



State of the art on research on technology enhanced spaces for intergenerational learning. Literature reviews and theoretical approach

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State of the art on research on technology enhanced spaces for intergenerational learning

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Summary

This document has two main objectives. First it aims to explore the current literature on intergenerational learning in public spaces. Second it seeks to define a relevant theoretical approach to embraces intergenerational learning in public spaces enhanced by technology. It contains three main parts. In the first part we will state the stage, that is define what we mean by places, who the participants are and how digital technologies can be used. In the second part, we describe our sources and resources to progress iteratively in defining our theoretical approach. The third part is dedicated to key dimensions and themes to go further in researching for intergenerational learning in public spaces.

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State of the art on research on technology enhanced spaces for intergenerational learning

Literature review and theoretical approach

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I	INTRODUCTION	3
II	LA PIAZZA : STATING THE STAGE.....	3
1	<i>What ? Places, Convivial Space, Transitional Zone, Living Stage</i>	3
2	<i>Who ? People, Learning and growing: It takes a village to raise a child5</i>	
3	<i>How ? Tools – Going Digital? - Projections into the future</i>	6
III	SOURCES AND RESSOURCES.....	7
1	<i>Practices and writings on intergenerational learning programs</i>	8
1.1	Context and place.....	12
1.2	Why intergenerational learning is highly relevant?.....	14
1.3	What makes Intergenerational learning programmes (IGP) successful?...15	
2	<i>Reflections from field studies and concept cards</i>	16
2.1	Intergenerational programmes in Liège	17
2.1.1	Time, Rhythm and Space	18
2.1.2	Person and Identity	20
2.1.3	Groups and belonging (appartenances) reciprocities	21
2.1.4	Mediations.....	21
2.1.5	Imaginary journeys	23
2.2	Process concept design	23
3	<i>Further theoretical explorations</i>	25
3.1	Time/place.....	26
3.2	Identities and pile worlds.....	27
3.3	Mediations.....	28
3.4	Imagination and creativity.....	28
IV	KEY DIMENSIONS AND THEMES	30
1	<i>Space-time.....</i>	30

2	<i>Traces and trails / routines and rituals</i>	30
3	<i>ME ++ (self-expansion, personal growth)</i>	30
4	<i>Togetherness (relating to other, us / them)</i>	31
5	<i>Dream space: Imagine, Create!</i>	31
6	<i>From experiential qualities to design guidelines (table 2)</i>	32
V	EXISTING RESOURCES	32
1	<i>Bibliography</i>	32
2	<i>Websites</i>	39

I INTRODUCTION

This document has two main objectives. First it aims to explore the current literature on intergenerational learning in public spaces. Second it seeks to define a relevant theoretical approach to embraces intergenerational learning in public spaces enhanced by technology. It contains three main parts. In the first part we will state the stage, that is define what we mean by places, who the participants are and how digital technologies can be used. In the second part, we describe our sources and resources to progress iteratively in defining our theoretical approach. The third part is dedicated to key dimensions and themes to go further in researching for intergenerational learning in public spaces.

II LA PIAZZA : STATING THE STAGE

Defining our research object “La Piazza, Technology enhanced public spaces for intergenerational learning” starts along three axes : **what** places ? **who** are the concerned participants? what is the social environment ? and **how** digital tools can be used to enrich social relations. Defining our theoretical approach to embraces intergenerational learning on the other hand emerges from three types of sources and resources that we will explore in a second time.

1 What ? Places, Convivial Space, Transitional Zone, Living Stage

Third-places, as defined by Oldenburg, are “great good places between home and work” where people from different ages and walks of life come together to

turn the habitual into the extraordinary [Oldenburg, 1989¹]. Examples of third places include cafes, theatres, public squares, museums, and concert halls. They also include dedicated locations for passing events or celebrations, such as carnivals, fairs, markets, or circus. Third places are important to intergenerational learning in that they bring together folks who wouldn't otherwise meet, to do things they wouldn't ordinarily do! *Transitional zones* in Winnicott's sense [2], these spaces *in-between* afford a mental elbow-room (*Spielraum* in German) for social actors to safely explore, recast, play out, and ultimately work through otherwise unspoken aspects of their lives, thus inventing new potentials, or virtualities, together. Third places are both convivial "piazzas" and living stages.

A "piazza" is fore and foremost a *convivial* space: a place where it feels good to be together. It is also a *transitional zone*, or *third-place* where people, like actors on a stage, play out and unveil aspects of their "personae" otherwise untapped. Lastly, a "piazza" is a living memory p(a)lace, structured by the community and reflective of the changing identities and dreams of its members.



Picture; 1a and 1b: Piazza as playground and living stage (source google images)

Our objective in reviewing the relevant literature is to help identify some of the spatial and relational qualities that make for a good piazza and to build a vocabulary that captures the evocative and holding powers and ambient qualities of place, beyond mere functionality.

¹ Oldenburg, R. (1989) *The great good place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community* (Paperback)

2 Who ? People, Learning and growing: It takes a village to raise a child



Picture 2 a and 2 b ;Growing in connection (source google images)

Looking into the spatial and relational qualities of existing—and imagined—piazas provides a useful lens to rethink learning in informal settings, in this case trans-generational learning. Three questions drive this part of the inquiry: 1. How to create a climate conducive to meaningful encounters between young and old. 2. Why encourage such encounters? What features of the environment, ambient qualities, and cultural activities are likely to foster collateral learning?

Here we aim to identify some of the relational qualities and socio-cultural dynamics that are conducive to collateral learning. Get a handle on the self-orienting techniques that people, young and old, invent for themselves to play, learn, grow, belong, and be loved.

3 How ? Tools – Going Digital? - Projections into the future



Picture 3 1 and 2 Event spaces of the future (source google images)

The team imagines scenarios for the “piazza” of the future, and proposes to augment these scenarios, using digital technologies. Three questions drive the inquiry: 1. How to mediate/enhance people’s sense and experience of place? 2. How to merge digital and physical in the design of sensorially-rich and stimulating places? 3. What technologies for what purpose?

