

## 5.0 DISCUSSION

### 5.1 INTRODUCTION

#### The backdrop of the discussion

Industry 4.0, indicates a fragmentation of workspaces. Hypothetically, the fragmentation would imply that the common workspace as a physical unit would no longer exist, but it seems to be the opposite when observing coworking spaces. Many of current knowledge workers and representatives of the creative class favor less fancy coworking spaces instead of the facilities of headquarters and corporations. The professional and creative freedom of entrepreneurship and freelancing seems to outweigh any well accustomed preferences on workspaces. It has created a generation, or a free spirited creative class very tolerant about their working environment. To refer back to the context of this thesis, the Norwegian mindset of the current generation is also interesting to mention again. A survey revealed that 31% population between the age of 25-39 (SSB) are with higher education, they are the very age group that frequent the coworking spaces mentioned. A bigger part of this group will also be more entrepreneurial trained, as a direct result of Kunnskapsløftet reform mentioned in the backdrop & context chapter. All these factors generate a very special a creative class in the Norwegian context, especially in Oslo, where most of the majority of the market is located.

However, freelancing and the lone eagle trend also have its drawbacks. Which is the endangerment of a corporate culture, which is an integral aspect of established companies and corporations. It is something the lone eagle cannot possess when doing individual work. This is the social limitations of entrepreneurship and the destiny of lone eagles, often cited amongst various entrepreneurs during the interviews, which was the very reason for many of them to choose MESH. However, these factors lead us to the coworking concept and the overarching mantra of it, which is to safeguard the serendipity of human interaction at the work place, even if it means across different employment.

There is also the aspect of financial issues of fragmentation and entrepreneurship. One individual cannot support basic amenities by himself or herself, such as a meeting room, kitchen, supplies, printer cost etc. in which the shared economy of coworking can solve. This is especially apparent in the Simula Garage, where economy was the main reason for the entrepreneurs to relocate out on Fornebu. Although MESH and StartupLab is much more expensive, it is both a better option both financially and culturally, in relation to a working culture.

### 5.2 SPATIAL LAYOUT AND CONTEXT

#### The resilience of coworking as program, morphology and architecture

The empirical work on the case studies showed a peculiar spatial distribution. The least favored spaces within the facilities are actually transformed to be used for coworking or coworking-related activities. Let



**IT-related businesses in Oslo.**

Location of businesses with IT as an integral part of daily operations, 2000.

Credit: Oslo municipality.

us digress a bit and ask look at a noteworthy dilemma: what happens when you place an extremely tolerant program such as coworking next to the offices of a traditional research facility such as in the Simula Garage?

The complexities of hybridization described by Moriset, demonstrates how the coworking concept show strong signs of compatibility with other concepts and working environments. This means that the resilience and flexibility of coworking as a program can expand, contract, transform according to whatever physical changes necessary. The users seem to be more than willing to put aside well-accustomed preferences and even inhabit the least attractive spaces, increasing the efficiency of the facility or building. This is very present in the cases of both the Simula Garage and MESH.

The high-profiled and firm architecture often seen in science cities or science parks, is no longer high priority. What seems important is not firmly designed office environments but rather environments that open for mixed use, changing uses, and flexibility in their spatial layout and architectural expression. However, not in a streamlined kind of manner. A certain resistance in the physical and organizational environments, may even be regarded as negative but rather as enriching. Coworking also becomes very relevant in context

with the transformation of existing building masses, especially in Norway where 70% of the buildings are already built for the next 30 years. Coworking have exceptional transformative properties where no space is too small or irregular for coworking, but the users of these spaces are often very tolerant and open-minded to spaces, because of the aforementioned social limitations individual work brings to it.

### **The second coming: professionalization of coworking spaces**

In this chapter, the cluster will be used as a common term to denote all kinds of 21<sup>st</sup> century industrial complexes from the literature review. More specific concepts, such as the science park and the science city, will be used and described accordingly to their definitions in the literature review. The appeal and resilience of the coworking spaces have sparked an interest by many policy makers and urban developers, drawing parallels to when the first successful clusters were observed and studied. A simple of quality of the coworking space is that it can exist within one facility. Therefore, it is relevant to discuss the physical layout in the interior when discussing coworking in relation to clusters. Aside from the hybridization Moriset is describing, there is also an ongoing professionalization in the development of coworking spaces. Coworking spaces are going from cheap office spaces and random people rounding up tables; serious planning, architectural design and user inclusion when designing these spaces.

