Building Sustainability in the Relationship with the Territory. The Cammino del Duca (the Duke's Way) of the University of Urbino

PEER REVIEWED

Nico Bazzoli

University of Urbino Carlo Bo

nico.bazzoli@uniurb.it

Eduardo Barberis

University of Urbino Carlo Bo

eduardo.barberis@uniurb.it

Elisa Lello[1]

University of Urbino Carlo Bo

elisa.lello@uniurb.it

Jonathan Pierini

Institute of Higher Education in the Artistic Industries

jonathan.pierini@isiaurbino.net

Elena Viganò

University of Urbino Carlo Bo

elena.vigano@uniurb.it

1.   Introduction.

Over the past decades, universities have experienced an increasing integration with their local contexts, playing a key role in urban and regional development processes[2]. Usually, this process has taken place

---

[1] Corresponding author.

[2] Giuliano Amato, Riccardo Varaldo, and Michela Lazzeroni, *La città nell'era della conoscenza e dell'innovazione* (Milano: FrancoAngeli, 2006); Arnaldo Bagnasco, "Città in cerca di università. Le università regionali e il paradigma dello sviluppo locale", *Stato e mercato*, 24 n.3 (2004): 455-474;

via technology transfer and building partnerships with local stakeholders, aimed at producing direct and indirect economic spillovers[3]. However, the compelling growth in relevance of sustainability issues implied a recalibration of such activities. Universities have been starting to operate to find effective solutions to address the significant social transformations and climate and environmental challenges currently underway[4].

Within this framework, Italy has also witnessed forms of convergence among the different missions of universities to develop local networks, collaborations, and exchange mechanisms with public and private actors in their catching areas[5]. This process is particularly relevant in more peripheral areas, where the relationships between universities and local communities appear particularly significant, given their generative potential in creating and diffusing innovation and mitigating inequalities[6].

This contribution aims to highlight the promoting and driving role that can be played by universities in the definition of sustainable local development projects, taking as an example the path of construction and implementation of the Cammino del Duca (the Duke's Way), proposed by the University of Urbino Carlo Bo in collaboration with two sections of the Italian Alpine Club (CAI), namely Montefeltro and Gubbio. The Cammino, which crosses an area rich in landscape, history, and nature, but affected by phenomena of economic and social marginalization, is meant as a project of sustainable tourism and community engagement, consistently with University's plural missions[7].

In particular, we will focus here on the process of implementation of the Cammino, highlighting its innovative aspects and critical issues, in order to promote a debate on opportunities and constraints affecting universities' sustainability policies when interacting with local reference contexts, to boost a culture respectful for local specificities, the environment, and the promotion of health and well-being.

This contribution is structured as follows.

After investigating the role of universities in promoting a process of sustainable development, the main features of the Cammino del Duca will

---

Michela Lazzeroni, *Geografie dell'università: Esplorazioni teoriche e pratiche generative* (Milano: Mimesis, 2021).

[3] Elvira Uyarra, "Conceptualizing the Regional Roles of Universities, Implications and Contradictions", in *European Planning Studies* 18.8 (2010): 1227-1246.

[4] Gregory Trencher, et al. "Beyond the Third Mission: Exploring the Emerging University Function of Co-creation for Sustainability" *Science and Public Policy*, 41, 2 (2014): 151-179.

[5] Cesare Emanuel, "Gli atenei come «luoghi terzi» della valorizzazione della conoscenza generativa e dei processi di sviluppo locale", edited by Michela Lazzeroni, Monica Morazzoni and Maria Paradiso, *Nuove geografie dell'innovazione e dell'informazione*, 11-24.

[6] Michela Lazzeroni, "Università e innovazione nelle aree periferiche: dinamiche di sviluppo, inclusione sociale e progetti di rigenerazione urbana", *Geotema*, 59 (2019): 25-34.

[7] Nico Bazzoli, Mauro De Donatis, Elisa Lello, Filippo Martelli, Elena Viganò, and Paolo Piacentini. "Il Cammino del Duca: un itinerario in costruzione tra università e territorio". In *Itinerari per la rigenerazione territoriale tra sviluppi reticolari e sostenibili,* edited by Luisa Spagnoli. (Milano: Franco Angeli, 2022).

be described. Namely, we will focus on its potential contribution to the revitalization of the area the Way crosses. Actually, the local context is more and more declining, with contrasting visions on how to keep together economic needs and environmental protection. Next, we will introduce the actions carried out to trace the path of the Cammino and share it with local populations. A special focus is devoted to the project logo, as a key element in the visual identity of the project. Some considerations on key driving factors and main critical issues of the project will be reported in the conclusions.

