Antonio Laurìa, Francesco Alberti,
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Enhancing cultural and natural heritage as a lever for the regeneration of rural areas

The village of Bënjë, Southern Albania, as a case study

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In continuation of Sections 4 and 4a, from an elevation of approximately 410 metres a.s.l, the route continues as far as the village at an elevation of approximately 497 metres a.s.l, with a section on the hydrographic right of the Bënjë Stream, characterised by semi-natural forest formations with a predominance of deciduous broad-leaved trees. Slightly further up they border extensive areas where plant life has disappeared due to widespread soil erosion and the consequent emergence of evolving scree formations. [Fig. 3.15] The path has a pronounced slope with stretches of traditional cobblestones (*kalldrëm*) which are still quite recognisable, albeit deteriorating (see § 3.3). The section is also characterised by the gradual appearance of elements that testify to the human presence in the area, such as dry stone walls, small buildings and rural tree formations (see § 3.3). Close to the village, the visual field of the path opens up higher up due to the absence of forest vegetation as a result of the aforementioned soil erosion and the emergence of eroding scree slopes. In this final section of the path, the anthropogenic plant presence of cypress trees in the cemetery of St Mary's Architectural Complex is a significant landscape landmark (see Chapter 2).

Figure 3.15 – The landscape in Section 5 of the path, in the vicinity of St Mary's Architectural Complex, on the side of the village most affected by the spread of rocky detritus outcrops and its degraded appearance.

3.3 Necessary constructions as a landscape paradigm

Pietro Matracchi

3.3.1 Introduction

The depopulation of rural areas places the focus on certain macro-phenomena, such as the abandonment of built-up areas, villages and isolated houses, and once cultivated fields, once again engulfed by the spontaneous and uncontrolled growth of vegetation. The human actions that on a daily basis shaped, maintained and made this environment liveable were neglected. These were small actions that fostered the cultivation of fields often created in impervious contexts: retaining works, systems to control surface water run-off, and the skilful placement of plants that at the same time generated stability in the soil. In the network of road connections, whose destiny is linked to the

inhabitation of places, the dense paths that criss-crossed the territory are even more in the background, almost to the point of being forgotten. In reality, this placement of paths in the shadows is the result of small alterations to the natural environment, by virtue of thorough knowledge of the orography, surface geology and vegetation. The extent to which these now almost lost routes were used and their relevance is sometimes evidenced in specific works such as stone bridges, which now appear as powerful and unexpected infrastructures.

This is the case of the path that, starting from the village of Bënjë, crosses a cultivated area and the bridge of the same name, and continues for a long stretch through a wooded area until reaching the Kadiu Bridge over the Lëngarica River, where it continued in the direction of the Shqeria and Kolonjës regions (Lauria *et al.*, 2020).

The support works for rural activities and pathways appear to be extremely fragile, a condition almost consubstantial to them. They represent the *necessary construction*, consistent with the goals to be pursued, based on daily presence and care, in a virtuous relationship with the environment. One can imagine a sense of community in populations that ensured significant, responsible and continuous work, guaranteeing a balance between the organisation of the agricultural landscape and respect for places, also thanks to the persistence of knowledge that was handed down from generation to generation. In a situation where everything occurred on the margin of subsistence, actions fostered by simple but pervasive gestures were carried out to maintain plots of land suitable for cultivation or pastoral activities, with an awareness of the specific nature of the contexts whose relevance should not escape us today, in the face of recurring catastrophic events caused by the hydrogeological instability of the territory.

The importance of the footpath network in the past, as an alternative to a major road network, is also inferred from a report written in 1922 by the economist Albert Calmés, sent by the League of Nations following the Albanian government's request for suggestions for the country's development. In a passage on the road network in Albania, Calmés observed:

> «Albania is a state politically, but not economically. Rather, it is an incongruous collection of economic districts and local markets more isolated from each other than they could be from official borders. The only way to reach Shkodër in winter is by sea. There are no direct roads from Tirana to the south of the country or to Korça. From Durres to Vlora you have to go by sea: and so on […] the economic consequences of the total lack of infrastructure are no less serious. Shkodër exports surplus leather to Italy and Gjirokastër has to go to Italy to buy it. For olive oil, the situation is reversed: Vlorë exports oil to Italy and Shkodër re-imports it to Albania. The reason is that these districts have some communication with Italy, but none with each other […]» (cited by Halimi, 2013: 95-96).

The Albanian territory posed particular difficulties due to its characteristics: 70% of it is mountainous, and the large coastal plains (Myzeqe and Zadrima) were marshy for long periods of the year. So, pastoralism became a particularly popular activity, benefiting from pastures covering 25-30% of the territory. Calmés denounced the limitations and underdevelopment of the cultivation systems, compared to the 9% of the country's surface area available for agricultural purposes, which involved 90% of the population (cited by Halimi, 2013). Moreover, agricultural land was largely in the hands of landowners: the most fertile area of Albania, between Durrës and Vlorë, was owned by just 165 families (Caselli & Thoma, 2000).