Our objective is to help identify which types of technological tools may best suit which contexts and to build a vocabulary for the design and evaluation of digitally enhanced event/ambient spaces.

III SOURCES AND RESSOURCES

To define our theoretical framework we used an iterative approach based on practices and writings on intergenerational learning programs, *a priori* field studies and *a posteriori* process concept design. On one axis (figure 1), field studies allow to define the more important issues or dimensions describing the context. On a second axis, process concept design allows to explore these dimensions in different contexts, to build a vocabulary for visioning digitally enhanced ambient spaces and to project them into "*what if*" scenarios, *what if* these dimensions would be supported by information technologies. This back and forth movement between context and concepts occurs iteratively.

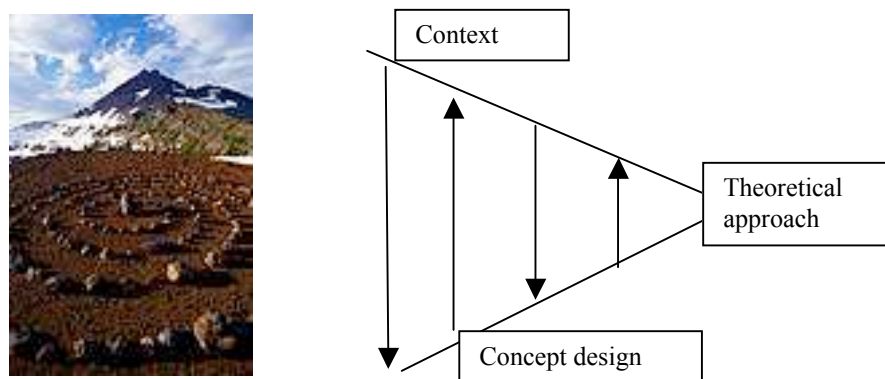


Figure 1. An iterative approach to define our intergenerational learning theoretical approach

In the following, we will explore sequentially

1. Current practices and writings on intergenerational learning programmes
2. Reflections from field studies and concept cards :what we learned from our sites, how concepts cards allowed us to further explore literature.
3. Further theoretical explorations that drive us to define dimensions and themes.

1 Practices and writings on intergenerational learning programs

We found interesting to start defining intergenerational learning by looking at Intergenerational programmes and their definitions. Based on these various inputs, we will later on build up a definition that will best suit our orientation within La Piazza JEIRP. There are several definitions of Intergenerational programmes. Some come from the International Consortium on Intergenerational Program (ICIP, UNESCO):

“Intergenerational programmes are vehicles for the purposeful and ongoing exchange of resources and learning among older and younger generations for individual and social benefits” (Hatton-Yeo & Ohsako, 2000²).

According to these authors various characteristics are essential to the success of IGP (InterGenerational Program): - to demonstrate mutual benefits for participants; - to establish new social roles and/or new perspectives for young and old participants; - to involve multiple generations and include at least two nonadjacent and non familial generations; - to promote increased awareness and understanding between the younger and the older generations and the growth of self esteem for both generations; - to address social issues and policies relevant to those generations involved; -to develop intergenerational relationships.

Within this definition there are four types of IGP:

- Older people serving children and youth (e.g. tutors, mentors, resource persons, coaches, friends, grandparent raising a grandchild)
- Children and youth serving older people (e.g. friendly visitors, companions and tutors, etc)
- Older people and youth collaborating in service to their community (e.g. environmental and community development projects)

² Hatton-Yeo, A., & Ohsako, T. (2000), *Intergenerational Programmes: public policy and research implications: an international perspective*, UNESCO Institute for Education, Hamburg & Beth Johnson Foundation, Stoke-on-Trent.

- **Older people and youth engaging together in informal learning activities (e.g. leisure, recreation, art festivals, exhibitions, sports).**

Note that in la Piazza project, we focus on the fourth type.

Another definition has been proposed by Oduaran³:

“Intergenerational programmes form a system, an approach and practice in which all generations, irrespective of age, race, location and socio-economic status bind themselves together in the process of generating, promoting and utilizing ideas, knowledge, skills, attitudes and values in an interactive way for the improvement of self and community”.

Within this definition, the benefits and contributions of IG practice are studied at three levels: - individual human development; - community development; and - development of the society.

What these definitions have in common is their focus on IG and on the assumption that human development and learning is a life long process.

According also to Loewen⁴:

“Intergenerational learning program should bring young and old together in similar numbers so that each may get to know the other, see the other in action and learn from one another”.

Finally according to Granville & Ellis (1999),⁵ Newman (1997)⁶

³ Oduaran, A., *Intergenerational approaches to sustainable community development in Botswana and Nigeria*, a paper presented to UNESCO symposium ‘Intergenerational strategies for sustainable community development in developing countries’, at the First ICIP conference *Connecting Generations – A Global Perspective*, Keele, 2002

⁴ Loewen, J. (1996). *Intergenerational learning – what if schools were places where adults and children learned together*. Report. EDRS.

⁵ Granville, G. & Ellis S. (1999). *Developing Theory into Practice : researching intergenerational exchange*. Education and Ageing, vol 14 N° 3, 231-248.

“Intergenerational activities are defined as bringing together the old and young generations in order to close the gap between them.”

They require to study IG practices referring to human life span developmental psychology (Eriksson), and focusing on several issues such as :

- *Citizenship* where for instance elderly offer their skills and experience and young offers sense of responsibility and support.
- *Social exclusion*: older and young are not contributors and considered as part of economic society, IG brings these two groups together to challenge this stereotype
- *Synergy*: when older and younger are bring together a new relationship is created, synergy, generations recognise their similarities and the way they are excluded from social trend.