2.   Universities and Sustainability: the Case of the *Cammino del Duca.*

With the increasing awareness about the socio-environmental crises related to the limits of existing development processes, several authors have emphasized the need to place university institutions at the center of the debate for the creation of a sustainable future[8]. These arguments move from the recognition of their specific position within society as unique sites for the production, dissemination, and use of knowledge, that is, those elements that can support broad economic and social transformations such as those related to sustainable development[9]. As is well known, this implies complex challenges, requiring not only new directions in teaching and research but also a rethinking of the very role of universities, and their relationship with the surrounding context, at different levels of spatial proximity.

A relevant push in this direction came with the United Nations 2030 Agenda, the first international development agenda to include higher education both in the goal of quality education (SDG 4) and as a key player in partnerships to achieve the other goals (SDG 17)[10]. This has resulted in a clear interest by universities to pursue 2030 Agenda's SDGs, albeit with varying modalities and intensity[11]. Indeed, it should be pointed out that university institutions are characterized by multiple values and visions regarding sustainable development, as well as different constraints and

---

[8] Issa Ibrahim Berchin, Ana Regina de Aguiar Dutra and José Baltazar Salgueirinho Osório de Andrade Guerra, "How do Higher Education Institutions Promote Sustainable Development? A Literature Review", *Sustainable Development* 29.6 (2021): 1204-1222; Anthony D. Cortese, "The Critical Role of Higher Education in Creating a Sustainable Future", *Planning for higher education* 31.3 (2003): 15-22; Paul Sylvestre, Rebecca McNeil and Tarah Wright, "From Talloires to Turin: A Critical Discourse Analysis of Declarations for Sustainability in Higher Education", *Sustainability* 5.4 (2013): 1356-1371.

[9] Jennie C. Stephens et al. "Higher Education as a Change Agent for Sustainability in Different Cultures and Contexts", *International journal of sustainability in higher education* 9.3 (2008): 317-338.

[10] Taya Louise Owens, "Higher Education in the Sustainable Development Goals Framework", *European Journal of Education* 52.4 (2017): 414-420.

[11] Maia Chankseliani and Tristan McCowan, "Higher Education and the Sustainable Development Goals", *Higher Education* 81.1 (2021): 1-8; Isabel Ruiz-Mallén and María Heras, "What Sustainability? Higher Education Institutions' Pathways to Reach the Agenda 2030 Goals", *Sustainability* 12.4 (2020): 1290.

peculiarities that influence their role, as well as their goals, strategies, and operational scope[12].

In any case, in the literature above there is quite an agreement that the interconnectedness and complexity of current socio-ecological emergencies require strong integration between disciplines and relevant interactions between universities and society, building partnerships to design and implement initiatives geared toward the pursuit of 2020 Agenda SDGs. This is especially true at the local level, where the ability of universities to interact with the social fabric, dependent on contextual knowledge and familiarity with communities, still has wide margins of improvement. In this respect, both greater openness to actors outside the academic community and the building of interconnections between different actors with a transdisciplinary approach are needed[13].

Such an orientation implies a third mission activity or a real fourth mission dedicated to sustainability[14], directed to the implementation of cross-sectoral and wide-ranging processes and initiatives that pay special attention to the local communities in which the universities are embedded. On the other hand, innovative proposals aimed at promoting sustainable development turn out to be sensitive to local contexts[15] and should be elaborated considering the peculiarities of places to grasp their latent potential and develop effective strategies for enhancement.

This attention to the context represents one of the main elements that, together with contamination and sharing, animate the worksite of "Uniurb Sostenibile" (Sustainable University of Urbino) and the actions of the pro-rectorate of Sustainability and Enhancement of Differences at the University of Urbino Carlo Bo. The focus is not only on building knowledge, but also on building relationships and initiatives on sustainability in different respects, via the collaboration and engagement of external stakeholders, as well as the university staff, and students.