The agrarian land registry, introduced only in 1928, and the concomitant start of the agrarian reform that led to the overcoming of landownership, did not reach a solution due to the excessive fragmentation of the land, most of which consisted of 2 ha properties (Caselli & Thoma, 2000). This condition continued even after the Second World War,

in the years of Enver Hoxha, when land became state property, with agriculture largely entrusted to cooperatives. Faced with the difficulty of modernising agriculture and, in general, the rural extent of the country, it was difficult for a large part of the population to overcome production that went beyond self-consumption by the family or internal consumption within the country's borders (Tachella, 2006; Caselli & Thoma, 2000). The area in which the village of Bënjë is located did not escape these severe conditions.

3.3.2 The route of the path

The village of Bënjë and the Kadiu Bridge represent the two poles of a path, part of a widespread network of links that branch off into the territory. Precise traces and stretches remain of this network, while much has been lost due to the combined effect of the abandonment of the most deprived areas and choices that have concentrated mobility on a few main road backbones. This change has taken place relatively recently in contexts such as Bënjë. However, it is still easy to imagine how important the path system had been for the sharing of social and economic relations in rural communities living in a harsh environment, little suited to major innovations in how the fields are organised or new crops are introduced. In this context it is difficult to imagine in the even more distant past a rural feat that could produce wealth and, at the same time, reshape the landscape, with processes comparable to those highlighted by Sereni's precursor volume (1961) on the Italian agrarian landscape, or by recent research (Fiore *et al.*, 2021) highlighting the initiatives of the communities in the Middle Ages to develop the road system.

The positioning of the Kadiu Bridge in relation to the particular orography of the Lëngarica River's route was not accidental. The bridge is preceded by a long gorge that snakes between high cliffs. Right on the last sloping offshoot of the rocks that cling to the riverbed, the abutments supporting the arch of the bridge found a powerful foothold, which are preceded by rock outcrops that help mitigate the impetuosity of floods [Fig. 3.16]. The change in orography before and after the bridge is evidenced by the sudden reduction in the steepness of the slopes at the river's edge. Beyond the bridge, the valley floor widens considerably, leaving more space for the Lëngarica riverbed and the gradual extension of the fields. [Fig. 3.17]

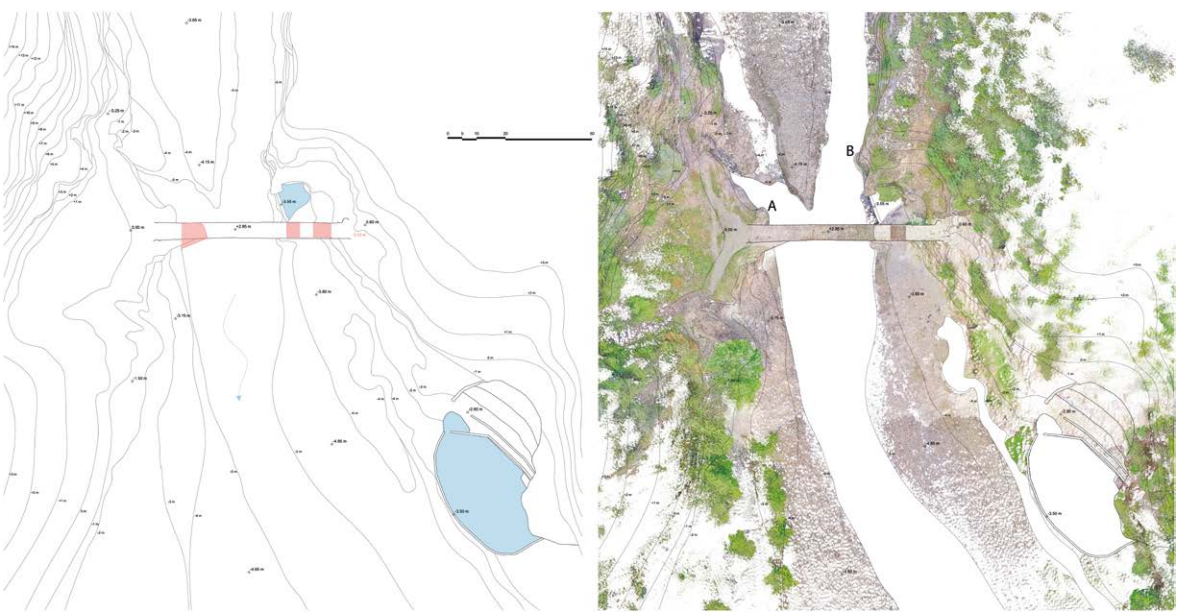

Figure 3.16 – *Left*. Plan of the Kadiu Bridge highlighting the piers (in orange), the contour lines of the area, and the thermal pools (in light blue). *Right*, plan view of the point cloud of the laser scanner survey, indicating the rock outcrops (A and B) protecting the bridge abutments.

