Cultural identity in the practice of design: methods for product development projects

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Abstract: The advent of globalization exposes cultural diversity and the fast development of technologies renders distances relative and disconnects time and space. Furthemore the fast pace of transformations with technological complexity modifies activities. Globalization is twofold, rendering homogenous products and processes and making local identities more evident. Organizations try to make reference to a local culture through the design of their products in the search for local identification. In this scenario, the role of the designer becomes increasingly complex as they have to consider cultural factors in a product project, as well as improve their project methods. Based on the study cases of projects in which cultural factors were added to the local identification of products, this paper discusses the methods adopted, guided by a bibliographical review that incorporates the main authors of the products' project methodology. Using semi-structured interviews with the project coordinators, it was possible to identify the phases in which cultural factors were more strongly considered as well as the implications of the methods in each project. The designer's role was made clear in the translation of the identity of a community, of a company and of professionals, as well as in the construction and interpretation of factors that are meaningful for the groups involved.

Keywords: methods in design, cultural identity, product project.

1. Introduction

One of the characteristics of post-modernity is the dialectic coexistence of globalized pressures coupled with pressures of local strengthening. According to Cardoso, Casarotto and Saldanha (2007), whereas the globalized movement imposes the homogenization of production and products, there is a pressure, at the same time, to maintain a certain difference among cultures – the so called cultural diversity; while the globalized movement imposes more flexibility of geographical borders, there is a reaction pressure to strengthen feelings of belonging to a local place – also known as local identity. This scenario is present in the activity of the designer, as well as in the discussion of the dynamics of cultural diversity and the construction and reconstruction of local identities.

For Ono (2006a), the main role of the design is to meet people's needs, promoting the improvement, self-realization and emancipation of individuals and societies, considering their identities, heritage and cultural diversity. The same author claims that cultural diversity is reflected in the perception of the world, in activities and preferences of people who seek identification in products, a factor that has been a relative barrier for the homogenization process and the opening for a "local" design movement tuned with consumers' and users' characteristics, aspirations and needs (ONO, 2006b).

Departing from Geertz' (1989) interpretive thought, culture is seen as a web of meanings weaved by men in their social environment through which human beings interpret the meaning of their own existence. It is a dynamic process, regulated by social systems of knowledge, ideology, values, laws and rituals of our daily lives. Culture can be observed in the products produced by the human mind and their union constitutes the material culture of a social group.

Nevertheless, it is possible to observe in the globalization process, that the borders are becoming smaller and that the world has become a type of collage where cultural diversity rules in a society (GEERTZ, 2001). It is important to highlight that "diversity does not equate with inequality" and that "difference" does not mean "division", and that the balanced coexistence of diversity in the totality is possible (ONO, 2006a).

As regards the dynamic trait of culture which is sped by the technological evolution and geographical mobility, the construction of individual and group identities has gained traits that adapt to each experience lived. Castells (2003) claims that all and each identity is built from their own

history, geography, biology, productive and reproductive institutions, collective memory and personal fantasies, power artifacts and religious revelations. It all depends on the forms that individuals, social groups and societies use to reorganize the meaning of this material. Identity is "the source of meaning and experience of a people".

In this light, cultural identity permeates professional practice, as well as the companies that are involved with products project, the population and consumers that relate to products, and the places where they are produced and consumed. The translation of identity as a construction of meanings of a group or individual suggests that when this identity is not well defined or conceptualized, this image cannot be adequately perceived by the other.

Artifacts serve as support to express a system of shared references that differentiate individuals or social groups among themselves, establishing their individuality and building their identity. As the design takes part in the construction of artifacts, it also takes part in the construction of culture and identity of a people. Thus, the study of cultural factors inserted in products projects proposes a look at their own identity, at the diverse and the complex.

