

Design used as a resource In the Increase in the value  
of goods and cultures: project design and competitive

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# Innovation In design education

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# INNOVATION IN DESIGN EDUCATION

Theory, research and processes to and from a Latin perspective

Edited by  
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## DesIGN UseD As A ResOURCe In tHe InCReAsE In tHe VALUe OF GOODs AnD CULtURes: PROJeCt DesIGN AnD COMPetItIVE InteGRAtION In tHe estRADA ReAL tERRItORY, BRAZIL (PHAsE II)

Germak, Claudio

Full Professor

Politecnico di Torino, d a d , Italy

claudio.germak@polito.it

De Moraes, Dijon

Full Professor

Minas Gerais State University - U eMg , School of Design, Centre for Studies, Theory, Culture and Design Research, Brazil

dijon.moraes@uemg.br

Bistagnino, Luigi

Full Professor

Politecnico di Torino, d a d , Italy

luigi.bistagnino@polito.it

Miranda, Paulo

Ph.D. Student

Politecnico di Torino, d a d , Italy

Minas Gerais State University -U eMg , School of Design, Brazil

paulo.miranda@polito.it

The study presented here aims to demonstrate the advances of the in fieri Project: Design and Competitive Integration in the Estrada Real Territory (p<sub>er</sub>), in the context of material, immaterial and historical culture, in a route corresponding to eight cities of the Estrada Real (ER) in the region of Minas Gerais - Brazil. Through the research partnership between the School of Design of the U eMg and the Politecnico di Torino, we saw the need, continuing as a second phase of this project, to define effective actions, throughout the breadth and scope of design, which should be able to articulate and enhance the development of the territory in question, having as a basis the increase in value of the local identity and culture, in pursuit of socio-economic and environmental balance.

This research involves the opportune participation of students and teachers from both universities, in a design action that also includes the insertion and distribution of territorial marketing in the Estrada Real through the following pilot localities: São Brás do Suaçuí, Entre Rios de Minas, Casa Grande, Lagoa Dourada, Resende Costa, Coronel Xavier Chaves, Pratos and Bichinho. Actions aimed at the increase in value of local products and services have been established through the recognition of the territorial potential and skills, as well as through the communication relationship between these means and the investigated context, in order to strengthen and propose new systems of production and

services that respect the regional vocation and establish creative and innovative cooperation networks of sustainable emphasis.

In this second phase of the research, we show the results of the project alternatives that were generated, analysed, improved and developed by the Italian-Brazilian work team (p\_o\_l\_i\_t\_o -U\_e\_M\_g), in which we prospect possible project issues, such as: information networks, sustainable handicrafts, local nature, typography with regional icons, mapping of local cultural events, merchandizing products for hotels and restaurants, local music and melodies (ER Net, Eco-art Zoo, Zoom in on Nature, (Re)Write, Calendar, Info-tools for Food and Table, Book of Musical Traditions). We emphasize that all concepts to be developed focus on the interface “territory, sustainability and design” and seek to contribute, in an original and innovative way, with the many actions inherent in the Estrada Real territory.

••• Design and local increase in value, territorial culture, meta-design and eco-museum, sustainable development •••

## 1. Introduction

The present article has the purpose of presenting the deepened results of the research work applied to the Project: Design and Competitive Integration in the Estrada Real Territory (p\_e\_r), from the application of Meta-project tools. The richness derived from the material, immaterial and historical culture of the territory conventionally called Estrada Real, has demonstrated a growing potential of local development. The p\_e\_r has verified, through its researches and analysis, that the way this territory has gained visibility does not contemplate all this richness, be it because of the investors or because of the local community itself. This way, the p\_e\_r - partnership between the Escola de Design de Minas Gerais (School of Design of Minas Gerais), Politecnico di Torino and the Centro Minas Design (Center Minas Design) - has worked in proposals that, through design, should be able to articulate and enhance the development of the region, based on the increase in value of the territory's identity and on the pillars of sustainability – society, economy, environment and culture. The goal of this work of research applied to the design project is to increase the value of the territory through its own resources, be them tangible or intangible. Here stand out not only the natural patrimony, the variety of raw-material and productive processes, but also the historical value and the sociocultural diversity of the investigated region, and mainly the information of where to find all this richness.

