

[04.1.1]

Strategic and conceptual development guidelines for the development of next-generation hybrid spatialized cultural interfaces



Introduction

This document is an output of the CoGhent-project, funded by the European funding program for regional development through Urban Innovative Actions (UIA). Its intentions and audiences are twofold. On the one hand, it provides a framework for those working on the intersection of cultural heritage, technology and neighborhood social cohesion, which this document refers to as the development of next-generation hybrid spatialized cultural interfaces. On the other hand, it provides a framework to drive developments within the CoGhent-project forward.

The CoGhent-project is active in the City of Ghent, Belgium (2020-2023). The municipality wants to connect local citizen-centric cultural heritage and the collections of the city's museums through a central open data system. With the CoGhent-project, the foundation of this ambition is being developed. In addition, the project aims to improve cultural participation and social cohesion in public and third places through the use of these data and visualizing it in an immersive digital experience room. By linking heritage on a city level and using it to capture and show stories in cultural public spaces, the aim is to leverage digitized heritage to be used in an engaging and purposeful way, as a shared connection amongst citizens.

This document is the output of the exploratory phase of the project, which assessed the intersection of cultural heritage, technology and neighborhood cohesion in order to provide fundamental design choices for the project. In addition, local experts and policymakers were involved in co-shaping the strategic orientation of the project (see methodology). This resulted in the definition of a set of conceptual and strategic guidelines. Hence, the goal of this document is to give an overview of these guidelines, and to provide an easy readable synthesis that can be shared with other strategic decision makers facing similar challenges in similar projects across the European Union.

First we provide an overview of *dualities*, fields of conceptual tension which require formal positioning to clarify the project's orientation. Next, within these conceptual dualities, a series of specific *design requirements* need to be formulated to drive materialisation of such projects. Hence, the second part of this document provides an overview of these choices and the rationale behind them.

Methodology

The results presented here are the outcome of the exploratory phase of the project which took place from August 2020 to December 2020. This phase entailed different research formats.

First, a *state of the art analysis* was executed to describe existing insights and initiatives on the crossroads of cultural heritage, technology and neighborhood cohesion (project deliverable D4.1.1). This was done by collecting and analyzing existing academic literature, deliverables from other projects and best practices regarding these subjects.

Next, local experts and stakeholders (project partners, government officials and product designers) were involved in a series of *three strategic workshops* to identify design requirements for the project (project deliverable D4.1.2). These workshops took place using video calls on November 12 (N= 12), November 23 (N= 12), December 14 (N=6), respectively covering the following goals: (1) identification of target audiences for the CoGent-box and corresponding goals the project needs to achieve for these audiences, (2) conceptualization of possible solutions for the goals that were identified in workshop one, (3) prioritization of design requirements that were identified during workshop one and two. The main goal of these workshops was to identify and select concrete design requirements for the development of the CoGent-box.

In parallel, a *long-term strategic analysis* was made to ensure future-aware development choices. This analysis entailed a combination of *desk research*, a *series of workshops* with experts (project deliverable D4.1.6). The desk research focused on mapping the strategic insights from the workshops on policy documents from the City of Ghent.

The three workshops took place using video calls on November 9, 2020 (N=12), November 30, 2020 (N=17) and December 21, 2020 (N=15) and involved cultural experts (stakeholders ranging from cultural institutions and museums to project partners and the urban department for culture). The methodology used in the series of workshops was based on the TAIDA model (*Tracking, Analysing, Imaging, Deciding and Acting*) developed by Kairos Future in Sweden¹, to explore long-term future perspectives. The first workshop (1) discussed the focal question, (2) analyzed and extrapolated relevant past events and their influence on each other and on the present, and (3) identified the most impactful trends. During the second workshop, strategic uncertainties were polarised, which led to the identification of the most relevant axes relating to the project. Future scenarios and storylines were developed during the third workshop. The

2

¹ M. Lindgren, H. Bandhold, Scenario Planning: the Link between Future and Strategy, Palgrave Macmillan, Basingstoke, 2003.

in 2030.		

workshops converged into a persona-driven story on how culture will be experienced together