Among the various projects promoted in this perspective over the past few years, the *Cammino del Duca* stands out. This route of about 100 kilometers winds between Marche and Umbria, connecting the cities of Urbino and Gubbio —both deeply linked to the history of Duke Federico da Montefeltro (1422-1482). This initiative is related to different missions of the University (third mission, teaching as well as research), with the priority aim of with the priority aim of contributing to the reconciliation of sustainability and local economy.

A key issue of the project is represented by the role of the University as a promoter, and actively involved in its implementation, in collaboration

---

[12] Andrea Cuesta-Claros, et al., "Understanding the Roles of Universities for Sustainable Development Transformations: A Framing Analysis of University Models", *Sustainable Development* 30.4 (2022): 525-538.

[13] Julie Klein Thompson, et al., *Transdisciplinarity: Joint Problem Solving among Science, Technology, and Society: An Effective Way for Managing Complexity* (Springer Science & Business Media, 2001).

[14] Chiara Rinaldi, Alessio Cavicchi and Richard N.S. Robinson, "University Contributions to Co-creating Sustainable Tourism Destinations", *Journal of Sustainable Tourism* 30.9 (2022): 2144-2166.

[15] Gregory Trencher et al., "University Partnerships for Co-designing and Co-producing Urban Sustainability", *Global Environmental Change* 28 (2014): 153-165.

with CAI (Montefeltro and Gubbio sections), local authorities, and a number of public and private bodies in the area. Therefore, the *Cammino* becomes a debate arena with the local context, to activate many resources to formulate a participatory proposal of slow tourism and knowledge of the local context.

Moreover, the *Cammino* is defined as an open-air classroom-laboratory for the sharing and co-creation of knowledge with the students and with stakeholders outside the academic arena, not only in reference to the historical, landscape, and naturalistic aspects, but also to local environmental, socio-demographic and economic problems. In this sense, the project also serves as a stimulus for the consolidation of research interests in the local context, channelling part of the energies of the teaching and research staff towards multi-interdisciplinary scientific insights that also intend to address the theme of local economies of marginal areas. In particular, the focus is on models combining income and employment creation with respect for the environment and the protection of well-being and health.

3.   A Trade-off between Environmental Sustainability and the Enhancement of Local Economies?

The route of the *Cammino* del Duca is divided into five stages that touch the territory of six inland municipalities in the Province of Pesaro and Urbino and two municipalities in the Province of Perugia. In addition to high orographic and landscape variability, the spatial context of the *Cammino* is quite heterogeneous in terms of spatial marginality and socio-economic characteristics. Two of the eight municipalities crossed by the route are classified, according to the National Strategy for Inner Areas, as poles, two as belt areas, and four as intermediate [Table 1]. Although only the latter falls within the delimitation of the Inner Areas, the entire area under consideration is affected by processes of population shrinkage (more advanced, as in the case of smaller and peripheral municipalities, or less). These municipalities show also socio-demographic and labor market indicators that, in several cases, are among the worst in the regional context.

Depopulation is just one piece of a larger mosaic of attrition - economic, social, demographic, and related to the supply of services - that undermines the well-being of resident populations and the ability to sustain local economies. Thus, in this area straddling the Umbria-Marches Apennines, albeit with different intensities, the typical issues of inland areas arise along with difficulties attributable to the various forms of decline that have recently involved intermediate territories[16].

---

[16] Francesco Curci, Arturo Lanzani and Agim Kërçuku, "Le geografie emergenti della contrazione insediativa in Italia: analisi interpretative e segnali per le politiche", *CRIOS,* 19-20 (2020): 8-19.

Table 1| Main socio-economic characteristics of the area traversed by the Cammino del Duca.
Source: elaboration on data from the Italian Institute of Statistics (ISTAT).
* Labour force aged 15-89 years
** At provincial level, the activity and unemployment rate – year 2022 are 55,1% and 4,6% (Pesaro-Urbino), and 53,1% and 7,3% (Perugia).

