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Forming Conscious Consumption: Visual Memories from the 1950s Up to Date in the Multimedia Representation of the VISOSMappING Platform †

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Abstract: The project VISOSMappING comes from a collaboration based on the sharing of different academic knowledges and is aimed at the development of an educational digital platform dedicated to sustainability, understood broadly: from the traditional meaning about the environmental notion to a transversal educational approach where "sustainability" becomes the imprint of all forms of men's relationship with oneself, others, and with ideas, things, and events. For this aim, the educational app VISOSMappING, a working progress platform, has been conceived to allow virtually the memory and places of consumption that have taken place since the beginnings of the affluent society in Italy up to date.

Keywords: visual narration; visual technologies for teaching; virtual learning spaces; education and history of consumption; multimedia representation

1. Introduction

To work nowadays in primary school teachers's training means to target scientific, cultural and social composite environments whose complexity implies attempts to include cross disciplinary contents and methodologies.

In a habitat of profound sharing based on the collaboration between researchers of the representation and researchers of the training processes, it was formally born the idea of coming to the collective fruition, with current language and tools, the contents of a project already underway on sustainability and on the educational meaning of consumption.

The invention of the collaborative project between work fields (potentially synergic but not always working alongside in teaching design and practice) is by itself a metaphor for the structure that the tool created has taken assuming the participatory mode of construction (platform input) and use in a didactic environment (social content sharing).

2. Sustainable Consumption as a Training Process: Visual Memory of Consumption from the 1950s to the Present

Stefano Oliviero

The flourishing and lively international historiography on the universe of consumptions has now consolidated the fundamental role they have played in determining national, individual, collective, gendered and generational identities, as well as in the development and organisation of society. It is a process that did not fail to characterise even the pre-industrial eras, before then taking on other forms in the 19th century with the modernisation processes related to industrial production. It is suffice to remember the right of citizenship and the meaning gained from the concept of consumption in the classics of economy from Adam Smith and Ricardo onwards. "Material desires", Frank Trentmann underlines, "are not a modern invention" [1]; nonetheless, this process of determining the consumption of a society, or rather on sociability and socialisation, has been particularly acute, and also particularly noticeable, during the 20th century. Think, for example, of how fashion (jeans), music (rock'n roll) and mobility (lambrette and vespa scooters) have distinguished western youth (especially Europeans in that precipuous era) between the 1950s and 1960s; we think about how much male and female identity has been defined by household consumption (washing machine), how much the creation and development of self-service purchases, with the proliferation of supermarkets, have influenced the lives of Italians, their food, their time, their social relations … or we think about how much consumption plays and played a key role in the identity of the whole country (pizza or cappuccino) [1–4].

The gradual decentralization of the production society has allowed a closer and freer understanding of the universe of consumption, which is free from moral prejudice to consumption interpreted only as waste or as a source and consequence of alienation. At the same time, and as a consequence, consumption has become increasingly central in society and their value-added load has gradually reached the traditional weight of productive work in the formation of human beings [5]. In short, continue understanding consumption only as the result of historical processes would be misleading or at least would only give a very partial view of the past. "We need to break", Trentmann insists, "with a tradition that has treated the material culture as a separate sphere of everyday life" [1]. So if the objects that surround us and consumption, material and immaterial, help determine what we are, consuming is a training process.

However, pedagogy has long overlooked this field of research, so much so that it has not yet elaborated a real paradigm useful to understand the phenomenon in educational and historical-educational perspectives. Notorially very young and epistemologically rather weak as autonomous science [6,7], pedagogy in the course of the twentieth century has been considered in fact with the world of consumption, first interweaving the debate that went on for the most of the sixties and the eighties on the relationship between education and leisure (and involving other pedagogists such as Giovanni Maria Bertin, Lamberto Borghi, Raffale Laporta, Filippo Maria de Sanctis and Francesco De Bartolomeis), then, from the 1980s, with some incursion in the studies on material culture, especially in the history of Italian school, principally by Egle Becchi and Monica Ferrari until the works of Juri Meda [5]. The debate on free-time, branded several times as lost and wasted time if dedicated to consumption, clearly demonstrated the limited understanding skills that the pedagogy of the era had in order to analyze the theme of consumption, a theme interpreted mainly as a source and a result of alienation, that is something negative to be contained or eliminated. Certainly, however, there were other studies, such as those of De Bartolomeis and De Sanctis [8,9], already capable of capturing the creative component of consumption in the definition of identities and society between the sixties and seventies.

