Understanding Different Qualities of the Knowledge Commons in Contemporary Cities

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In the past ten years, many (local) policymakers and entrepreneurs have been fascinated with the economic potential of so-called creative industries and smart cities. This fascination was stirred by the conviction that creativity boosts the (local) economy. And because the urban economy accounts for 70 per cent of the global GDP, and as more than half of the total world's population lives in cities, creative industries are all the more relevant both socially and economically. Based on principles of generating creative attractors in city centres, stimulating the creative class, fostering creative communities and developing creative spaces in local areas – blocks, districts, towns and cities – scientific and political practices began to focus on creative urban transition. So did the entrepreneurs.

An important force in all this has been the contribution of Richard Florida with his work on the economic impact of the creative class (Florida 2002). Policymakers across the globe are trying to do spatial transformation to attract creative workers and high-skilled people. They do so by means of developing cultural amenities in cities or local areas. Following what they thought Florida's message to be, they assumed that the congregation of people employed in the creative industries would bring about in a spontaneous way local economic prosperity and an improvement of social qualities. Accordingly, many towns hastened to construct cultural centres and innovation hubs in order to attract creatives and encourage the development of creative industries.

In recent years there has been a backlash. People began to see the shadowed side of the focus on creativity and creative industries. Critical scholars began wondering whether the promised economic returns materialised, how the vulnerable neighbourhoods fared in this new regime, how the quality of the urban environment was affected overall, and, more particularly, whether the sources that were poured into creative sites came at the expense of the sources for affordable housing. The suspicion arose that when the urban landscape and the local economy improved due to the influx of creatives, not all inhabitants profited and some even lost in terms of the quality of jobs, of their housing and their neighbourhoods. Many people actually felt forced to leave their neighbourhoods and their towns, mainly because they could not continue to pay the rent in their "regenerated" neighbourhoods. A policy directed at creativity may, therefore, have an increase in inequality as the unintended consequence.

Moreover, a loss of local identity is another critical issue. This happens when people from the outside move in and change the environment. Or it happens when areas are overtaken by tourism. The tourists, attracted by a creative atmosphere, cause overcrowding and a flux of commercial activities to satisfy their wants.

It seems vague to understand what the influx of creative activities contributes to the way people live together, apart from the financial outcomes. Does the quality of social life change indeed as is now surmised? In what way do cultural qualities change? Social and cultural qualities become increasingly important in a new economy focused on urban qualities and a meaningful life. City planners and politicians need to determine what works and they need to understand the dynamics of social and cultural qualities. Entrepreneurs and people who seek a place to do their (creative) thing want to be well informed as well of the qualitative characteristics of such a space, and that on the basis of data. Unfortunately for them, standard (economic) accounts of city life do little to meet their needs.

This chapter, therefore, explores a new approach to making sense of the social and cultural qualities of cities in the new economy. This is the so-called Value-Based Approach (VBA) with novel concepts such as shared goods and practices, willingness-to-contribute (WTC) (Klamer 2016), and – a key notion in our application – a commons, more precisely, the knowledge commons.

For the sake of understanding the notion of the commons, this study attempts to elaborate how the commons are generated, organised and appropriated in local neighbourhoods and how they can be studied empirically. By characterising different qualities of the commons in contemporary cities, this study attempts to identify certain qualities of the shared goods that specific neighbourhoods in Seoul and Amsterdam provide. Those neighbourhoods were the subject of urban regeneration programmes by way of cultural and creative interventions. One case that appears to exemplify what is precisely meant by a different understanding of the notion of the commons is the knowledge commons. In order to find out whether the different qualities of the knowledge Commons framework as inspired by the work of Elinor Ostrom (1990) and developed further by Frischmann, Madison and Strandburg (2014).

This chapter consists of four sections. The first section is an overview of what is happening in contemporary cities and what is missing in the current perspective on what people do in the new economy. The second section presents a new framework for analysing urban economies, the value-based approach. The third section reflects on the methodological implications of these different perspectives. The fourth section applies this framework to an empirical exploration of the commons in Amsterdam and Seoul. This study also shows how city government can contribute to or damage environments that are conducive and supporting for generating and refining relevant commons in a society.

11.1 WHAT IS IMPORTANT TO CITIES IN THE NEW ECONOMY?

By and large, the question of what makes some cities better than others has been addressed with the standard economic paradigm. According to this paradigm, success denotes economic success and is evident in the form of the growth of the production goods and services as measured with GDP, financial returns, and the number of jobs. It follows that urban development is about the development of markets; governmental interventions are directed at the advancement of market activities. Schools prepare citizens for the labour market, museums strive to attract tourists, and so do shopping centres and nightclubs. The city is seen as a source for economic activity, more precisely, financial transactions. The new economy, however, is more about creativity and innovation, and about social and cultural qualities. Talented individuals are seeking a meaningful and inspiring life, they focus on their well-being over and above their material welfare and like to have a sense of endless opportunities. To serve the need for social and cultural qualities organisations and (local) governments have to look beyond the growth of quantities of products and services, and develop an interest in issues like the balance between life and work, lively neighbourhoods, good social infrastructure with a great variety of social networks, and a range of cultural spaces. Important themes are increasingly sustainability, circularity, social empowerment, community-based solutions, cultural qualities, creativity, innovation, cocreation, and sharing. Firms recognise the potential of the creative industries and increasingly realise the need for qualitative approaches, such as sharing knowledge and practices, and cultural entrepreneurship. Even urban developers are appropriating a different, more comprehensive way to revitalise a town. So, cities in the new economy strive for a great range of social and cultural practices that generate not only economic value (jobs and incomes) but also social and cultural values that are key for quality of life.