Figure 3.17 – Orographic context of the Lëngarica River upstream *(left)* and downstream *(right)* of the Kadiu Bridge.

The relevance of the bridge area is also linked to some caves that testify to human presence in times necessarily much earlier than the construction of the bridge, dating back to the period between the 18th and 19th centuries during the reign of Ali Pasha of Ioànnina (Shtylla, 2013; Lauria *et al.*, 2020). [Fig. 3.18] The presence of thermal waters that could have had a religious or curative value may also have been considered when deciding the location of such rock dwellings (Melillo, 1995). The specific location of the bridge can therefore be explained by several factors, with the orography of the context seemingly the most significant.

Figure 3.18 – The Bënjë Cave, on the right side of the river, with the Kadiu Bridge in the background.

Figure 3.19 – Thermal pool on the edge of the Kadiu Bridge.

From a more general point of view, according to Kola (2002) the thermal baths, together with the Kadiu Bridge, constitute a strategic junction because several roads connecting two large provinces intersect here [Fig. 3.19]. They served as a permanent guidepost. «In fact, one of the first military trigonometric points was built on the highest hill to the north-east of the village (*Kryqëzë*), which also served as a stationary landmark» (Kola, 2002: 10).[7]

From the Kadiu Bridge, the path towards Bënjë continues to climb until, having overcome a difference in height of approximately 100 metres from the bridge,[8] it does not go beyond the hilly promontory between the confluent valleys of the Lëngarica River and the Bënjë Stream. In this short portion of the path, neglect of the land has already led to the almost obliteration of an initial section. The interruption, which was not accidental, is in a compluvial area between rather steep slopes, where a torrent forms when there is heavy rainfall, as evidenced by the area devoid of vegetation due to intense erosion by water runoff. On the same site, the disordered accumulation of slabstones would suggest the remains of a walled construction connecting the two slopes, dismantled by the impetuosity of the waters, which likely became more forceful when use of the path became increasingly sporadic, until it was completely abandoned. [Fig. 3.20]

Figure 3.20 – Compluvial area between slopes where the path that led to the Kadiu Bridge is interrupted.

[7] Author's translation from Albanian.

[8] For the morphological aspects of the area and the route of the path, see § 3.2.

Beyond the promontory, the physiognomy of the village of Bënjë can be seen in the distance, set against the mountain. The path continues to descend and its route is not always clear, also due to the construction of new dirt roads. In any case, it had to reach the bridge over the Bënjë Stream (*Ura e Bënjës*). Here, too, the archway, although its span is much smaller than that of the Kadiu Bridge, stands on rocky ridges that are very high above the stream bed. [Fig. 3.21] The ability to take advantage of the geological features of the ground can be fully grasped in the fact that an abutment dismantled by flood waves did not cause the collapse of the bridge, which benefits from the substantial support provided by the rock itself. This in any case triggers instability in the masonry, which we will return to later. The choice of the bridge's location must have been considered so important by the builders that, in order to reach it from the left side of the stream, a section of path had to be built on a slope with widespread superficial gravitational instabilities related to erosive processes of water runoff.

Just upstream of this crossing rises an excavated rock face with thin sandstone layers alternating with silty-clayey marl layers with extensive, highly fractured flakes. [Fig. 3.22] This is probably a quarry face, rather than a slope cut for the path to pass through it. In fact, the thin layers of compact sandstone were most likely used to construct the adjacent bridge. The choice of such a position for the bridge was also due to the fact that creating a passage a little further downstream, where the compluvial area between the slopes widens, would have required the construction of a bridge with a much more imposing and therefore much more costly arch.

Figure 3.21 – Bënjë Bridge.

Figure 3.22 – Rock face near Bënjë Bridge.

After crossing the Bënjë Stream, the village is reached by following a rather short but steep section of the path, with a challenging change in height of more than eighty metres, which initially runs orthogonally to the contour lines, unlike the previous part which tends to cut diagonally across them, mitigating the steepness. The orography of the slope means that as one ascends from the bridge, only in the final stretch does one first glimpse the cypress trees marking the Church of St Mary and the adjacent cemetery, then the apsidal building and the village of Bënjë, now only a few dozen metres away. [Fig. 3.23]

The section of the path between the bridge and the village also has the distinctive trait of crossing a cultivated area organised into fields delimited by wooded borders. [Fig. 3.24] These mostly follow the contour lines and form a kind of extensive tree line that stabilises the soil in cultivated areas and slows down the runoff of surface water, thereby safeguarding the cultivated land, which is made regular and only slightly sloped. The tree-lined borders seem at times to be the remnants of a wooded area, part of which survives on one side of the path, where, by means of a kind of targeted deforestation, fields have been carved out of an area considered fertile. Not by chance, this area is close to a source of water, namely the presence of two streams on the slopes of the village side (the Oskrusheve and the Bënjë), which then join into a single stream that is a tributary of the Lëngarica.