In any case (and ultimately), the construction of a pedagogical paradigm on consumption has struggled to take hold, perhaps because it was strongly invalidated by the so-called "destructive" consumption that for a long time had contributed to the very formation of the negative meaning of the verb "consume". It seems clear, however, that consuming deeply addresses the educational context and that this phenomenon can be investigated as a real training process.

The construction of training courses on conscious consumption, hundreds of courses we can easily find with a trivial search on the net, cannot thus overlook awareness of the educational value of consumption.

The bottom line of the platform therefore insists on the opportunity of a serious comparison with the educational value of consumption as the first step of every consumption education study. To this end, it is necessary to develop an Educational App that enables to virtually meet the consumption places that have followed from the first steps of the affluent society in Italy (era, as mentioned, the influence of consumption was particularly evident On people's lives and on society), up to now. Places that will be intertwined with the memories of ordinary people's consumption, collected in audio-visual interviews, first among all the people born in the early post-war years, or the so-called first generation [10]. Through this kind of virtual tour, the user will have the ability to effectively consider the training value of the consumption by direct contact with visual and audio-visual memory, idea and reflection bearer memory and unquestionably preeminently judged by the most recent educational historiography [11,12]. Educational memories can in fact provide keys to understanding and scenarios, such as the universe of consumption, which are not well-studied by traditional educational historiography, and are therefore sources that are particularly suitable for discovering aspects on which, as mentioned, the epistemological investigation as well as historical has been flawed and latitant.

3. Digital Educational Instruments: The Critical and Methodological System

Paola Puma

By the end of the 20th century, the cognitive and educational model that made the information a closed package transferred from a source to a passive recipient, has begun to assume a growing evanescence, then culminated in overcoming the separation between the creator and the user of the information matured with the web 2.0.
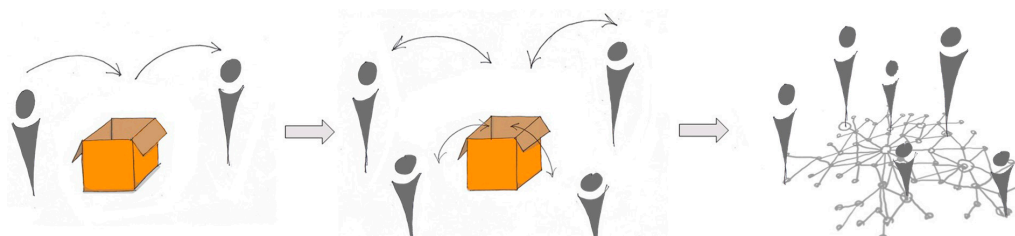

Figure 1. The trasformation of information environments: hierarchical, relational, connective.

In these premises we can find some of the reasons for the progressive shift from the "accumulation" databases to information-sharing environments where data are spontaneously and continuously re-aggregated to produce maps of knowledge fluid and synchronously varying.

But more than other ways of acquiring data, it is above all a paradigm shift in access to knowledge and a profound transformation from the unexplored implications in the field of education [13], which relies on problematic notions such as "permanent proximity" [14], a new hybrid dimension where converge materials connections (realized through digital devices: smartphones and tablets), social networks (social networks, chat rooms) and theme connections about contents of common interest for groups of similar users.

In this framework the project group has worked on the design concept idea of setting up a "shared information" educational initiative to realize the intersection of children with the memories of the places of consumption (spatial axis) and with the memories of the people on consumption (temporal axis), an intersection that can be fruitful in creating the path towards the culture of sustainability and knowingly living the city as a place of daily experience of continuous changing their own habitat.

3.1. From Databases to Progressive Web Apps: Acquisition, Fruition and Cognitive Models

The recent boundaries of didactic planning show increasingly the need to intertwine the theoretical reflections about didactic planning and efficiency with the current communication technologies. If at the end of the 90s and at the beginning of the 21st century a sense of strong optimism was looking at the experiences of e-learning (where the value of transmitting knowledge was also added to the potential of electronics and information technology), the most recent reflections on the state of the art lead us to update and expand the technological scenario in front of us.

The traditional e-learning model was launched by some main assumptions, such as the use of networking for the use of didactic materials and the development of activities based on the specific technology of the Learning Management technology platform LMS (There are many software applications available, some of which have prevailed with respect to others becoming the standard. The most used platforms (for the number of users) are certainly Moodle and Ilias, two highly customizable open source platforms that soon became part of the didactic instrumentation of different types of institutions (high schools, universities, research centers etc.) with focus represented by the working group (the class). E-learning and on-line training have represented a new business area, and there are several commercial software that have been developed over the last few years. Commercial software have greater accessibility and easier programming than open source, especially for people without the digital know-how).