Conceptual and strategic dualites

Developing solutions on the crossroads between technology, culture and social cohesion is a challenging endeavor, with many pitfalls, implicit assumptions and high-impact choices. Such 'imaginaires' can be made explicit by formulating opposing conceptualizations. As such, formulating these dualities allows designers and strategists to manage project decisions and shortcut often drifting discussions. The exploratory phase of the CoGhent-project (cfr. methodology) revealed a series of such dualities. In this section of this document, we provide a non-exhaustive overview of the identified fields of tension. This framework is meant to provide a set of strategic dimensions that can be reused by similar projects.

citizen-sourced content vs. museum content

Participatory cultural projects aiming at disclosing (local) cultural heritage though citizens and combining this with existing museum collections face a field of tension regarding their primary focus. On the one hand, (digitized) museum collections need to be unlocked in innovative ways. Yet, these museum collections don't always have an explicit link to the neighborhood level where most of the citizen-sources cultural heritage is being collected. Considering the spatiality as a central aspect in the entanglement of both content types, this poses a challenge: where to start? Local citizen-sourced content matches very well with the neighborhood, but this only (directly) matches a small proportion of the digitized museum collections. Consequently, this duality forces project decision makers to choose one of these sources as a starting point.

interaction vs. participation

When developing new interfaces to disclose cultural heritage in innovative ways, a project should consider the different layers of interaction and participation. This entails both the definition of these layers as well as the development of tools to support these. For example: low-engagement interaction interfaces facilitate new ways of exploring and experiencing cultural artefacts, while high-engagement interaction models facilitate contributing new content, developing new interfaces or use cases or remixing content. This wide range of interaction modalities should be well described and delineated, and adequate instruments and processes should be developed to support these (not per se in a holistic, integrated way).

shared neighborhood identities vs. fragmented neighborhood identities

When unlocking cultural heritage for every neighborhood resident, aiming for the development of a collective identity to strengthen neighborhood cohesion, a diversity issue inevitably rises. Urban neighborhoods are characterized by superdiversity. Within a neighborhood, a variety of identities is present due to a diversity in inhabitant characteristics (ethnical background, social economical status,...). Hence, the neighborhood can be approached holistically, bound to the neighborhood characteristics. Or it can be approached as a cluster of different identities bound to the characteristics of different social groups. In addition, when approaching the neighborhood with multiple identities, a second choice needs to be made in terms of what identities should be targeted and how to bring these together to promote social cohesion. Similarly (also see 'centralized vs decentralized interventions'), the renegotiation of cultural heritage can potentially accentuate differences between communities (e.g. through filter bubbles or an explicit confrontation of perspectives), but might also bring cultures closer together through the shared space in which these interactions take place.

individual vs. collective experiences

Whether developing interfaces for a public space context or a museum context, innovative interaction modalities often require a definition of actors and interactions. Generally this implies choosing between the dominant single actor input heuristic (one person controlling the interface, e.g. personalized content) versus the development of shared interfaces that facilitate more complex and hybrid multi-actor control. This is related to an individual experience versus a collective experience. Especially in the context of the promotion of social cohesion, and the development of next-generation third spaces, this should be carefully considered. Similarly, the goals of the interface can relate to personal self-development (at the individual level) or to social experiences in larger groups.

geographical demarcation vs. storytelling networks

When spatiality is considered the linking pin between culture and social cohesion, the question rises which kind of spatial conceptualization should be applied. The neighborhood level is considered most valuable to the promotion of social cohesion due to the spatial proximity, which is beneficial for the development of social support mechanisms. However, how a neighborhood is conceptualized, constitutes a field of tension. From a managerial perspective, a geographical demarcation is often applied (e.g. dividing a city in different regions on a map). However, reality is more blurry and different mental constructs of a neighborhood exist among city inhabitants. Furthermore, citizens have different relationships to neighborhoods (inhabitants, workers, visitors, commuters,...). Hence, neighborhoods could also be

conceptualized as storytelling networks, semi-organic networks which solidify around neighborhood-based communication practices.