The main aim of this paper is to contribute to studies of cultural diversity and local identities in the process of design, relating them to the praxis and methods adopted. A bibliographical review of methods recommended by authors who study the process of design and study cases of Brazilian projects was made to verify the best praxis that can be adopted in the inclusion of cultural factors in the local identification of products, as well as the most adequate phases to do so.

The projects that were objects of the study cases were carried out in different states, by different professionals, for different products and organizations, considering their size and local, regional and world impact. The study offers an important view of the methods employed, enabling the verification of a Brazilian multiculturalism reflected in the product project suggesting that the local identification of products does not equate with commercial barrier.

This paper presents partial results of a master thesis entitled: The inclusion of cultural factors in the product project: a contribution for the construction of a local identity (CARDOSO, 2008). Its aim is to expose one of the thematic blocks investigated in the aforementioned thesis, namely, the main methods used in the product project, considering the inclusion of cultural factors for a local identity of the product.

2. Methods

Due to the subjectivity of the theme, a qualitative study with an interpretive basis was conducted. For Richardson (1989), the adoption of a qualitative study is an adequate means to approach a phenomenon. A bibliographical review of methods employed in the design was made to verify the most adequate methods to include cultural factors to locally identify a product. As a complement, a study case of six projects in three different states in Brazil which included local cultural factors in products was made. Three projects were about tiles in Santa Catarina, one project was about handcraft in Rio Grande do Sul and two projects were about small and medium sized companies – SMC's of the furniture industry in Minas Gerais. So as to allow individual expressions, semi-structured interviews were conducted with the designers responsible for the projects so as to gather their practical experience in regards to the object of study. Semi-structured interviews are important data collection instruments for they allow a deep look at the subject and the complexity of the problem looking for answers to "why, how, where, when and how often certain things happen regarding the researcher's beliefs" (RICHARDSON, 1989).

The topics studied followed a pre-determined scheme built from thematic blocks, as recommended by Richardson (1989). The contact with the interviewees was mediated by professionals who were close to the authors and linked to the area of design, enabling a good rapport. The content of the interviews was transcribed with fidelity and discussed in light of the theoretical aspects reviewed in the literature. This paper presents the thematic block concerning the methods studied.

3. Design process

As pointed out by Löbach (2001), "the design process is both a creative process and a process of problem solution". For this author, the phases of the design process begin with the acknowledgement of a problem that can be defined; information is then gathered on the problem and then analyzed and related in a creative way; alternative solutions are created for the problem and then are assessed according to criteria established; developing the most adequate alternative. For Baxter (1998), each phase comprises a cycle in which ideas are generated, followed by a selection of these ideas, thus being a structured process.

The solution to a problem can also be considered the development of a product, whether it is material or a type of service. As highlighted to Rozenfeld et al. (2006) the development of products consists of a set of activities to reach the specifications of the product project and its production process to enable its manufacture and the company to follow the product after its launching. For these authors, the identification and prevision of market needs, as well as the proposed solutions to meet these needs happen in the Product Development Process (PDP) which is consolidated as strategically important for the companies.

For Baxter (1998), the design process must focus not only on the visual aspect of products, but also on the

inclusion of a project for manufacture, for market needs, for cost reduction, and for reliability and ecologic sustainability. "The discovery of market needs and the embodiment and manufacture of a product to meet those needs are vital and integral parts of the same process" (BAXTER, 1998).

What is clear is that the scope of the design must have a systemic vision – from the project to the strategic planning of companies. In this scope, besides the economic sphere, the social sphere must be included, as well as the environmental and cultural spheres, reflecting the company, a net of companies or a region and its actors (CARDOSO; CASAROTTO; SALDANHA, 2007).

4. Methods and phases of the design process

Methods reflect the most adequate means to reach certain goals and define how to go about them. Despite their systematizing function, methods should not make the process rigid, acting like a straitjacket, making the search for new ways difficult. Jones (1978) warns us that the "methodology should not be a fixed route towards a concrete goal, instead, it should resemble a conversation about all the things that we can make happen."