At the end, we present the project proposals of intervention, destined to the increase in value of the culture and identity inherent to the territory, considering a determined route as an “experimental laboratory” and the local identity as a model of projectual reference.

## 2. COMPet It IVe InteGRAt IOn In t He est RADA ReAL t eRRIt ORY

The importance of the paths that integrate the Estrada Real has motivated the appearance of villages and cities throughout them. With time appeared chapels, ranches, sales places, offices, houses of pau-a-pique<sup>1</sup>, where the social actors have articulated themselves and become part of a vast and rich political, cultural, economical and social history. With more than 1.600km (994.2 miles) of history, the Estrada Real, comprehends different local cultures, more intensely in the Brazilian Colonial Period, allowing the construction not only of routes and paths, but also of a singular history of this territory and the actors involved in it: bandeirantes<sup>2</sup>, tropeiros (muleteers), military officials and many travelers and peddlers who have found, in its ways, the material and cultural transportability throughout products, gold and diamonds.

The Estrada Real Territory is a Geo-touristic complex formed throughout the systemic relationship of its paths: the Old Path (Caminho Velho), the Path of Sabarabuçu (Caminho do Sabarabuçu), the New Path (Caminho Novo) and the Path of Diamonds (Caminho dos Diamantes), and the limitrophe geographical composition, determined by ten zones that are divided by historical and geographical importance, in certain Touristic Regions of the Estrada Real, being them: Diamantina, Conceição do Mato Dentro, Ouro Preto, Barbacena, Juiz de Fora, Rio de Janeiro, Vertentes, São Lourenço, Terras Altas da Mantiqueira and São Paulo.

Standing out that the Touristic Regions of Rio de Janeiro and São Paulo are inside the limits of their respective federal states. (Figure 1).

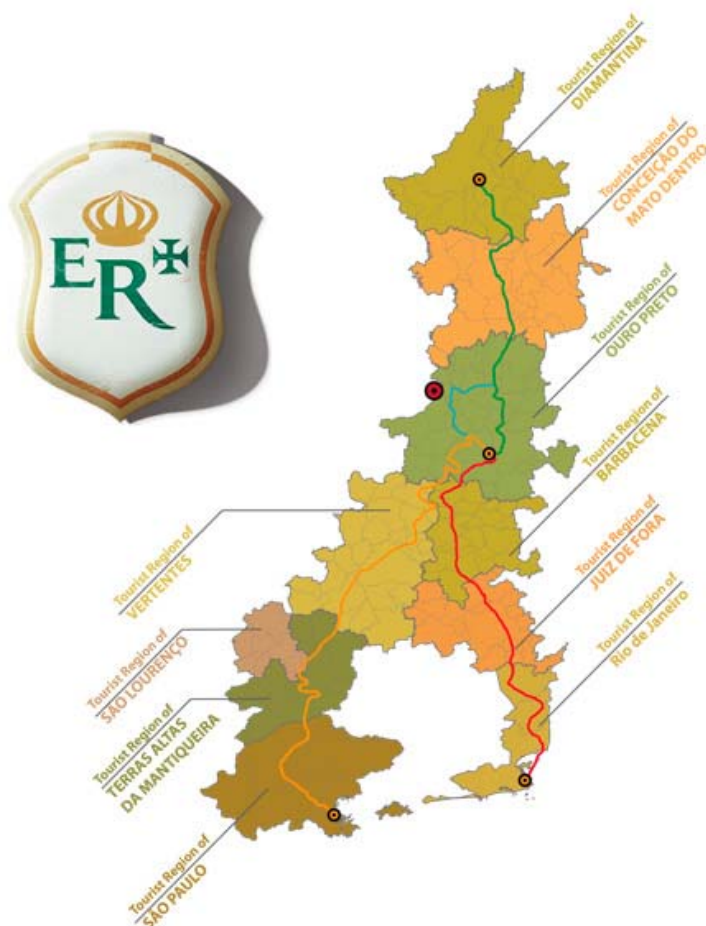


FIG. 1. est RADA ReAL t eRRIt ORY | t OURist IC ReGIONs OF t He est RADA ReAL COMpLeX s OURCe: PRoJecTs t eAM OF t He sCHOOL OF DesIGN OF t He UeMG (2010)<sup>3</sup>.