When we consider the importance of social and cultural qualities that a city generates with its practices, we get interested in the questions of where people meet and what kinds of practices they produce and share (Collins 2004). In this sense, as will be discussed in the next section, the social infrastructure and the social and cultural practices of a city over and beyond the economic value help us explore these questions. Here we side with various scholars who have challenged

a single-minded focus on urban economies with its penchant to elevate economic and financial criteria as sole indicators of how well a city is doing (Jacobs 1964; Bell 1973; Harvey 1990; Pratt 2009; Florida 2017; Chetty et al. 2018; Klinenberg 2018).

An important argument pertaining to this discussion is prefaced on the idea that social and cultural qualities cannot be obtained simply by an influx of the creative class. More precisely, urban creativity is not something that an influx of highly skilled people can generate by itself. Csikszentmihalyi and others have stressed the importance of the right environmental qualities and of ecosystem for innovative activities (Csikszentmihalyi 1991; Moretti 2012). Attractive cultural spaces are only part of that. The right educational institutions can be important, too, as well as the entrepreneurial climate as depicted by Currid-Halkett for New York in *The Warhol Economy* (2008). Following this, an important question that cities have to engage with in addition to making sense of the importance of urban qualities concerns a different approach that takes into account social and cultural dimensions of city life. Those engaged in the shared practices will be more attentive to human interactions and contributions, and to the meanings and reflections that people share.

We, therefore, are in need of a different perspective that does justice to these complicated developments in cities. It must be an institutional approach that serves not only city officials but also people who are trying to figure out which cities suit them best to make a life and a living. That framework is, so we suggest, the one provided by the value-based approach (Klamer 2016).

11.2 A NEW INSTITUTIONAL APPROACH

11.2.1 Changing the Perspective with the Value-Based Approach

Let us begin with an example to understand the differences of Value-Based Approach (VBA) from the standard economic approach. We take a revitalisation project in the city of Hilversum of The Netherlands as an example (as one of the authors was involved in the process as political governor of the town). Hilversum is a provincial town in a green area close to Amsterdam. Its main claim to fame is the presence of the media sector with most of the radio and television studios that broadcast in The Netherlands. At the centre of the town is a market square with a farmer's market on each Wednesday and Saturday. On the other days, the square was empty and quite desolate until 2017 when a food hall opened in an old, then abandoned, building on the west side of the square. The building had housed a movie cinema until 2014. City planners and their advisors had proposed to take the building down in order to create more space and open the arteries that the city planner a century ago had designed for the town. There was some opposition to this plan. Older inhabitants had nostalgic associations with the building. The city government discussed what to do. It was pointed out that the building had historic significance for Hilversum as it was built as a factory of transistors in the 1920s; that factory had been the reason the first radio operators chose Hilversum as their residence. The television studios followed after the Second World War. The building signified the historical start of the media sector in Hilversum. Before the building became a cinema, it was also used by a car dealer. All that was not sufficient to convince the city government, but when it was discovered that the building had a facade with some sculptures and a curved cement roof that was unique in The Netherlands, the governors decided to save the building and to organise a competition for the best plan. A local entrepreneur won with his concept for a food hall. He named it Mout.

In 2017 Mout opened and ever since the centre of Hilversum has been transformed, attracting even people from Amsterdam to visit. Mout has become a bustling centre where people meet, work and relax, with regular events taking place. Even though it appears to be a commercial initiative that has turned out quite well for the entrepreneur, it adds a great deal more to the town. It has become a shared space for the inhabitants of Hilversum, a place where people meet business contacts, socialise and work. It has given a boost to the social and cultural qualities of the town. Social qualities have increased because of what people perceive as the "coziness" of Mout (coziness or "gezelligheid" is a key Dutch value). Cultural qualities have been enriched as well: the place is a source of inspiration of the creatives in town. Hilversum, as a media town, attracts all kinds of creatives who now have a place to meet, a place that reminds them of the vibrance of the city of Amsterdam. In this way, Mout has become a locally shared space over and above the commercial venue it is.

The VBA invites us to look beyond the economics of a place like Mout, and also beyond its physical (architectonic) and functional aspects that the city planners stressed. The VBA considers the values at stake, the social and cultural qualities that are affected. When we look at cities through the lenses that the VBA provides, we want to know what values are important for those who inhabit, govern, visit and work in a city, that is, what are their values. When we try to assess spaces like Mout, we are not only interested in the financial and infrastructural conditions but also in the way it enables inhabitants, businesses, workers, visitors and governors to realise their values. In terms of the VBA we would say that people are realising values by way of Mout, and that Mout has contributed to social and cultural qualities. Call this the shared goods that Mout generates.