In the context of clusters, the professionalization and the development of policies came at the loss of natural autonomy seen in clusters of Silicon Valley. In many cases, the professionalization of clusters became the downfall of its strategies. One can look at the serendipity and random factors that define the success of Silicon Valley in order to understand the complex nature of autonomy. How may the architectural planning of coworking differ from the same pattern other industrial complexes has followed? The professionalization of these spaces seem trying to avoid that. By engaging in user interaction, the developers and architects try to enhance what is naturally embedded in the place, and to carefully tailor a space according to the user's needs. In a way, autonomy is facilitated through the understanding of needs instead of overly designed facilities.

### **The iconography of coworking spaces**

A workspace is interpreted based on the different meanings we assign to objects and furniture. The examples are a desk for work, a kitchen for food, barista machine for coffee, cafeteria for break etc. What dual meanings or connotations do we apply on the same objects and furniture within the coworking concept? What makes the same set of furniture and spaces differ from a regular workspace and the coworking space?

Let us start with a peculiar piece of furniture that exist in all of the case studies investigated in this thesis, the table tennis. None of the community managers could give an exact reason for why a table tennis exists in MESH, StartupLab, the Simula Garage. It has no more relevance than a foosball table or mahjong. One could speculate whether it is linked to the American infatuation with beer pong at frat parties, in the same way startups is an American trend. Then again, beer pong requires only balls and not the entire table. Yet it signifies something important to the coworking concept, which is flexibility, dynamic change and something foreign in a workplace, recreational pleasure.

This also transcends to the interpretation of desks, which in most cases has wheels and clean desk membership are to signify flexibility and dynamic change (ex. the Simula Garage and StartupLab). Yet, in both cases the desks did not move an inch in a period of two months when visited. It is quite contradictory though, that the members that have external computer screens and to some degree with laptops, are independent on fixed power outlets, which to a certain degree inhibits the flexibility of its wheels. Aside from professional appearances the meeting rooms brings with them, they also represent a serendipitous nature between the members and the ones visiting the coworking space. As mentioned in chapter 4 – case studies with the Aksel Lund Svindal incident.

To sum up in one word the aforementioned oddities found in the iconography of coworking, is that it is multi-faceted. Some are to convey a playful approach towards work (ex. ping pong table), others are to convey a dynamic culture of coworking (ex. wheels) and others actually borrow established iconographies of professionalism from the corporate world, such as for the meeting room. The desk is still for work, yet in a very social environment such as coworking space. It seems the entire intention of coworking is to be the opposite of the corporate or traditional workspaces, such as the foreign ping pong table or the wheels underneath the desks. This is very apparent in Silicon Valley here the nonconformists taking a stance against corporate traditions. Yet, there are still conventions and barriers any workspace has in which even the ever-so-tolerant coworking concept cannot break, such as the professionalism the corporate image brings with it, hence the appearances of a meeting room.

## **5.3 INDUSTRIAL COMPLEXES AND URBAN ENVIRONMENTS**

### **The rightful heir to the title: 21<sup>st</sup> century industrial complex**

In the works of Castells & Hall, *Technopoles of the World – The making of the 21st century industrial complexes*, they go to great lengths describing every possible industrial complex of their generation. It is therefore ironic that Castells & Hall refer to technopoles, science cities and parks as the 21<sup>st</sup> century industrial complexes when they are in fact 20th century creations (1950s). The authors are even indicating that these complexes may very well be a decadent development policy as early as in 1994, at the turn of the 21<sup>st</sup> century. This is also what all the other scholars agree on, Bagwell, Wadhwa, Anttiroiko etc. (except Porter). One could speculate that Castells & Hall are prematurely trying to establish a legacy for the next century, but either way it does not change the fact that their work is still highly relevant in understanding the current structural change in the economy affecting the contemporary society.

