion of the points of interest for increasingly accurate spatial mapping, refining the process of understanding and recognising territorial peculiarities, the basis for planning in mountain areas (De Vecchis, 1992, 2004; De Vecchis and Pesaresi, 2008, pp. 3-10; Piva and Tadini, 2021; Prezioso, 2022, pp. 60-76). The work, in agreement with the municipal administration, could in the future represent the preliminary database for the historical centre panelling project, planned once the urban redevelopment work is completed.

More generally, the effectiveness of mapping lies above all in its immediacy and its ability to illustrate cartographic representations, captions, insights and photographic material through agile restitution and scrolling templates. The study aims also to provide young people with an in-depth knowledge of the area, “combining field observation with multimedia tourism that allows them to gain awareness and direct vision of the places” (Ciaschi and Pesaresi, 2007, p. 287). For a geographical context such as the L’Aquila earthquake crater, the proposal could be replicated in other towns and perhaps lead to the creation of a geoportal of historic centers with Story Maps accessible to communities and tourists; in continuity with what the USRC has already prepared in recent times regarding cultural events in the earthquake-affected areas, involving 56 municipalities (USRC, 2023).



Figure 8. The historical graffiti in Via Pantano. Source: Photo by the Author.



Figure 9. A moment of the urban cycling excursion organised in summer 2023, following the points of interest on the Story Map. Photo by Filippo Marzella.

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