11.2.2 Shared Goods and Willingness to Contribute

Shared goods are goods that are "shared by a few people, or a group of people, without a clear legal definition of ownership" (Klamer 2016: 80), and are usually

practices, implying a sense of "us" exclusively. We thus use the terms shared goods and shared practices interchangeably. Shared goods include one or another kind of relationship based on co-creation/co-working, such as a social network, companionship, a neighbourhood or friendship. Shared goods mostly serve social and cultural values and require mutual contributions and participation in order to produce and consume the goods (Klamer 2016). A neighbourhood is a good because it requires efforts to acquire, and it gives all kinds of benefits, just as private and public goods. The difference is that you can acquire a private good by paying for it, or enjoy a collective good just by being part of a collective. A neighbourhood is shared by people who live and work there. When someone claims to have a great neighbourhood he or she shares that good with the neighbours. What is at stake here is that the meaning of the neighbourhood refers to something beyond the legal and spatial definition, and also includes what people do and what values people realise in the neighbourhood, such as localities, community activities and local ambience.

To acquire a shared good, to call the neighbourhood yours, you need to contribute somehow. A friendship, the typical example of a shared good, comes about when both friends contribute to it. A contribution like volunteering to do something valuable is a contribution when it is not rewarded with something equivalent in return. Willingness to contribute, thus, is the key (Table 11.1).

Key terms	Description
Willingness to contribute (WTC)	 We need to focus on qualities instead of quantities Values are qualities, price is a quantity and is therefore not a value
Shared goods	 Shared goods exist usually as a form of "practices" Shared goods have shared ownership Others are excluded from ownership and there is rivalry People acquire ownership by contributing to it, using it, and participating in it Shared goods cannot be bought and sold; they do not have a price Examples are: practices that people share, knowledge, conversations, neighbourhood, community activities, art, music, society, outcomes of cultural economics

TABLE 11.1. A new type of goods in the new economy

Source: Elaborated by authors.

Willingness to contribute promotes the production of shared goods. Shared goods are ongoing and are visible in the interactions, the conversations, the co-creations that take place. For instance, practices, which are a sort of shared goods, generate and stimulate a commons when the practices become a source for others to join. Thus, shared goods are distinguished from the commons; however, not all shared practices contribute to a commons. Friendships and families, for example, will be too exclusive to constitute a commons. Shared practices may be more exclusive than the commons. You may, for whatever reason, not be able to join a particular group of creatives. But the activities of a group of creatives who undertake diverse activities and contribute a great deal to the liveliness and creative atmosphere of an urban space will undoubtedly contribute to and add value to a particular commons, for instance, a specific knowledge commons in town.

11.2.3 The Commons within Contemporary Cities

The notion of the commons has been conceptualised since the 1960s: Hardin and Nobel Laureate Elinor Ostrom opened up a rich discussion, and many other scholars developed the discussion in a vast array of sectors (Hardin 1968; Ostrom 1990; Hess 2008; Harvey 2012; Frischmann, Madison and Strandburg 2014; Borch and Kornberger 2015). Among others, this study focuses on the two points: a community-based framework that Ostrom demonstrated by reviewing empirical studies and characteristics of the commons within contemporary cities. She showed that communities are able to self-regulate their commons without resorting to governmental controls or privatisation.

Following Ostrom's contribution, some city officials have become aware of the potential of the commons in understanding the new economy. To what extent Ostrom's notion of the commons is practical and useful in an urban setting is questionable, though. The main reason is that the character of urban commons is different from what Ostrom had in mind. Ostrom's notion of the commons applies especially to natural resources, common pool resources as she calls them, whereas the commons in cities are mostly about creative and knowledge activities. The latter work differently. In the case of natural resources, the main problem is excessive usage and depletion. In the case of creative and knowledge commons usage is needed for the maintenance of its values. Where people use and consume natural resources in order to benefit. Consequently, the free rider problem does not apply (Borch and Kornberger 2015; Foster and Iaione 2016; Klamer 2019; Won 2020).

The commons, as we use the concept, is therefore different from the commons as usually understood. In contemporary cities the commons are about practices rather than about natural resources and physical development. Practices are characterised mostly by qualities: some creative practices may be more creative, more engaging, more open, more intense than others (Won 2020). The commons in contemporary cities are about how involved people are, how accessible they are to newcomers, how rich they are. The reason that creatives choose Amsterdam over Hilversum, or Rotterdam for that matter, is because they appreciate the qualities of the commons of Amsterdam above those of Hilversum and Rotterdam.

We define the commons as a "source, like an ongoing conversation out there. People can participate in it, draw benefits from it, but how and to what extent depends on the conditions of participation (or of membership)" (Klamer 2016: 81). In this context, we observe commons of all sorts and see cities differently. We would argue that Mout is a place to create shared goods, such as co-creation activities. A commons as the one boosted by Mout turns out to cater especially to the creatives who are drawn to the type of food culture of Mout (like poke bowls and street food), and to the chance to run into others like themselves. This is in line with another insight of the VBA, which is that people not only work to earn an income but seek to share practices and knowledge, and to contribute to them. Much of creative activity takes place in informal settings, with fortuitous meetings and casual conversations. We therefore see in cities that are known to be creative the emergence of all kinds of spaces like Mout, where people gather to drink a cappuccino together, to have some food and to talk. This realisation calls for a new perspective that enables cities to clarify functions of buildings in a market square, or, to take another example, social infrastructures, such as public libraries.