On the other hand, design methods can make the designer's thought public reflecting the project process. For Jones (1978), "From the creative viewpoint the designer is a black box out of which comes the mysterious creative leap; from the rational viewpoint the designer is a glass box inside which can be discerned a completely explicable rational process; from the control viewpoint the designer is a self-organizing system capable of finding short cuts across unknown territory". This last view point is what would allow the evolution of effective project methods.

A non-systematized process to obtain the specifications of project makes it impossible, or at least, very difficult, to transmit the knowledge obtained during the professional practice of the project. For Pahl et al. (2005), a series of steps must be taken when the institution is the only responsible for the processes of project and creativity. Purely intuitive methods run the risk of not having the right idea in the right time; fixed conventions and imagination make new ways difficult to find; and because of their inadequacy, new technologies or processes are not available to the professional. As these disadvantages increase, the specialization, work division and time pressure increase.

According to Bazarian (1985), knowledge can be categorized as intuitive, sensitive and rational. The difference among them is that intuitive knowledge deals with the subconscious, underlying perception and it is obscure to the senses or reason, whereas sensitive and rational knowledge deal with conscious and perceptible data. The heuristic intention is, at first glance, hard to explain, it is also irrational, like a mystical force. However, for the author, there is no intuitive knowledge independent of other types of knowledge. "Intuition does not work without the help of the senses and reason, or without sensitive and rational knowledge."

For Pahl et al. (2005), a project methodology is a planned procedure indicating actions to be taken during the development and project of technical systems. This procedure must be planned, moreover, it must be flexible and open for optimization and verification.

In general, the methodology presupposes the systematization and planning of the process, usually divided in work phases. Jones (1978) describes three essential steps accepted by many writers, namely: the analysis, synthesis and evaluation of the design process. During the analysis phase, the problem is divided in parts that are analyzed when the stable parts of all the variables involved are related to the problem and established. During the synthesis, the pieces are put in a different order and a model based on creative methods is then made. During the evaluation phase only one alternative is chosen with the progressive reduction of uncertainties and the application of tests to find out the consequences of new organizations in practice. Nevertheless, Jones (1978) suggests another division in three stages called divergence, transformation and convergence. Divergence refers to the act of extending the boundary of a design situation so as to have a large enough search space in which to seek a solution; transformation refers to everything that makes designing a delight – fun, high-level creativity, flashes of insight, inspired guesswork, etc; and convergence is the stage after which the problem has been defined, the variables have been identified and the objectives have been agreed upon.

Under a different light, Baxter (1998) suggests the use of the so called "risk management funnel" - a convergent process of decision making among the possible alternatives and decisions, with the progressive reduction of risks.

The unified model of the process for product development proposed by Rozenfeld et al. (2006) is unfolded in macro phases and phases. The activities relate to the information input, the content of tasks, the information output, the support tools and the control mechanisms. One of the characteristics of the model is the evaluation of the results of each phase, in moments defined as gates that serve as reflection for the project and the prevision of problems.

A divergence found in the unified model proposed by Rozenfeld et al. (2006) in relation to the models of Jones (1978), Löbach (2001) and Baxter (1998) refers to the professional action of the designer. In the unified model the designer's action is limited to the phase of conceptual project, more specifically to the activity of "defining ergonomics and aesthetics." The activity of "defining ergonomics and aesthetics" comprises, according to the authors, the human factors that besides meeting the technical functions needs, must render the product aesthetically

pleasant for the client to attract consumers. Under this light, the authors reduce the designer's action to the application of a style or a simple makeup that promotes the sale, inserting their activity late way in the PDP. "The treatment of these aesthetic attributes of product is a topic dealt with in the area known as design or industrial design" (ROZENFELD et al., 2006). This interpretation contradicts Baxter (1998) in the sense that style must be elaborated during the whole process of product development, it cannot be inserted in the product in a determined phase or in the end of the development.