The path that climbs up from the stream for an initial stretch is between the cultivated area and the wooded area; it is then flanked on both sides by fields, while in the upper part the vegetation completely disappears due to extensive rock outcrops with fragmentary sandstone and particularly fine materials. [Fig. 3.25]

Figure 3.23 – To the right of the monumental cypresses, the last section of the path crosses the bare slope and reaches the Church of St Mary and the village of Bënjë.

Figure 3.24 – View of the cultivated area on the slope down from the Church of St Mary showing the Bënjë Bridge (1) and the last section of the path before reaching the church (2).

Figure 3.25 – Cypress trees at the end of the path mark the proximity of the village of Bënjë.

3.3.3 Structures along the path

For long stretches, the path seems to be marked merely by the removal of the sparse vegetation that manages to grow in areas of rocky outcrops or that are covered by a very thin layer of soil, removed by the continuous passage of people and animals. This was enough to create a sort of natural cobblestone and should not be considered a coincidence, but the result of profound knowledge of the places and of the ability to grasp their virtues and vocations, avoiding modifications, when possible, that would prove onerous and not very long-lasting or effective over time. In some sections, the route is orthogonal to the sandstone formation layers, which thereby create a system of natural steps, albeit uneven and irregular, that make it easier to walk along. [Fig. 3.26] This characteristic has ensured that the path has lasted over time, making it still legible for long stretches today despite its enduring non-use. In addition, it is likely that only small connection works were carried out at the most difficult points, as the small messy accumulations of slabs that are sometimes encountered would seem to indicate. Where the vegetation thickens, the path becomes a dirt track, at times almost indistinguishable among the spontaneous forest regrowth, no longer obstructed by the regular passage of people and animals.

Figure 3.26 – Outcrops of rock and erratic boulders on the path.

The layout was dictated by the orographic conformation, the steepness and the surface characteristics of the soil. In some sections, the path was defined with barely perceptible incisions in the rocky slope, without adding any constructive action. Near the church, in addition to the modest cutting of the ground, on the downstream side there is a band of slabstone, supported by dry-laid stones. [Fig. 3.27] As evidenced by the lithological characteristics of the context, the slabs and stones were found in the very place where the material was used. Greater difficulties were posed by the location of a stretch of the path, close to the Bënjë Bridge, where one has to cross a slope characterised by silty-clayey marl layers with highly fractured flakes, on a considerable slope, and affected by surface instability. Today, almost all traces of this ancient passageway, which must have required frequent maintenance, have been lost. A masonry

relic survives in the original position of the path and there is a further small portion of wall slightly downstream and blocked by a shrub. These traces show that the pathway here consisted of drystone masonry, which rose from the outer face resting on a narrow levelled strip. From the foot of the facing, a masonry wall with a mostly triangular cross-section rose up, gradually filling in the area between the facing and the slope profile with rubble; the top walking surface was finished off with slabstone, which still exists among the surviving wall fragments. [Fig. 3.28]

Figure 3.27 – Traces of the paving of the path near the village.

Figure 3.28 – Surviving wall fragments of the path section on the left side of the Bënjë Bridge.

Climbing up from the bridge towards Bënjë, for a long stretch the path is paved in *kalldrëm* and its width almost suggests it was a road. This is probably because it crosses a cultivated area close to the village. A great deal of attention was paid to the organisation of rural activities and the community's management of grazing areas, thereby allowing the stables to be located outside the town centre (see § 2.1.4).

Nowadays, the path is almost completely screened on the sides by trees and bushes, concealing its close relationship with the adjacent terraced cultivations. [Fig. 3.29] The path is wedged into the ground at times like a slight crevice. In some places one of its edges borders steep slopes, whereas in others it is flanked by portions of masonry of different widths, made necessary by the adjacent terracing. [Fig. 3.30]

Figure 3.29 – Cultivated fields on the edge of the path.

