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Multidisciplinary design for intercultural learning. Crafting digital services for a multicultural society

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Abstract: *Several literatures acknowledge that design education has been shifting from the mere training of young students to be skilled professionals to a more profound understanding of the social context in which the future designs will emerge (Norman, 2010) (Findeli, 2001)(Frascara, 2007). This comes from the increased understanding that in order to craft sustainable and viable products, being material or virtual, students have to refer in the first place to their living environment and feed their creativity with the challenges experienced in real life. For educators this starts firstly an investigation on how to guide their students in the exploration of the well-known and therefore unquestioned events they experience, and secondly on how these experiences can be articulated into design projects. The particularity of the case study reported in this paper, comes from the multidisciplinary team of professors, from communication design and computer engineering, and the novelty of the project brief dealing with the intricate topic of intercultural communication and social integration on the Italian and Milanese territory (Granata, 2011) (Pedersen, 1995, 2004).*

Keywords: *higher education, pedagogy, interdisciplinary collaboration, communication design, ICT, intercultural learning*

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Introduction

The Italian social context and its diversity

The Italian society has traditionally been perceived as a homogeneous one, carrying a richness of cultural heritage and the weight of an old, gregarious bureaucratic system. Less known and still disregarded is the transformation that the Italian demographics have seen in the last decade and the importance that this change has at all levels of the social and cultural life of the country. This transformation is due to several factors such as the ageing population, the decreasing birth rates, and in the same time the increasing flow of immigration.

This final issue is perhaps the most visible at street level and therefore causes concern both in political circles and in mass media. In particular in Lombardy the presence of foreign population increased in the last decade by 11 % by year with peeks between 19-23% in the period from 2003 to 2005 (ISMU-ORIM, 2012), changing the picture of the Italian demographics and creating a constant pressure at the administrative level. Although immigration in Italy is largely seen by international experts as an invaluable and still unexploited resource the public opinion is still reluctant to accept diversity in a historical homogeneous social context.

Bringing real social issues into the academic realm

Rather than avoiding a critical situation that will impact on the future of the young generation, the academia has the duty to bring forward the social discourse and transform it into an educational opportunity for creative professionals in the design field. Moving away from the “master – apprentice “ model criticized by Frascara (2007), in which a well skilled teacher encourages students to learn by imitation of craft, the pedagogical experience reported in the following pages aims to re-direct the attention of higher education teachers towards a different kind of student-teacher dynamic. This implies a change in the structure of pedagogical activities, and the radical re-considering of the role of the teachers in the design education. In this concern Donald Norman (2010) underlined the need to establish new design courses that bridge the gap between the outside world and the academic one in a conscious, responsible manner, and make place for authentic scientific knowledge in the project based design courses.

The following paper describes a master level course that deals with the presence of foreigners in Milan and aims to communicate the potential of service and communication design to draft and simulate valid strategies that raise the awareness about immigration as a social and psychological phenomenon, which has to be mitigated by both the host society and the incoming foreigners.

This type of actions are placed in an already established academic content dealing with social innovation and sustainability (DESIS P&C Clusters, 2012) and aims to focus the attention of the teaching staff and students on the most relevant issues present in the city they live in.

Although primarily concerned with the pedagogical content, the course is informed by social identity theory and puts in contrast the perception of the students’ group as a structured and cohesive entity with the stereotype of foreigners’ group.

By acknowledging the two different groups, the aim of the course was to challenge the in-group bias of the stereotype of “us” and “them” (Tajfel, 1978, Castano, 2002) and put students in the condition to design services that will enable intercultural

contact and communication.

Theoretical framework

The concept of “social identity” concerns the cognitive and perceptive aspects that make individuals seeing themselves as part of a specific social group (Tajfel, 1972). As Turner explains, the group members are not initially linked by affective ties, but rather share the same behavioral patterns and perspective on the surrounding context (1981). Furthermore, Gergen (1971) sets up an important distinction between self-concept as a set of psychological attributes and self-concept as cognitive structure. The two identity sets, can change according to the context in which the individual operates and the situation in which she founds herself; in other words rather than seeing the self identity as a compact system, the social identity theory presents the multifaceted and dynamic self as a mediator between social structure and individual behavior (Hogg et al., 1995). If the social identity theory, gives the possibility to acknowledge the differences between various cultural groups, the communication issues are outlined by the intercultural dialog approach, in which foreigners manage to adapt to the host culture gaining cross-cultural communication skills without losing the original identity (Ward, et al., 2001).