Municipalities	Group in the National Strategy for Inner areas	Inhabitants 2022	Change in population (%) 2011-2022	Old age index 2022 %	Activity rate 2019 %	Unemployment rate 2019 %
Acqualagna (PU)	Intermediate	4.182	-7,4	186,2	56,3	9,7
Cagli (PU)	Intermediate	8.068	-11,1	274,3	51,0	8,5
Fermignano (PU)	Belt	8.239	-4,6	155,6	58,5	9,2
Frontone (PU)	Intermediate	1.204	-11,7	276,6	52,1	11,0
Gubbio (PG)	Areal centre	30.650	-6,0	235,4	52,0	8,8
Provincia PG	-	640.482	-2,8	211,8	53,8	10,7
Provincia PU	-	349.818	-3,9	201,1	55,5	10,5
Scheggia e Pascelupo (PG)	Belt	1.280	-13,4	300,7	45,4	11,6
Serra Sant'Abbondio (PU)	Intermediate	919	-17,1	471,6	46,3	10,4
Urbino (PU)	Areal Centre	13.772	-11,5	262,5	53,1	7,8

In these rural and mountainous areas, socio-economic trends in the last decades show an urgent need to sustain the local economy and employment. At the same time, these needs often tend to conflict with environmental protection goals, making the reconciliation of these two dimensions problematic. Indeed, in some cases, an (outdated) view persists, maintaining that environmental initiatives can be constraints for the development of local business and economies.

As a result, openly hostile positions gain momentum, harming initiatives aimed to reconcile income and employment creation with environmental protection making the implementation of sustainable economy projects even more complex. On the other hand, the increase in the frequency and intensity of extreme weather phenomena related to climate change—which have severely affected in recent months many of the municipalities involved in the Cammino—is showing more and more that a strong commitment is needed, not only in the mitigation of the greenhouse effect, but also in the conscious and responsible land management.

4.   Building the Cammino del Duca.

In the context of the pandemic and the rediscovery of inland destinations, awareness of the potential of slow tourism linked to walking routes has further asserted itself. This awareness, combined with a careful assessment of the paths crossing the Marche and Umbria regions, moved a group of professors and researchers from the University of Urbino toward the definition of an initial hypothesis of a route for the Cammino del Duca. This was intended as a basis for a shared definition involving a working group extended to the CAI sections of the territories concerned. Following numerous meetings and discussions, a draft route was agreed upon in the spring of 2021 to be promoted and tested through experience. With the aim of directly assessing the feasibility of the route by different categories of users, an initiative open to the public was then organised to walk the five identified stages. The experimentation, which took place from 26 to 30 July 2021, was preceded by appropriate promotion and communication initiatives and initial mapping of the accommodation facilities, commercial activities and elements of significant landscape, geological and cultural interest in the vicinity of the route, to propose them as points of refreshment, refuelling, overnight stays and thematic deepening.

An intense listening and discussion activity with the territories concerned accompanied the event. At the end of each stage, near the places of arrival and overnight stay, public meetings were organised in which the group of walkers interfaced with various representatives of local institutions and communities, and with individual citizens. These initiatives served to make the Cammino del Duca project known to institutional stakeholders and the inhabitants of the municipalities crossed and, at the same time, to understand the needs of the territories and the main issues to be addressed for the implementation of the Cammino itself.

The importance the working group attached to listening was also reflected in the group of walkers who were testing the route for the first time. In fact, a prominent role was reserved for gathering feedback and information from the participants to obtain an initial assessment of the route, critical points, and aspects to be improved.