centralized interventions vs. distributed interventions

When cultural institutes extend their practices outside the built museum environment and enter the public space, the spatiality of these interventions has to be carefully considered. On the one hand, centralized interventions (e.g. focusing on a central geo-sociological domain such as a well-visited park) have the potential to act as a centripetal force and bring different areas together in a common third space. However, this might also have an excluding effect as such spaces are often related to different semantic understandings of that place (e.g. as being appropriated by hipster parents and their toddlers). Hence, distributed interventions provide the opportunities to better tailor these interventions to the hyperlocal conditions, but this might also strengthen the (perceived) cultural differences between the different neighborhood areas. When combining central and distributed interventions (e.g. by using a mothership vs. satellites intervention model), these dynamics should be carefully considered.

served audiences vs. unserved audiences

Entering the public domain with cultural interventions might reduce the psychological distance between citizens and museum collections, since the collection is partially stripped from its institutional layer (having to go to a museum, pay for a ticket, entering the building, ...). Hence, this implies a potential to reach audiences that do not often visit museum institutes (unserved audiences). However, while developing such interventions and technologies, this might imply an entirely different set of design requirements. Hence, it should be carefully considered and delineated what the primary goal of the intervention is. Using an inclusive design perspective designing for unserved audiences might also provide value for served audiences, but the intervention will probably mostly engage served audiences (hence, served audiences are probably the drivers of such interventions). On top of that, unserved audiences need to be carefully described to allow focus (e.g. young people, people speaking a different language, people with a different cultural interest, ...).

public space vs. private space

Considering the spatial nature of neighborhood-oriented cultural interventions, the openness of the intervention location is of specific interest. The public domain has the highest degrees of commonness, but might be both appropriated by subgroups and might pose challenges regarding both weather, infrastructure and vandalism. (Semi-)private locations (e.g. a local

community center) provide a safer space in this regard, but might embody new institutional barriers, which hinders inclusivity.

digital interfaces vs. analog interfaces

Innovation often entails harnessing the opportunities of novel technological developments. Especially in the realm of new interactions with digitized cultural heritage, technology has a lot to offer. However, the applications built upon such technologies potentially exclude less digitally literate publics. So, while on the one hand complex exploration, annotation, linking, remixing etc is possible (e.g. by disclosing the collection through an API), the other end of the spectrum requires intuitive interfaces with as few digital prerequisites as possible (e.g. owning a smartphone). In developing such interfaces, this requires a thorough discussion and potentially the definition of a layered approach which allows the experience and interaction to take place in different levels of digital complexity.

gamification vs. no gamification

When engaging audiences over longer periods of time, the interaction design also entails behavioral design. A common strategy for retained behavior (e.g. interacting multiple times with the intervention) is the use of gamification techniques. Gamification techniques can be designed for short term goals (e.g. resolving a challenge in situ) or long term goals (e.g. a two week competition between neighborhood residents). While such techniques have a strong engaging effect, the question emerges whether this aligns with the consumption of cultural heritage. Since these techniques often draw more attention to the competition itself than to the content being presented, this might not be the most appropriate way to promote cultural participation.

place-based communities vs. topic-based communities

While spatiality is considered the key component to converge diverse groups around a common ground in the neighborhood, communities usually crystallize around shared interests (called issue networks). Whether the spatiality is strong enough to act as an 'issue' is highly dependent on both the place and the interaction modality (for example, on social media, space can be a strong connector, but town squares do not always have a similarly strong converging effect). Hence, when designing spatially embedded systems, one should consider if the place is strong enough, or a (layered) topic-based approach is better suited (which can still be place-based: e.g. revealing the history of a town square, relating to mobility policy protests in the neighborhood, etc.).

content (the message) vs. form (the medium)

Spatialized cultural interfaces intervene in the public space. As such, the form of the intervention itself has an important role, since this is the first layer on which interaction takes place. On top of that, such interventions can be conceptualized as add-ons on the social infrastructure of the neighborhood (providing/promoting new social interaction modalities). Hence, both the 'wow' factor (appealing and triggering interest) and the socio-functional role of the intervention require adequate design attention. However, (as discussed in the gamification duality) this does not suffice if the goal is to disclose cultural heritage. Hence, such interventions must think carefully about the dominance and interrelations between the medium and the message.