In recent years, however, the research about learning in the digital era [15] have questioned the effectiveness of these tools, showing us how simply being connected to the network is not in itself a sufficient condition to ensure the success of the training process (The positive effects of this revolution were, of course, an high degree of liberty from presence or timetable constraints and the free possibility of monitoring the learning level through the tools provided by the platform.).

In general, rather than rethinking contents or technological and instrumental features, the attention is increasingly focused on how students interact with each other in digital environments [16] and how these relationships can or may not support learning processes (There are several long-standing team-oriented digital platforms (Padlet, Gooogle Drive, etc.) providing virtual boards to share textual content, videos, images, links, etc. Shared workspace is constantly synchronized so that all users can see their changes in real time: the information that flows into these environments is therefore periodically updated and re-aggregated) [17,18].

3.2. The New VISOSMappING Platform

The above is the reference framework and scientific background for setting up a tool that configures the VISOSMappING project strategy, which is based on three main pillars:

- the connected learning, based on "multiple intelligence", concerns the learning that comes from active production, creation, design and experimentation, and helps create simultaneously skills, experience and knowledge;
- research about visual and audiovisual memory are by themselves making important steps in the historical-educational field and can assume incentive fruition patterns if designed according to current cognitive and visual frames, referring to the world of serious games;
- the integration of "multiple intelligence" that contemporary culture constantly requires in relation to our everyday environment can facilitate the use of materials on visual memory and visual audio.

The project concept therefore integrates the contents of education to sustainability into a design that recalls Century skills, the goals set in 2016 by the New Skill Agenda Europe [19] and the pillars of the model Connected Learning [20]; the Agenda provides for the strategy, the CL model provides for the guidelines, giving rise to the app's configuration on three levels, which then become in parallel the focus of the three platform's items. (Figure 2)
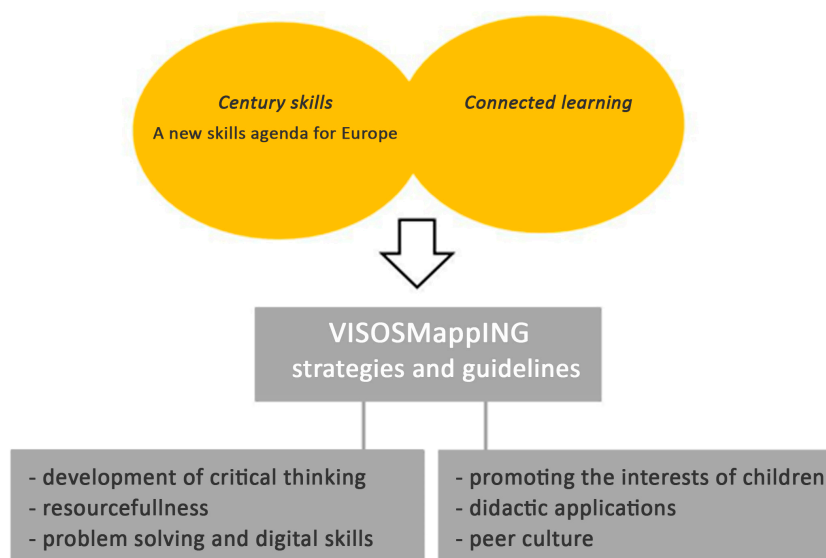
Figure 2. The project structure: the strategy and guidelines of VISOSMappING.

The platform is in the Progressive Web App format, according to the most current hybrid model between web and mobile app: the web site management way makes it easy to use while the mobile app interface facilitates intuitive use and fosters collaborative construction of the educational pathway; the quantitative platform implementation is complemented by the qualitative one: the multimedia materials that are posted can in fact be modified by different participants only if the change takes place in a contextual presence so as to encourage participants' physical presence and interaction in a real social network.

The Connected Learning model is the main structure of the guidelines that led to the scalar operation of the project, articulated on the intersection between promoting children's interests, applications with educational implications and stimulating the use of peer culture.

