"Knowledge City, seen as a Collage of Human Knowledge Moments"

Ron Dvir
Illustrations by Arye Dvir

Abstract

The recent concept of a “Knowledge City” has attracted growing levels of attention from academics, practitioners and politicians as a potential solution to modern cities’ sustainability challenges. The idea of a “Knowledge City” is only just emerging, as well as being complex and hard to define. Several perspectives have already been used for its definition, e.g.: economic, value-based, sociological, quantitative, structural and historical perspectives.

These multiple perspectives both reflect the complexity of the concept and complement each other. Together, they provide the foundation of a deeper understanding and clearer path to the transformation of an urban settlement into a Knowledge City.

In this paper we suggest to analyze the idea of Knowledge City from a human perspective – the perspective of the individual who lives and works in the city. We ask the following questions:

- What does an individual experience in a Knowledge City?
- What are the personal benefits of belonging to such a city?
- How is the concept related to the citizen's daily life – to what he or she does in the morning or late night?

In order to connect the Knowledge City concept to the personal level, we reframe the Knowledge City as:

*a milieu which triggers and enables an intensive, ongoing, rich, diverse and complex flow of Knowledge Moments.*

The framework puts each Knowledge Moment at the intersection of People, Place, Process and Purpose.

Using a story-telling technique, the transformation of the hypothetical city Zarpom into a Knowledge City is described. Through a collage of thirty two Knowledge Moments happening in eight knowledge places (library, museum, town hall, school, piazza, stock exchange, café and family home) the reader tracks several citizens throughout a typical day.

Many observations about the nature of knowledge cities emerge from this collage of human Knowledge Moments. For example: the role of architecture in creating knowledge places, the multi-scales of Knowledge Moments, and the balance between structured and spontaneous Knowledge Moments.

The paper is concluded with suggestions for future ethnographic studies which explore urban Knowledge Moments and their role in city transformation programs.

1. Introduction

1.1. What is a Knowledge City?

The emerging notion of “Knowledge City” attracts considerable interest from city policy makers and researchers in the domains of knowledge management and knowledge based development. The transformation into a Knowledge City is seen by
many actors in the urban development field as a possible solution to the sustainability challenges of the modern city and a recipe for citizens’ prosperity (e.g. Ergazakis et al, 2004). And yet, the concept of “Knowledge City” is at its infancy, and there are no agreed definitions of this term. Rather, there are several complementary perspectives from which to consider the concept, such as: Urban Capital Systems (Carrillo, 2004), Regional Intellectual Capital (Bounfour and Edvinsson, 2005), Information Technology (Komnions, 2002), Urban Processes (Landry, 2000), and Urban History (Kunstler, 2004). Other researchers attempt to define the Knowledge City through a checklist of desired characteristics (Ergazakis et al, 2004).

This paper illustrates the Knowledge City idea from a new perspective – one which connects to the daily experiences of the citizen.

1.2. What happens in a Knowledge City?

We understand a Knowledge City as a milieu which triggers and enables an intensive, ongoing, rich, diverse and complex flow of Knowledge Moments.

A “Knowledge Moment” is a spontaneous or planned human experience in which knowledge is discovered, created, nourished, exchanged, and transformed into a new form. Nonaka (1986) suggested the cycle of four modes of knowledge conversion: socialization, externalization, combination, and internalization.

In our Knowledge City model, a Knowledge Moment happens at the intersection of People, Places, Processes and Purposes (figure 1). In essence, the Knowledge Moment is a conversation between people in a particular place, using structured or unstructured processes aimed at explicit or implicit purpose.

People – Knowledge Moments are human experiences which could (and should) involve the full range of any human being acting in the city – citizens and visitors; city officials, business people and artists; local people and other cities’ men and women; young and old.