In recent years, there has been a proliferation of isolated and local intergenerational practices. In the USA, shared intergenerational website programs are developed to provide new opportunities for learning that engage both young and older while creating stronger intergenerational relationships (Arfin, 2002 ; Steinig and Peterson, 2002⁷). However, little research has been completed on these experiences. What has been done has been deemed vague and fragmented. Therefore it is increasingly important for intergenerational programs to demonstrate their effectiveness to policy makers in addressing individual, social, and community problems.

Research about intergenerational practices can be classified in two main streams. On the one hand, focus is on the significance of intergenerational engagement in terms of impact on human development outcomes. In this regard, some good

⁶ Newman, S. (1997). *Intergenerational Programs: Past, Present, and Future*.
Washington : Taylor & Francis

⁷ Arfin, P. (2002). An observational research project, research methodology and issues.
First ICIP International Intergenerational Conference, Connecting Generations, a global perspective. April 2-4 Keele University, UK.

work has been done in charting out how various intergenerational endeavours contribute to the cognitive development and social and emotional growth of young and older adult participants of such initiatives. Intergenerational learning through play has been studied by Davis, Larkin and Graves (2002)⁸. The assumption here is that play is universal, and thus a good way for all to learn about themselves and the world. Shared play experiences are important in building mutually beneficial relationships among younger and older generations, and they contribute to cognitive growth, improved social skills, physical development and emotional wellbeing. The study shows how older adults can be involved in children's play; appropriate toys and materials, and play games in ways that bring generations together successfully.

On the other hand a broader theoretical framework for understanding the significance of planned intergenerational exchange starts to emerge at the community level. Intergenerational program specialists in several countries are now considering outcome variables, which include impact upon community institutions and settings. Kaplan (2002)⁹ for instance explored the intersection between domains of intergenerational programming and community development, and investigated program strategies for bringing young people and senior adults together to collaboratively study neighbourhood development issues and explore and pursue civic involvement possibilities. Efforts to facilitate meaningful intergenerational exchange within community participation endeavours are highlighted, as well as broadening the base of professional participation in the intergenerational studies field to community planners, architects, geographers, and anthropologists as well as gerontologists, child development specialists, and educators.

Steinig, S. & Peterson, J. (2002). Intergenerational shared sites and services for children, youth and families. *First ICIP International Intergenerational Conference, Connecting Generations, a global perspective*. April 2-4 Keele University, UK.

⁸ Davis, L., Larkin, E. & Graves, S.B. (2002). Intergenerational Learning through Play. *International Journal of Early Childhood*, 34(2). p 42-49

⁹ Kaplan, M. (2002). Impact of intergenerational programmes on community initiatives and settings. *First ICIP International Intergenerational Conference, Connecting Generations, a global perspective*. April 2-4 Keele University, UK.

Rydmark and McCrea (2002)¹⁰ explore the uses of technology in intergenerational learning from two perspectives: A Swedish program in which seniors interact with school-age children using computers; and a USA program that uses distance education to teach professionals how to develop intergenerational programs. The project "Seniors in Schools" aims at creating new meeting-points for schoolchildren and senior citizens. The goal is to get the old life-experienced generation to interact with the younger IT-generation. The seniors engaged in the project visited local schools and participated in school activities. The exchange of knowledge between project participants was thought to be a vital force for understanding of computers, life-long learning and history.

Langford (2002)¹¹ explores the dynamics of intergenerational projects using different art forms (*Photography - Creative writing - Drama Design*), and stresses the role of artists who work with young and older people. Her study is based on practical experience of intergenerational arts projects in the East End and other parts of London. This includes work with frail nursing home residents, elders with dementia and Bengali elders.

1.1 Context and place

It has become commonplace to distinguish between apprenticeship (learning within community) vs. school teaching, and informal vs. formal learning, and these distinctions call for further attention to intergenerational learning. Intergenerational learning occurs in three kinds of places:

- In families,
- In formal settings (like school),

¹⁰ Rydmark, P. & McCrea, J. (2002). Intergenerational learning using technology. *First ICIP International Intergenerational Conference, Connecting Generations, a global perspective*. April 2-4 Keele University, UK.

¹¹ Langford, S. (2002). Intergenerational arts projects. *First ICIP International Intergenerational Conference, Connecting Generations, a global perspective*. April 2-4 Keele University, UK.

- In communities creating informal settings. (Gadsen & Hall, 1996).¹²

In the La Piazza Project, we focus on the third places—between school and home (see hereafter)—while not neglecting the two others when relevant.

The *sense of place* is nowadays the subject of many studies, which is not surprising in the context of mondialization and people mobility.

There is not a single "sense of place"¹³; instead, we bring to the places we live a whole set of cultural preconceptions that shape the way we respond to the place, and reshape the place to fit those preconceptions. Various definitions are given which illustrate the diversity of understanding the sense of place. Most of them associate with the concept *sense of place*, notions such as *place attachment*, *topophilia*, *insidedness*, and *community sentiment*.

- "*Place attachment* is the symbolic relationship formed by people giving culturally shared emotional/affective meanings to a particular space or piece of land that provides the basis for the individual, s and group, s understanding of and relation to the environment.... Thus, place attachment is more than an emotional and cognitive experience, and includes cultural beliefs and practices that link people to place as explained by anthropologist Setha Low, "Symbolic Ties that Bind: Place Attachments in the Plaza")¹⁴ .

- "*Sense of Place* is the particular experience of a person in a particular setting (feeling stimulated, excited, joyous, expansive, and so forth)" according to the Environmental Psychologist, Fritz Steele¹⁵,
- "*Spirit of Place* : the combination of characteristics that gives some locations a special feel, or personality (such as a spirit of mystery or of identity with a person or group)."
- "*Setting*: a person's immediate surroundings, including both physical and social elements."

¹² Gadsen, V. L. & Hall, M. (1996) *Intergenerational Learning : a review of literature*. Philadelphia, PA : National Center on Fathers and Families.

¹³ *Cross (2001 12th Headwaters Conference, Western State College, November 2-4, 2001.*

¹⁴ Low, S. 1992. Symbolic Ties that Bind: Place attachment in the plaza. In: Altman, I. and Low, S., (eds). *Place Attachment*. New York, NY: Plenum Press. 314 p.