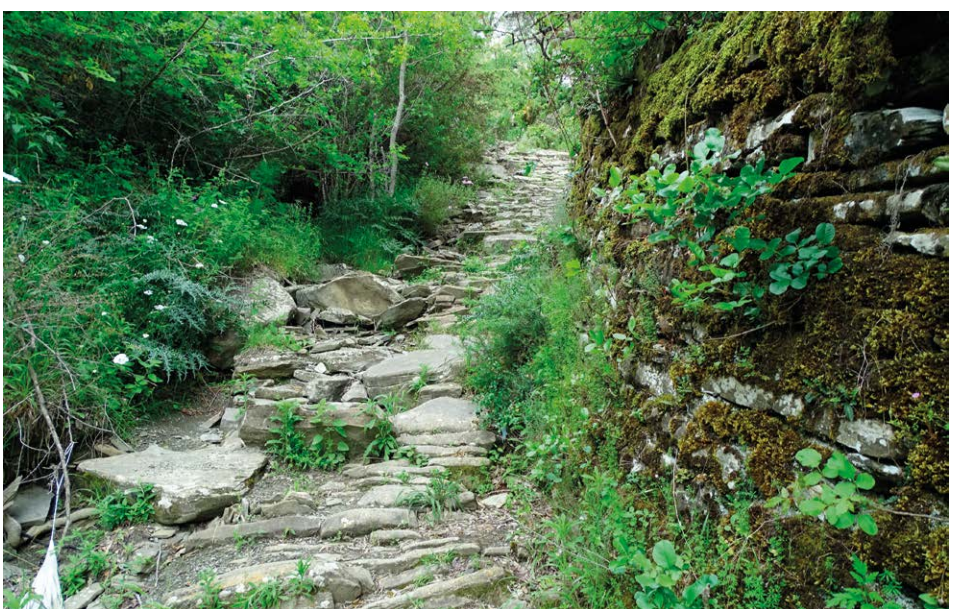

Figure 3.30 – The *kalldrëm* paved path crosses terraced fields supported by drystone walls.

Figure 3.31 – Details of the laying of the *kalldrëm*.

The *kalldrëm* consists of slabs laid with the thinner edge exposed, filled with earth or minute fragments of rock. [Fig. 3.31] The rows tend to be transverse, but rarely continuous over the entire width of the path. The irregularities are due to the fact that there was a tendency to accommodate the unevenness of the ground, corrected in part by the use of slabs of different sizes, sometimes laid on small volumes of soil that uniform the surface. The pattern of the slabs frequently adapts to the rocky outcrops, the top of which becomes part of the walking surface, in some cases after having been levelled. At the same time, the outcrops are particularly strong points of adhesion to which the slab can connect. More rarely, large-format slabs arranged as continuous transverse planking are used. Sometimes such slabs are used to create connecting steps between parts of the walking surface with significant height differences.

The overall stability of the paving is ensured by the deep insertion of the slabs and the lateral confinement, achieved with walls, or with the ground surface slightly raised at the edges. When the ground tends to slope at the side of the path, the *kalldrëm* is blocked with an edge made of massive polygonal slabs. [Fig. 3.32] The use of large slabs in the remaining parts appears to be episodic. Despite the humble means employed, attention to detail is evident even in the care taken in the gaps between the path and the fields: despite the small differences in height between the two parts, even here there is no lack of stone elements alongside the paving stone.

Stone materials similar to those used in the construction of the *kalldrëm* were used in the drystone retaining walls bordering the path. The distinguishing feature of the latter is the choice of a facing with larger ashlars, more suitable for providing stability with respect to the thrust of the terracing ground. The stone rows tend to maintain their horizontality but are irregular due to the continuous variation in height of the stone used. However, the wall system is extremely compact due to the skilful connection between the heterogeneous stone elements, in addition to which there was likely drainage on the inner side of the facing. Proof of this is the absence of collapses and alterations limited to the inevitable presence of biological colonization.

As further confirmation of the symbiosis between materials, environment and measured construction actions, a rural building bordering the last section of the path towards the village has a slabstone roof whose pattern is in continuity with the same type of slabstone dispersed on the adjacent slope. [Fig. 3.33]

Figure 3.32 – Section in *kalldrëm* with the edges blocked by large slabs.

Figure 3.33 – Roofing of a building made of the same slabstone used for the path.

3.3.4 The bridges

The Kadiu Bridge and the Bënjë Bridge are monumental works that in the present context almost seem to be semblances of a vanished world, no longer part of a system of connections or a living context. These structures testify to the importance of paths, as a system of widespread connections in the territory, which ensured that they were passable even at times when the water level of the streams and rivers rose, preventing or making fording difficult. Today, the Bënjë Bridge is in fact a neglected structure that has been severely damaged as a result of its state of abandonment. [Figs. 3.34] Despite the loss of masonry on the left abutment due to flooding, it has not yet undergone urgent restoration work that can no longer be put off.

The fate of the Kadiu Bridge was different due to its monumental size and its particular location close to the entrance to the canyon of the Lëngarica River; no less important is its function as a connection to the adjacent thermal baths on the left bank, which in recent years have become a destination for an increasing number of tourists. During the *Albania dei Piccoli Borghi* Thematic Workshop,[9] held in May and June 2019, it was possible to appreciate the temporary continuity in the use of the bridge with traditional activities, when it was crossed by a compact and numerous flock of sheep stretching from one bank to the other. [Fig. 3.25]

Figure 3.34 – Detail of the arch of Bënjë Bridge.

Figure 3.35 – The Kadiu Bridge crossed by a flock.

[9] Promoted by the Department of Architecture, University of Florence, coordinator Antonio Lauria (see Lauria *et al.*, 2020).