Places – Knowledge Places are the spaces in which Knowledge Moments happen. A Knowledge City transformation strategy might include a plan to upgrade some of its exiting (and frequently aging) institutions in order to provide richer context as knowledge places. For example, a city might redefine the roles of the library or museum to become knowledge creation places. Traditionally, the term refers to physical places but virtual urban knowledge spaces (such as an urban citizens’ portal) are also being experimented with (e.g. Bagir et al 2004).

Processes – Knowledge Processes can be well planned (for example a structured decision-making process) or un-planned (e.g. a spontaneous encounter). The more complex processes might involve many people, places and Knowledge Moments.

Purposes – All Knowledge Moments involve intrinsic motives of the actors such as joy, engagement and personal growth. Some are also related to specific, predefined external purposes (e.g. promotion of an economical objective of an individual, group of people or the whole community).
The fundamental idea behind this model is based on the principles of co-evolution – through the dense stream of Knowledge Moments, all actors acting in the city co-evolve towards sustainability.

1.3. How to understand a Knowledge City?

There are several ways to explore and understand a Knowledge City, using the Knowledge Moments lens:

1. **Wander around the city**: see what is happening and identify typical or exceptional Knowledge Moments.
2. **Follow several people** for a day: see how they spend the day and what they experience. Is the day full of Knowledge Moments? Does the city provide them with opportunities for such moments?
3. **Follow a specific knowledge place** during a whole day or week: is the place full of Knowledge Moments? Was new knowledge created, discovered, shared, and transformed into value?
4. **Follow a specific knowledge process**: who is involved? Who is not involved? In which places does it take place? What purposes does it serve?

As visualized in the following illustration, we suggest to understand the Knowledge City as a complex collage of interconnected Knowledge Moments which reflect the citizens’ reality. This metaphor is inspired by the book of Peter Cook, “The City, Seen as a Garden of Ideas” (2004).

Figure 2: the collage of Knowledge Moments
2. A collage of Knowledge Moments

2.1. A note on story-telling

Zarpom city does not exist. It was invented to illustrate the Knowledge City idea. However, many of the Knowledge Moments were not invented – they happened, or could have happened, in the many cities the author visited in his search for the conceptual meaning of Knowledge City. Similarly, the eight knowledge places will be familiar to the reader. Museums, libraries, town halls and schools exist in most cities, and some of them are already on a transformation path to becoming places that enable and trigger Knowledge Moments.

2.2. The city – history, transformation, citizens & knowledge places

For many generations, the city of Zarpom enjoyed economic prosperity accompanied with social stability. In the last two decades of the 20th century, its traditional industrial base was quickly eroding, and in the process of globalisation, the economical restructuring has generated employment problems and a loss of jobs to lesser-developed countries with lower overheads and wages. A decline in the standard of living and an increase in social burdens followed. The young generation began to flee from the city. At the beginning of the third millennium, the new mayor, supported by an ambitious council, committed to reverse this vicious cycle of urban decline. They created a new strategy which they called “transforming Zarpom into a Knowledge City”.

The city always had a well developed urban infrastructure and wide range of public institutions. As part of the transformation strategy, many of them are now acting as “Knowledge Places”: the city library, art museum, stock exchange, school, town hall, piazza, cafés and the house of a typical family. The following map provides a schematic view of the city.

There are about 150,000 citizens. Our visit will introduce the reader to a dozen of them, including Ed, the commissioner for future generations; Jane, a chemistry student; Ruth, a 12 month baby; Barbara, 14 years old; and Martin, the new mayor.
2.3. Urban Knowledge Dairy

The table below is a chronology of one typical day at the city. For each of eight knowledge places, four snapshots of specific Knowledge Moments are briefly described.