Taking into account the insights from the social identity theory, and intercultural learning, the course accompanied the students into an introspective journey, from acknowledging their group identity, to being aware of their personal self, in this way preparing them to confront diversity without preconceived judgments. By decomposing the in-group values and dynamics, the students were more prepared to conduct a rigorous fieldwork and relate to the problems of the foreigners in Italy. This led to a thorough evaluation of the critical issues encountered in the real life and to the finding of relevant design solutions.

Multidisciplinary teaching team and course organization

Given the complexity of the brief, the course organization accommodated an important number of external guests and partners, who gave their contribution to the theoretical lectures and feedback on the students’ work. In this sense the organizing team of professors had to be seen as mediators of the different disciplinary inputs, molding them into a coherent pedagogical content. The class had a total of 93 students organized in groups of three or four persons. All students had a mixed background coming from industrial design, communication design, interior and fashion.

An important feature of the course was the presence of a multidisciplinary team of professors and tutors, coming from communication and product design and computer sciences, which carried on the course preparations and followed the class activities. In this sense the preliminary activities began more than three months in advance and enabled the adjustments of the lectures and content and the familiarization with the different work methods of the various members. The communication design approach based on the close examination of the users and problem identification to generate the design solutions, was supported by technical lectures regarding digital content management, and the creation of mash up hybrid applications.

The course structure combined the theoretical stream coming from the lectures on social organization and behavior, cultural issues and communication with a practical stream regarding exercises and project revisions, and was organized in different phases (fig.1)

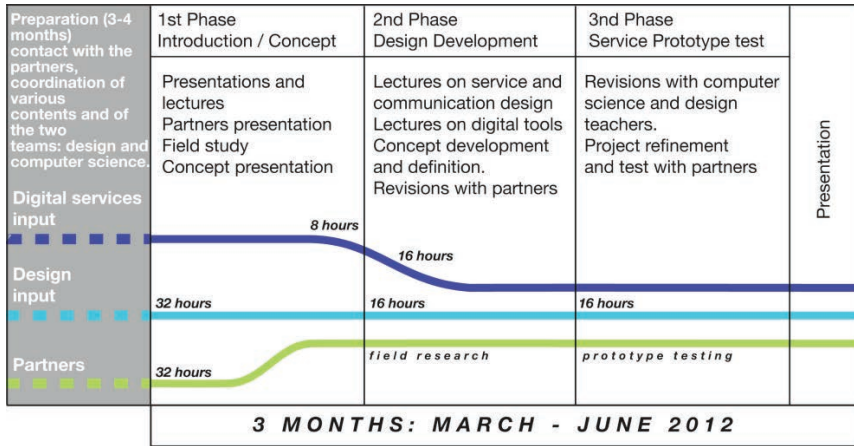


Fig.1 Class schedule and overall activities with the no. of input lectures in each phase.

The **first phase** introduced the students to the brief and the intricacy of the intercultural dialog. In this phase several external lecturers presented examples from real life services dedicated to the foreigners and to the concept of multiculturalism. To consolidate the theoretical lectures, the students were given small assignments that emphasized the notion of personal identity.

In the **second phase** students had to establish the area of interest and contact possible partners that are presently offering services for foreign citizens and (legal or illegal) immigrants. In this phase the class had to draft their concepts and discuss their ideas with the teachers and partners.

At the end of the second phase the students had a fairly good grasp of the theme and were prepared to investigate the possibilities of service design. In the **third phase** service design revisions were alternated with digital technology revisions. Here the projects were further developed and students had to prepare the mock-up digital platform and test it in a simulation.