This leads us to the main question of this section, 16 years into the 21<sup>st</sup> century, what complex is the rightful heir to the title mentioned above? The empirical work in this thesis points at coworking spaces as the rightful 21<sup>st</sup> industrial complexes. The case studies such as MESH, StartupLab and the Simula Garage seems to answer what the all scholars are critical about of the concept of the 21<sup>st</sup> century industrial complex, which is the lack of autonomy, undefined meeting grounds etc. In comparison to the clusters, the coworking spaces are small enough to support a functioning synergy, the value chains and business models flexible enough to adapt any sudden change and trends overnight. Whereas the clusters, which in most cases have strong ties to

governments (ex. universities, research facilities etc.), are much slower machineries and change at a much slower rate. The fact is clear: new complexes are emerging, there is less focus on clusters, but more on what the arguments of every critic is pointing at; a focus on the people in the context of clusters, not the physical clusters itself. This group of people have many names, as mentioned in the literature review. Florida may call it the people climate or the creative class; Castells & Hall's innovative milieu; Moriset reintroduces established concepts such as the lone eagle. Either way, the sum of these people or the sum of how they interact is the definition synergy, not the co-location of facilities.

Even words with any connotations to “industry” and “industrial” seems to have less relevance, leading Miao, Benneworth & Phelps to coin the term 21<sup>st</sup> century knowledge complexes in 2015, in their revision of Castells & Hall's work: Technopoles of the World. We could also speculate that Industry 4.0 by all means could be renamed Knowledge 4.0 instead, as the word “knowledge” seems to be the fashionable expression when talking about technology, industries and complexes. Looking past what is currently fashionable, the word actually makes more sense in terms of describing industrial complexes, as it is the knowledge of that define the industrial complexes and new coworking strategy.

From now on in this thesis, these terms will be used to distinguish the old and the new, and not describe the same concept. It is also natural to do so, in the context where automation, immaterial production and computers have led to the extinction of any traditional industrial production of material goods in the contemporary workspace. The third and fourth industrial revolution have led the complexes to handle knowledge instead of industry, or to put it bluntly, from material production to immaterial production.

#### **From major urban developments to micro-cities**

In the translation from industrial complex to knowledge complex, there is also an undeniable absence of the urban dimension which must be addressed. As mentioned and clearly pointed out in the literature review, planned clusters are too slow machineries to handle innovation and do not adapt well to trends and sudden changes. This is what the tech entrepreneur Vivek Wadhwa is pointing out. He argues that there is too much focus on urban design and state-of-the-art facilities and not enough focus on the people within these urban designs and state-of-the-art facilities. Other scholars such as Bagwell, Siegel, Phan, Wright and Anttiroiko critique the lack of clarity in virtually every aspect of industrial complexes, from lack of clarity as a development policy, the social dynamics, as a business model, collaboration between public and private sectors etc.

The conclusions from all the scholars and those with critical views do lead us to the conclusion that it is the interaction between people that is the synergy, the social glue that binds together an industrial or knowledge complex. Therefore, we have to ask, when did urban design and major industrial complexes play such a pivotal role for a social culture across professions, vocations and facilities? There are actually no clear answers made by Porter on this question. What is clear though, is that the 20th century did generate a great quantity of intellectual knowledge and technology, which may have resulted in the literal translation of major industrial complexes and clusters.

Every argument against and for seems to be a match-made-in-heaven in favor of coworking spaces. This leads us again to the conclusion that a new complex is necessary, or to be more precise, the knowledge complex known as coworking spaces. The study of the downfall of Oslo Teknopol and the rise of Oslo Business Region in chapter 3 – backdrop & context, indicate this certain shift of focus, from industrial to knowledge complexes, from cluster to coworking mindset.

Winther clearly states: “rather than turning the wheels of big industries and forces as Oslo Teknopol did, it is easier to accommodate existing coworking spaces and communities”. This automatically diverts the development from major urban development with Masterplans for the industrial complexes, to ‘knowledge districts’, manifested in the coworking ideology. In this view, StartupLab and Simula, they can be perceived as implementations of condensed and highly functional knowledge complexes in the context of major dysfunctional industrial complexes. StartupLab located in the context of an image of a science park and a science city, Gaustadbekkdalen. StartupLab is thus interesting as an example of new trends (coworking space) trying to salvage old relics. The Simula Garage is also interesting as its success rests on the secluded aspects of the site, which is the result of the failed cluster strategy of IT Fornebu.