<table>
<thead>
<tr>
<th>Time</th>
<th>School</th>
<th>Stock exchange</th>
<th>Piazza</th>
<th>The café</th>
<th>Town hall</th>
<th>Library</th>
<th>Museum</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>19th century exploration task – discovery!</td>
<td>Morning coffee – and the Casino Initiative (I)</td>
<td>Knowledge City tour, Encountering</td>
<td>Council meeting: “Knowledge City in action” program</td>
<td>Initiating the “City as a Public Library” project</td>
<td>Kindergarten week at the museum</td>
<td>Ideas pipeline</td>
<td></td>
</tr>
<tr>
<td>Afternoon</td>
<td>“The city as a Public Library” design meeting</td>
<td>“The city as our office”</td>
<td>The casino initiative (II)</td>
<td>“Writing a book together” workshop</td>
<td>Development workshop – museum as an innovation lab</td>
<td></td>
<td></td>
<td>Standing up for the first time</td>
</tr>
<tr>
<td>Evening</td>
<td>“My five top websites” fair</td>
<td>Public Monopoly evening</td>
<td>Piazza a la hyde park</td>
<td>Knowledge café event</td>
<td>Intelligence query – Casinos and urban life</td>
<td>Future Images – Chemistry education 2020</td>
<td></td>
<td>Family Dinner</td>
</tr>
<tr>
<td>Night</td>
<td>“Time bank” activities</td>
<td>Public Monopoly evening</td>
<td>Egg-dropping competition</td>
<td>Two people, one bottle of wine</td>
<td>The casino initiative (IV): Citizen action group</td>
<td>Preparing the mobile library “Knowledge Bus”</td>
<td>Hard rock party and monthly White Night</td>
<td>Knowledge Cities Observatory</td>
</tr>
</tbody>
</table>

Figure 4: The urban diary – a typical day in a Knowledge City

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2.4. Visiting the Knowledge City

The reader is invited to visit the Knowledge City and explore the collage of Knowledge Moments using three possible paths illustrated in the following figure:

- Chronologically: captures a snapshot of the city in the morning, afternoon, evening and late at night.
- Tracking places: e.g. discover what happens in the library from morning until late night.
- Following individuals: for example, follow Barbara, a 14 year old student, as she moves during the day between different knowledge places.
- Following processes – tracking separately each theme or story (the casino case, the networked library initiative etc.).

As the people, processes and places intertwine, all of the alternative paths provide a rich understanding of the essence of the Knowledge City.
School

The school’s new strategy re-defined it as a “community center for values, education and learning”. It is open from early morning to late night.

Morning: Barbara (14) is one of the dozen members of the “19th century city exploration task force”. Recently they have spent most of their school time on exploring the city’s history. Barbara reports her discovery from last night’s research in an old history book: the first lawn library in the continent was established in the city on 1814. An idea emerges, and Barbara runs to the new library to discuss it with the librarians.

Afternoon: Barbara, Ronald and Chris, the initiators of “City as Public Library” meet to promote the project. They act fast, and by tomorrow, an invitation will be emailed to all city citizens, calling them to register their books at the city book repository. The plan is to launch a pilot next week and start experimenting with the first public book exchanges. In six months, the “City as Public Library” will become a cornerstone of the evolving identity of the city as the “city of books”.

Evening: The “My top five websites fair” opened in the afternoon and attracted more than one hundred students and teachers. Experiences, recommendations and hyperlinks were exchanged. Jane, participating from home, discovers some good sites she was not aware of – real pearls.

Night, late: the school “Time Bank” program was launched a year ago. The school community members, mostly school children and their parents but also other people from the neighborhood, were invited to register at the “knowledge yellow pages” service and specify their strength areas – specific domains where they could support someone else. Judo training, C++ computing, mathematics, chess, electricity maintenance, hair dressing – overall some 250 areas and more than 550 people enroll at the program. For each hour contributed one hour credit is earned and can be consumed. Nicolas is at one of the classrooms, helping Steve overcome some algebra questions. Barbara, his daughter, will use the credit for a sculpturing lesson from Juan, another participant.
The Café

The Zarpom café is a “third place - one of those public ‘great and good places’ where people can gather, put aside their concerns of home and work and hang out simply for the pleasure of good company and lively conversation” (Oldenburg, 1999).