The main issues that emerged from this activity made it possible to initiate a process of redefining certain parts of the route, providing for some alternative paths, also based on different users' profiles and interests [Figure 1]. This revision of the Cammino was carried out by the CAI sections involved in the project, bearing in mind specific criteria such as the use of existing paths and roads, the state of maintenance of the pathways, the need to avoid asphalt roads as much as possible, the safety requirements for usability, the length of the stages, the difference in altitude, the physical effort required and the possibility of guaranteeing at least a minimum logistical support at the stage points.
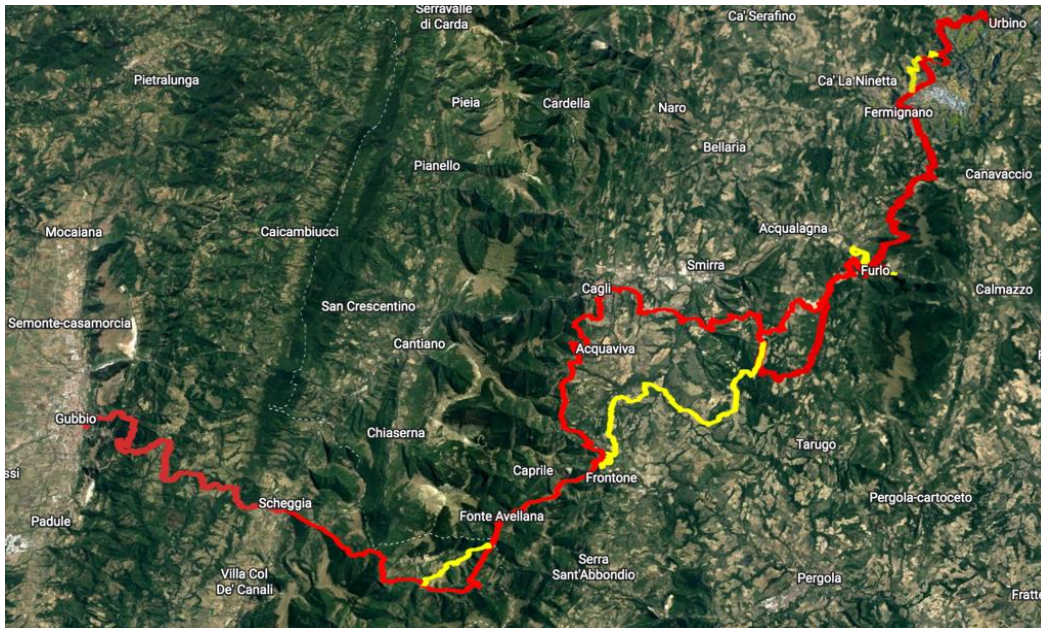
Figure 1| The Path of the Cammino del Duca (in red) with the alternative path (in yellow).

The success with the public and the good feedback received led to the organisation of a second structured walking activity from 29 June to 3 July 2022, with the aim of continuing the itinerant construction process of the project and further strengthening the relations between the University of Urbino and the local stakeholders, in a generative perspective.

At the same time, the process of institutional recognition of the Cammino del Duca by both the regions and the municipalities involved was initiated, with a view to its inclusion in the Atlante dei Cammini (Atlas of the Ways) of Italy, through the preparation of technical reports, the survey of routes and the design of the logo. The latter, in particular, represented an important phase in defining the identity of the Cammino and in helping to increase its knowledge on the part of both the local populations and those potentially interested in walking it and getting to know, from multiple perspectives, the territory along which it winds.

5.   Communicating the Cammino del Duca.

Developing the Cammino del Duca included a design activity in the field of graphic design and visual communication aimed at creating a graphic sign and an identity system capable of responding to different communication needs. Consistently with the objectives of the project and its implementation strategy, which identify the centrality of the university's action and the definition of a network of local stakeholders as a distinctive feature, it was decided to entrust the graphic design and communication project to the Istituto Superiore per le Industrie Artistiche (ISIA) di Urbino, involving a dedicated team of students, researchers, and lecturers. The choice seemed particularly appropriate given the Institute's teaching and research activities centred on the redefinition of the communication project based on principles of

sustainability, the attention to the complexity of contexts, the intended enhancement of the differences, and the understanding of designing as a tool to stimulate participation and a sense of belonging.

First of all, designing an identity system for the Cammino del Duca meant questioning the functions to which it must respond both in terms of identity and directional information. These dimensions of graphic design refer to specific disciplinary fields: that of corporate identity, understood as "the set of images or ideas or qualities of an entity that people have or are formed by relating to them through elements, called touch points, such as brands, buildings, products, packaging, printed matter, ..."[17] and that of wayfinding, a branch of information design and environmental graphic, or that field of design which, including different skills, deals with the implications of communication design in the built environment.

It was, therefore, necessary to question how the cultural, theoretical, and technical tools of identity and wayfinding design could account not only for the specificities of the object of application, the Cammino del Duca, but also for the process of its design from a collaborative, sustainable and inclusive perspective.

In recent years, designers and communication design scholars—among others—have become increasingly aware of the need to address territorial communication issues and enhance the specificities of places. This need has emerged from an understanding of the phenomena described above in terms of a progressive marginalisation of peripheral areas and, at the same time, from the awareness of the role that tourism, in its various forms, can play in coping with processes of marginalisation and depopulation.