<sup>1</sup> A type of house that is constructed with wood, bamboo, liana and mud.

<sup>2</sup> Members of the 16th–18th century South American slave and richness-hunting expeditions called Bandeiras.

<sup>3</sup> The projects team of the School of Design of the UEMG is integrated by the professors Dijon De Moraes, Roberto Werneck, Lia Krucken, Paulo Miranda, José Nunes, Ana Luísa Cerqueira, Glaucinei Correa, Igor Rios, Márcio Lambert, Ricardo Portillo, and by students of the third year of Design of Products and Graphical Design.

### 3. FOCUS On tHe AnALYsIs AnD PROCesS

Based on the investigation around the Estrada Real Territory, knowing its paths and relations, associated with the social-environmental relations and with the touristic and economical potential, problems and failures have been verified, with the focus on the study and on the methodological application in a stretch that is not very structured for touristic reception nor has regularity of paths nor proper orientations. Besides physical problems and deficient infra-structures, we have noticed the lack of consideration, by the local actors, of assimilating the local true Eco-touristic potential, by not doing, for example, preventive policies oriented to protect the material and immaterial patrimony. This way, the maintenance and increase in value become necessary, with the aim of generating income and currency to the local communities, being identified, therefore, the possibilities of intervention by the design.

The projectual method adopted for this work had as focus the meta-project and the systemic design, associated with the participative methodology. The objective was to develop proposals of actions that can be appropriated by the territory's community, what is a fundamental aspect to promote the continuity, and, therefore, to give sustainability throughout those who are part of it. All the information that has lead us to the elaboration of the presented proposals were obtained and/or verified with the communities situated at the selected pilot stretch: São Brás do Suaçuí, Entre Rios de Minas, Lagoa Dourada, Resende Costa, Coronel Xavier Chaves, Prados and Bichinho (Figure 2).



FIG. 2. seLeCt eD st RetCH InsIDE OF tHe est RADA ReAL COMPLEx, In tHe tOURIst IC ReGIOn OF VeRtentes, FOR tHe ACt IOns OF tHis PRoJect. sOURCe: PRoJect's teAM OF tHe sCHOOL OF DesIGN OF tHe UeMG (2010).

One of the project's specific goals is to attend the variety of people that interact with the cities and their natural, social and cultural attractions. Local people, Brazilian and foreign tourists, who have demands and needs, sometimes ordinary ones, sometimes very specific ones. For that, each project proposal that has been developed, specially had the precise characterization of their target public. It is worth standing out that, in what concerns the local population, we have tried to integrate the actions of the many proposals with emphasis in the innumerable possibilities of actions with a social-educative character, since the conductor axis of this work is the cultural, material and immaterial patrimony and the historical and environmental patrimony, considered here as the main resources of the Estrada Real territory.

#### 4. MetHODOLOGY OF InteRVentION

The methodology of intervention applied and approached by the project, such as the meta-project and the systemic design, used many analytical and reflexive instruments, amongst which, there were study of cases that retreat the Italian experience throughout applicative examples of Eco-museums, such as the Scopriminiera, an Italian Eco-museum created in the Region Valdese of Piemonte, in 1998. The initiative has renewed its installations, transforming an old deactivated mine of mineral talc into a touristic interactive structure in the well known alpine valley, Val Germanasca, situated at 70km (43.5 miles) southeast of Torino. The actions of this project were coordinated by the Architects Professors: Giorgio de Ferrari, Claudio Germak, Claudia De Giorgi and Maurizio Lucat, all professors at the Politecnico di Torino.

The actions undertaken in the project Eco-museu Scopriminiera Val Germanasca are extended to many areas. Amongst the most important ones, stand out the preservation and increase in value of the local patrimony for the creation of products of cultural tourism, investigation and formation of local agents, communitarian actions with the development of projects for the creation of communication maps, and production of interactive expositions and the activation and the management of local nets in a national and international level (Germak e De Giorgi, 2008).