Morning: Shirley appreciates her daily visit to the café – in the modern suburb she left a year ago there were no ‘third places’. In her newsletter she discovers a small article on a local entrepreneur’s intention to turn the old textile factory into a casino. This rings alarm bells not only to her, but also to several other early morning visitors at the other tables. Four of them agree to go to the town hall in the afternoon.

Afternoon: Three software programmers are already on their fourth hour and fifth coffee. Their company is experimenting with a new workplace design to replace their old offices. They call it ‘the city is my office’. Every morning, each employee chooses where to work that day – from home, the library, the café, the community club – or at one of the few remaining offices in the small new office building the company rented. All they need is a laptop, wireless internet connection for each employee, coffee vouchers and fresh thinking. Fridays are the official office days – all employees meet at the central office.

Evening: Every Thursday the café runs a “knowledge café” event. This is now a tradition here and in five cafes in other cities around the county. Tonight’s question is “how to attract more tourists to the county”. At the end, the six cafes exchange discoveries and ideas, using simple video conferencing.

Night, late: Two people at a side table, glass of wine, quite conversation.
Town hall

The new model of Zarpom governance is based on a visionary and energetic leadership in combination with a strong citizen-participation focus. The town hall, once a site for formal events and city officials' offices, is once again a place for the citizens.

Morning: The city council is discussing the “Knowledge City in Action” program, which serves as the strategic umbrella framework for city transformation. There is a hot debate – the mayor, Richard, suggests turning priorities upside down, and committing 75% of the program budget to educational activities. Most council members resist, believing that direct investment in knowledge-intensive industries will yield faster impact.

Afternoon: The job definition of Ed, the Commissioner for Future Generations, is “to ensure that current developments and decisions will not limit opportunities and possibilities of the future generations”. Every day he understands a little more about what his title really means. Thirty minutes ago Shirley rushed into his office with the casino story. She argues that the long term damage might be significant. Fast action is needed – the council will make the decision next week. They phone the city intelligence centre at the library, and ask for fast initial information on similar experience of other cities. (note: we follow here the example of retired Judge Shlomo Shoham, who pioneered this job title at the Israeli parliament in 2002).

Evening: The word spreads to many citizens by email. The commissioner arranged an emergency open meeting to discuss the casino initiative. Two hundred people arrive, listen to an initial intelligence report by the librarian, and explore the long term implications. Ed seriously believes in applying the idea of the “Conversing City”, although it can surface significant conflicts, which is the case tonight.

Night, late: Ed is still in the building with the citizen action group that started this morning at the café. Based on the voices heard at the evening meeting, they will challenge the new casino program at the council.
Library

Any city needs an **identity**. One of the first steps in the city transformation program was to discover and leverage the uniqueness of the city. It took two months of conversations and workshops for an answer to emerge – Zarpom is now **The City of Books**. The library now invites conversations, music, activity, and all of the “quiet please” signs were removed. People still come to read and borrow books, but also to talk with old and new friends, create and discover.

**Morning:** Barbara rushes in with two of her colleagues to discuss their idea of turning the whole city into one big public library. Tom, the community intelligence steward, buys in. “We have some 30,000 volumes, and can afford less then 600 new titles a year. But combing all private home libraries will mean a collection of maybe 1,000,000 books with thousands of new additions each year”. They agree that Barbara and her friends will start a pilot at their neighborhood to test the idea. Tom will help them browse the web for similar initiatives in other cities.

**Afternoon:** Today's workshop of the popular **“writing a book together”** series attracted some twenty participants. They work on co-authoring a book on the city’s transformation over the last decade. The city library has already published ten books created through this workshop series – ranging from science fiction to a home owners guide to a child book. For many of the coauthors – so far frustrated writers, the program has helped them realize a dream. Tom believes that “a library should act not only as a temple of the human knowledge created in past generations”; like the old Alexandria library in its golden days, the library can be a place for nourishing new ideas.