¹⁵ Steele, F. 1981. *Sense of Place*. Boston, MA: CBI Publishing Co., Inc.

- "*Topophilia* is the affective bond between people and place or setting." Such ties vary in intensity, subtlety, and mode of expression. Responses to the environment may be aesthetic, tactile, or emotional." Yi-Fu Tuan¹⁶,
- "A *sense of place* is something that we ourselves create in the course of time. It is the result of habit or custom.... A sense of place is reinforced by what might be called a sense of recurring events." Landscape Architecture/History: John Brinckerhoff Jackson, *A Sense of Place, a Sense of Time*¹⁷
- "By *sense of place* , we mean people's subjective perceptions of their environments and their more or less conscious feelings about those environments. Sense of place is inevitably dual in nature, involving both an interpretive perspective *on* the environment and an emotional reaction *to* the environment.... Sense of place involves a personal *orientation* toward place, in which one's understanding of place and one's feelings about place become fused in the context of environmental meaning." Sociology: David Hummon, "Community Attachment: Local Sentiment and Sense of Place"¹⁸ ..

1.2 Why intergenerational learning is highly relevant?

Much of the rationale in education literature is based on a societal need and historical evolution of generations' separation: The case is made that generations are much farther apart today in spatial, emotional and cultural terms than before. Groups begin to be institutionally segregated (e.g. pediatric definition, social security added the notion that demand of generations was different).

¹⁶ Tuan, Yi-Fu (2001). Space and place, the perspective of experience. University of Minnesota Press.

¹⁷ Jackson, J.B. (1994). *A Sense of Place, a Sense of Time*.. Yale University Press

¹⁸ Hummon, D. (1992). Community Attachment: Local Sentiment and Sense of Place. Plenum Press

Theories of aging stress the need for elderly people to be more connected with society. Alias, being engaged in meaningful activities, together with others, is a condition for their wellbeing. On the other hand, the increased development of a “youth culture” with a life of its own is seen as evidence of the widening gap between young and old (Loewen, 1996). In short, retirement villages entrench the elderly on one end of the generational spectrum, while MTV and the advertisement industry generate a “youth culture” and entrench the younger generations at the opposite end of this spectrum.

1.3 What makes Intergenerational learning programmes (IGP) successful?

Loewen (1996) gathers the most effective elements from approximately twenty programmes of IGP into five categories serving as criteria for intergenerational programmes:

- *Curriculum based*: by basing IG within the school curriculum two things happen – the activity is given value, and devoted significant time to; - the activity is constructed by the teacher from an “optimal learning perspective”.
- *Relationship based*: a structure is required. Also programmes need time for personal connections to be developed between students and adults
- *Reciprocal relations*: to achieve optimal learning, both adults and adolescents can offer expertise, and the learning process should be as dynamic as possible. In the best programmes the lines between those served and those serving are blurred to the point of irrelevance.
- *Community based*: involving students in a community of practice, based on real community issues.
- *Authentic work*: final product relevant and worthy of great mental and physical energy, not only focused on the pleasure of meeting.

2 Reflections from field studies and concept cards

Based on case studies in four sites (Cosmo Caixa / MAMAC / Space Signpost, Bristol Harbourside Cultural Quarter, Computer Club House, Viborg¹⁹) a first series of themes emerged, mostly from interviews, which helped researchers narrow down some of the characteristics that make for great good third places, including safe havens; dream spaces; room for symbolic exchanges and play; room for personal expression, mutual respect and empathy. All these dimensions are drivers in informal learning and community building. They play a key-role in inter-generational learning.

Making use of interaction design, or co-creation methods (as leaded by University of Siena), researchers and site participants joined forces to imagine new forms of integrated third-places (the piazzas, cafes, market-places of tomorrow). Based on first-hand experience, and drawing from diverse expertise, the team drafted a handful of *innovative concepts cards*. Participants were encouraged to merge digital, physical, and virtual to generate engaging and “futuristic” event-spaces.

Comparing and contrasting the outcomes of the two approaches (fragments of interviews and concept cards) has been instrumental in refining and articulating emerging dimensions.

Several issues that appear relevant for understanding technology enhanced public spaces for intergenerational learning. Based on interviews with art and IG

¹⁹ – see Chabert, A. & Barajas, M. (2006). Technology-enhanced public spaces for intergenerational learning : Case studies, Kaleidoscope D 38-3-1. 75 pages.
Barajas, M., Magli, R., Owen, M., Safin S., Toccafondi, G. and Molari, G., “La Piazza” –Convivial Spaces for Inter-generational Learning: Which role can learning technologies play?. In "Current developments in computer-assisted education (2006)" (Eds. A. Mendez-Vilas, A. Solano Martin, J. Mesa-Gonzalez, J.A. Mesa Gonzalez). Publisher: FORMATEX, Badajoz, Spain.

actors²⁰ in Liège, we have identified five categories of issues essential to understand IG practices. These actors were referring mainly to two important intergenerational programmes that recently took place in Belgium. At first we will describe these activities and then we will discuss key issues²¹. in the light of early interviews with our IG actors in the site of Liège.

2.1 Intergenerational programmes in Liège

« **Digestions: memory and transmission** » an Exhibition in MAMAC (September - October 2005). The goal was to create a link between youngsters and elders across several events focused on joint exploration of the archives of the « Cirque Divers ». Dimensions of the project include.

- The creation of a convivial space for exploring the archives and a meeting point between youth and elders: “apero-archives”
- At the same time, establishing collaborations with three schools that have included work on these archives within the class curriculum.
- Turning the exploration of the archives into an authentic “labor of love”, or a work of inspiration, geared toward the creation of art works, to be exhibited at the museum.
- Invitation of young artists « heirs » chosen by the older artists who had participated to the “Cirque Divers” activities.
- Conferences specifically dedicated to the intergenerational issue: feminism today, social movements post-68...