single purpose vs. modular usage

This duality entails both the usage and the re-usage. In a rapidly changing environment characterized by high levels of diversity, one should consider the fixed nature of the design. Often, tailored solutions are developed to suit the needs of a specific project, a specific target population, a specific use case, etc. This allows custom solutions which maximize value creation for that specific purpose. However, this often blocks diversity in usage (allowing different usage patterns), especially 'underground' of 'unforeseen' usage (e.g. graffiti, skateboarding, children climbing on the installation). In a single purpose intervention, these conflict with the design goals, while modular usage designs could integrate such 'deviant' usage patterns (although this might conflict with the content (see content vs. form duality). On the other hand, artefacts that are being developed for a single purpose are often discarded after the purpose is fulfilled, which often implies loss of value (e.g. screens, algorithms, databases, ...). Open-ended modular solutions could facilitate easier re-use in different contexts and for different purposes.

From dualities to conceptual and strategic development guidelines

The CoGhent-project applied the above described dualities to manage strategic and conceptual decision-making processes. During the first phase of the project, the project owners discussed the project using this framework. Next, the consensus and decisions were transformed into "design requirements" which drive further strategic and conceptual developments. In this section, we provide an overview of design requirements and relate them to the dualities above. This list of guidelines is not exhaustive.

These strategic and conceptual design requirements are divided in the following clusters:

- Experience & Participation
- Data & Technology
- Inclusion & Integral Accessibility
- Operational design requirements

Experience & Participation

Strategic requirement: Collections of Ghent should focus both on personal and social experiences.

The need for storytelling is increasing and people seek specific experiences. The CoGent-box should offer its visitors both personal growth and social enrichment. Thus visitors should have the option to learn new things and/or to connect with others. In order to increase social cohesion, Collections of Ghent should facilitate encounters in cultural third spaces and help to connect passionate people with similar interests.

Motivation: The City of Ghent is a warm city where people meet each other and feel connected. The city sees public spaces as social crossroads. During the workshops the evolution towards either personal or social experiences was considered as one of the biggest uncertainties for 2030. Hence the Collections of Ghent project should focus both on personal and social experiences.

Design requirement: CoGent facilitates a place for neighborhood inhabitants to meet and interact with each other.

Duality: Public space vs. private space, interaction and participation, Public space vs. private space

The CoGent-box will provide a space that can be used by neighborhood inhabitants in order to interact with other neighborhood inhabitants. This will be done by providing e.g. benches and other facilitations around the CoGent-box.

Motivation: The core of the CoGhent-project is to enhance local social cohesion within the Ghentian neighborhoods where the CoGent-box will be placed. Therefore, providing facilitations for inhabitants for social interaction will be integrated in the CoGent-box design.

Design requirement: CoGent will be modular in its design in order for neighborhood inhabitants to adjust the box to the local neighborhood and the social needs of neighborhood inhabitants.

Duality: Public vs. private space, Single purpose vs. Modular purpose

CoGent will be modular in its design. In this manner, the box can be set up in different constellations according to the neighborhood it will be placed in.

Motivation: CoGent will benefit from local assets in order to match the box with the physical (place) and social characteristics (needs of the inhabitants) of the neighborhood. By designing the CoGent-box in a modular manner, it can be adjusted according to these local assets.

Strategic requirement: Collections of Ghent should offer a tailored experience.

Digital solutions and data analytics can be used to enhance experiences. They allow for a more personal experience suited to the special interest of each person or group. However, the Collections of Ghent is meant to increase social cohesion. It's therefore important that a personalised offer doesn't lead to polarisation. The fragmentation of filter bubbles should be avoided by connecting intersecting bubbles. The project should help to broaden one's view and let visitors discover unexpected content (serendipity).

Motivation: Experts describe how cultural interests have a long tail; When visitors can find and afford products and services tailored to their individual tastes they will choose these over homogenised hits. The policy note of the Department for Culture describes how it's important that museums stay attractive in a digitised world driven by the experience economy.

Design requirement: CoGent will offer a combination of individual and collective experiences in the box.

Duality: Individual vs. collective experiences

When neighborhood inhabitants visit the CoGent-box, they should be able to individually visit the box and have an individual experience. However, the visitors should also be able to share this experience with other visitors of the box. Thus, the CoGent-box will be able to facilitate an individual and collective experience for its visitors.