**Evening:** Shirley, assisted by one of community intelligence stewards, explores how other cities were impacted by the presence of casinos, and how social risks have been addressed. The information they discover will be the basis for the citizen action group started this morning at the café. The role for library staff members has been re-defined in recent years, and now this place is the community intelligence center – adopting methods from the Technical and Business Intelligence centers in some of the larger city commercial businesses.

**Night, late:** two staff members load books on an old bus. Tomorrow morning they will travel to the southern villages. The knowledge bus is part of the library strategy to reach all potential readers and extend this “knowledge place” beyond the city center.
Museum

The City art museum was closed in the mid 1990’s – it was too expensive to maintain and received hardly any visitors, as was the case in other cities (Florida, 2002). Last year, as part of the Knowledge City strategy, the museum was re-opened with the same old collections and staff – but in a new site – the old Under-roof Market, and with a completely new mission and atmosphere. The museum is now as much about the future as the past, as much about creation as exhibition, and as much about the art of living as ancient art.

**Morning:** This is ‘young generation’ week at the museum; it is home to dozens of very young artists who left their kindergarten and moved to this wonderland for a week. Tim (who is 5) and some friends work on a large sculpture of a child and mother. Yesterday they toured the museum and discovered several interesting human body artworks, and found some really good ideas in works by Henry Moore and Dali.

**Afternoon:** The museum has defined one of its wings as an “innovation laboratory”. Entrepreneurs, individuals or groups are invited to use the space for several weeks or months to seed their ideas. The proximity to artworks adds a new dimension to the work. Today, the museum hosts Gregory and some friends who develop a prototype for radical children’s bicycles. Henrietta, an artist working as a museum guide, stops by for a minute with some of the kindergarten children visiting the museum. The children are curious, and Gregory and his colleagues have a completely new direction.

**Evening:** Chemistry professors, chemistry teachers, a medical doctor, a sculptor, a biotechnologist, students, school teachers, a philosopher – all gather to draw “future images” of Chemistry Education in year 2020. The results will be presented at the museum in the gallery of Future Images. Would they have an impact? It will be up to the participants to join forces and make a case for their ideas and take their vision forward.

**Night, late:** Hard rock party in the main exhibition space. 16th century painted figures stare from walls at the lightly dressed dancers. The design gallery is noisy as well – tonight’s “museum monthly white night seminar” is dedicated to “love vs. time”. The participants will leave the place early next morning – after exploring...
The Piazza

The Piazza is the heartbeat of the city. This is the place for encounters, and spontaneous gatherings.

Morning: The Piazza is the departing point for the increasingly popular three hour “Knowledge City Tour”. Ordinary tourists and officials from other cities alike come to see how the city is being transformed. The group climbs the bell tower, from where the guide points to some of the “knowledge places” that they will visit today – the library, the museum, the town hall, the old new industrial zone, the market and more.

Afternoon: The Piazza is filled with people going out for their lunch break. Some people meet old friends, some get into conversations with new friends, some read newspapers, some ideas are exchanged, some rumors emerge.

Evening: Was it a visitor to London’s Hyde Park that brought the street debate tradition to Zarpom city perhaps twenty years ago? Today, as on every nice Tuesday evening, several speakers conduct loud debates with handfuls of opposers, supporters and curious young and old people gathering around them.

Night, late: Tonight the bell tower has a new role. The competitors in the 3rd annual dropping egg championship – young and old, professional hydraulic engineers and school students, artists and team of local politicians - climb up with sophisticated egg protection mechanisms embodying diverse technologies – hoping their egg will survive the 180 foot-long fall. A 35 year old architect, and his twins try their luck, using an idea modified from Leonardo Da Vinci’s parachute system. They have invested many nights over the last month in research, development and testing. The four previous competitions have already triggered two pending patents, one popular toy, several improvements in products of local industries, thousands of broken eggs and lots of fun.
The Stock Exchange

Zarpom stock exchange is the new heartbeat of the city's knowledge-based economic life – this is where ideas meet resources.