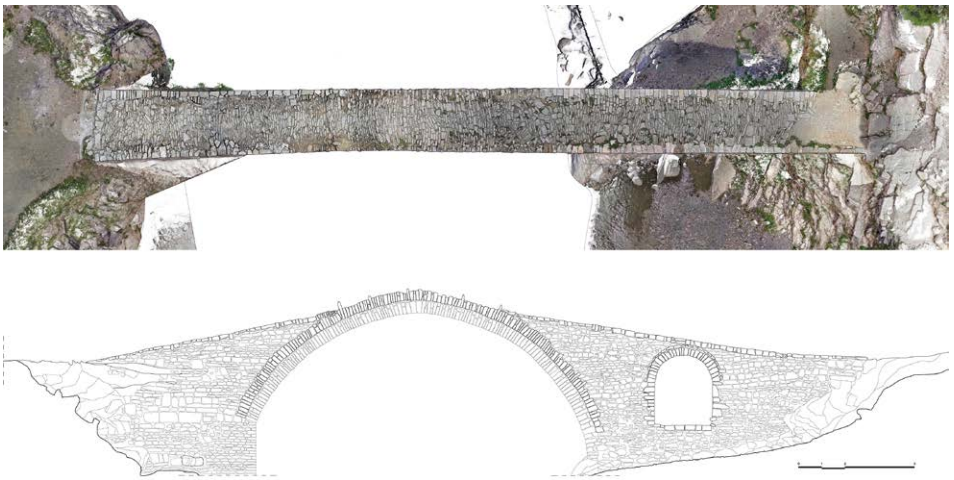

Figure 3.36 – Kadiu Bridge. *Above*. Photogrammetry of the plan representing the walkway. *Bottom*. Downstream elevation.

Figure 3.37 – Abutment of the Kadiu Bridge and thermal pool, detail of the archway springer and the side archway.

The characteristics of the Kadiu Bridge piers reflect the deliberate adaptation to the orography of the context. The one on the right rises up from the riverbed with a particularly irregular planimetric arrangement, due in particular to the downstream slanted side that widens, in two misaligned sections, to encompass part of the high ridge of supporting rock. [Fig. 3.16] In addition, the wall underneath the bridge arch, in turn, has been significantly rotated, increasing the span on the upstream side, thereby accommodating the outflow of water. Due to this slanted position of the inner side of the pier, the bridge arch has an upstream span of 15.10 m, which is reduced by approximately 0.80 m on the opposite. [Fig. 3.36] The more gradual steepness of the left bank of the river made it possible to set the pier on a footing on the rock, which for long periods of the year is above the water level. The bridge then continues, with a constant width, resting on the prominent rock, which gradually reduces the height of the wall mass. This section, more extensive than the other side, has an arch for releasing water pressure so that pressure on the flank is reduced in the event of major flooding, which generates a small water collection basin in this part. [Fig. 3.37]

The arch of the bridge has edges delimited by square stone ashlars, usually extending the full height of the stone archivolt which is approximately 50 cm. In the intrados of the barrel vault, in the internal parts, on the other hand, the use of smaller stones in a considerable variety of sizes can be seen, sometimes laid with a certain approximation. [Fig. 3.38] Adequate toothing between such inhomogeneous parts was achieved by using rather large ashlars on the intrados, sometimes exceeding the height of the stone archivolt itself. Given this constructional arrangement, it is reasonable to assume that the thickness of the barrel vault is reduced in the inner part between the edge arches.

At about half the height of the stone archivolts, small eyelets of metal ties, which do not always have an anchor bar, emerge from the mortar joints, comparable to those observed in the ties of the pronaos of the Church of St Mary. The position of the ties indicates that they were put in place when the bridge arch was under construction. Aside from the fact that there were not many anchor bars, the small size of the existing ones should be emphasised, from which it can be deduced that friction between the bars and the masonry of the vault was relied upon in order to reduce the risk of the formation of cracks parallel to the directrix, i.e. the side arches.

Figure 3.38 – Kadiu Bridge, details of the stone archivolts.

In some areas of the bridge intrados, the presence of smoothed overflow mortar can be seen, due to the use of the timber covering of the centring set up in the construction of the vault. The same stone archivolts of the bridge arch serve as the centring of a further arch, overhanging by around 10 cm and featuring ashlars in the central area that continue for a stretch beyond the top of the bridge. This device was designed to create a protection at the edges of the bridge, which was likely connected with a thin lateral wall, which has since been lost, as the similar bridges (both with overlapping stone ar-

chivolts) of Kamare (1715) in Librazhd (in Elbasan County), with evident remains of walls on the sides, and Mes (1768) near Shkodër, featuring protective walls, seem to prove (Maiellaro, 2006). [Fig. 3.39]