The design of the project is therefore articulated on three levels (Figure 3):

(1) sharing their own memory materials (to act on the direct interest of the participants for the theme);
(2) construction of the instrument in the didactic laboratory (to activate applications and teaching implications);
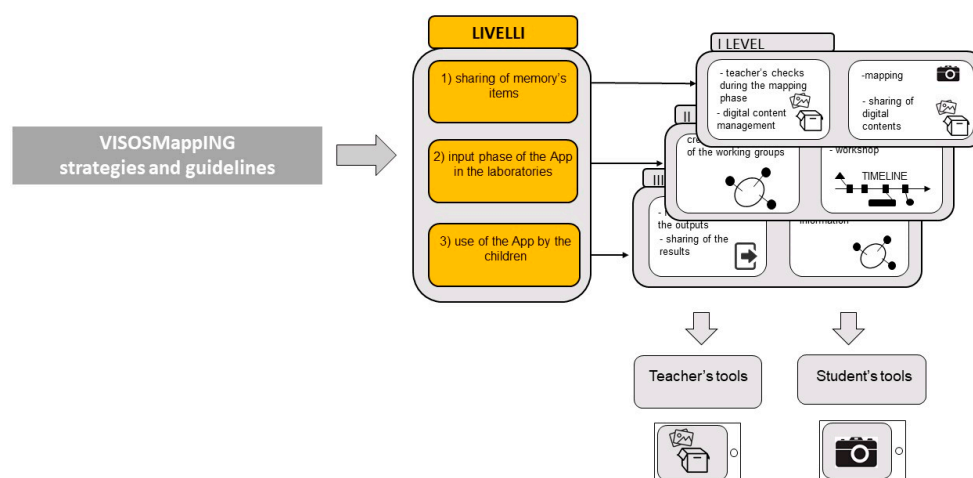(3) use of the platform by children (to stimulate peer culture).

Figure 3. The app concept.

4. Results and Conclusions

Giuseppe Nicastro

4.1. How the App Works: Functional Workflow

The operational scheme of the project is a progressive type based on three levels (Figure 4):

The first level is focused on the sharing of their own memory materials through a visual mapping process that connects the images captured by smartphones and tablets with the geographical position: the concerned operation, the geo-tagging is by now integrated in all the devices also of medium/low price range.

Not considering Gis systems and the interfaces for geographical database analysis (perfect tools for the creation of personalized database but difficult to use without a determined know-how), applications of widespread consumption allow to create some personalized maps by beginning from territory representations of different types (satellite photogrammetry, physical maps, traffic maps, etc.). This gives the possibility to personalize your own description of the city and to integrate the geographical element with multimedia contents such as images, videos and tags which highlight visited places, favourite places, etc.

The first stage of mapping is followed by laboratory didactic time when teacher and children share the collected data so as to build the synthesis tool: the interactive timeline.
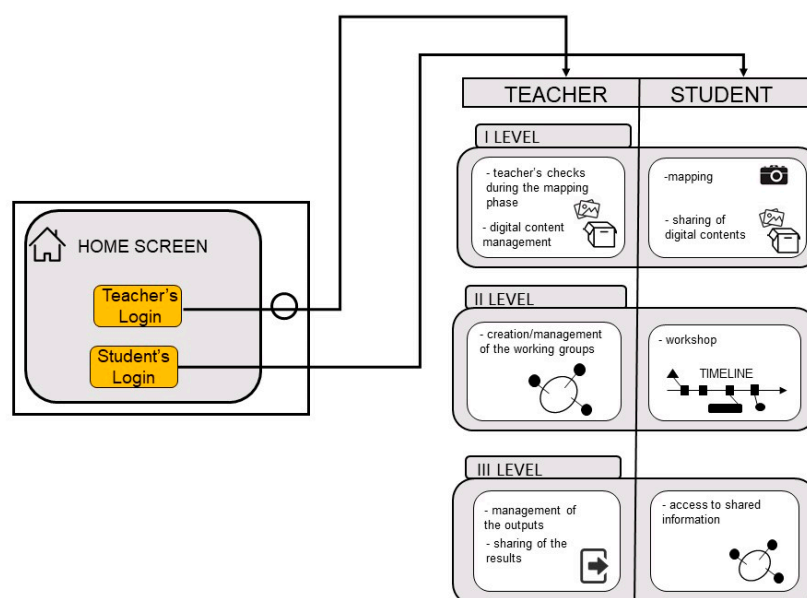

Figure 4. The app functional structure.

In this way we want to produce a dynamic relationship among what we define as fluid contents (the database created by the students, that varies depending on the sensitiveness, the experience and the personality of the ones who produced them) in comparison to the didactically consolidated contents produced by the teacher (types of notions such as historical, sociological, political, geographical types, statistic data etc.) [21].

