

Work-live in "New Media"

The challenge(s) of working from home

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The world currently faces the problem of a lack of workhomes or in other words dwellings adapted to the New Media way of working. As our experience during Covid-19 times, as you personally may well know, research of Fersch, B., (2009) and my own questionnaire have shown there is currently a lack of workspace in our dwellings. This research aims to provide an answer to the question "How do you make a high-quality, affordable workspace in a workhome?" especially with the rise of New Media. New Media in this research is perceived as the advances in the way of networking, computing, and technologically. (Manovich, L., 2003)

To gain more insight in the problem, firstly New Media was researched in terms of what it entails and how it has influenced our work and life styles. It became apparent that New Media has changed our way of living and working a lot, due to the change in technological advancements we were able to work a lot more flexible both in terms of working hours and place. Along with this new way of working, new types of jobs were created, among these new jobs freelancing and streaming became popular. To get a better grip on the needs of these New Media workers, in this case freelancers and streamers, the work of Fersch, B., (2009) was used along with my own questionnaire. The needs between these two types of New Media workers didn't seem to differ much aside from special requirements regarding their workspace, which were closely related to their occupation.

By investigating Holliss' work it became clear that the term workhome wasn't really well known anymore and thus no good examples of these buildings exist nowadays, that fully cover all the needs that these target groups have. In addition the analyses of 4 case studies showed that there is no clear answer regarding how to make a high-quality, affordable workspace in a workhome. However recommendations, based on these case studies and findings, can be given of which the best result is to create rental single household dwellings, which can be either fully single person households with their own necessities, that means their own bed-, bath-, workroom and kitchen or coliving, where they only have their own personal bed- and bathroom, and possibly a separate workroom.

Key-words

Work-live - Workhome(s) - New Media - Streamer - Freelancer - Housing - (Flexibility)

Introduction

Ever since the creation of the internet, a form of New Media, the way we work has been changed. Over the last decade especially work has become way easier and more convenient, as we aren't constrained by the place we work and how to work anymore. Nowadays the internet and its presence in our workflow can't be missed anymore since it is an integral part of how do our work. (Law, W.K., 2006)

As the importance of the internet, and thus New Media, over the last few years has grown, so have also the diversity in work. Freelancing for example have strived and amassed a bigger amount of workers than ever before. The ease of the internet has made it possible for us to work anywhere at any time, diminishing the need for us to work for companies and going to work, seeing as we can do everything ourselves at home. (Law, W.K., 2006)

One of these freelancing jobs that has become more and more popular since 2010 is live streaming. An online streamer, also known as a live streamer or streamer, is someone who broadcasts themselves online through either a live or pre-recorded video. With the first being the most well-known as streamer and latter more like a youtuber. Streams are found in various categories that range from video games, tutorials or even chatting streams. (Taylor, T. L., 2018)

With the growing interest in working from home, as a form of freelancing like streaming is, and the necessity of it due to Covid-19, it is clear that this type of trend will only keep growing. This necessity of working from home and online work, stresses the importance of the "New Media" even further and its influence on our work and life styles.



As mentioned in the introduction the "New Media" allows for more flexible ways to work and the type of work we perform. While the amount of people doing this type of working is growing, so is also the lack of workspace for these people. The dwellings held by these people often are not meant for working at home, they don't have a space where they can retreat to and work in peace. Like many of us, they are stuck with the current situation, often working from either their kitchen table or from the couch. People don't have the space to comfortably work and have meetings for work or school. This is all due to a lack of space, my tutor Pierijn describes this perfectly in a meeting that we had a few weeks ago: "[...] having a space, where you can work and maybe have a meeting without a bra showing in screen or people bugging you, might be needed".

As Covid-19 also stresses the fact of working from home, the need for dwellings that offer space for people to work from home only rises. To put it bluntly there is a shortage on dwellings / housing that offer good work-live environment, and this needs to be addressed not only for the current pandemic, but especially for the rise in flexible working due to the rise of the "New Media".

Research questions

To address this problem regarding the lack of workspace, a solution has to be found for the question: "How do you make a high-quality, affordable workspace in a workhome?".

To get this conclusion a few things have to be researched of which firstly the precise meaning and influence of the New Media on our work and life styles. "What is New Media" "How has New Media influenced our work and life styles?"