If libraries were thought of as places where people went to borrow books, we think of them now as spaces that provide manifold shared practices in which people can participate, like storytelling for children, reading clubs, meetings of retirees or networking for moms. Public libraries become increasingly spaces not only for knowledge accumulation but also for social and cultural practices with an aim at developing the commons. So even though most of these shared goods do not generate much, if any, financial returns, they are significant for a civilised society, and for a creative economy. The point is that the qualities are characteristics of the commons that mostly are in the form of ongoing practices, knowledge, conversations in many cases, or activities of all sorts. But how can we recognise these characteristics? The big research challenge is to figure out how to "assess" the social and cultural qualities of a commons. How can we determine that, say, the commons in one city is different from or superior to the commons in another city?

In the search for answers, the GKC framework accommodates a way through which to facilitate the flow of the knowledge commons and shared goods. We argue that the knowledge commons comes about by promoting shared goods to which knowledge workers contribute, usually in informal settings, such as networking, socialisation and talking with others. Accordingly, the social sphere counts.

11.2.4 Knowledge Commons and Shared Goods

Let us recall the basics of this volume that Dekker and Kuchař introduced: markets are cultural and coincide with a form of culture that relies on shared goods. The emphasis on the relationship between shared goods and the commons is because of our interest in the new market interactions that reside, above all, in the dynamics of new economic activities. The presumption is that such commons only thrive in a certain urban environment that encourages creativity and an active community (Dietz, Ostrom and Stern 2003). Important here is a supportive environment that is not merely about the great number of jobs or the increase in tax revenues, but about the presence of creative vibes based on local participation. Good educational institutions such as universities, art academies and libraries, a great variety of cafes and restaurants, museums, bookstores, cinemas, theatres and incubators constitute sources for people living in the city as well as for commercial parties in need of creative inputs. When the qualities of certain commons are considered low, people can join efforts to generate, organise and appropriate the commons by virtue of developing shared practices in order to boost such qualities.

More to the point, we argue, following Ostrom and Jacobs, that the knowledge commons, as one of the commons, requires strong social participation that enables cities to engender, organise, and govern the knowledge commons within cities, in the sense that shared goods are produced and reproduced by active contributions and sharing (Jacobs 1986; Hess and Ostrom 2007; Klamer 2016). It is, above all, the local people who enrich shared goods in neighbourhoods/ communities/ cities. Despite this, the debate on what contributes to urban qualities often misses this key point; the fallacy of the Floridian approach is the case. Albeit the commons in contemporary cities rely on social and cultural practices, the debate on the commons often misses this key point.

Consider, in this respect, the knowledge commons. The qualities of the knowledge commons that Amsterdam creates are different from those in Rotterdam, since the characteristics of shared goods that the two cities produce are different. Ostrom also points out that a revised approach to the knowledge commons is required due to the complexity and interdisciplinary nature of the knowledge commons. For example, the knowledge commons does not rely on physical resources, but focuses on the community (Levin 2007);¹ shared knowledge is engendered by participation and contribution (Klamer 2016; Won 2020). The more people who share and contribute to it, the richer the knowledge commons becomes. A high degree of social and cultural qualities is more important than a strong government intervention for the community-based governance; more and more, social interactions become important (Frischmann, Madison and Strandburg 2014). In this vein, we want to connect the GKC Framework and the VBA to identify the nature of the knowledge commons in the new economy context, and to what extent they spill over in other social and market activities.

¹ See Levine (2007).

The GKC framework describes how the knowledge commons are generated, used and governed. There have to be certain resources, a relevant community, rules or norms that participants heed, the participants, or actors as they are called in the framework: first, resource characteristics could be articulated by the economic, social and cultural dynamics; second, sense-making activities² and willingness to contribute characterise attributes of the community and rules-in-use; third, social and cultural practices articulate action situations, and thus, understanding the characteristics of shared goods can be said to effectively benefit the action arena of this framework; fourth, important values that people in the community strive for would help cities to understand patterns of interactions. In this sense, the VBA is useful in articulating the process of how shared goods endorse the knowledge commons.

It is worth addressing a better strategy for community self-governance of knowledge commons through this framework; yet, the focus of this chapter is more on an understanding of why shared goods are important to engender the knowledge commons. The VBA takes the questioning towards those who participate and contribute to a commons in contemporary cities. The question to ask is what are the important values and purposes that they are valorising by partaking in shared practices. Why is this question important? Consider, for instance, when people in a certain place appreciate knowing more about modern art, and value being up-todate, they stand to benefit from the presence of a modern art museum and a series of serious art galleries as well as regular meetings, seminars and symposia about the arts. Then it is to be expected that the quality of the knowledge commons of the place is closely associated with modern art. However, the presence of those related physical infrastructures per se does not guarantee creation of the relevant knowledge commons. Therefore, we are in need of identifying what kind of social and cultural practices exist in a certain place. By doing so, we can characterise a particular social and cultural practice that enhances a certain quality of the commons at either the neighbourhood or the city level. What qualities of the knowledge commons do people produce, reproduce and appropriate for the new economy? How do we characterise different qualities of the knowledge commons?

Following the discussion, Table 11.2 illustrates the basics of the combined framework driven by the VBA. It extends the market-driven understanding and considers qualities of the commons.

We do not claim that the characteristics of shared goods denote qualities of the commons, but say that they will be of value in making sense of the relevant qualities that the given community/ group/ neighbourhood/ city produce. Based on these remarks, what matters in the following part is to pay close attention to characterising shared goods with an empirical analysis.