Motivation: Neighborhood inhabitants have the need for an individual experience of their own story and cultural heritage. However, as the CoGhent-project aims to increase social cohesion, and avoid polarisation, sharing cultural heritage among neighborhood inhabitants and creating a common story is necessary to reach this goal.

Strategic requirement: Collections of Ghent should be participative.

People should have the possibility to build their own story if they desire to do so. Activities with the public, will increase and bring on new forms of interaction and participation. However, the desired participation level differs per person and participation should be optional. Furthermore, it's important that the Collections of Ghent collaborates with heritage institutions. The Collections of Ghent project should facilitate the exchange of knowledge and create room for experimentation and innovation. Its activities can help to strengthen understanding among communities and individuals.

Motivation: The shift from consumers to prosumers was described by the experts as an impactful trend. Borders between creators and visitors may become more vague. The Department for Culture describes culture as connecting DNA and as a means to increase social cohesion. The City of Ghent wants to boost participation levels and places a lot of importance on dialogue with and between its inhabitants.

Design requirement: CoGent will collect content originating from the neighborhood inhabitants through the participation toolkit.

Duality: Citizen-sourced content vs. museum content

CoGhent unlocks cultural heritage originating from the neighborhood inhabitants (postal cards, art, stories,...). In addition, the project will engage local inhabitants to annotate this heritage as well. In order to collect this heritage, a participation toolkit will be developed in order to identify and activate local neighborhood ambassadors. These ambassadors have the possibility to share content with the project. Thus, this information and content will still be collected through an interface which is integrated in the CoGent-box.

Motivation: We choose this manner of data collection because of different reasons. At first, in order for inhabitants to understand what the purpose of the box is, a single purpose is more easy to understand. When multiple purposes are integrated, users may be confused in the features of the box. Therefore, we choose for a single purpose for the box. Second, when the CoGent-box is open for every citizen to share its own content, it becomes more difficult to control the content which is unlocked in the box. Here, the risk of unlocking improper and unethical content becomes bigger. Third, data regulation regarding intellectual property becomes more complex when inhabitants can freely upload their own content. Therefore we choose to create a more controlled environment where trustworthy inhabitants can share neighborhood content.

Design requirement: CoGent will make use of a web interface that provides a channel for neighborhood inhabitants to share their own cultural heritage with the box.

Duality: Citizen-sourced content vs. museum content

CoGent will make use of a web interface that allows neighborhood inhabitants to share their own cultural heritage with the CoGent-box. In this interface images, audio, video and textual content can be uploaded and added to the collection of the Ghentian.

Motivation: Next to the collection of Ghentian museums that will be unlocked within the CoGent-box, neighborhood inhabitants often possess a rich amount of content that has cultural value as well. This web interface will be the portal for neighborhood inhabitants to share their own heritage and add it to the online database.

Data & Technology

Strategic requirement: Collections of Ghent should use data ethically.

The growth of data intelligence offers tremendous possibilities. Data can be used for a higher degree of personalisation or better service rendering. Various movements are being seen to open up public data and protect personal data. The Collections of Ghent project should be GDPR-proof and process different kinds of data in an ethical way (privacy by design).

Motivation: The growing importance of data is a transforming element with many implications. This confirms the choices made in the Collections of Ghent project to invest heavily and continuously in the data aspect. The use of data also raises privacy concerns in the data movement, especially due to the perceived value of data. The City of Ghent is developing a structural operation around data and information management.

Strategic requirement: Collections of Ghent should transcend (data) silos.

Data is only impactful if you know how to apply it. Collections of Ghent should focus on interoperability and work with open linked data and international standards (such as OSLO), so they can extract cultural data from its silos and other cities can re-use and adapt the project. The transcendence of data silos can help to facilitate collaboration and the exchange of knowledge.

Motivation: The growth of data intelligence possibilities offers new opportunities, but also makes data processing more complex. Most cultural institutions in Europe are digitising their heritage collection but lack the tools to realise, use and capitalise on this. The City of Ghent firmly believes in the added value of open (linked) data and implements the 'open by default' principle. Working with linked open data opens up cultural heritage and increases its visibility, accessibility and use. The 'Ghent, more than a smart city' policy note, anchors data as a fundament. Together with the Flemish Community Commission, Imec and 12 other centre cities, The City of Ghent co-created the Open Data Charter.