According to Germak (2008): "the exaltation of the doing and providing through the cultural increase in value told by the regional historical context and its traditions, has demonstrated an exponential touristic and economical projection, through simple and directed elements, identified as the sociocultural and iconographic elements of the territory: people, nature, subjectivity elements, work and artifact tools, culinary." For this projectual experience, there was, a priori, the raising of the cultural, social and economical value of the region where the oldest mine is situated, and, afterward there was the application of a projectual methodology.

Fundamentally, in this work we have used the Meta-project applied to the Territory's local identity, as a projectual model. According to Moraes (2010): "The meta-project aims to go beyond the project, transcending it by making a critical and reflexive reflection about the projectual

context itself. The meta-project thinks the project, analyzes the demand and prospects about an existent or future scenario, having as basis the raising of researches, critical analysis and reflections made earlier, throughout previous data recollection”.

Moraes (2010) complements that “the meta-project explores all possible potentialities of design, but it does not produce output, like a single project model, and pre-established technical solutions. This methodology aims to propitiate, through a pack of tools, a previous conceptual analysis (concept) or a corrective analysis (diagnose), where there are positive and negative points related to the project, through the application of models of analysis and meta-project actions.”

Inside of the existing complexities, through the social, environmental and economical relationships which determine the criteria of the sustainability that touch the project, the capacity and amplitude approached in these questions emphasize, in this model, the methodological application of the meta-project as the main instrument for the development of the project. Other important references considering the relationship between the territory and its self-increase in value are observed by Bistagnino (2007, 2009), with the application of the methodology of systemic design, as well as the exploration with a sustainable character and attention to the increase in value of the territory with meta-project actions observed contemporaneously by Krucken (2009), Germak, Moraes, Miranda e Krucken (2010) and Moraes, Krucken e Reyes (2010). Other advanced studies in design, which make specific approaches to the methods, can be contemplated through the organization of Morais (et al., 2011), who makes a reflection of researches of many Brazilian and foreign universities about the project models related to design.

## 5. The Conceptual Proposals

The continuation of the Project: Design and Competitive Integration in the Estrada Real Territory defines, as the next step, the execution of the hereby proposed actions, leading to their implementation. Considering that each proposal involves products with different characteristics and implementation time frames, it is also necessary to have them individually assessed, to allow a precise understanding of their technical and financial requirements. Thus, the further development of the proposals depends on the future actions carried out by entrepreneurs: *Uemg*, *CMd*, *fapeMig* and local authorities from the participant communities.

### 5.1 Eco-Art Zoo

The Eco-Art Zoo is a proposal of a museum action about the fauna, that consists of a space that values and promotes the local artistic diversity, the handicraft techniques, the region's nature, the richness of local raw materials and traditional cultural values and that also enhances the tourism in the region. The goal is to articulate actions with the local community and to develop its territory, through the local values and patrimonies. The proposal is to integrate the environment with the cultural, social, economic and technological development of the region, making it a place of gathering, research, conservation

and interpretation of natural and cultural elements.

The concept of Eco-museum is variable since it depends on the ecosystem and society that lives in that particular environment. “It is the society that creates it, since an Eco-museum is a reflection of the population, which is a reflex of the culture and traditions of a territory” (Silveira, 2010). The Eco-museum is, therefore, a territory, a patrimony in which culture and community come together in a common and shared space, defending the preservation of natural resources.

The context is local handicrafts. The proposal is justified by the fact that there is already expressive craft work representing the regional fauna (Figure 3). There is also natural diversity to be explored, presenting a vast range of opportunities to be developed with craftsmen and artists of the region (Figure 4).



FIG. 3. sOME sAMPLes OF MAnY OF tHe VARIOUs CRAFT sMen AnD ARTIst eXPRESSiOns tHAT CAn Be FOUnd In tHe ReseARCh AReA. sOURCe: sYnt Het IC BOARD eLABORAt eD BY tHe PRQJect s t eAM OF tHe sCHOOL OF DesIGN OF tHe UeMG (2010).