² See Klamer (2019).

Object/unit	Previous understanding	New understanding	
Cities	Characterised by the market dynamics	Characterised by the economic, social and cultural dynamics	
A commons and cities	Cities are considered as shared resources, such as CPRs in the spatial/physical sense	Cities in themselves are not considered as a commons and instead cities are considered as a place full of different qualities of the commons.	
Framework for understanding a commons	CPRs Framework	GKC Framework	
Goods in cities	Private/Public goods	Shared goods	
Major drivers that generate the goods	Preference/Surplus The amount of production and consumption	Willingness to contribute Shared practices Sense-making activities ^a	
Determinant	Transactions/Pricing (Cost–benefit analysis)	Value proposition (Value-oriented production and consumption)	
Spheres	Market and Governance (Market-driven approach)	Cultural, Social, Market, Governance, and Oikos Spheres (Value-based approach)	

TABLE 11.2. Differences between the previous standpoint and a new perspective.

^{*a*} See Klamer (2019). Source: Won 2020.

11.3 METHODS FOR MEASURING THE QUALITIES OF URBAN COMMONS

For the empirical analysis, let us start with a key proposition of this volume that the knowledge as a shared good constitutes our civilised society, supporting markets. And some part of knowledge exists as a commons. This section situates this idea into the contemporary urban context by raising the questions: How do we notice that some neighbourhoods/ cities provide a more supportive environment for engendering shared goods than others? What qualities contribute to civilisation of contemporary cities?

The willingness to contribute is the input of actors. But it is not possible to measure it because of a lack of data and difficulties in identifying the magnitudes or activities that we would need to record. We therefore attempt to measure these contributions in an indirect way, through what people say. A particular topic of conversation between people implies a marked knowledge creation of that domain and it supports the relevant businesses – regardless of whether the knowledge is entirely shared by the entrepreneurs or not. This study makes use of big data, mostly from social media, and analyses the patterns of what people talk about.

With an emphasis on the interpretive analysis, the data analysis attempts to interpret communications in social media channels and search engines. The attempt here is to detect patterns in a massive amount of data by means of web scraping of conversations between people by counting word frequencies. This is a popular way to analyse social media data (Schroeder 2014). This study uses open access data: NAVER (provides search engines and social media channels in South Korea) and Twitter for the case of Seoul, and Twitter for the case of Amsterdam. Due to the limitation in accessing personal information for sorting out specific population, this study sets geographical and periodic scopes: Jung-Gu in Seoul between 2013 and 2015, and Westergasfabriek (West Gas Factory) in Amsterdam between 2015 and 2016 (Won 2020). We do so because both districts have been hailed as creative neighbourhoods in their respective cities.

The idea is that these patterns reflect characteristics of shared goods, such as sense-making activities (Klamer 2019), of the two neighbourhoods and indicate certain qualities of a commons. These different qualities contribute to understanding the action arena of the GKC framework. What do people write about, what concerns do they share and what issues do they address? Do people mainly communicate about process issues, or do they also talk about the content of what they are doing? Do social themes dominate the chattering or is the creative process the big topic? The outcome matters, for example, for people considering moving to a city. In order to discern significant differences between two different neighbourhoods we attempt to characterise shared goods that both neighbourhoods produce with the empirical analysis.

11.4 EMPIRICAL METHODS FOR CHARACTERISING THE QUALITIES OF THE COMMONS

11.4.1 Attributes of Jung-Gu, Seoul

Seoul, the capital city of South Korea, has served an important role economically, socially and culturally. The city has been the centre of South Korean society and economy. The intervention of the Seoul Metropolitan Government has all but dominated South Korean society. However, since 1991, the central government has encouraged the local government to develop local economic, social and cultural sources independently. The city of Seoul also became one of the local governments, instead of functioning as part of the central government. Even so, it continues to be influential statewide as it governs the centre of business activity.

Jung-Gu is the smallest district of Seoul. It has served as a centre of media, business and administrative functions of the city. A major challenge that the municipality has faced is to achieve transition from manufacturing to the creative industries. For the sake of the transition, as is customary in South Korea, governmental interventions have strongly promoted creative workers, appealing to the creative economy since 2013 (Won 2020). For the transition towards the new economy, the district focused on economic prosperity by first developing tourism businesses, as did many other cities. At the same time, the municipality improved the living conditions for inhabitants, though it is unclear whether the approach contributed to creative transition via social and cultural practices.

11.4.2 Characteristics of Shared Goods in Jung-Gu

The interactions between people have certain qualities and so does the sensemaking that the mutual conversations brings about (Klamer 2019). At this point our main objective is to identify in the districts of our research what people talk about, what is on their minds, since creating a commons requires social participation. If we find distinctive patterns we have an idea of what characterises the commons in the districts, what the central themes are. By comparing with other districts we get a first indication of the respective qualities.

Based on the methodological framework of Table 11.3, Figure 11.1 presents the conversation related to the cultural sphere. In this figure, the place and the size of the words are significant. The further removed from the centre the less relevant to the mainstream topic of the cultural sphere is the discussion. The size of a word is determined by frequency. The greater the size, the more popular is the topic. The placing implies connections between topics. The data analysis of 2013, for instance, shows that the topics related to political issues and travel were the most popular; however, the topics related to the local creative sectors, such as IT or scientific issues, were rare.