While in many cases, the response of graphic and communication design has been that of territorial branding, which has applied the logic of the promotion of consumer goods and services to the communication of territories, a front of critical reflection has also opened up, which has concentrated its efforts on redefining communication design, increasingly moving away from a vision of design as a tool for regulating the forms of the visible referred to a subject, in favour of designing conceived as a tool for the enhancement of differences.

From this perspective, the identity system is no longer necessarily a closed synthetic sign but it can rather consist of a variable identity, a writing system that modifies itself on the logic of a grammar designed from time to time according to needs[18].

This non-finiteness and adaptability of graphic design is a central feature in designing identities applied to contexts. If places are bearers of multiple meanings—some being more stable, linked to their formal characteristics, and others generated by uses and projections—the role of

---

[17] Frederick Henri Kay Henrion and Alan Parkin, *Design Coordination and Corporate Image* (London: Studio Vista, 1967).

[18] Ulrike Felsing, *Dynamic Identities in Cultural and Public Contexts* (Zurich: Lars Müller, 2010).

communication is to hold this complexity together, interpreting the spirit of the place and, at the same time, allowing everyone to interact with it[19]. On a communicative level, this means designing a graphic identity that incorporates characteristics of variability, combining distinctive graphic characters with a non-imposing logic, one that is sensitive to contexts, aware of sustainability over time and of the possible appropriation of the system by users. In this regard, Piscitelli, Ferrara and Guida[20] mention the case study of the Lost Cities paths near Aleppo in Syria, emphasising how its graphic-wayfinding system, making use of cement posts well integrated with the context, is characterised by a low production cost, does not require special maintenance and envisages the local procurement of raw materials.

The graphic design of the Cammino del Duca consists of an acronym (CDD) whose layout is variable with respect to a basic grid and in which the letters are connected by straight lines and curves that recall cartographic notational systems [Figure 2].

Figure 2| The Logo of the Cammino del Duca.

Realised in black and white, the logo-mark system has little impact on the natural environment in which it will be used. It is versatile, economical due to the use of a single colour; it can be easily reproduced: a characteristic that also allows it to be written by hand on irregular surfaces such as wood or stone found along the Way. The system's configurations also make it possible to use different variants for each point of the Way, or for a set of points along it, emphasising the specificity of each place without compromising the overall effectiveness of the identity project [Figure 3].

---

[19] Daniela Piscitelli, Cinzia Ferrara and Francesco E. Guida, "Design e comunicazione visiva", in *I paesaggi culturali. Costruzione, promozione, gestione*, Ed. Michela Barosio (Milano: Egea, 2013), 329-352.
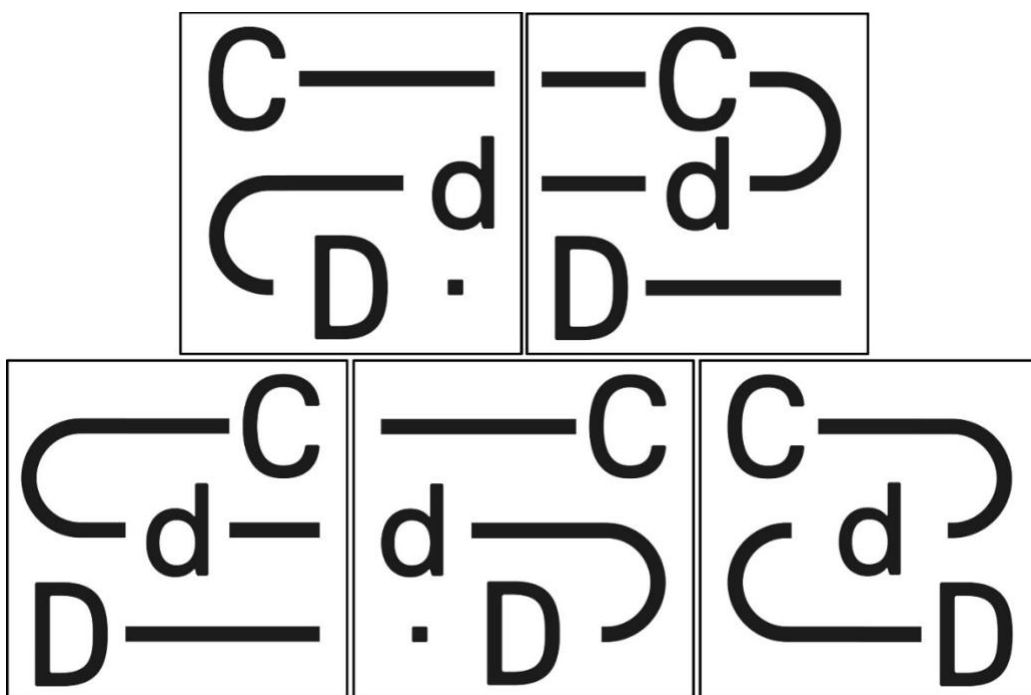[20] Ibidem.