The common point in the four propositions, besides the division in phases of a process which is not fixed, is the characteristic of advance and retrospect, enabling the revision of previous phases, tuning the process to the project scope and the company's strategic goals.

For the present study, the initial phases of the PDP will be studied: planning of project, informational project and conceptual project. The restriction to the initial phases is due to the fact that after the conceptual project, the process is sent for projectual materialization with the administration of tests before it is sent to production. The terms used by Rozenfeld et al. (2006) were adopted for this study with the difference that here the designer takes part in all phases of the project.

4.1. Project planning

For Baxter (1998), good planning must have a defined goal, resulting in a commercial commitment generated by the opportunity specification and in a technical commitment generated by the specification of the project. The opportunity specification aims at an administrative decision before the characteristics of the project are defined. In this phase, the identification of the people who are most interested in the product project takes place together with the definitions of scope for the product and process, specifying what will be offered to the client and how it will be obtained (ROZENFELD et al., 2006).

In the specific case of the inclusion of cultural factors in the identification of a product, the planning phase is one of the first opportunities generated for action. The company itself is one of the most interested parties in the product project and it can require the inclusion of cultural features in the product or the features can be suggested by the project staff, with an opportunity specification. Once this commitment is generated with the scope of the project and the project plan, the works are then forwarded to the informational phase of the PDP.

4.2. Informational project

In this phase of the process, preliminary information is collected and analyzed to supply necessary subsidies for the conception of the product. These phases comprise the definition of the problem, the identification of the client's needs that are transformed into the client's requirements, the requirements of the project, and the specifications of the project as well as the functions of the product. The initial phase of the informational project can be compared to the "preparation phase", coined by Löbach (2001), and that must involve the "analysis of design problem" under various angles. The information generated in this phase will also supply the opportunity specification, and according to Baxter (1998), it includes the identification of an opportunity, the marketing research, the analysis of competing products and the proposal for the new product. The author explains that opportunities can originate in market demands as well as in the technology offers.

In the unified model proposed by Rozenfeld et al. (2006), a set of information pieces is developed in this phase and it is called specifications goal of product that guide the generation of solutions supplying the basis to define the criteria for evaluation and decision making adopted in the next phases.

Besides the clear definition of the problem, the identification of the clients' needs is an essential task since it can constitute the basis for the project specifications. The needs obtained are not always verbalized and can be extremely objective or totally subjective, ample, confuse and ambiguous. The objective needs are easier to manipulate and transform into measurable requirements whereas the subjective needs comprise social, cultural and psychological factors. Subjective needs have been studied within design, taking into consideration the concentration of interests in the practical and technical needs, a result of the long period in which the functionalist movement predominated. The inclusion of cultural factors in the identification of the product is thus placed in a process of translation of needs that are clearly subjective and demand a close relationship with fields stemming from social arts and science.

Departing from the identification of needs, the user's requirements and product requirements are then generated and translated into an appropriate language for the universe of design in project specifications. This whole set of information pieces will then feed the next phase of conceptual project.

4.3. Conceptual project

The search, creation, representation and selection of solutions for the project problems take place in the conceptual phase. The search for solutions must be made among the existing ones in similar or competing products; the creation of solutions must be free of restrictions but directed by the needs, requirements and specifications of the product project; the representation of solutions is often made together with the creation; and the selection of the solution is made based on the methods that are aligned with the needs or in previously defined requirements (ROZENFELD et al.,

2006). For Baxter (1998), the conceptual project must be coherent with the mission, the goals and company's strategy as well as with the product development.

In the methodology recommended by Löbach (2001), the conceptual project would be the phase of generation of alternatives producing as many ideas and alternatives as possible in a creative process that generates facts and the association of ideas that, though incoherent, are converted into a simple and sensible order. Jones (1978) highlights the fact that during the creative phase the individual does not do anything, only searches information, studies trivial aspects of the problem, or their attention is focused on a series of disconnected problems. This period is known as "incubation" and depends on the ample and immediate knowledge of the problem. The capacity to transform complex problems in simple ones would be an expression of personal knowledge and exterior realities as well as the ideas of what is good and bad or ugly and beautiful, or pleasant or boring, constituting a group of opinions of morality and values.