In 2015, we discovered changes in the patterns: topics related to social and cultural activities emerged significantly and climbed to the top of the rankings. It does seem that people pay close attention to socialising: the words Friends and Family emerged in 2015 as one of the top three words in the centre. This implied that interest in relationships had increased. And the term Volunteer Work emerged in 2015, which implied that the social engagement in societal value creation had increased. More precisely, what people talk about has been specified in the topic related to travel: the words of Region, Local area, Town and Village were accentuated in 2015, indicating certain cultural streets, such as Hongdae, and neighbourhoods. In addition, the topic of music education appeared.

Discussions of issues and themes related or referring to a strong governmental intervention are clear in the Jung-Gu district. However, the cultural content clearly increased from 2013 to 2015. Talk related to the cultural sphere has been more culturally focused. The primary conversation is more about social and cultural activities, travel, volunteer work and relationships without any interruption by words related to governmental initiatives. This suggests that the characteristics of shared goods in this district changed. So did the qualities of the commons.

Purpose	Data collection				
	SEL	AMS	Approach	Analysis	Research question
Characterising social and cultural practices	Social media data collected from Naver, Twitter	Social media data collected from Twitter	Hermeneutic approach	Big Data Analysis with Software R, Python	How cities get to know different social and cultural qualities? Do cities provide a supportive environment to generate the commons related to the certain creative industrie Do social and cultural practices respon- to creative activities?

 TABLE 11.3. Summary of methodological framework

Source: Won 2020.



FIGURE 11.1. Conversations on culture in Jung-Gu in 2013 and 2015 Source: Won 2020

Moreover, what people talk about is irrelevant to the knowledge input of dominant creative industries of this district, such as the IT and Communication industry. Despite the remarkable commercial character of the area – its market share is about 17 per cent of the total for Seoul – with lots of IT people active and others focusing on technical processes, people talk more about political issues, travel, leisure and building relationships rather than about activities or reflections related to IT industries, innovative procedures, or the creative industries. We, thus, see that the presence of creatives itself hardly guarantees a change of local practices. More to the point, even though the public investment in the creative industry could bring about a particular knowledge and labour power, creation of shared goods and the knowledge commons related to it requires social engagement. This is the very point that Florida missed in his argument on the creative class, and that Jacobs emphasised. In light of these remarks, the most important part of this interpretation is to identify predictable and potential avenues for the different qualities of knowledge commons. That is to say, when it comes to Figure 11.1, the action arena in this district is most likely characterised by activities related to travel and socialising rather than creative industries per se. Resource characteristics, for instance, the knowledge input, could be determined by the great influx of people employed in creative industries, such as IT and Communication industry and market activities; however, it does not mean that the qualities of the knowledge commons follow the input.

The intended contribution of this method that enables cities to make sense of what the different qualities of the commons look like in practice via describing data. We now turn to the case of Amsterdam in order to see whether we can discern significant differences and similarities.

11.4.3 Attributes of Westergasfabriek, Amsterdam

Like other advanced cities, the Amsterdam city government identified "creativity" as the essential engine to make the city flourish for the new economy. It endeavoured to realise and implement urban creativity through policy measures intended to focus on creative processes, creative industries, social entrepreneurialism and incubators rather than tried to become an overall business-friendly city (Bontje and Lawton 2013; Savini and Dembski 2016). A well-known Amsterdam creative policy dates back to 1999 and consists of the initiation and stimulation of incubators (broedplaatsen), intended to bring together creative start-ups and starting artists and thus to stimulate co-creative processes and strengthen the commons related to creative activities (Peck 2012). The municipality initiated projects away from the historical centre where the main cultural institutions attract overwhelming crowds of tourists, and targeted specific neighbourhoods with abandoned industrial spaces, such as Westergasfabriek (the West Gas Factory), currently named Westergas.

The "Westergasfabriek" was a large factory that produced coal-based gas in the nineteenth century; however, the site closed and left industrial facilities including a huge round gas container when coals became politically unacceptable and commercially unprofitable (Mommaas 2004). In the 1960s, the local administration embarked on a programme to redevelop the site. It took several decades before the plans materialised. It was not until 2003 when Westergas reopened the gate to the public. The one challenge was to constitute a governance that brings about a productive and pragmatic collaboration between the (commercial) owner of the site, the local government, the neighbourhood and the cultural sector. The risk was that commercial interests would take over as bills for the clean-up and the renovation of old buildings including the container had to be paid. Cultural activities usually cost money so who would pay the bills? The huge project has multiple stakeholders, such as citizens, designers, civil servants, cultural companies and organisations, and the commercial owner of the site cooperated for the project.

It really was a public-private co-creation. There was political recognition of the importance of the social context.

Eventually it was conducive to the realisation of a social and cultural commons within Westergas. The government has acted in an entrepreneurial sense by giving space to the manifold creative groups to participate in the project and thus to stimulate civic engagement. Fostering creative vibes and developing creative activities are left to the social initiatives. Westergas now provides an important space for all kinds of creative events to take place in the gas container (such as opera performances, automobile show), and in a cinema. In addition, it houses several restaurants and cafes that the locals also attend, as well as shared work spaces. All these activities have given the Westergas a name, an identity that people in and around Amsterdam recognise.