Figure 3| The "Cammino del Duca" Logo: possible variants.

These characteristics define a graphic system that is sufficiently open to be offered for use and appropriation by all the subjects of the network as well as the end users, in the awareness that each sign acquires meaning through use over time.

6.   Some Concluding Remarks on the Nodes and Criticalities of the Process.

As in any project endowed with a certain complexity, the implementation process of the Cammino del Duca has brought out some interrelated nodes and specific critical issues. These are related both to the inclusion of the project in the framework of constraints, opportunities, guidelines and policies marking the local development path, and to the role assumed by the University.

Although there is some agreement within the framework of sector studies about the need to include local stakeholders in sustainable development projects, their actual involvement does not appear to be without problems. The issues underlying this difficulty can be multiple and related as much to the technical capacity of local stakeholders to cooperate as to their willingness and conviction to do so[21]. In fact, in the experience of implementing the Cammino del Duca, it should be pointed out that the participation of actors outside the promoting group is, in some cases, complex and constitutes a dimension to which specific

---

[21] Chiara Rinaldi et al., "Universities and Smart Specialisation Strategy: From Third Mission to Sustainable Development Co-creation", *International journal of sustainability in higher education* 19.1 (2018): 67-84.

energies should be devoted, especially about the engagement of actors and their contribution over time. In view of the final launch, the various formal steps to arrive at the recognition of the Cammino by the Marche Region and the Umbria Region will hopefully represent an opportunity to strengthen relations with local authorities and the various socio-economic actors.

A second element of criticality, partly connected to the previous one, concerns the role assumed by the University as a co-proponent and co-leader in the implementation of the project. This specific role of the University of Urbino testifies to a direct commitment of the academic community to the territory, which is also rich in innovative aspects. At the same time, it risks representing a limitation to the systematization and consolidation of the Cammino. To allow the project to "walk with its own legs," it is necessary for the University to take on a different role from the current one, less tied to activities in the field and more oriented toward strengthening the participation of actors and the sharing of vision and goals, leading to the creation of a network of public and private entities that will be responsible for the promotion, maintenance, care, and usability of the itinerary. This issue about governance opens up the need to broaden and consolidate the relationships between the actors involved, accompanying them on a collaborative path fueled by the sharing of some basic elements about local sustainable economies.

Finally, the difficulty in reconciling different visions about local economies and "development", manifesting themselves in individual orientations and in the proposal of divergent projects in terms of land management choices and enhancement mechanisms, should be recalled. This is an area in which the university is called upon to make multiple contributions. First, regarding the promotion of sustainability, it can act through the proposal of innovative approaches to environmental management in its activities, that can be adopted by the different entities that come into contact with the university, fueling a process of progressive contamination[22]. Second, its action can be aimed at the definition and promotion of socio-economic patterns which are able to take into account the specific needs of different territorial contexts and their social groups together with respect of the environment and landscape. In this sense, the university can play a role as a mediator and glue between different local contexts, institutions and stakeholders, facilitating the elaboration of a strategic vision and the goals to be achieved to build a truly sustainable future.

References

Amato, Giuliano, Varaldo, Riccardo, and Lazzeroni, Michela. *La città nell'era della conoscenza e dell'innovazione*. Milano: Franco Angeli, 2006.

---

[22] Stephens et al., "Higher Education as a Change Agent", 317-338.

Bagnasco, Arnaldo. "Città in cerca di università. Le università regionali e il paradigma dello sviluppo locale." *Stato e mercato* 24, 3 (2004): 455-474.