FIG. 4: COncEptUAl PROPOsAL. sOURCe: sYnt Het IC BOARD eLABORAt eD BY tHe PRQJect s t eAM OF tHe sCHOOL OF DesIGN OF tHe UeMG (2010).

## 5.2 Calendar

The calendar aims to promote the events of the cities involved, in an organized and objective way. The main objective of the system’s implementation is to provide community members, visitors and potential visitors with information about activities in the region,

contributing to the participants' social integration while increasing economic and touristic flow in the region.

The information available in the Calendar can reach the main public in multiple ways. Different media formats and semantics will be studied accordingly to the project's directives, to promote the events planned for the Estrada Real Territory.

To develop the Calendar project, it is necessary to have full knowledge of all existing events in the region. It is also necessary to analyze the available media formats and to promote the interfacing with other proposals of the Project: Design and Competitive Integration in the Estrada Real Territory. Based on this information, it is possible to build models capable of fulfilling all the calendar needs for both, digital and printed promotional products (Figure 5).



FIG. 5. The Calendar, Benchmarking And Conceptual Proposals. Source: elaborated by the Project's team of the School of Design of the UEMG (2010).

### 5.3 er Net

The er Net Project consists on the development of a touristic information system, designed for handheld devices, in the range of towns and locations sheltered by the Estrada Real Project. It also extends its coverage to the planning of the outdoor structures by which the system will be offered and will support information platforms for users.

The project's goal is to promote the natural and cultural (material and immaterial) richness of the territory - generating more visibility for the regional attractions - and to enrich visitors' experience, by widening and improving their access to information, while attaining to sustainability parameters.

e\_r Net targets tourists already familiarized with the use of new technologies in their daily life, and will be of great help for foreigners, which will be provided with comprehensive information on locations and events.

C ontext - Squares: In general terms and in the studied region, squares are public urban meeting spaces, frequently linked to cultural religious aspects, but also related to commercial, administrative and civic activities. Urban furniture: concerns distribution, appearance and functionality in public or private outdoor areas. C ontributes to the development and well-being of the population. Focuses on how people live and use the urban space, targeting economical development and strengthening of the local culture (Figure 6).



FIG. 6. e\_r net, Ben CHMARKIn G  
An D COncEpt UAL VIsUALIZAt IOn.  
s OURCe: eLABORAt ED BY t He  
PROJect s t eAM OF t He sCHOOL OF  
DesIGN OF t He UeMG (2010).

#### 5.4 Info-tools

The shortage and limited access to information regarding the region is one of the foremost deficiencies encountered by researchers in the Project Design and C ompetitive Integration in the Estrada Real Territory. Given the immense touristic potential of the region, it is crucial to solve this issue.

The proposal allows for the conception of several products, related to several different contexts. Thus, a need for limiting the scope was perceived at the beginning of the project. It has been decided that, in this first stage, the Project will aim Gastronomy, comprising table and kitchen as ambiances, since the theme is one of the region's greatest strengths. Hence, restaurants, cafés and diners are excellent locations for distributing information, as they will surely receive a great number of tourists.

The project's goal is to extend information vehicles as to promote the richness and values of the region. The strategy to do so relies on developing a wide range of items, targeting their use by local businesses, taking advantage of the tradition of the local cuisine. Info-tools targets several niches of travelers, as to widely spread information on regional points of interest.

The Info-tools project targets tourists, Brazilian and foreigners, who visit the region willing to experience to the maximum its peculiarities and attractions – specially those with autonomy to make slight changes on their itinerary and that are interested in taking home items that refer to their experience while traveling (Figure 7).



FIG. 7. The Info-tools, Benchmarking and Conceptual Propositional Source: elaborated by the Projects team of the School of Design of the Uemg (2010).

### 5.5 (Re) Write

The (Re) Write proposition was thought as an answer to the lack of Identity regarding Estrada Real related material. The idea is to develop written and visual languages from elements of the territory’s culture, and to let people use those elements in their own way to help building an Identity more directly related to the Estrada Real.