As presented in all the case studies, entrepreneurs and innovators are both extremely lazy and efficient beings. The synergy and serendipity production, such as the work, relaxation, coffee breaks and socializing happens in the closest proximity possible. The complexity of urban spaces in science cities or science parks, or even in a multi-story facility contradicts a functioning synergy and the hectic life of an entrepreneur.

#### **Lost in translation**

Let us discuss the shift from clusters to coworking spaces which also relates to the shift of ideology. The change from corporate to collective ideology, is very present in the Oslo-based interest organizations for both industrial and knowledge complexes. Or to be more precise, the foreclosure of Oslo Teknopol and the establishing of Oslo Business Region in 2011 as mentioned in the context chapter. Although the case studies show strong signs of urban awareness, the establishing of coworking spaces instead of industrial complexes is still at the loss of the urban dimension. Let us examine the urban properties of each of the case studies.

- MESH, although it has generated a highly popular meeting ground within just facility, it stills contribute greatly to the urban fabric or the setting where the urban life is limited, such as Kvadraturen. In the case of MESH, it shows how successful a coworking space can be when used as an urban tool to generate culture where there are none.
- StartupLab, which is placed in the densest research location in the entire Norway<sup>1</sup>, seems to feed more of the image of its urban context of education and research, than the actual proximity of research. According to the community manager there, Kjetil Holmefjord, approx. 25% have connections to the local context of the University of Oslo. StartupLab is otherwise a secluded community from its context and does not generate any urban life to the campus context.

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*1 33% of the nation's research activity is within 1,5 km radius of StartupLab.*



- The Simula Garage, its success may lie in the core virtues of the coworking space, which is about altruistic values, removed from the urban fabric so the members of the coworking space can focus on their singular work. In regards to their own intentions, the Simula Garage is highly successful, but in regards to an urban and community discussion, it is a complete disaster to establish a community based on seclusion and isolation in the context of global headquarters and companies such as Telenor and Statoil.

With these facts in mind the cluster strategies seem to be a more appealing development strategy in regards to urbanity, as the industrial complexes, especially the science city show huge emphasis on architectural and urban design, often developed by renowned urban planners and architects. Even though there is no synergy between professionals, the “byproduct” is still a design of public spaces and parks. From the perspective of developers and policy makers the design aspect has a bigger and more visible appeal. Although without the focus on urban visibility, coworking spaces distinguishes the common grounds, synergy and community much more clearly. The success of coworking may also lie in how they have understood the shortcomings of industrial complexes by becoming a condensed version of them extracting only the essence and most important parts. All the scholars presented in the literature review agrees upon one aspect; the people involved has to be a main focus, not giving all attention to the co-location of facilities. The coworking concept deals with this aspect elegantly, by dedicating much more emphasis on the community within a facility, rather than focusing on the community across many facilities.

The coworking facility may become the urban fabric itself. Some are open to the public feeding directly to the urban fabric (ex. MESH, Tøyen Startup Village), while others are private, secluded and eclectic communities disregarding the urban fabric (ex. StartupLab, The Simula Garage). Therefore, the hybridization of coworking spaces will pose important questions of how to maximize urbanity and minimize the cost in doing so. To take it to a further extent, what happens when city districts gets an increased number of different coworking spaces maximizing the urbanity through hybridization, seen in Kvadraturen with MESH, Sentralen and Bitraf, or the coworking cluster Tøyen Startup Village? Then the close proximity of multiple coworking facilities, to a higher degree, will have the potential to affect the urban life in the given location.<sup>2</sup>

Then there is a question in what degree should these coworking spaces work together, both among coworking spaces themselves and together to create a better urban service? First the aspect of the coworking spaces in between. In Kvadraturen, MESH, Sentralen and Bitraf have certain roles. MESH as a common ground, Bitraf as the main makerspace, whereas Sentralen has marketed itself as the place for cultural production. In that order there are a presence where they cooperate by sending their members to the other spaces with the best expertise. Fredrik Winther of Oslo Business Region, is very adamant on where the coworking spaces should cooperate and where they should compete. He mentions the shared knowledge culture seen in Silicon Valley as very important, that the entrepreneurs in-between should meet up and swap information and share technical issues and solutions, either it be in each of the coworking spaces or in the city somewhere it does not matter. The coworking spaces should also cooperate on profiling Oslo as a startup community as a unified

front and coworking place. This means, their presence in the urban life has to be clear, either it be public

<sup>2</sup> This is very much implicated in the illustration published by ICT Norway on the Tøyen Startup Village proposal.

events, hybridization etc. However, in the liberal market of services they have to compete, in order to raise the quality of coworking spaces individually. This is in terms of attracting the best partnerships, investors, collaborators, judicial services etc. The competition will not have any negative repercussions on the city, since each of the coworking spaces will improve and become better team players in the long run.