**Morning:** 09:01 – Roy, a trader coming back from a long vacation, quickly scans the screens mounted on the walls of the trade room. What is this? He discovers a new screen, labeled “Intellectual Capital Index”. It shows four indicators for each company already committed to this index: “human capital”, “organisation capital”, “renewal and innovation capital” and “relationships capital”.

**Afternoon:** Jane meets with Roy, who works for “City Ideas”, an urban joint venture fund. They discuss the commercial potential of the idea she submitted to the City Ideas Pipeline earlier today.

**Evening:** Richard, the owner of the pub on the stock exchange ground floor, is the spirit behind the monthly Monopoly competition. It looks like a hybrid of traditional Monopoly and the popular SimCity computer game. The place is filled with business people eager to show off their skills, students ambitious to watch the experts, children coming to learn from tycoons, city planners coming to get some ideas, artists and doctors.

**Night, late:** The game is still on. Over the night, more than fifty new startups were established, other companies went out of business, new approaches to tax paying were explored, the university was privatized, and the city economy reshaped.

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Home

“Knowledge City, seen as a Collage of Human Knowledge Moments”, Ron Dvir

“My home is my castle”, says the Englishman. Home is also the place where much of our learning, discoveries, knowledge exchanges, ideas, and deepest inspirations occur. It is the site for endless amounts of Knowledge Moments. While many remain between the four walls of their houses, other moments extend to the whole city and beyond, through information technology.

**Morning:** Jane logs onto the online “City Ideas Pipeline”, a marketplace for citizens to publish and discover ideas, seek feedback, complementary ideas, potential collaborators, opportunity for investments and more. Some ideas are commercial while others relate to social, educational, cultural and political issues. Jane presses the “submit” bottom.

**Afternoon:** Baby Ruth (12 months) stands up for the first time, and falls backwards immediately. She tries again and again.

**Evening:** Dinner. This is the family time to tell small anecdotes from today’s events, share frustrations, ask for advice, test an idea, laugh.

**Night, late:** Richard logs onto the internet. Tonight is the monthly Knowledge Cities Observatory online meeting. Mayors of Melbourne, Monterrey, Barcelona, Delft, Holon, Bangalore and more than fifty other cities that define themselves as “knowledge cities” meet to learn from each other.
3. Conclusions

This collage of 32 Knowledge Moments demonstrated diverse human experiences, experienced in different places, by different people involved in different processes.

A bird's eye view on these scattered moments suggests some insights about the essence of the Knowledge City. Each real world city is unique – there are no cities with the same history, mix of people, socio-economic challenges. Each is unique, yet there are common characteristics.

3.1. Observations and insights from Zarpom

Quality and quantity: a Knowledge City is about the quantity of the Knowledge Moments occurring within it – we argue that quantity creates quality and impact. The more opportunities for knowledge exchanges are created, the more opportunities for sustainable impact are generated.

Continuation and heartbeat – the stream of Knowledge Moments in Zarpom is continuous. A stream of ongoing encounters and Knowledge Moments is complemented by weekly or monthly events that act as the Knowledge City heartbeat.

Planned and Spontaneous - it is the combination of planned and spontaneous Knowledge Moments that ensures the Knowledge City's vitality.

Breakthroughs? - each of the operating principles of the knowledge places and processes are already practiced in most cities. It is the combination and intensity of already known principles that transform a city into a Knowledge City.

A sense of historicity – some of the ideas demonstrated in Zarpom were practiced in old times and communities (e.g. the School’s Time Bank), resembling the old goods barter economy. The modern Knowledge City can learn a lot from history’s most innovative communities (Kunstler, 2004).