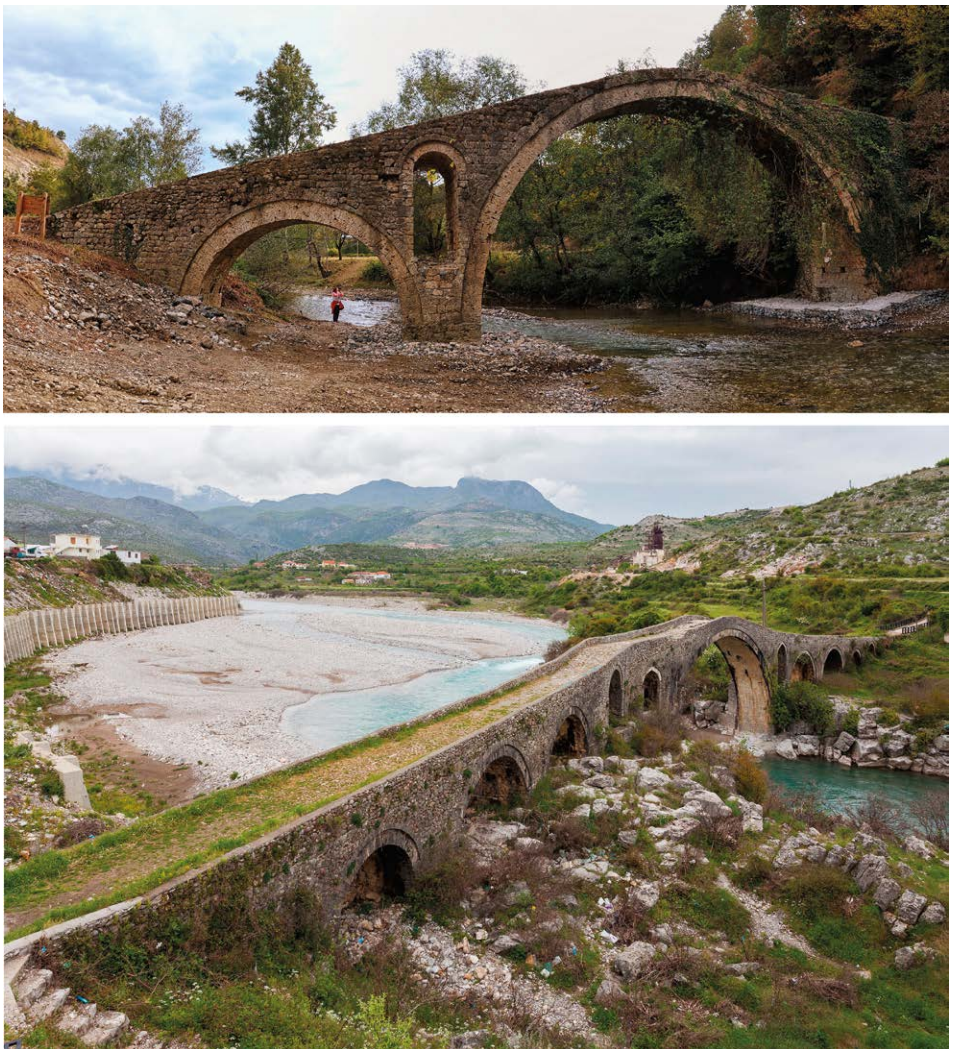

Figure 3.39 – *Above*. Goliku Bridge. *Bottom*. Mes Bridge.

For a large central section of the bridge, the floor slab is included in the thickness of the second arch. Considering that this arch is of modest thickness (just over 30 cm) and that the slab must have a certain depth, there would be too little residual thickness for a possible further barrel vault. It seems more likely, therefore, that the upper arch did not extend beyond the visible stone archivolt and was intended to create the architectural theme of the recessed arch, while at the same time providing a reliable anchorage for the ashlars extending beyond the walking level. Also in the side arch of the left abutment of the bridge, the crowning arch has a slight recess and an overposed moulding finish.

Bridges with archways designed by two adjoining arches, of which the upper one is slightly projecting, are a distinctive feature of several bridges. For instance, in addition to those already mentioned in Kamare and Mes, the Goliku Bridge (first half of the 18th century) in Pogradec can also be mentioned (Maiellaro, 2006).

Information on the restoration of the Kadiu Bridge is limited to more recent years (Lauria *et al.*, 2020). The right pier, probably also due to its position in the riverbed always below the water level, suffered a collapse in the masonry on the downstream side, which was rebuilt in 1982. On the other hand, hydrogeological conditions are considered one of the primary factors of bridge damage in Albania (Gega & Bozo, 2017). Nowadays, the Kadiu Bridge is in an overall good state of preservation; recent work involving the pointing of parts of the wall facing and the complete resurfacing of the paving can be seen. Such works are not always appropriate in the choice of materials and quality of execution. One problem that is certainly open is the safe use of the bridge, as it does not have side guards.

Figure 3.40 – Bënjë Bridge, the stone archivolts and the intrados.

Figure 3.41 – Bënjë Bridge, the masonry joined by vertical stone elements, connected to a section of wall on overhanging slabs.