This proposition’s goal is to create typefaces and dingbats related to the culture, history, nature and habits surrounding the Estrada Real. The intention is to use this production in all sorts of materials related to the territory. By doing that, we hope to contribute to the construction of an Identity more directly related to its traditions. The results of this project can also be used as basis to the visual identity of the other per proposals (Figure 8).

Theoretical Guidelines: “[vernacular typography is] “writing’s handicraft”- Martins, Bruno (2007); “the term vernacular suggests the existence of visual and local languages that refer to different cultures” - Dones, Vera Lúcia; “multiplicity of visual repertoires that coexist in our culture (...) it is up to the designer to transform them into new visual languages that translate our cultural identity” - Finizola, Fátima (2010); “popular lettering (...) gives us a large amount of visual experiences that

can be used as a rich source of inspiration to formal design.” - Finizola, Fátima (2009).



FIG. 8. t He (Re)WRIt e, BenCHMARKInG AnD COn CePt UAL PROPOsAL sOURCe: eLABORAt eD BY t He PROJeCt s t eAM OF t He sCHOOL OF DesIGN OF t He UeMG (2010).

### 5.6 Book of Musical Traditions

The uniqueness of the culture of Minas Gerais is reflected on productions, practices and customs related to the music in this territory. Many of the values there built still have a large presence in its current cultural dynamic. The Book of Musical Traditions emerges in this context as a necessary mean of registration, as well as an alternative way to bring to the general public this cultural content of musical character, that still carries an important presence in the daily life of the regional communities.

The proposal was conceived as a mean of providing registration and visibility to the memorial and current practices related to the Musical Tradition present in the Estrada Real region.

In order to reach the best format to configure the Book of Musical Traditions, several books were analyzed through various scopes, such as formats, contents and organization of the information (Figure 9).



FIG. 9. t He BOOK OF MUsICAL TRADIt IOns, BenCHMARKInG AnD COn CePt UAL PROPOsAL sOURCe: eLABORAt eD BY t He PROJeCt s t eAM OF t He sCHOOL OF DesIGN OF t He UeMG (2010).

### 5.7 Zoom in on Nature

The Zoom in on Nature proposal is based on the concepts of Bionics and Bio-mimetic, which seek to learn from the organic and structural solutions applied by nature to its elements, and use this knowledge to the development of new products. The proposal aims to value and promote the diversity of the regional biome and explore the values and richness of the area, involving local artists and craftsmen in the conception of new products, valuing, as well, the diversity of techniques and materials present in the region.

The project consists of an analysis of this biome in the region of the Estrada Real Project, observing solutions - structures, shapes, textures and colors - that can be applied to the development of regional products, offering a variety of surface patterns with a representative set of structural types and colors of the region.

Influenced by the resources, characteristics and needs of the new economy, the tourists are showing behavioral changes that call for a revaluation of both, services and products currently offered. This new kind of tourist shows a more conscious consumption and the desire for objects representing a bond to the place visited, with some sort of reference to the region's nature, landscape and culture. These objects should reflect the experience the tourist went through in that territory (Figure 10).

Biome of the Region: "The Southeast region of Brazil summarizes the major Brazilian ecosystems: rainforests and seasonal forests in the highlands in the east and south-center; Cerrado in west and center; Catinga in the north; and mixed and Araucaria forests in the hills of the south and south-center." (Radambrasil, 1983; Veloso et al., 1991); "Regions where different ecosystems occur side by side, forming a true mosaic" (Desjardins et al., 1996); "The natural vegetation is very diverse, featuring several Eco-types within a radius of 1 km (0.62 miles). South of the studied area, in the talus slope, the Seasonal Semi-deciduous Forest is the dominant vegetation, but nearby it there are mixed forests, with the occurrence of Araucaria. At the north and east, the savannas predominate. And from 1250m (4,000 feet) of altitude, at the mass metarenites, the area is dominated by alpine pastures" (Radambrasil, 1983, Carvalho et al., 1994).