²⁰ **Michel Antaki**, organiser of the exhibition «**Digestions: Memory and Transmission**», founder director of the “Cirque Divers”, an important Belgian cultural place in 70-80 years. He’s currently the director of the non-profit association “D’une certaine gaité” organisation of permanent education in cultural domain.

Werner Moron, artist, specialized in intergenerational cultural activities, in cultural workshop for youth, especially in the framework of the “youth houses federation”

²¹ In the next section we will refine our classification system taking into consideration other sources and resources (readings, design process, other sites observation) to identify dimensions for IG learning.

Intergenerational artistic workshops. Starting from the will to connect generations around art and the artistic creation, and to address the issue of the public in the arts, the interviewee led several activities :

- Implication of youths from a Youth House for the exhibition « biennium of photography » in order to let them show to adults who they are and the type of places where they do evolve together.
- Artistic animations at schools and other organizations.
- Animation of intergenerational activities for the promotion of a cultural centre in Belgium. The objective of the workshops is to attract neighbours to contemporary art exhibitions in a Cultural Centre thanks to a work that engages younger and older audiences. Target groups are youth (10 years old) and elders (70+). This one-year lasting work consists in learning to act using symbolic expression such as theatre or paintings and engaging in the life of the Cultural Centre and the community (city) by expressing themselves.

What these projects have in common is that they are not confined into one place (school or museum, or neighbourhood), that they evolve over time, and that they don't feel "fake"—This element of authenticity or genuine and mindful engagement in an endeavour that is meaningful and inspiration is a key to the success of any intergenerational program. Below, a first look at some of the key issues emerging from the interviews, and related questions that need further exploration.

2.1.1 Time, Rhythm and Space

As outlined by one interviewee (artist, practitioner in intergenerational work), a key to success is to take the time to reflect on the issue of time(s). *“Individual times are different between generations. One needs to design collective times, and create rhythms. But one also should allow for intra- and intergenerational moments. If people are put together too quickly, one loses in the richness of the encounter (...) Intergenerational activities can't be time-efficient or product-driven: They are inversely proportional to the demands of the current era! These*

projects must have disproportionate ambitions in time, history, and at the same time a very great humility in terms of result“.

2.1.1.1 Time, Rhythm — “Take your time”

Several issues appear relevant:

- Time of meeting (may be experienced differently by younger/elderly)
- Levels of tolerance for “filled” time versus empty time (may vary)
- Rhythms and routines, or the pace of things (may vary)
- Times of preparation and of result (meddling about vs. show and tell)
- “Structure”: prepared, organized

“If one wants to do an intergenerational work, one needs to reflect on the issue of time. There are individual times that are different between generations. One needs to design collective time, to create rhythms. One needs intra and intergenerational moments. If people are put together too quickly, one can lose something in the richness of the encounter. Intergenerational activities are not simple in terms of speed of result. It is inversely proportional to the demands of the current era. «These projects must have a disproportionate ambition in time, history, and at the same time a very great humility in terms of result. It is necessary to find money to give oneself time, to find funding without having to justify this time »

2.1.1.2 Space, Place — “Find your place”

Here the issues concern:

- Dedicated space (agora)
- Public and private areas: Niches and nooks?
- The art of distancing: How close? how far?
- Thresholds and borders: Fixed? Adjustable? Tight? Permeable?

DESIGN OF A SPACE

“ Aperitif-archives. Convivial space for encounters, discoveries, questionings. It’s an informal setting, broad-minded in a dedicated space (agora) focusing on conviviality and freedom of exploration.”

2.1.2 Person and Identity

2.1.2.1 Being in the world —*keep in touch*

Construction of **Identity** involves the whole person. Being in touch with what one feels, perceives, understands, likes, is a key to a person’s identity formation.

2.1.2.2 Person in the world—*find your voice*

As a member of a socio-cultural community, a person’s identity has also much to do with becoming an active and respected member of a group —whose opinion matters to the individual. Role of elderly in society - place of younger in society

Quotes from interviews ²²

- NETWORKS

To initiate intergenerational activities, it is necessary to use pre-existing networks. To attract youth, they have to be guided by an existing structure. « In every transmission, the path has to be indicated » The encounters can create new networks, facilitating intergenerational meetings.

2.1.2.3 Definition of self / identity

“*Me seen through others*”, we are the way the others perceive us. These mirroring effects contribute to define the role of people in definition of self/identity. Intergenerational work, and transmission, is a mean for elders to have a role in society, to define themselves a new identity. This is also done

²² Note: reflection below come from experiments with young people in an art school.

through a mirror: how elders understand they are viewed by younger, what they can read in younger eyes and inversely.

2.1.3 Groups and belonging (appartenances) reciprocities

This relate to expectations and ideas that each generation has regarding the other - who can teach what to whom? What are the social identifier, what are their world views ? Opportunities for knowing from each other - creation of a dialogue

Reciprocity of learning: mutual learning previously structured or incidental

Michel Antaki talks of “transmission” as a unilateral dialogue. The youth is there to learn, and the elder to teach. The roles get loosened, and sometimes revered, through joint artistic creations. For him, youth are mainly a resource for the teaching of techniques. « By teaching me the technique, (the youngster) sees how I learn it, and at that moment there is an exchange. That makes me ask questions about the technique, about his life, and I reflect about myself (...) I talk about transmission because that’s how intergenerational exchanges mostly work: a one-way dialogue”.

Transmission in the arts offers new ways to work together, to learn ropes that are not taught in school. Youth are an amazing resource when it comes to pragmatic (technological) problems « They have a natural ease to make things » and a different rapport to technologies (graphics, communication). « In fact they feed me [...] They have access to new networks, they apprehend the current world differently, all of which enriches me”.

2.1.4 Mediations

Mediating tools are several, for instance oral versus written transmission. The practitioners we met talk about *cultural bath*.