### **The culture and community generator**

The coworking concept may also have a dual role in urban planning, apart from tapping into the urban fabric through its limitations of four walls. The coworking space can potentially also generate culture in neighborhoods where there is less. MESH may be an example of this. However, this discussion relates even more closely to the newly established Sentralen, which is in close proximity of MESH. According to Per Mejlænder Brynning, the producer and PR representative at Sentralen, they have already seen a ripple effect in the neighborhood, where cool and hip establishments are settling right next to Sentralen, generating a diversity other than the heterogenic office tenants which is currently dominating Kvadraturen (example, the local barber who trims Brynning’s beard).

Comparing similarities and differences between the two concepts of coworking and cluster regarding culture and community, one interesting fact is revealed. While the cluster clearly separates between research facility and meeting grounds within an industrial complex, coworking itself becomes the manifestation of both, inside a single facility. In other words, coworking successfully extracts the essence of industrial complexes and creates a viable development strategy (in the cheapest manner as possible) as well as being a facilitator for the synergy or serendipity production.

This means that coworking as a compartmentalized entity (in a positive and inclusive sense) not only can be retrofitted in any space, but potentially be implemented in any type of urban fabric and industrial complexes, potentially playing a role in a local urban development. This is where the conventional industrial complexes fall short, where the complexes were in fact the Masterplan, the entirety of an urban fabric. The industrial complex made no distinction between work and pleasure, facility and meeting or common ground. And as the industrial complexes grew bigger so did the complexity of a functional meeting ground within them. To reference back to Silicon Valley startup cluster or tech community, where work and pleasure was clearly compartmentalized in a functioning way. The work, from companies to startups resided in Stanford Industrial Park, the suburbs and garages of Menlo Park etc. The meeting or common ground was in fact a selection of peculiar restaurants the knowledge workers knew were frequented by the tech community. Hence, coworking as a compartmentalized symbiosis between work, pleasure and notion of community, in which can be retrofitted in any space may have a considerable importance of implementing culture and community generators in any given setting.

#### 5.4 MANAGEMENT

Both Fredrik Winther from Oslo Business Region and the community managers of MESH and StartupLab uses the inconclusive description “to curate spaces”, but what the community manager are in fact doing, is more than just mere curating square meters.

Community managers are able to not only cultivate and curate, but engineer communities he/she see fit the image and profile of the specific coworking space. This is partly attributed to the members the community manager let into their communities based on the criteria for entrance, but also the management of the afterlife in the coworking space. As mentioned this is an enhanced ability the community manager has because of the special timeframe he/she is operating in. The community manager use not only architecture, but members as building blocks to change the physical environment. Meaning he/she moves and pair people who fits each other the most, bot socially and ideologically. Or if the company are on the same stage where they actually compete. The community manager both curate and reclaim the space that is already assigned to members when suitable, for whatever reason that would benefit the society the most. This fact is not as dramatic as it sounds, as coworking spaces have a pre-condition that their members must be open to their workspace being moved and swapped around (ex. StartupLab and MESH). There is a constant flow of knowledge in these facilities, in which the industrial complexes have failed, and the community manager has the sole responsibility to somehow facilitate for shared knowledge mentality or the best community possible. The actions that the community manager carry out in relation to engineering communities, give us knowledge of how to deal with serendipity production and synergies, in a practical sense, rather than turning the wheels of major industries such as the scope of what a cluster may implicate. The entire business model and architecture of MESH is based on the entire idea of serendipity production. In other words, the community manager does not design architecture in the conventional sense with bricks and mortar, but design of the working and social culture within the architecture. And in the cheapest sense as possible.