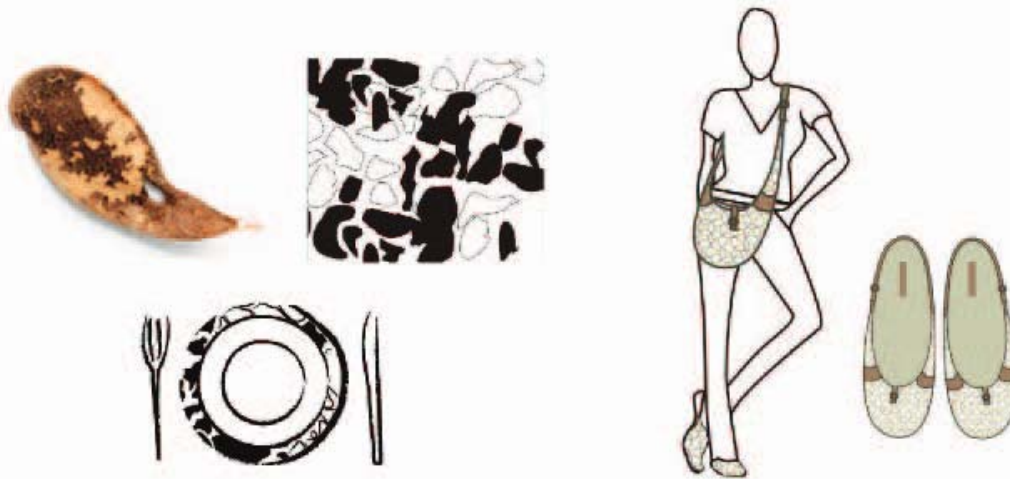


FIG. 10. ZOOM In On nAt URe, Ben CHMARKIn G AnD CO n CePt UAL PROPOsAL s OURCe: eLABORAt eD BY t He PROJ eCt s t eAM OF t He sCHOOL OF DesIGn OF t He UeMG (2010).

## 6. eXPeCt eD Res ULt s

We expect, with this experience between the Minas Gerais State University - U<sub>eMg</sub>, Politecnico di Torino - p<sub>o</sub>l It o and the Center Minas Design - c<sub>Md</sub>, that new opportunities will be open in the ambit of the stretches involved, having as support the design; that new opportunities of tourism, commerce and consume will appear, exploring, in a sustainable way, the whole potential of the originality of the local handicraft; that innovative interaction nets will be established, allowing the territorial marketing in the localities, touristic points, inns and hotels that compound the Estrada Real; and, above all, that it will promote a research in fertile field of academical study, throughout the creation of a rich space for the professional maturing of the students and professors, from Brazil and Italy, involved with the challenges of this project.

## 7. FIn AL CO n s IDErAt IOn s

The great contribution of the project is in the preparation of the students in the competences of design, which were experimented when dealing with the elements of the territory culture and its competitive integration. Besides that, it offers to the region feasible conceptual proposals, that can be implemented to enhance the touristic potential and, consequently, the income of each city.

## 8. CO n CLU s IOn

The continuation of the Project: Design and Competitive Integration in the Estrada Real Territory/ p<sub>eR</sub> establishes, as next step, the projectual execution of the proposals, leading to their implementation. Knowing that each one of these proposals involves products with specific characteristics and implementation time frames, it is necessary to have them individually assessed, to determine with more precision their technical and financial specifica-

tions. The further development of the proposals will depend, therefore, on future actions of the entrepreneurs: c Md /U eMg , f a peMlg and City Halls.

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#### 10. ACKNOWLEDGMENTS AND NOTES

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Elena Maria Formia is an architect and has a Ph.D. in History of Architecture and Urban Design. Since 2008 she has coordinated the activities of the Latin Network for the Development of Design Processes, an international organization of professors and researchers from nineteen universities, which meets every year during a thematic Forum. Her research deals with the history of design and its impact on contemporary professional culture. Over the years, she has attended several international conferences and has written many articles in magazines and journals, such as Strategic Design Research Journal, Redige, I+Diseño, The Art Newspaper, Il Giornale dell’Arte, Il Giornale dell’Architettura, and Le Culture della Tecnica.

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