Design requirement: CoGent will gather and unlock museum content in combination with cultural heritage originating from the neighborhood.

Duality: Citizen-sourced content vs. museum content

The project chooses to use a collection of museum content as a basis for the content that will be presented in the box. Here this basic collection forms a starting point which can be presented in the local neighborhood. In addition to this basic collection, a web-interface will be developed in order for local inhabitants to share their own content with the project. Consequently, neighborhood inhabitants will be able to experience both museum content and local cultural heritage content originating from the neighborhood.

Motivation: This choice can be motivated because of two reasons. Firstly, a basic set of content is needed in order to create the foundation of the CoGent-box. Secondly, with this foundation, local content originating from local inhabitants can be shared and added to this foundation and therefore still unlocks the story of the local neighborhood and their civilians.

Design requirement: CoGent prioritises the collection of cultural heritage content.

Duality: Citizen-sourced content vs. museum content, collecting vs. unlocking cultural heritage.

CoGhent chooses to collect and unlock cultural heritage content in the following order: images, audio, video and textual content. In addition, and connected to these different types of content, the project also collects information about this content. This is done by annotating this content through neighborhood inhabitants.

Motivation: The project chooses this prioritisation in order to create a closer scope in terms of content collection and unlocking. This is because a focus is needed for communicative (communication to the neighborhood civilians), technical (storage) and regulation (GDPR & IP) purposes.

Strategic requirement: Collections of Ghent should have a clear framework for data ownership.

Existing art has always been used as a basis for new pieces, but the complexity of attribution will keep on increasing with data possibilities. Collections of Ghent's digitised collection can be used to experiment and co-create. Thus needs a clear framework for data ownership and copyright guidelines for attributions.

Motivation: Within the cultural shift from consumer to prosumer, copyrighting becomes increasingly complicated. The concern for protection of the creative rights of all contributing elements is heightened. The possible decentralisation of data ownership may lead cultural organisations to adapt their model and request permission to use certain data or to apply it for personalisation. This is an aspect the project could already anticipate by developing a framework for data ownership. The City of Ghent has a participative data policy and wants to facilitate the re-use of data.

Strategic requirement: Collections of Ghent should combine the benefits of the digital and physical world.

Hybrid experiences combine physical and digital elements and can enhance the visitor's experience. In the design phase of the CoGent-box, these hybrid elements should already be taken into account (hybrid by design). There needs to be a hybrid understanding of the concept instead of digital layers over traditional set-ups. Physical and digital elements should be treated as equals.

Motivation: Digital will take up an increasingly important role in the cultural sector. Barriers between the real and digital world are fading. Digitised collections democratise access to art and heritage. Innovation and technology can be used to get closer to citizens.

Design requirement: CoGent will apply high-tech interfaces, only when this means an addition for the experience of the user of the box.

Duality: Digital vs analog interfaces.

CoGhent will develop hybrid interfaces in order to unlock cultural heritage. High-tech interfaces have a big contribution in order to create an impressive experience for consumers of cultural heritage. While this is still a purpose of the CoGent-box, the interfaces that will be developed, must have an added value in experiencing heritage content. Thus, the CoGent-interface should help in facilitating new, impressive, but also educational purposes.

Motivation: The goal of the project is not to experience cultural heritage through high tech interfaces, but through innovative interfaces. This will be achieved through developing interfaces which combine high-tech (if necessary) and low tech technologies. In addition, these high-tech interfaces remain expensive and complex to develop. Here, the development of the CoGent-box interfaces serve educational interfaces first.

Strategic requirement: The CoGent box should be future-proof

Collections of Ghent should have an offering that stays relevant and interesting. For example by adapting its content frequently. Furthermore, the Collections of Ghent project should have a flexible outcome, so it's suited for adaptive re-use and upcoming technologies. Collections of Ghent should explore up-and-coming experiences, such as no-touch experiences.

Motivation: DING, the new wing of the Design Museum, wants to evolve together with its users. During the workshops, experts described how technology evolves at an unprecedented pace. It's therefore important to gain understanding of the potential of current and upcoming technology solutions. No-touch experiences, for example, will stay relevant for public spaces and public activities in the upcoming years. The CoGent-box can become a benchmark for other departments and cities.