Bazzoli, Nico, De Donatis, Mauro, Lello, Elisa, Martelli, Filippo, Viganò, Elena and Paolo Piacentini. "Il Cammino del Duca: un itinerario in costruzione tra università e territorio". In *Itinerari per la rigenerazione territoriale tra sviluppi reticolari e sostenibili*, edited by Luisa Spagnoli. Milano: Franco Angeli, 2022.

Berchin, Issa Ibrahim, Dutra, Ana Regina de Aguiar and de Andrade Guerra, José Baltazar Salgueirinho Osório. "How do Higher Education Institutions Promote Sustainable Development? A Literature Review." *Sustainable Development* 29, 6 (2021): 1204-1222.

Chankseliani, Maia and McCowan, Tristan. "Higher Education and the Sustainable Development Goals". *Higher Education* 81 (2021): 1–8.

Cortese, Anthony D. "The Critical Role of Higher Education in Creating a Sustainable Future." *Planning for Higher Education*, 31, 3 (2003): 15-22.

Cuesta-Claros, Andrea, et al. "Understanding the Roles of Universities for Sustainable Development Transformations: a Framing Analysis of University Models." *Sustainable Development* 30, 4 (2022): 525-538.

Curci, Francesco, Lanzani, Arturo and Kërçuku, Agim. "Le geografie emergenti della contra-zione insediativa in Italia. Analisi interpretative e segnali per le politiche." *CRIOS* 19-20 (2020): 8-19.

Emanuel, Cesare. "Gli atenei come «luoghi terzi» della valorizzazione della conoscenza generativa e dei processi di sviluppo locale." *Geotema* 59 (2019): 11-24.

Felsing, Ulrike. *Dynamic Identities in Cultural and Public Contexts*. Zurich: Lars Müller, 2010.

Henrion, Frederick Henri Kay and Parkin, Alan. *Design Coordination and Corporate Image*. London: Studio Vista, 1967.

Klein, Thompson J. et al. (Eds.). *Transdisciplinarity: Joint Problem Solving among Science, Technology, and Society: an Effective Way for Managing Complexity*. Springer Science & Business Media, 2001.

Lazzeroni, Michela. "Università e innovazione nelle aree periferiche: dinamiche di sviluppo, inclusione sociale e progetti di rigenerazione urbana." *Geotema* 59 (2019): 25-34.

Lazzeroni, Michela. *Geografie dell'università: Esplorazioni teoriche e pratiche generative*. Milano: Mimesis, 2021.

Owens, Taya Louise. "Higher Education in the Sustainable Development Goals Framework." *European Journal of Education* 52, 4 (2017): 414–420.
Piscitelli, Daniela, Ferrara, Cinzia and Guida, Francesco. "Design e comunicazione visive." In *I paesaggi culturali. Costruzione, promozione, gestione,* by Michela Barosio. Milano: Egea, 2013.

Rinaldi, Chiara et al. "Universities and Smart Specialisation Strategy: From Third Mission to Sustainable Development Co-creation." *International Journal of Sustainability in Higher Education* 19, 1 (2018): 67–84.

Rinaldi, Chiara, Cavicchi, Alessio and Robinson, Richard N.S. "University Contributions to Co-creating Sustainable Tourism Destinations." *Journal of Sustainable Tourism* 30, 6 (2020): 1-23.

Ruiz-Mallén, Isabel and Heras, María. "What Sustainability? Higher Education Institutions' Pathways to Reach the Agenda 2030 goals". *Sustainability* 12, 4 (2020): 1290.

Stephens, Jennie C., et al. "Higher Education as a Change Agent for Sustainability in Different Cultures and Contexts." *International Journal of Sustainability in Higher Education* 9, 3 (2008): 317-338.

Sylvestre, Paul, McNeil, Rebecca and Wright, Tarah. "From Talloires to Turin: A Critical Discourse Analysis of Declarations for Sustainability in Higher Education." *Sustainability* 5, 4 (2013): 1356-1371.

Gregory Trencher et al. "University Partnerships for Co-designing and Co-producing Urban Sustainability." *Global Environmental Change* 28 (2014): 153-165.

Gregory Trencher et al. "Beyond the Third Mission: Exploring the Emerging University Function of Co-creation for Sustainability." *Science and Public Policy* 41, 2 (2014): 151-179.

Uyarra, Elvira. "Conceptualizing the Regional Roles of Universities, Implications and Contradictions." *European Planning Studies* 18, 8 (2010): 1227-1246.