Once this group of opinions is shaped by a system of references that identifies or distinguishes the professional with others, not only the cultural factors that build the product identity are at play but also the designer's own identity, the identity of the company and the identity of the individual that will make contact with the product.

5. Case studies

Of the six cases studied, three belong to the tile industry, two to the furniture industry and one to the handcraft industry as can be seen in Table 1. The methods used, together with their objectives in the projects were identified in the interviews with the designers.

At Laces Line tiles, designer João Luis Rieth participated as general manager in the development of the product, managing the adequacy of proposals, questioning and verifying the feasibility and following up the production. The development process was made by an internal staff using materials sent by salespeople and commercial representatives, such as photos and catalogues as well as benchmarking.

The aim was to launch the "institutional" product with a high aggregated value, so as to mark a new phase for the company. In order to do so, commercial success was not mandatory. This fact justified the lack of market research or hiring of external professionals in other areas. According to Rieth (2007), the movement of inserting cultural identity in a product project was new in the company. Nevertheless, "There was a strong integration with the Marketing Department to assess how we would reach the market and present the conceptual proposal."

During the transposition of the image into the tile surface, the staff aimed at following traits such as color, texture and brightness of the bilro lace. The transposition was literal, without decoding, in an attempt to be faithful to the theme, reaching the result in a tactile level "touching the product one can almost feel the lace itself" (RIETH, 2007). Given the easy, fast and cheap prototype phase in the tile industry, many experiments were made until the desired surface was reached.

The Gávea Stone Collection tiles did not originate in a formal briefing, "since it came as a surprise, inside the factory, through a laboratory experiment" (FINGERHUT, 2007). After reusing some serigraphic canvases to find new materials and technologies, a laboratory technician found a rustic surface in varnished tile. After it was found out that the company would have to present a new product in the American Coverings Fair – the International Fair of Tiles, in Florida, USA, and after learning that the American consumer likes rustic tiles, the technician foresaw an opportunity for innovation. Designer Ruth Fingerhut structured and estimated costs for the project before presenting it to the Commercial Board of the company, requesting their authorization to work, focusing on communication strategies. The project was structured in three main ways: the staff working internally in the issue of "Brazilianism", the rustic effect of the surface which resembled a rustic rock, compared by the designer to the Gávea Stone, a touristic spot in Rio de Janeiro; the fondness that Americans have towards the city of Rio de Janeiro. "Americans love Rio de Janeiro! They only know Rio de Janeiro and the Indians in Brazil. That's what they know!" (FINGERHUT, 2007).

Table 1. Identification of projects studied.

Project	Laces line	Gávea stone line	Campeche line	São Lourenço collection	Ubá collection	Goiânia collection
Product	Tiles	Tiles	Tiles	Handcraft for tourism	Furniture	Furniture
Interviewed professional	João L. Rieth	Ruth Fingerhut	Ronaldo Glufke	Heloísa Crocco	Dijon de Moraes	Dijon de Moraes
Company requiring project	Cecrisa	Portobello	Portobello	SEBRAE, prefeitura e associação de artesãos	SEBRAE e associação de moveleiros	SEBRAE e associação de moveleiros
Project date	1997	1999	2000	2004	2003	2006

With this scenario Ruth Fingerhut set off to photograph the Gávea Stone and the main touristic spots in Rio de Janeiro, focusing on the communication apparatus and the distribution of Gávea Stone Collection. The images constitute the basis for the product presentation in international fairs, catalogues and sales spots, as well as to present the product for the company itself.