11.4.4 Characteristics of Shared Goods in Westergasfabriek

What people talk about in Westergas was mainly focused on cultural and creative activities that this neighbourhood provides. That much becomes clear from Twitter. As Figure 11.2 shows, the shared goods that Westergas produces are closely associated with Dutch fashion industries, music festivals, creative business events and family activities. For instance, we notice lots of activity generated by the so-called TNW conference, a technology festival that the world's top technical firms attend, and that start-ups promote by sharing relevant knowledge and practices. We also note lots of

(2016)



FIGURE 11.2. Explanatory analysis on West Gas Factory Source: Won 2020

(2015)

talk about a local brewery on the premise, a creativity club, music, family activities, and the park on the site.

Political conversations are all but absent. We also observe a great deal of talk about local matters and local spaces, as there are many references to the streets in the neighbourhood, such as Westerpark, Haarlemmerplein, Nassaukade and Westergasterrein. It implies that this neighbourhood provides a supportive environment for ongoing creative activities for people who work, but also for people who live a in a spatial sense. We discern appreciation through use of typically Dutch expressions such as "gezellig (cozy)" and "aardig (lovely)". In this case, the action arena is characterised by different qualities of the commons, such as design, festivals related to creative industries, and local cultural activities. The knowledge commons that this district engenders, thus, appears to influence and to be influenced by practices that people share via social and market activities.

11.5 CONCLUSION

With the notion of the commons Elinor Ostrom revived an important concept. It has a serious impact on the way we perceive contemporary cities. It allows us to look beyond the usual economic and financial criteria and, as city planners will consider, more than merely the functions of infrastructural projects. This study attempted to make sense of the notion of the commons in the contemporary urban context beyond Ostrom's sense of the commons. To this end, this study set up a theoretical framework by bringing two novel notions of shared goods/ practices, and a willingness to contribute with a value-based perspective and connecting them to the GKC framework. What is ultimately at stake, when trying to establish this idea within the new economy, is to understand that the commons in cities are social and cultural practices and the commons are qualitatively different in nature between cities.

To characterise different qualities of the commons, and to assess those qualities, we are in need of a research method for different kinds of data analysis in a more systematic way. For the empirical analysis, we set up a different methodological approach to analyse the different qualities of shared goods via interpretation of big data from social media networks and search engines, with explorations of the cases of Seoul in South Korea and Amsterdam in The Netherlands. For the sake of a comparative analysis, we narrowed the spatial scope by selecting a neighbourhood from each city designated as a creative space – Jung-Gu in Seoul and Westergas in Amsterdam – and we demonstrated our methodology to detect whether creative activities of the neighbourhoods contribute to creating the relevant commons within the given regions. It is worth noting that the primary aim of this approach is not to claim causality, but to characterise patterns of practices that people share.³ The challenge is thus to characterise qualities of the commons within cities/ neighbourhoods in such a way that

³ See Chetty et al. (2018).

patterns become clear and comparisons become possible, and to anticipate what qualities of knowledge commons are related to those jurisdictions.

Both cases demonstrate why shared goods and practices are important to making sense of the qualities of the commons via interpretive data analysis. Two points are of special note here: first, shared goods are hardly formed by the governmental initiatives, as the empirical studies delineate. Even though there was a strong governmental intervention to promote certain creative industries, such as highskilled industries, without social participation, relevant shared goods are hardly produced. This indicates one of the key discourses of cultural economics: crowding out. Strong governmental involvement crowds out cultural and social activity (Frey 1997, 2000). When shared goods become too dependent on governmental support or are too strongly controlled by the government, participants defer to the government rather than take initiatives themselves and focus on what their (creative) work is all about. Second, we noticed that there was a discontinuity between characteristics of shared goods and the knowledge commons that local creative industries contribute, unless relevant local practices were developed. It became clear when we compared the local practices of Jung-Gu and Westergas: the characteristics of shared goods in Jung-gu are mostly specific to the IT sector; yet, the qualities of the knowledge commons to which local people contribute tend to be related to other industries, such as tourism and travel.

There are two limitations of this research. First, we have not specifically explored the shadowed sides of urban regeneration by means of creative policies; however, we observe the importance of a constructive practice in the case of Westergas. More to the point, it is the locals who, in turn, develop, characterise and embrace practices that engender the knowledge commons within a neighbourhood. This study, following the community-based approach to the commons by Ostrom, highlights the importance of understanding why local practices need to be involved in producing shared goods and the commons within contemporary cities. To this end, we proposed a systematic way to identify different qualities of the commons of neighbourhoods or cities. Second, we see cities as a place full of different qualities of shared goods and the commons, and do not consider those in themselves as a commons. Thus, the trajectory of this research did not deal with shared places themselves or their governance system, but focused on characterising the different qualitative nature of the commons in different places. In this vein, it was hard to confine access limitation or clear boundaries and define monitoring or sanctions processes. As this study earlier mentioned, the commons in the new economy is something beyond natural resources, more subject to social and cultural practices, and organised by contribution of participants. So the further researches should deal with the question of how shared goods are governed by communities and how practically contributions are fostered.