Partners

In order to accommodate the multifaceted phenomenon of immigration and the problems that foreign citizens encounter upon their arrival in a new country the partners involved were associations and private agencies, which responded to different needs of the foreigners in Milan. The **Asnada** school, is one of the few associations with a consolidated tradition of offering free Italian language classes to foreigners present in Milan and Rome. **Naga** association is a non profit organization providing medical care and legal help to illegal immigrants in Milan. **Fondazione Intercultura** is another non-profit organization whose mission is to promote the intercultural dialog and cultural exchanges for high school students in Italy. Along with the above mentioned associations, the students were introduced to the **Intese project**, an online platform developed by Metid center and dedicated to foreign students at Politecnico di Milano.

Intercultural communication and service design

Service design concerns intangible processes and activities and are intended to improve the user experience through the study of behavioral patterns and to create new service solutions (Mager, 2008). Service design has an important social dimension that has been explored in-depth in the last years and several literatures have been focusing on the services as a change factor for social innovation and sustainability. Previous research projects have tested the relevance of service design approaches in observing collaborative dynamics in communities all over the world (Jegou, Manzini, 2008) or as a connecting link in cross cultural workshops, where the pedagogical content of a service design course in Italy was transferred and tested in the Chinese context (Gong, et.al, 2009). Moreover, working on poor communities in India, Rao (2009) suggested the application of the service design framework as a practical tool that enables the small artisans to access different forms of capital, in this way advancing towards a systematic organization and sustainable development.

In the case presented in this paper service design is not used as an imposed framework but as a way to establish an intercultural communication between the local residents in Milan and an increasing foreign population. The students had to use methods specific to service design to create strategies that will enable both parts to participate in an intercultural dialog. In this sense the service design projects are used as mediation tools between the local and foreign communities present on the same territory.

From personal identity to cultural identity

One of the most intricate and difficult to explain concepts is the nature of diversity and how to accept the differences without cultural biases. In the beginning of the course activities the main challenge was to confront an already constructed image of the other and decompose the stereotype of foreigner. For this reason we proposed a short class exercise entitled “who I am”. The main objective of the exercise was to establish an introspective situation in which each student thinks of him/herself as an unique individual discovering the treats of his/her cultural heritage and acknowledging the differences and common points with the rest of the class. The exercise was coordinated by one of the partners (Asnada) and took one hour and a half. In this time the students had to make a collage of colored pieces of paper on a black background expressing the most important elements that formed their identity (fig.2). Along with the images they also had to explain in a few words the image represented.



Fig.2 Who I am collage exercise. from left: "I don't know yet who I am but I like to find out day after day"; "Afternoon walking in Venice"; "The garden city.' I believe the stories, the old ones and the new ones, could contribute to educate the mind' Gianni Rodari".

Intercultural dialog reflected in the design projects

As mentioned before in the introductory phase the lectures and exercises concerned mainly the theoretic knowledge and were intended to sensitize the students bringing them closer to the concept of diversity, preparing them to confront with the partners. In result the projects tackled the issues discovered on the field research and were relevant to the specific problems underlined by the partners.

Some of the most interesting projects related to the free time of the immigrants away from home and acknowledged the lack of services to encourage the outdoors activities and sports. *Game mate* is a project that proposes the organization of multicultural sport events, in this way encouraging the creation of social ties between people from different cultures, who share the same passion for sport. The team designed a digital platform that combines the functionalities of a social networking service with information about the story, origins and traditions of the sport practices in different cultures. The project has been tested in a simulated event and received a positive feedback from the involved associations and participants.



Fig.3 GameMate project: onsite event simulation and digital platform interface.

Play with mi is an online and offline game aiming to invite the local residents of Milan to discover the multicultural events and interesting locations. Working as a touristic guide, the project is intended both for Italians and foreigners and proposes the collaborative creation of an alternative map that signals the presence of positive multicultural places. The places are mapped with a series of markers, small boxes that contain a piece of information or a keepsake related to the place. The location of the "markers" is posted on a Google map and has to be discovered through a series of hints. The students developed a complete digital platform ready for use and simulated several steps in completing the tasks. The use of the game metaphor to explain the presence of cultural diversity was an interesting and viable choice, however the main critique of the project is the lack of an initial communication strategy. Without a critical

mass of participants willing to engage in the game, the service fails to accomplish its main objective.