The briefing requested for the development of Campeche Line tiles was for a product of aggressive surface aiming at filling the gap of the American market which consumed strong colors. These data were crossed with the state of design to define what was being consumed and produced with this tendency with the staff's own perception. According to Glufke (2007), the ethnic elements were in fashion as strong graphic elements and the source of inspiration was something rustic with ethnic expression. "We studied what we had as ethnic expression in Brazil. The indigenous, the handcraft, or in the essence that was in the rock engravings" (GLUFKE, 2007). Departing from the review of literature, rock engravings in the archeologic site of Campeche Island were selected because of their proximity. The designer made an estimate in loco, looking for surfaces, colors and graphic elements. The selection of these inscriptions departed from a previous notion of what could be transferred to the patterning and of the type of image resolution that was possible for the drawing. For Glufke (2007), the development process of the product can be unfolded in four to five phases until the manufacture of the prototype, following a cyclic pattern in which the analysis of the pros and cons is made in each phase, redefining the route. This method is compared by Glufke (2007) with a PDCA – Plan, Do, Check, Act, method of continuous improvement. "This happens intuitively, it is not in the paper" (GLUFKE, 2007).

São Lourenço Collection handcraft was one of the results of the Tourism in the Costa Doce Project in partnership with the Brazilian Service of Support for Micro and Small Companies – SEBRAE-RS, aiming at the integrated development of the cultural, nautic and rural tourism in the region.

As an integrating member of the Piracema Laboratory, responsible for actions in project design, Heloísa Crocco described a predefined methodology for a group work with local designers that were trained as handcraft artists. The first phases were: internal diagnosis with project evaluation; analysis of the geography and history of the region through bibliography review and internet sites; analysis of profile of artists previously selected; choice of methods, techniques and tools to be adopted; establishment of phases and actions of project; elaboration of work chronogram. Only then the first meeting among laboratory, designers, artists, City Hall and SEBRAE-RS was made in which the project plan was presented. Crocco (2007) makes it a point at highlighting the fact that the region is always studied before the work with the local artists begins. The photographic survey of the region, the objects of the daily lives of dwellers and artists is used as support for actions to come. In the case of São Lourenço, a historian participated and exposed the memory of the place, explaining and directing the works, contributing for the establishment of a scientific basis. "Our work does not happen in an empiric way. We do not arrive and do, we study before we come" (CROCCO, 2007).

This content served as basis for an "immersion workshop" aiming at stimulating the creativity and perception of artists in regards to their own environment. In these meetings, unexpected data arise, such as old photographs, forgotten customs or "making an old dweller open the trunk of old dwellers" (CROCCO, 2007). The following workshop with Piracema Laboratory and artists gathered the material researched, the raw material to be worked, the tools to make drawings and the exchange of knowledge to develop new products, based on the previous selection of the immersion workshop. The project was executed in a pilot fashion, choosing a "theme" or reference that later unfolded in other collections. The whole work was made in group and very little was brought from outside. The best options were selected and the drawings were made by the artists, helped by the professionals of the laboratory and the local designers that were being trained. The execution of the prototype pieces began then, as well as the elaboration of the manufacture manual. The laboratory staff met again regularly evaluating the works. The presentation of the result to the community took place in a planned event including data-show and all the steps to the project and the final production.

The Ubá Collection was mediated by SEBRAE-MG and aimed at small and medium-sized enterprises (SME)'s of the furniture industry invited to take part in the project. The scope included the promotion in the application and use of design strategies as tools to compete and as growth artifacts for SME's of Arranjo Produtivo Local - APL – Ubá.

As pointed out by designer coordinator Moraes (2007a), a project model with all the phases predetermined was adopted. This project was presented to a group of young designers and entrepreneurs to raise their awareness to the action of the design and forecast of all the phases of the project. The phases included: visit to the factories to learn more about the machinery, the technology available and raw material used; lectures about furniture evolution, industrial production and aesthetics of industrial products; survey of cultural references; decoding of references; generation of alternatives; application in project; follow up of prototypes; and presentation of prototypes for companies in a fair.