##### Artificial autonomy

The sum of the community manager’s efforts in curating a community is also the equivalent of cultivating an artificial autonomy among and across startup companies, or in other words a synergy. A functional community is the flow of knowledge, a strong working and social culture. This is a direct reference to the much sought after trait in industrial complexes. It is contradictory though, because as the case studies reveals, the community manager has to go at great lengths attaining such an autonomy. We have to analyze the factors and intervention the community manager has to make in creating a synergy amongst and across companies within a coworking space. It is factors such as:

- Ideological and personal compatibility, whether the personalities fit each other. The community manager may even exclude people and refuse entrance if their personalities does not the community.
- The state of each of the startups, can go both ways. If the companies are in two different states it can be hard to relate. If they are at the same state, they may relate to each other, or they will compete. In this case the community manager has to intervene and rearrange seats.
- Artificial selection. The entire notion of community lies in the mental state of its members. Members

who do not frequent the facility gets basic membership instead of a fixed desk. In worst-case scenario the members who are not willing to share and generate a good autonomous environment are also excluded.

MESH and StartupLab supports these claims that an autonomy actually requires a great deal of supervision and monitoring of the people within the facility. This backs up the argument by Wadhwa that the obsession should lie with the people and not in the clustering of facilities. But the argument seems incomplete when presented here it is not enough to redirect the focus from facilities to people. There must also be a focus on how to practice an artificial autonomy amongst the people in the community, to successfully generate a serendipity production based on placing people and not companies together.

##### Sustainability

If the core element and purity of coworking is a place where people of different employment share office spaces and workspace amenities, then the concept of hybridization is diluting the concept of coworking. Yet, it seems that the hybridization is an absolute necessity for the survival of the coworking concept. This is very apparent at MESH, where activities in the backyard both supports MESH socially and financially. Coworking as a concept is great, but not so as a business model. The financial gains of a cluster may be hard to measure, as there are both private and public initiatives involved, sometimes with stakeholders across regions. According to a survey by Deskmag in 2013, 60% of all coworking spaces registered were not profitable. Coworking spaces cannot live off the rent income on the lone eagles and is currently relying more and more on alternate revenue stream. So, by making a hybridization a necessity to the coworking concept, it also increases its sustainability in the urban context through hybridizations such as public amenities, sales of services etc. (Moriset 2013: 16-17).

##### Image and appearances

The earlier chapters and sections put much emphasis on urban implications, structural changes in the economy, Industry 4.0 and lone eagles increasing the popularity of coworking spaces. Although this thesis has made no mention about the subject of appearances, it is an underlying aspect, that the people involved with a coworking space must have a set of personal characteristics.

There is a big focus on the image and branding of coworking spaces, mainly spearheaded by the administrative unit at the given coworking spaces. This is very present in StartupLab, MESH, Sentralen, Tøyen Startup Village etc. Tøyen Startup Village has such a strong brand and it is in fact impossible to understand what kind of coworking space they are developing, by reading their published plans and development strategy. The commonality amongst the coworking spaces that gain the most media attention is that they all give a sense of both suave and sophisticated exuberance, yet also a youthful and hip personality.

My empirical findings lead me to the conclusion that the most successful coworking spaces are the ones with the most elaborated marketing strategies. These range from the name of the specific

coworking space, webpage design, age of the administrative unit, physical looks, showmanship and even the quality of the headshots taken of the administrative unit. There is one common denominator in all of the marketing strategies: the appearance of being cool and hip, or at least the image of it. Even the interest organization Oslo Business Region use unconventional ways of publicly communicating to the startup-related coworking spaces..

## 5.5 CLOSING REMARKS

### Challenging the institution

A shift from material to immaterial production also means the traditional ways of organizing workspaces with a specific geographic location is no longer a necessity, as mentioned in the description of the Fourth Industrial Revolution, or Industry 4.0. To quote Moriset once more:

*“...IT has driven the institutional fragmentation and geographic splintering of value chains. A massive trend toward outsourcing (...) leads firms to become orchestrators rather than owners (...) well-defined entities of innovators and producers being replaced or complemented by myriad s of contributors.”* (Moriset 2013: 4)

Our technophilic culture may cloud important discussions that should be brought to light. We need to research and discuss what spatial and cultural repercussions Industry 4.0 may have for architecture and urbanity. We do see tendencies such in Tøyen Deichmanske Library and Tøyen Unlimited etc. crossing the line from being an organization and library and adopting a coworking profile.