Bënjë Bridge is modest in size, but it has similar characteristics to the Kadiu Bridge in that it has a pointed arch with a double stone archivolt, with the upper one slightly projecting. Differences can be seen in the size of the ashlars of the main arch, which here have thicknesses that decrease from the haunches to the most central area of the arch, where a kind of slab is used that is in continuity with that of the remaining part of the barrel vault. [Fig. 3.40]

A further similarity is due to the upper arch, which also uses some longer stone elements; here they are also inserted into a section of masonry delimiting the sides of the bridge. But Bënjë Bridge provides a further important piece of information. In the section of masonry to the side of the archway, the use of vertical stone elements juxtaposed with a horizontal row masonry continues. [Fig. 3.41] When it comes close to the slope, the masonry continues with an overhanging slab. In fact, with this device, the short section of the connecting wall (to the left of the stream) between the bridge and the slope was built as an overhang on the rock escarpment, dem-

onstrating the incumbency of the slope in the passage area and the desire not to alter it with excavations, however modest. Nowadays, these wall sections are surmounted by a ground crossing, with a walking surface for the most part horizontal. [Fig. 3.42]

Figure 3.42 – Walkway over the Bënjë Bridge.

This highlights a twofold difference with the similar bridges mentioned above: the lack of a paving slab and a humpbacked conformation. Taking into account the distinct features observed in the bridge's masonry, it could be assumed that the paving slab and the prominent passage were obliterated by the accumulation of soil that over time poured into the bridge passage from the looming slopes, characterised by unsta-

ble surface materials. Indeed, the masonry interpenetrated by vertical or sub-vertical stone elements would suggest the existence of a parapet up to the vicinity of the central area of the bridge, which would be configured as the top of a humpbacked path. This doubt could be clarified by minor excavation sampling to be carried out in the vicinity of the walls incorporating the vertical stone elements.

The left side of the bridge arch, placed up against a vertical, heavily stratified rock face, fell on a narrow abutment now completely demolished by floods. The modest thickness of the masonry abutment must have favoured this outcome; the prevailing part of the bridge abutment consisting of rock, however, has conferred stability to the arch to date [Fig. 3.43]. Due to the slight overhang in relation to the rock below, a corbel-like arrangement was created at the base of the arch, which partly compensated for the lack of an abutment. In such a condition of obvious vulnerability, the gradual disintegration of the masonry beyond the support of the arch is in any case occurring, which on the upstream side has already affected a section of the stone archivolt of the arch and the masonry of the side. This makes it all the more urgent to restore the missing parts, ensuring that the pillar to be rebuilt, being of modest masonry mass, has the appropriate anchorage with the adjacent rock wall, which was not provided for in the original structure characterised by this probable genetic factor of structural weakness.

Figure 3.43 – Details of the left abutment of the Bënjë Bridge.

3.3.5 The approach to the construction of the path and a lost features of the bridges

Retracing the path between the Kadiu Bridge and the village of Bënjë through the material remains of the small gestures that guided its construction and the choice of route testifies to the use of the environment with an approach that was aware of the strength and fragility of the contexts. Proof of this can be seen in the fortunate position of the bridges placed where the orographic and geological conditions guaranteed natural and reliable abutments supported on rock, partly concealed by wall coverings. It can also be seen in the ability to accompany the path with contained construction or modification actions, often limited to barely perceptible incisions in the ground, thanks to the identification of carefully chosen routes that also reduced the maintenance re-

quirements. It was also inevitable that areas with an unstable surface would be crossed, such as in the vicinity of Bënjë Bridge, where a short section of the path is built with a modest drainage wall, made of dry-stone, avoiding inserting it by excavating the slope, which is particularly steep. Measured soil changes affected the area on the slopes of the village, terraced and crossed by the path, which also provided access to the crops.

With regard to Bënjë Bridge, the possibility has emerged that soil gradually accumulated on the route. If this is confirmed after appropriate inspections, the original conformation of the humpback bridge, with part of the side walls, could be brought to light. All this would simplify the solution of ensuring the safe crossing of the bridge.

Recent restorations to the Kadiu Bridge have extended the slab of the walkway up to the edges of the bridge without taking into account the original arrangement delimited by masonry, elements that today need to be reconsidered and supplemented with additional devices to address the problem of lateral protection here as well.

The rational choice of where to take action and the minimal subtraction and addition of material seem to be constantly pursued intentions. The arrival area from the path towards the village seems to deviate from this approach to some extent. It is affected by extensive excavations bordered by a long retaining wall, where the area for the construction of the Architectural Complex of St Mary was created. Behind the apse, a large space continues, an important meeting place for the community of Bënjë,[10] which appears to have been deliberately made rough and with evident and irregular steepness, without going beyond what was deemed necessary.

[10] See § 2.3.1.

People _ Places _ Architecture

This book presents the results of research carried out by a work team from the Department of Architecture of the University of Florence, promoted and funded by the Italian Agency for Development Cooperation in the Western Balkans (Tiranë). It focuses on Bënjë, a rural village in the municipality of Përmet, southern Albania. Bënjë is studied and described in relation to the surrounding territory of the upper Vjosa Valley, of the hightest landscape value. The research defines a strategy of small interventions aimed at enhancing, in the most respectful way, the natural, architectural and social resources of the area as a lever for a process of sustainable and socially inclusive development, proposing an approach to the revitalisation of rural areas that can be replicated in other similar contexts.

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