- “Cultural bath”: different approaches to expressing one’s thoughts and feelings, using available cultural tools. different modes of communicating (colours, smells, etc), and styles of learning and speaking
- “literacy” : different levels of fluency in the usages of cultural media. Different genres of writing (computer-literacy versus “alphabetisation”)

“CULTURAL BATH”

In the artistic activities, the idea is to create "cultural baths". It means places of meeting allowing the expression not by the discourse but by artistic means. « If one gives us the means of being in a cultural bath where people are at the same time experimenters and experienced, where the things are thought by other thing than [the speech], but by the perfume, the colour, ... People would understand each other without knowing what they have said »

There are no objectives in terms of "results" (that they paint well, that they make beautiful music...) they will be natural consequences of a work well done on the level of a cultural bath. Thus one of the objectives is the cultural baths, where « adults who have the information, meet youth who did not even know they need those »

ART AND INTERGENERATIONAL LEARNING

The transmission to youth has never been a central issue in the plastic arts (vs theatre or music). There are elder and youth, but the issue of filiation and continuity has never been asked. It starts to emerge now.

Art is pedagogically interesting for working with youth. « The boss is not us [But a product, a deadline...]. It is not , it is not friendly or evil ». The requirements are precise, clean, unambiguous. One can be quite rude because the requirements are hard. « When in music one asks for a la, it's a la. In other types of activities one can not have this kind of requirements. That allows a relationship that is not politically correct »

The introduction of the notion of audience is another kind of requirement that allows deep reflections.

2.1.5 Imaginary journeys

- “TRAJET RÉEL - TRAJET RÊVÉ”: REAL JOURNEY - DREAMED JOURNEY

The idea is to do a work with the young people on “trajet réel - trajet rêvé” « once that one made the observation of a trivial reality (trajet réel), one can convene his imaginary (trajet rêvé) » « They have to know from where they start to express themselves, and be conscious of that ». Often the youth “borrow their identity” «They regurgitate, in the framework of the expression, MTV pre-formatted discourses ». It is a responsibility to understand who the young is really.

The work consists in identifying what remains when all the pre-formatted influences have been taken away. The remaining part is our self, our identity. It is a strong base to situate ourselves in our places, in our live, in relation to our friends, our families, our fears... Starting from that point it is possible to really dream i.e. defining what we want, what we want to be and where we want to go.

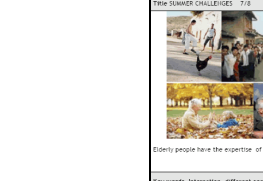
- ANCHORING - GROUNDING: CENTERING, SELF-ORIENTING

« Before working the expression, it was a question of seeing who they were, in what they were anchored. See why they did not express their own day-to-day, but were constantly out of them, in the reference »

2.2 Process concept design

The co-design session leaded by University of Siena consisted in a brainstorming session based on participants’ experience and was articulated around idea-generation techniques: *attribute listing*, to create vignettes, *collection of elements*, to start concept production; and *exquisite corpse*, for the production of concepts. The cards below are the outcome of this co-design activity aimed at the production of personal stories. The emerging cards offer a visual and textual encapsulation of 8 concepts to be used as inspirational materials by researchers

and actors in the sites^{23 24}

Time: WHAT DO YOU EAT NOW? 1/8  I DID NOT EXPECTED THIS FOOD WAS PRECIOUS... I ATE THAT THREE TIMES IN A LIFE TIME NOW OLD IS FOOD! NOW IS DIFFERENT! THIRST! HUNGER! A LONG TIME AGO... Key words: different ages, magical, sharing, memory, virtual, real, history, storytelling Description: people buy street food, through a bar code reader they discover how different was the experience about that food 50, 55, 60 years ago. There is sense of cooking and storytelling happening as artistic performances. People Actors-roles: shop sellers, pedestrians, storyteller, cook, reflection Physical context: outdoor park, square, temporary installation, street	Time: TRACE & TRAILS 3/8  EARTH!! EARTH!! SOMEBODY HAS BEEN THERE TAKE MY HAND AND COME WITH ME LOOK OVER THERE, OUR FOOTPRINTS!! I AM MY FRIENDS LET'S CROSS THE FIELD Key words: Pathways, journey, roaming, navigation, persistence, temporality, emergent Description: The space takes memory of the passage of people Local / collect personal memories Team for time Pathway - boundary / optimize Journey - navigation Difference among history / personal history / experience Collective events Clashes / Topics Actors-roles Physical context: Public space Shared spaces Protective spaces Space mediates activity	
Time: ON THE ROAD AGAIN! 4/8  WE ENTERED INTO A LABYRINTH WE DISCOVERED A MESSAGE WE LEFT A STORY WE UNCOVERED VALUABLE OBJECTS FROM DIFFERENT AGES REINTERPRETED LIBERATED WHILE DRIVING I TOUCHED THE HAND I TOOK A SOUND I LEFT A PICTURE Key words: personal experience, large, mirror, different ages, magical, sharing, memory, virtual, real Description: people enter into a labyrinth with a collection of objects, when they collect an object they leave another one. In the labyrinth there are tactile experiences, it is possible to draw, to hear sounds, to leave a message. When people exit the labyrinth they tell their experience to other people entering. Actors-roles: couple of 2 people (old/young) part of the same group Physical context: indoor/outdoor museum, park, square, temporary installation	Time: FLAG OF OUR NATIONS (F.O.N.) 5/8  WE'VE BEEN SHOWNED ALL RIGHT WE'VE PEOPLE WE ALL WENT ALONG THE CITY, WHAT THIS FLAG MEANT? Key words: Flag, communities, design, conversation, explore, identity, sharing, village, non-cultural Description: Many communities, each with shared history, come cultural emblem, the flag and the team represent the team. Individual communities visit all stands, learn history and create their own flag for their own community. Each of the exhibition/stands, showing new flag of all communities. Could also be applied to: National Flag Dress-Song-Dance Actors-roles: Everybody-Communities (explaining flags) create new ones Physical context: City, village, school, ...	Time: SHADOW-GAME: PROJECTION, REFLECTION, CO-CREATION 6/8  There is a shadow hanging over me Shadow is a trace or a mark of you. It is a dark figure projected by a body interesting two of light, often regarded as an apparition, a mysterious attendant or companion. A person secretly following another, a shadow that has the shape of a shadow, a wall or a landscape, a mirror or a reflection in a mirror. Key words: How verbal, gestural reinforce ideas and concept, participation Description: the shadows of the people crossing the space are captured and stored in a shared visual archive (collective wall). They can then be activated and projected on the walls in order to merge the physical and the virtual space in a common shared environment Actors-roles: Dance with shadows of past visitors... Physical context: Public space; shared space; reactive space; space mediates activity
Time: SUMMER CHALLENGES 7/8  Elderly people here the experience of our whole historical heritage Key words: Interaction, different ages, culture and history Description: in a small community, in holidays, some activities for children are organized with the aim of better learning their history and culture. So they get a problem to be solved and they need the help of the elders of the village-community (the solution is not going to be found in the internet), but they have to present the answer through new technologies (notebook, phone, iPad, ...) Actors-roles: young and old people in a small community Physical context: The community	Time: VIRTUAL SUMMIT 8/8  YOU'VE GOT A COMMON TARGET LET'S GO UP THE HILL IS HARD BUT IT'S FUN!! HUNT FOR ME, PLEASE... IN TOO SLOW... I'VE FOUND THE TREASURE!! Key words: Problem solving, involve the others, rules, treasure hunt, the clues are shared among generations Description: There is a common objective target (the top of the hill) and the people have to work together to solve the problem (find the treasure) like in a treasure hunt game Problem solving Team work Destruction Actors-roles: Intergenerational team work Physical context: Journey (virtual) Summit / destination Symbolic places	