Let us speculate on the repercussions of Industry 4.0 and splintering of value chains. For example, let us look into the Massive Open Online Course trend (MOOC), which is the digitalization of education, where many schools are taking their knowledge base onto the internet – some for free, others taking a small fee. This trend has emerged as a massive trend since 2012. Notable Ivy League schools such as Yale, Princeton, Harvard, Stanford etc. have also joined in this trend. However, what is missing in this kind of education? It is the university culture that is missing, such as peer pressure, academic community etc. What if coworking spaces established a new profile such as an educational collaborative, where students that took courses online could meet, converse, and have the synergistic peer discussions one often have on a university? Would this not virtually enable any person to take a degree from Harvard from the slums of India taken into account that the person had access to a computer and a coworking study place? Let us extend this thought even further, as seen in Tøyen Unlimited, Deichmanske Library etc. What if one applies this logic further; would this break up established programs such as libraries, schools, universities, churches etc.? Will there be anything left such as a program-specific building? Will the future development of architecture focus much more on generic buildings and the integration of mixed-used buildings in the urban fabric?

### The reinvention of coworking

Moriset is very strict on that coworking spaces should not be mistaken with flexible offices and various kinds of incubators and accelerators. He seems to contradict himself saying that coworking is part of an ever-

changing trend, but still claims strict boundaries of what coworking is not.

*“Coworking participates to (and results from) a global process of blurring the lines between old, well-defined categories, concepts, practices and objects in the political, social, economic and technological realms.”* (Moriset 2013: 17)

With Moriset’s observations in mind, coworking spaces provides an incomplete business model, a useful tool, and brand urban developments (similar to science city as an image) The coworking concept needs to rise above its own definition and be reinterpreted in order to keep its relevance potent.

### The legacy of coworking spaces – the community

The cross-sectional timeframe or the contemporary nature of this thesis does beg the question; what is the legacy of coworking spaces? What aspects of coworking makes it so enduring, not only for the contemporary society, but also for societies to come? What aspects of coworking transcends bricks and mortar, workspaces, cultures and zeitgeist?

The literature review, context, case studies and this entire chapter have one recurring theme, the community, or the ability to plan, design, affect, cultivate, curate, and even engineer urban, working communities. Every aspect of the fourth industrial revolution (Industry 4.0) and for technological achievements in telecommunications, the lone eagle mentality and blurring of industries dictate fragmentation of the institution. The expected outcome of neo-liberalistic ideology and capitalistic spirit of entrepreneurship is competitiveness, and not collectiveness. The social limitations of entrepreneurship reveal what is taken for granted in the shift of ideology, the sense of community that was supposed to be an integral part of the corporate culture and business. To quote Schwab once more from the WEF summit 16th of January 2016:

*“...Sometimes I wonder whether inexorable integration of technology in our lives could diminish quintessential human capacities, such as compassion and cooperation (...) Constant connection may deprive us of one of life’s most important assets: the time to pause, reflect, and engage in meaningful conversation.”* (Schwab 2016)

Knowledge workers react to the digital workspace, using its benefits and experiencing its faults. They may even understand much of the dangers and implications of Industry 4.0 and they seem to have solved some issues through coworking. Some of the fear and inclination Schwab have towards fragmentation of society or Industry 4.0, he can probably rest assure with the current rise of coworking spaces.

### Lessons to be distilled

The coworking concept itself may fade away and maybe startup-related coworking/startup communities go into obscurity, yet, I argue here that it is this culture of community which make aspects of coworking transcendent and stand the test of time. Although the phenomenon was comprehensively described only as late as 2013 by Moriset, informing on the genesis and formative years of coworking, it has since grown

to become a complex space of both cultural and urban character. As mentioned earlier, according to Oslo Business Region's estimates, startup-related coworking may take up to as 40% of the employment in Oslo in near future where the percentage is currently on 2. Coworking may not only become the norm of workplaces, but also generate unprecedented variations of what a professional or social community can be. The upcoming years may in fact reveal coworking spaces in its adolescent years, generating the most interesting data on collective ideology and the planning of communities, which have the potential to be translated into architectural and urban development. They should be monitored, studied and researched upon to understand what direction the next generation of workspaces and societies may take. We have to speculate from the very modest beginnings of the lone eagles rounding up tables in a shared facility, to what role and impact they may have on society.