Fig.4 Play with MI digital service interface

ABC diario is an online vocabulary that links the words in the Italian vocabulary with the stories of the participants. The website allows users to upload pictures and drawings to describe the significance of the Italian letters and words in their own language. The target users are the students at Asnada language school. The project recognized very well the character of the pedagogical activities carried by the partner. The simple and functional interactions of the digital platform, made the service very easy to use even for a foreigner with a discrete knowledge of the Italian language, moreover the way in which the service is structured and presented emphasizes the language as work in progress and shows the effort and willingness to communicate in a foreign culture.



Fig. 5 ABCDiario digital service interface

Snap and swap is a service that helps organizing shared meals and it is intended for the international students. The service works as a social network that transforms the fusion cuisine meals into a multicultural experience. Playing with the metaphor of the shared table, the participants can create their own half of paper table mat with a recipe and place it together with the chosen other half. The service is intended for foreign students participating in the Intese project launched by the Metid Center at Politecnico di Milano. The team developed a straight forward communication strategy, taking advantage of the already established social networking platform and adding an

enhanced value to it. By proposing a digital service that has as the final objective a convivial experience, the project bridges the gap between virtual and real social interaction.



Fig. 5 Snap & Swap table mat with recipes and facebook page

Discussion

Cultural differences have been present in the Italian society for many years now, however until the foreigners arriving in Italy are only mentioned in the daily paper, the immigration phenomenon is not a reality. The encounter with a different culture is not necessary seen as a pleasant one and most of the time triggers strong hostile reactions from the local residents. If the foreigner arrived in a new country encounters a culture shock, in a certain way a similar phenomenon could be seen in the host population, which has to adapt to the changes of its very structure passing from a heterogeneous society to a multicultural one. The course aimed at bringing forward precisely this phenomenon of transformation from within the society, and channel the imminent disorientation of the students into a creative experience. By having to focus on a critical issue and find a solution that can address it, the students made a step forward in understanding the larger scale dynamic of the cultural adaptation that enables the intercultural contact (Ward et al.,2001). In this case, the ones who had to adapt through field research and close observation of the user behavior, were the Italian students.

The design teachers, throughout all the phases of the pedagogical activities, had to mitigate several important issues. Firstly in the preliminary phase the main challenge was to explain the objectives of the course and its relevance to the computer science team. In this sense the main lesson learned was to try to construct together the course content rather than dislocating the different inputs. The highly technological input acquires in this way a meaning shared by both teams. Secondly the role and involvement of the designers and the application of their skills in highly sensitive social issues wasn't clear for the partners contacted. The first reaction in all the cases was the confusion on how their activities can inform design students' work and how the final projects might be relevant to the intercultural dialog. A general idea about the design discipline as being concerned primarily (if not only) with craft and materials, is still the main trend. Thirdly, perhaps the most important issue was the acknowledgement of the contrasting views that students expressed with respect to immigration. One of the main insights coming through from the experience is that not all participants in the course were convinced by the benefits of the intercultural dialog. Especially in this case it was extremely important to leave space for personal expression even though it might contradict the main credo of the didactical activity.

Conclusion

In the current situation of deep economic, environmental crisis the university cannot continue to exist being disconnected from the social environment. Rather than enclosing itself into the “ivory tower” status, the academic environment has to prepare the students for the changes that already occur. This in the case of the design education implies a shift in the attitude towards the aim of design project and therefore a transition in the role of the designers from that of mere professionals to agents of change (Manzini, 2011). This transforms universities in social resources, which are integrated into the society, transferring its problems into educational content and empowering the students to have the courage to make a difference. An extremely important factor in this change stays in understanding the society and the academia as two different, and sometimes contrasting contexts. The process of bringing relevant social issues in the midst of academia is therefore characterized by frictions, which have to be understood and mediated. In the case reported we concentrated on the relation between the students and teaching staff, without considering the extended design community. Future work could inquire the importance of social issues in the professional design, investigating the relevance of the cultural context in the design practice.

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