²³ see Ackermann, E.□Chabert, A, Decortis, F, Magli, R., Napoletano, L., Owen, M. (2006) ." 'La Piazza': Convivial spaces for intergenerational learning: What places for the digital age? ". In *Current developments in computer-assisted education* (2006)" (Eds. A. Mendez-Vilas, A. Solano Martin, J. Mesa-Gonzalez, J.A. Mesa Gonzalez).□Publisher: FORMATEX, Badajoz, Spain.□Vol. 3. pp. 1359-1363.

²⁴ Cards in a readable size can be found at http://www.futurelearning.org/la_piazza/designcard.html

Concept-cards — clothes fight [1]; what do you eat now? [2]; traces and trails [3]; on the road again [4]; flag our nation [5]; shadow games [6]; summer challenges [7]; and virtual summit [8].

1. Clothes fight describes a role-playing game where people can “put themselves in other people’s shoes”. They dress up to stretch their identities;
2. What do you eat now builds on the power of food to draw people! Gastronomic habits activate a narrative flow when a food is encountered in a public space like a market;
3. Traces and trails lets players drop memories in a public space and share them with passers-by, marking a territory with their traces;
4. On the road again describes a labyrinth where players find tokens left by previous explorers (sounds, pictures) and drop their own, to be found by others;
5. Flag our nations lets players explore the social meanings of cultural symbols, such as flags, and engage in building their own special flag or totem to represent their communities;
6. Shadow games merge physical and virtual to capture people’s shadows as they cross or mingle in a shared area;
7. Summer challenges offer engaging ways for players to solve a problem of interest to all, and where the contribution of each is fundamental to reach a shared goal;
8. Virtual summit is similar to 7 in the form of a treasure hunt. Players are set to reach a goal (mountain top). They join forces to succeed in their adventure.

These concepts have been inspiring material for the definition of key dimensions of IG learning.

3 Further theoretical explorations

Concepts cards drive us to further explore the literature and to dimensions that appear relevant.

3.1 *Time/place*

Concepts cards exploration among partners open further opportunities to discuss dimensions such as :

- Traces and trails : keep a trace / trail
- Gesture inscription, embodiment
- Untie the trace
- Chronotope

Yi-Fu Tuan (2001)²⁵ considers the ways in which people feel and think about space, how they form attachments to home, neighbourhood, and nation, and how feelings about space and place are affected by the sense of time. He suggests that place is security and space is freedom: we are attached to the one and long for the other.

As shown by Manzo (2005)²⁶, attitudes and meaning linked to places depend on the experiences lived in these places. Places are not significant by themselves but through *experiences-in-places*. Several factors make places meaningful:

- ❖ Places can help to build identity, as freedom spaces, as self-being spaces, allowing introspection and also as spaces having marked the course of live (places associated with milestones moments). These places grow in signification throughout the social relation that take place in it. Therefore identity creation is a process that relates self and places.
- ❖ Places can operates as bridges to the past through remembrances of recurring past events and particularly important events. Throughout the places people can make connexions between a collection of past and present feelings and experiences.
- ❖ Places can be spaces of security or community membership.

People develop various meanings (negative, positive or ambivalent) in relation to several places (from a room to a country). The combination reflects our way to be in the world. Relations to places are dynamic and represent evolving

²⁵ Tuan, Yi-Fu (2001). *Space and place, the perspective of experience*. University of Minesota Press.

²⁶ Manzo, L.C. (2005). For better or worse: Exploring multiple dimensions of place meaning. *Journal of Environmental Psychology*. 25(1). pp. 67-86

identities and personal development. People choose places that are congruent to their way of living.

Place relation is bi-directional : it is throughout their usage that they acquire meaning.

A space gains meaning when it triggers recordings of its use at several times. Moments acquire evocating potentialities when we can mentally link them to places. When urban places keep traces of past uses they gain in evocating power due to the fact that it contains, it embraces all these different times. When a place is able to signal how it was used over time, then it becomes more interesting. And similarly when a place offers immediate capacity to appreciate past activities it increases in density. Therefore from an experience point of view, time and space cannot be distinguished and from a design point of view it is important that these dimensions enters into resonance in order to enrich the experience.

3.2 Identities and pile worlds

Younger and elder have different world views, different experiences, and perspectives and sharing views is not always straightforward.