Design requirement: CoGent will make use of no-touch interfaces...

Duality: Digital vs. Analog interfaces

CoGent will develop no-touch interfaces (E.g. motion tracking interfaces, voice tracking interfaces,...) to unlock cultural heritage.

Motivation: Today, an evolution towards no-touch interfaces is becoming more prevalent. As a strategic requirement of the CoGent-box is to be future-proof, the box will make use of no-touch interfaces to remain up-to-date in the upcoming years.

Design requirement: CoGent will offer a covid-proof experience.

We're all facing a global pandemic and its impact will continue to linger. The CoGent-box should offer a covid-proof experience. Crowd management will also be an important topic.

Motivation: The pandemic left many people with a heightened concern for hygiene. Consulted experts expect this concern regarding touch will only slowly decrease.

Inclusion & Integral Accessibility

Strategic requirement: Collections of Ghent should be accessible for a hyperdiverse audience

Collections of Ghent should reach a hyper diverse audience, be integral accessible and target all age groups. This doesn't only include physical accessibility (eg. being accessible for visitors in a wheelchair), but also psychosocial, informative and communicative accessibility. Visiting the CoGent box should have a low threshold while respecting the value of heritage. The project should be appealing for previously unserved audiences. It should also include people with a lower digital proficiency. Additionally, the collected (im)material heritage should reflect said diversity.

Motivation: Both the experts as multiple policy notes consider the evolution towards a hyper diverse society very important. The City of Ghent is an inclusive and ageless city that embraces diversity. The City of Ghent believes in the principles of universal design and has composed a charter towards an accessible Ghent, which includes accessibility on the subject of infrastructure, communication and services. The Department for Culture aspires to increase the cultural participation of target groups. In their policy note they describe how culture should be accessible for everyone. Experts warn that the rapid pace of digitalisation could widen the digital gap, which is something that should be avoided during the Collections of Ghent project.

Design requirement: CoGent will develop an interface that is fit for unserved audiences and served audiences.

Duality: Served audiences vs. unserved audiences

CoGent aims to reach out to inhabitants who are not yet, or limited, active in cultural participation. This group of inhabitants rarely visit Ghentian museums. By developing the CoGent-box in a user friendly and user fit manner, this audience will be approached by the project.

Motivation: Cogent wants to increase the cultural participation of Ghentian civilians. Therefore unserved audiences who do not participate in Ghentian museums yet, will be approached specifically.

Design requirement: Collections of Ghent should be interesting for children and youngsters.

Duality: Served audiences vs. unserved audiences

Collections of Ghent should involve youngsters and children, because they are the future. The CoGent box should offer them a rich experience. The cultural data lab should give them a place for experimentation and can show them the creative side of technology. Tailored communication channels and messages can help to target youngsters.

Motivation: The City of Ghent is an ageless city and aspires to become European Youth Capital in 2024. Child and youth-friendliness is seen as a touchstone of a responsible social and people-friendly policy.

Design requirement: Cogent will be accessible for neighborhood inhabitants who do not speak the dutch language.

Duality: Served audiences vs. unserved audiences, Shared neighborhood identities vs. fragmented neighborhood identities.

CoGhent wants to reach out to all inhabitants who do not speak the Dutch language. Therefore the presented content in the box will be translated in a series of languages that are common in Ghent.

Motivation: CoGhent wants to reach out for all inhabitants of Ghent. Because of the presence of various communities who speak foreign languages (e.g. Turkish, Moroccan, Bulgarian,... communities), the CoGent content will be available in different languages.

Design requirement: CoGent will be accessible for all neighborhood inhabitants who have physical disabilities.

Duality:

CoGhent wants to reach out to all inhabitants of the city of Ghent. Therefore the CoGent box will be accessible for all neighborhood inhabitants who have a physical disability (e.g. wheelchair users). Here, physical barriers such as stairs will be avoided in the design.

Motivation: Because of the physical disabilities of a significant group of neighborhood inhabitants, physical barriers can prevent this group of visiting the CoGent-box.

Design requirement: CoGent will be placed in a public area.