For the cultural references survey, anthropology professor Antônio Greco Rodrigues was made available to the staff. He made a previous research on "what it means

to be *Mineiro*, and what this *mineiridade* story is all about" (MORAES, 2007a). *Mineiro* is the dweller of Minas Gerais and Mineiridade is the way of life in Minas Gerais. His study was presented to the staff in a seminar in which the text was read and discussed with the designers. After that, a reflection was made and a list of topics about what it represented was elaborated in an immaterial way, "being *mineiro*". In a second moment, the coordinator designer asked all to reflect about what could reflect the *mineiridade* in a tangible way. The conditionings were selected by the coordinator from the result, these should guide the generation of alternatives for the projects: the contrast light/dark observed in the baroque architecture in Minas Gerais; the consonance of straight line of the train tracks and the curves of the mountains; and the metal and wood of Minas Gerais. From these data, references were generated by the staff to be decoded for application in the project of each product.

The coordinator participated actively in all phases: "I sat with each one. Sometimes I initiated, stimulated and they continued. Sometimes they initiated, showing me the material for approval" (MORAES, 2007a). A total of 46 possibilities were generated in the project, and 22 were selected for the collection.

The next phase was of prototype execution and the designers were instructed to follow this close, inside the factories. As many different products were made for different factories, the final phase of prototypes was conducted in a fair to present the collection and catalogue promoting the communication support, with all information about the project to the factories, the entrepreneurs and professionals involved.

The Goiânia Collection Design was one of the results of the Project to Develop the Furniture Sector of the Metropolitan Region of Goiânia, coordinated by SEBRAE-GO with the aim of promoting the improvement of furniture products in the region. The challenges were to incentive competition, generate aggregated value to the furniture and provide the participants with knowledge about all the phases of the development of a product, motivating the practice of a self-sustainable design.

The first actions of the project were the bibliographical and photographic survey, with an iconographic study of the city, region, state and local history. "I spent many days there, in the public archives, studying how the "March to the West" of the people of the South of Brazil, São Paulo and Minas Gerais took place in the center-west region of Brazil" (MORAES, 2007b). Departing from this study and seminars with the staff of designers who had just graduated and three professors of the Catholic University of Goiânia, the main references were selected and later limited again to three conditions to generate alternatives for the project. The conditionings were the robustness of the pioneers in the region, the linearity of the urban plan of Goiânia and the *art decó* of the local architecture. Moraes (2007b) explains that the selection of three conditionings is part of a personal decision based on his professional experience that constitutes a reasonable number for application in this phase of the project.

6. Discussion

During the interviews, it was possible to observe in Rieth (2007), Glufke (2007) and Fingerhut (2007) a difficulty to characterize a formal method in the projects. Ronaldo Glufke highlighted the fact that the process is cyclic and used the terms intuitive and intuitively six times, corroborating the idea that the process does not follow a predefined plan and that the decisions to choose the method, the techniques and tools to be employed depend on a personal perception and on the possibilities offered by the company. Ruth Fingerhut, in turn, considers the method important to impose discipline to the process, but this discipline does not follow a "step by step" since she does not believe in processes that are too structured.

This line of thought is acknowledged by Baxter (1989) who mentions that some designers do not agree with the division of the project in phases since in practice the process does not follow a linear sequence. The human mind explores ideas in a conceptual level and at the same time, thinks about details in others. "Ideas appear in a random fashion and in many ways. It is not possible to limit them to predefined phases. Until the final stage of the project is reached, the ideas come and go many times in an interactive process."