They have also different access, and different keys to access this world – Who is allowed or able to go where?

As Boltansky and Thevenot²⁷ show, we are all actors in society living in a world which comprises various levels, a kind of “world piles”, each world having its own values that circulate simultaneously. Indeed in a given context for all type of action, the agreement or disagreement between actors will depend if the actors succeed in finding a compromise which corresponds with the values underlined ideas of justice and honesty. Six worlds are identified such as the inspiration world, the domestic world, the opinion world, the business world and the industrial world. For instance lets take the inspiration world which is characterised by the will to discover, to imagine, to dream. Values are

²⁷Boltansky and Thevenot (1991). *De la justification: les économies de la grandeur*. Paris, Gallimard.

singularity, difference, innovation, imagination and attitudes are spontaneous, passionate, risk taking, open-mindedness, independence and intuition. The industrial world is concerned by integrating, mastering, stabilizing, implementing. Values features are related to progress, efficiency, performance, productivity, reliability.

3.3 *Mediations*

The socio-constructivism gives interesting insight here through **Social mediations**. Vygotsky²⁸ describes what he calls the *law of semiotic mediation*, that is we learn through the experiences of others. For example we may learn something and create visual images about Sahara without having been there but only by listening others telling their experience and memories. Social memories and social practice take here all its substance because it allows the construction of imagination.

But there are also other mediating tools which are maybe more unknown. Using territories as a media to communicate experience, interests, emotions, etc.

See also Vygotsky. A construction of fantasy may constitute something effectively new and which doesn't correspond to any object / concept yet really existing. But once this product of imagination is crystallised into an image, once it is externalised, it becomes a thing among other things, it starts to exist in the world and to act on other things.

3.4 *Imagination and creativity*

Imaginary “journeys” : displacement & reality shifts – imagination / simulacrum simulations recall the definition Vygotsky gives to imagination. Imagination is no antithetic to reality but a mere exploration of it and imagination exploits traces of events in new forms. The creative activity of imagination depends on the richness and variety of previous experience made by an individual because fantasy constructions are composed of the material supplied by experience.

²⁸ Vygotsky, L. (1986). *Thought and language*. Cambridge, MA : MIT Press

But this is has to do with journeys toward others and coming back to self. Travel in hyper reality (Eco²⁹). Displacement and dreams to see others, see what is there and also what could be there. Social practices and social memories play also a role here given that through intergenerational interactions and dialogues one may live in imagination past and present events.

²⁹ Eco., U. (1990). *Travels in hyper reality*. San Diego : Harcourt Brace Jovanovich..

IV KEY DIMENSIONS AND THEMES

Recurring themes from literature review, interviews and concept cards have been grouped into five dimensions to be taken into account when designing or facilitating events and spaces for intergenerational learning.

1 Space-time

Take your time and find your place. In their everyday lives, people don't usually separate time and space the way scientists do. The word "chronotope" (Greek for time/space) captures the notion that, in human experience, place is tied to events, i.e., evocative of what happened in it over time. Conversely, timely events are associated with, and evocative of, place. Intergenerational learning calls for dedicated space/times that enable shifts between private and public, comfort and challenge, "connivence" and inclusiveness (like-minded and extraneous). Time and place are experienced differently at different ages, and so are levels of tolerance for "filled" versus, "empty" time/space (noisy/silent, crowded/void, fast/slow).

2 Traces and trails / routines and rituals

Keep track and come back. In Casey's words, "*Who we are is where we are and when we are*" [4]. Finding one's way around (navigating) and keeping a bearing (having a direction or destination) are needed for people to exist, physically and mentally, in time and space. Traces and trails are *self-orienting device* to help people in transit—or minds in motion—be grounded and able of return. So are routines and rituals. They also convey an identity to place itself (genius loci), and stimulate a sense of belonging by the people who contributed to the construction of its identity.

3 ME ++ (self-expansion, personal growth)

Tell your tale and find your voice. Identity formation is about staying in touch with what one feels, perceives, understands and likes. It also involves an ability to speak one's mind, and be heard. To Bruner, stories happen to those who know how to tell them [5]. Early on, children learn to tell their tales to those willing listen, and they soon become silent if their gift is not heard. People, young and old, speak in a hundred languages to express themselves (words, gestures, humour, music) [6]

4 Togetherness (relating to other, us / them)

Belong and be loved – Mingle and share. As a member of a socio-cultural community, a person's identity has much to do with becoming an active and respected member of a group. It also has to do with being able to negotiate differences. Intergenerational encounters are a means for old-timers and newcomers to reshape their roles in society, define a new identity for themselves, and regain a voice as a group.

5 Dream space: Imagine, Create!

Dream it up and make it happen! The future belongs to those who invent it! Making dreams come true is a key to both personal and societal growth. Envisioning possibilities, or gauging *what is* in terms of *what could be*, opens new horizons and sheds different light into one's reality. Imagination naturally occurs in make-believe activities, such as storytelling, or play. Creativity reigns in the mind of the artist.

6 From experiential qualities to design guidelines (table 2)

Dimensions	As experienced	Example	Lessons for design
Space-time	Chronotope.	Sun-dials	Time-aware spaces, spatially grounded moments
self (expanded)	ME++ There's more to me than my individual self, here and now	Me as I was (past) Me as I will be (future) Me as I 'd like to be Me when I go there. Me when I am here	Design stages / events to boost personal expression, self-expansion, and identity formation. Ex: story telling; performance
US (relations)	Connectedness Empathy Dance/dialogue	Me seen through other Other seen through me Many kinds of others	Design stages / events for Sharing, trading, dancing Ex. Become other/carnival
Dream-space	Envision new horizon. Open possibilities. Invent future	How I wish things were How things could be Fictionalize. Dramatize Think out of the box	Design stages / events for Co-creation, co-invention, Building fictions together Theatre. Poetry. Story-telling

Table 2 summary of dimensions, examples, and lessons for design

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