Duality: Public space vs. private space

The CoGent-box will be placed in the public space of the neighborhood.

Motivation: CoGent needs to be accessible for every inhabitant of the neighborhood. When the box will be placed in a private area, physical and psychological barriers will be created

for neighborhood inhabitants. Therefore we will place the box in a public area.

Design requirement: CoGent will make use of a central box that will be placed on a central place in the neighborhood.

Duality: Centralized interventions vs. distributed interventions

The CoGent-box will be placed on a place which is accessible for all neighborhood inhabitants. This place will be determined in collaboration with neighborhood inhabitants. In this box, inhabitants of the neighborhood can experience local cultural heritage.

Motivation: At the core of this project, the CoGent-box provides cultural heritage to the neighborhood inhabitants. In order to attract as many inhabitants as possible, the placement of this box must appeal to every inhabitant of the neighborhood.

Design requirement: In addition with the central box, CoGent will make use of satellites within the neighborhood in order to attract neighborhood inhabitants to the CoGent box.

Duality: Centralized interventions vs. distributed interventions

In addition to the central CoGent-box, two or three satellites will be placed in the neighborhood. On this spot, teasers or conversation starters will be placed in order to make the CoGent-box visible in the neighborhood, and to attract the inhabitants to the central box.

Motivation: Neighborhood inhabitants meet at different spaces. Because of the demarcation of the neighborhoods that are selected for the box to be placed in, the neighborhoods cover a wide spread area. When only applying a central box, it becomes more difficult to reach out to every inhabitant. Therefore, installing satellites spread amongst the neighborhood, we expect to reach more inhabitants to attract to the CoGentbox.

Operational design requirements

Design requirement: CoGent will be designed to be resistant to vandalism.

Duality: Public space vs. private space

The CoGent-box will be placed in a public area, a full time supervision cannot be guaranteed. Therefore, the box will be designed with firm materials that are resistant to vandalism. In addition, the box will provide a place for graffiti-tags.

Motivation: Vandalism is an issue that many similar projects face when applying an intervention in a public area. Therefore the project wants to anticipate this issue, by constructing a firm CoGent-box that allows graffiti-tags.

Design requirement: CoGent will be designed to be resistant to different weather conditions.

Duality: Not applicable

The CoGhent-box will be designed to be resistant to different weather conditions. The box must be rain, wind and snow proof.

Motivation: The box will be placed outside and through a whole year. Therefore the box must anticipate the different weather conditions in Belgium.

Conclusions

The Collections of Ghent project wants to connect local citizen-centric cultural heritage and the collections of the city's museums through a central open data system. In addition, the project wants to create value on the intersection of cultural heritage, technology and neighborhood social cohesion. This will be done by developing next-generation hybrid spatialized cultural interfaces that contribute in improving neighborhood social cohesion, namely the CoGent-box. In order to develop this open data system and the CoGent-box, an exploratory research phase was conducted by analyzing existing literature, best practices and by involving the perspective of local stakeholders and experts regarding this topic. The strategic and conceptual insights of this research phase were synthesized in this document. Hence, this document provides a synthesis of 1) dualities or discussion topics the project faced during this exploratory phase. These dualities can be applied by designers or project strategists to manage strategic project decisions and can assist them in making design choices in similar projects. 2) In addition, and by applying this framework within the CoGhent-project, a set of strategic and conceptual design requirements was formed. These requirements show how the City of Ghent wants to position itself with the CoGhent-project, and what conceptual and design specific requirements will be applied in the development of the CoGent-box.

By collecting and structurally capturing the gained insights during the exploratory phase, we aim to create value on two different levels. Firstly, within the conceptual development phase of the project, where the CoGent-box will be further developed, we can use this document as a navigation tool to make further strategic, conceptual and design decisions for the box. Secondly, we want to share these insights with other cities across Europe who apply similar projects that focus on the intersection of cultural heritage, technology and social cohesion as well. Therefore, European strategists can apply this document in order to gain insights in the dualities a similar project faces, and to find inspiration in the strategic and conceptual design requirements that this project embraces.

Authors

Bastiaan Baccarne - Researcher UGent Lina Juvens - Innovation lead District 09 Ben Robaeyst - Researcher Ugent