The intuitive method was mentioned as if the process used was not systematized or had used only the experience of professionals. Nevertheless, the description of the process made it possible to observe that its procedures are recommended by many authors (ROZENFELD et al., 2006; BAXTER, 1998; LOBACH, 2001; PAHL et al., 2005; JONES, 1978). On the other hand, it was observed that the methods used were not formalized and did not generate a memory of the project with the set of data obtained and the procedures employed. In this aspect, the formalization of processes invariably contributes to generate a memory for future projects, since it can serve as source of information regarding the procedures adopted, including the mistakes and hits. According to Rozenfeld et al. (2006), the advantage of using a model is that it describes processes in the development of the product, serving as reference for the company and its professionals to develop products with a common view point, leveling the knowledge of the actors that take part in the process.

The process used by the interviewees reveals the tacit knowledge, fruit of a lived experience acquired with other projectual processes with academic background and a mental selection for the most adequate methods for each

project. Thus, intuitive methods are not to be confused with lack of method.

The tile industry involves few components and is characterized by low projectual complexity when compared with products of the furniture industry, or the car and electronics industries. Since the staff composing the projects was relatively small, it can be concluded that the projects coordinated by Rieth (2007), Glufke (2007) and Fingerhut (2007) were easy to control and did not demand a structured model.

Worth of highlight is the methodology employed by Moraes (2007a), Moraes (2007b) and Crocco (2007). In the three projects – Ubá Collection, Goiânia Design, and São Lourenço – the methodology was previously built in accordance with all the parties involved in the process, generating a project plan, as recommended in Rozenfeld et al. (2006) and a commercial commitment, as in Baxter (1998). In the case of São Lourenço Collection, the methodology used follows recommendations of the Program for Handcrafts of Sebrae.

The structuring of the projectual process or the possibility that its division in well defined stages may reduce the creative capacity of the group or harm the final result was not made evident during the interviews with Dijon de Moraes and Heloísa Crocco. The fact that the three processes were structured became a positive factor. Converging with Jones' (1978) recommendations, it is important to consider that the more sophisticated the process, the more variables there will be in it, such as people, knowledge and activities involved, as well as more need for systematization to enable more management and control.

The physical proximity with technicians in the laboratory (Gávea Stone Line), with the prototype (Campeche Lines, Laces, Ubá Collection and Goiânia) and with the offices of artists (São Lourenço Collection) enabled an efficient development of projects since the manufacture of prototypes and the experimentation of materials and techniques were made easier. In this sense, experimentation and testing became a methodological strategy to speed up processes.

The phases in which the possibility to build local cultural identities were observed relate to the activities developed in the phases of project planning, informational project and conceptual project. Among the most relevant activities are the realization of deep researches of the profile and wishes of consumers and the context where the product will be inserted (Campeche Line and Gávea Stone). Regarding the construction of cultural identity of the company through the inclusion of cultural factors in the product, the search for local, regional and national iconographic references was revealed, and does not constitute a commercial barrier enabling, instead, the construction of a system of reference of their own (Laces Line, Ubá Collection, Goiânia and São Lourenço Collection).

The cultural factors added to the product project were either decoded or transferred literally. In this process, the designer's role in the translation of the identity of a people, of the company and the professionals involved in it, as well as in the construction and interpretation of factors that impact on them, was made clear.

7. Final considerations

When inserting cultural factors in a product project aimed at the local identity, it is important to look at the links and meanings weaved by people in their social environment or in their so called "family yard", to paraphrase Geertz (1989). In this sense we can highlight the subjectivity and objectivity, the coding and decoding in product project, the most appropriate communication strategy, the interpretation of the data obtained in relation to the local, regional and world aspects.

In the Brazilian context, the importance of a product's cultural identification is related to its possibility of acknowledgement of its own culture and identity. Due to the cultural hybridism found in Brazil, the acknowledgement of local contexts contributes to the rescue of plural identities. This movement of strengthening of local autonomy and cultural identity tends to result in new traits that, once inserted in the product, build a new language that also translates a plural design. This plural design, in turn, strengthens local contexts, raising the self-esteem of the social group involved, establishing a new back and forth movement of feeding and exchanging.

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