Once completed the laboratory didactic stage, in the third step of the project the children can continue to use the platform in an independent way by consulting the materials loaded by the class and the products of synthesis created during the laboratory stages: the aim in this stage is to stimulate in the child the development of a critical sense towards his/her own researches and the work done together with the other mates. All the results of the working group can finally be loaded in a devoted section of the platform with the possibility to share the experience on the social networks or on the hosting video services such as Youtube or Vimeo.

The VisosMapping platform, in its alpha stage, has been made integrating the html5 programming language for the creation of the basic functionality (input and geo-localization, class management, comments and moderation) with a graphic interface editor edited with AppMaker.

One of the headline goals of the project has been, since the concept stage, the will to make the platform usable both by teachers and by children themselves. For this reason a Drag and Drop (The software solutions to create educational applications can be divided into two macro typologies: open source (Mitt App Inventor, Jclic, Scratch) or commercial ones (Shoutem, Swiftic, Game Salad, TinyTap, AppMaker).) type editor of the contents has been used: different typologies of pre-arranged functions can be combined one another by dragging them inside the editor and assembling them in personalized configurations.

The logical/mathematics functions typical of the computer language are so introduced in a graphic way as if they were parts of a puzzle or a Lego to freely assemble. Colours and shapes then lead the user into the creational process that becomes, therefore, an assemblage for pre-packed parts; this type of solutions guarantees a most immediate approach to the creation of digital products, getting to know with the computer language also those who don't have a direct experience in planning and coding.

The platform has finally, been projected in Progressive Web App format, according to the most current hybrid model between web and app for mobile device. Every day we experiment the difficulties of surfing on websites not optimized for the vision on small dimension screens: the digital tools planned in progressive web format guarantees a readability of the contents despite the typology of electronic device on which they are used. In this way, a platform that on a pc desktop appears as a website, whether used on a smartphone or a tablet it is instead used as an App: ViSosMapping includes therefore a devoted key on the Home screen of your own telephone, a drop-down menu and a structure able to suit in a progressive way on different typologies of devices.
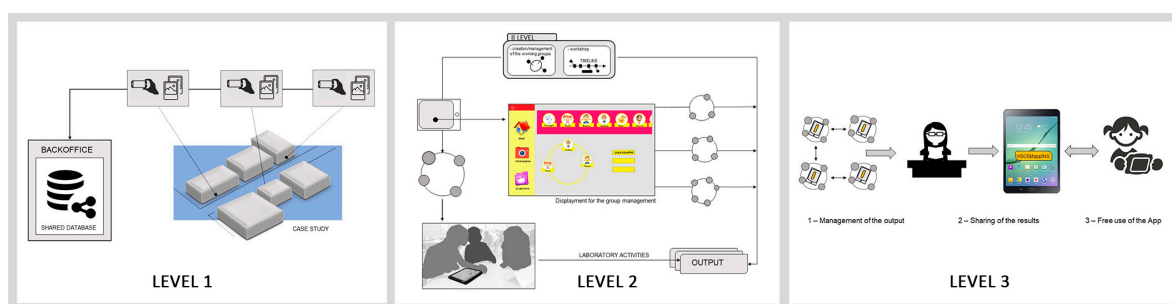

Figure 5. The app design by three levels.

4.2. Sample Study

The audiovisual material of the start-up phase, which the project plans to increase ad hoc, comes from the SRI laboratory database of the Department of Sciences of Education and Psychology, University of Florence.

The sample case is represented by the historical centre in Florence and particularly by the portion of city delimited by the avenues with a focus on "Piazza San Pier Maggiore" (St. Pier Maggiore Square) and the neighboring zones close to the "Arco di San Pierino" (St. Pierino Arch).

The choice to test the first experimental uses of ViSosMapping in this area is motivated by the wish to test the potentials of the platform in a portion of city where perfectly clear are the signs, the consequences and the contradictions of material consumerism models (specifically, food) and immaterial ones (specifically, the consumption due to mass tourism) which show all the marks of a by now critical sustainability [22].

The experience is also aimed to make people think to which extent specific models of individual consumption end up transforming the collective habitat: this can include for instance what has happened in the most recent years following the impact of the mass tourism on the Florentine historical center where the shops and the historical business frequented by the residents have been

gradually replaced by shops and services devoted to tourists and to which extent the increasing demand of food has modified the image of the city.

During the mapping process, by using tools more and more present in their daily life (videos, photos, etc.), children are driven into the analysis of the most evident transformations of the shops set in the considered streets and squares. The experience in this case is aimed to make children think on how apparently distant aspects as living the city and some activities of their daily life (like the food consumption) are social actions and are related in a far more evident way than it is thought.

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