Roots – Zarpom is well rooted in its history, legacy and tradition. However, is it possible also to create an ‘instant’ Knowledge City? There are several attempts, mostly in South East Asia, to build knowledge-based cities from scratch (Yang, 2005).

Future orientation – although its historical roots are respected, Zarpom also has a strong future orientation. Some of the Knowledge Moments are related directly to concerns of the citizens about various long term challenges, and result in practical action to secure the future.

Identity – Zarpom discovered its unique identity (“city of books”) and now is leveraging it. This is a crucial challenge and critical success factor for any Knowledge City.

Governance – Zarpom practises a form of urban governance which is based on both strong and visionary leadership and commitment to citizen participation. This combination is manifested in many effective Knowledge Moments.

Multi-faceted – as shown in the collage, the Knowledge City idea encompasses all aspects of the citizens’ everyday life and well being – urban economics, social challenges, personal relationships, arts and education, for example.
Different scales – Knowledge Moments happen at all scales – from individual pause for reflection to big public events. However, even at the larger knowledge places and Knowledge Moments, the human scale is maintained, and the individual citizen ‘feels at home’.

Dynamic flows – as demonstrated in the Zarpom story, many knowledge processes flow between places, involving different people at different phases.

Inclusive Knowledge City - the Knowledge Moments are not inclusive to the “knowledge workers”, nor to the intellectuals. All can participate – citizens and visitors, young and old, industrialists, writers and council members.

Speed – the flow between Knowledge Moments – from problem to idea to realisation – is fast. The city economical infrastructure, participatory governance model, and open cultural climate all contribute to faster cycles and action. And yet, people – individuals and groups – have the time to reflect and deeply explore things which matter.

Information – many Knowledge Moments involve the discovery of already existing (but frequently hidden) information, expertise and experience – and the conversion of it into action. A good knowledge place increases the chances of such discovery. Good information technology is important as well.

Transformation of existing places – most Zarpom knowledge places are old institutions whose original role was enhanced to support the Knowledge City transformation. In many cases, it is a more sustainable approach than creating new places, with the potential to enable more interesting places contribute to knowledge creation.

The role of architecture - the physical design of a place impacts the probability of Knowledge Moments, enables interesting flows and highlights values. The city architects were major contributors to the transformation of many of Zarpom’s aging institutions into vibrant knowledge places. They worked at all scales – from urban planning to detailed interior design. Architects enable the choreography and movement of knowledge, feelings, and ideas through and in between knowledge places (paraphrasing Lawrence Halprin, 1968)

Local and global focus – while many of the Knowledge Moments were focused on internal issues, Zarpom maintains strong knowledge exchange relationships with other cities.

Serious Play – many of the Knowledge Moments at Zarpom involve playing and fun, e.g. the Monopoly night at the stock exchange. Play is an effective way to learn, discover and explore unknown areas together.

Conversations – most of Zarpom’s Knowledge Moments are conversations, mostly between people, sometimes within people. Generalising from this observation, the following insight come to the front of this story: The Knowledge City is a Conversing City

3.2. Future Research
Zarpom was invented in order to illustrate a new perspective to the Knowledge City, and as an attempt to describe this idea in a form that connects to the daily experiences of each of us.
We suggest deepening the analysis of Knowledge Moments through comprehensive ethnographic study in which real Knowledge Moments, experienced by real people in real places will be explored. Such research would help addressing the following questions:

- What is the difference between a 'Knowledge City' and a 'regular city'?
- How does the intensity and characteristics of Knowledge Moments impact the sustainability of the city?
- What is the role of Knowledge Moments in the Knowledge City transformation strategy?
- How can urban places be re-designed and re-defined in order to trigger and enhance Knowledge Moments? What would be the supporting knowledge places?
- Would a cross-cultural ethnographic study reveal the differences between Knowledge Moments experienced in different cultures?

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