In conclusion, the intended contribution of this chapter is to make sense of why the commons in the new urban economy are different from those in the previous economies and how cities can extend their perspective to identify the differences. Our methodology is still limited in the sense that we have difficulty in getting data on the scale of neighbourhood/ blocks/ cities. Big data have also serious limitations (Twitter is not a representative sample of the ongoing conversations). We would like more data and more inputs to get an even richer picture of the social and cultural qualities of knowledge commons and to explore their relationship to economic practices and financial outcomes. Our contribution has been to initiate a connection of exploration of city life with the re-invigorated notion of the commons, and to show how the value-based approach can enrich the perspective on the urban commons.

REFERENCES

- Bell, Daniel. 1973. The Coming of Post-Industrial Society: A Venture in Social Forecasting. New York: Basic Books.
- Bontje, Marco and Philip Lawton. 2013. "Mobile Policies and Shifting Contexts: City-Regional Competitiveness Strategies in Amsterdam and Dublin". *Tijdschrift Voor Economische En Sociale Geografie* 104: 397–409.
- Borch, Christian and Martin Kornberger. 2015. Urban Commons: Rethinking the City (Space, Materiality and the Normative). Oxon: Routledge.
- Chetty, Raj, John N. Friedman, Nathaniel Hendren, Maggie R. Jones and Sonya R. Porter. 2018. *The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility*. NBER Working Paper Series, no. 25147.
- Collins, Randall. 2004. Interaction Ritual Chains. Princeton, NJ: Princeton University Press.
- Csikszentmihalyi, Mihaly. 1991. Flow: The Psychology of Optimal Experience. New York: Harper Perennial.
- Currid-Halkett, Elizabeth. 2008. The Warhol Economy. Princeton, NJ: Princeton University Press.
- Dietz, Thomas, Elinor Ostrom and Paul C. Stern. 2003. "The Struggle to Govern the Commons". *Science* 302: 1907–1912.
- Florida, Richard. 2002. The Rise of the Creative Class. New York: Basic Books.
- 2017. The New Urban Crisis: How Our Cities Are Increasing Inequality, Deepening Segregation, and Failing the Middle Class and What We Can Do about It. New York: Basic Books.
- Foster, Sheila R. and Christian Iaione. 2016. "The City as a Commons". Yale Law & Policy Review 34(2): 281–349.
- Frey, Bruno S. 1997. Not Just for the Money. Cheltenham: Edward Elgar. 2000. Art and Economics. Heidelberg: Springer-Verlag.
- Frischmann, Brett M., Michael J. Madison and Katherine Strandburg. 2014. Governing Knowledge Commons. Oxford: Oxford University Press.
- Hardin, Garrett. 1968. "The Tragedy of the Commons". Science 162: 1243-1248.
- Harvey, David. 1990. "Flexible Accumulation through Urbanization: Reflections on 'Post-Modernism' in the American City". *Perspecta* 26: 251–251.

2012. Rebel Cities: From the Right to the City to the Urban Revolution. London: Verso.

Hess, Charlotte. 2008. Mapping the New Commons. SSRN Electronic Journal. https://doi .org/10.2139/ssrn.1356835

- Hess, Charlotte and Elinor Ostrom. 2007. Understanding Knowledge as a Commons: From Theory to Practice. Cambridge, MA: MIT Press.
- Jacobs, Jane. 1964. The Death and Life of Great American Cities. Harmondsworth: Penguin Books.

1986. Cities and the Wealth of Nations. Harmondsworth: Penguin.

- Klamer, Arjo. 2016. Doing the Right Thing: A Value Based Economy. London: Ubiquity Press.
- 2019. "Economy and Culture: The Importance of Sense-Making". In *The Oxford Handbook of Ethics and Economics*, edited by Mark D. White. Oxford: Oxford University Press. DOI: 10.1093/0xfordhb/9780198793991.013.17.
- Klinenberg, Eric. 2018. Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life. New York: Crown.
- Levine, Peter. 2007. "Collective Action, Civic Engagement, and the Knowledge Commons". In Understanding Knowledge as a Commons: From Theory to Practice, edited by Charlotte Hess and Elinor Ostrom, 247–276. Cambridge, MA: MIT Press.
- Mommaas, Hans. 2004. "Cultural Clusters and the Post-Industrial City: Towards the Remapping of Urban Cultural Policy". Urban Studies 41: 507–532.
- Moretti, Enrico. 2012. The New Geography of Jobs. Boston: Houghton Mifflin Harcourt.
- Ostrom, Elinor. 1990. Governing the Commons. Cambridge, MA: Cambridge University Press.
- Peck, Jamie. 2012. "Recreative City: Amsterdam, Vehicular Ideas and the Adaptive Spaces of Creativity Policy". International Journal of Urban and Regional Research 36: 462–485.
- Pratt, Andy. 2009. "The Creative and Cultural Economy and the Recession". *Geoforum* 40: 495–496.
- Savini, Federico, and Sebastian Dembski. 2016. "Manufacturing the Creative City: Symbols and Politics of Amsterdam North". *Cities* 55: 139–147.
- Schroeder, Ralph. 2014. "Big Data and the Brave New World of Social Media Research". *Big Data and Society*. DOI: https://doi.org/10.1177/2053951714563194
- Won, Youn Sun. 2020. Assessing Urban Qualities within the New Economy: A Value Based Approach to Cities. PhD Thesis, Erasmus University Rotterdam.