With a new way of working also new jobs come into play of which one is already pretty wellknown among everyone, the freelancers. However for this research another job, which only exists because of New Media, is also going to be researched, namely the streamer. Seeing as both these jobs seem very different initially it must be researched what their relation is to each other "What is the relation between New Media and streamers?". When that is established their needs or necessities for a dwelling can be researched as to know what could be the needs of New Media workers. "What are their needs in terms of their work and dwelling?"

Lastly the research will focus on the workhomes themselves to see if there are any already known examples of workhomes that fit the criteria of the New Media workers. "Are there currently any workhomes, and if so what kind(s)?"

Relevance and position

Although there are already studies on the concept of workhomes, for example *Beyond Live/ Work: The architecture of home-based work* by Holliss (2015), these do not sufficiently explain how to create such a dwelling, nor does it provide examples of New Media home-based dwellings. For examples Law, F., (2006) has written that New Media has changed the way we work and live, and thus changing our needs regarding our work and life styles. In addition Holliss (2015) argues in her book that the examples that are given, maybe do not suffice for the New Media workers who might only need a bedroom to work from. These studies show that a link between the aspect of the workhome and New Media, and all its incidentals, is yet to be established. For this research sources focusing on different subjects are used. To gain insight in the meaning of the term 'New Media' and its influence on our work and life styles, four sources are used. These sources are: Manovich, L., (2003) and Lister, M., (2009) give a good explanation on the meaning of 'New Media', while Law, K., (2006) and Howard, C. M., (2000) give better examples of the influence the developments in New Media have had on our way of working. Howard especially, being dedicated to the change of journalism, explains this in the most detail for this specific occupation.

Identifying the streamer and explaining the workings of their job Taylor, T. L., (2018) and Woodcock, J., (2019) are used. Additionally they give insight in the importance of livestreaming, their respective platforms nowadays and their possible importance in the future. These sources serve as confirmation on the importance of streaming and thus streamers as New Media jobs / workers. It lacks however information on the necessities of streamers in regards to their dwellings.

Fersch's research is used as a comparison material to link the chosen target group, in this case streamers, to already more known New Media workers. Fersch in her research writes about the work and life styles of freelancers and even has interviews, which give more insight in the personal thoughts of freelancers on their situation and their jobs. As this research is based on freelancers in Germany and Denmark, this research can't be taken 'one-to-one' to the Dutch situatio, however it can be used as a comparison material to gain an idea of the relation of freelancers to other New Media jobs.

Giving the theoretical backbone to this research is Holliss' book *Beyond Live/Work: The architecture of home-based work* (2015). Holliss' book serves as a source of information on not only the history of workhomes, but also the workhomes that exist nowadays.

Methodology

To answer the research questions several sources have

To answer the research questions several sources have been researched. Using three main differentiable methods: Literary Analysis, Questionnaire and Case study.

Firstly to identify what New Media is and its impact on our work and life style, four sources are used. Manovich, L., (2003) and Lister, M., (2009) explain the history and meaning of New Media the best, while Law, K., (2006) and Howard, C. M., (2000) focus more on the way that it has changed our work and daily lives. Using all four of these sources a basic understanding about the New Media and its influences is established. Meaning what exactly New Media is and what the influences of this New Media, as then determined by these sources, on our work and living conditions.

To understand the New Media workers themselves better a target group was chosen to act as an example, namely the streamers. To understand the term streamer and everything associated with them two sources have been used. Taylor, T. L., (2018) and Johnson, M. R., & Woodcock, J. (2019) describe in their works what being a streamer entails, so to say what they do, how they start out and how they view the future of their streaming career and the platform.

As not all the required information, meaning the needs and wishes, regarding their workspace and dwellings, of streamer can be found in the works of Taylor and Woodcock, a questionnaire is made with questions regarding their work, life styles and dwellings. The information that I hope to gain is mainly about their living conditions. Questions along the line; is it an apartment? Are you in a house? What is the size? Is there anything lacking / missing in your home? With these type of questions I hope to establish a base of information to confirm what has been written by Taylor and Woodcock along with expanding on this research by asking specifically about their wishes and 'look-fors' in dwelling regarding their needs for living and working. The questionnaire is distributed to several considered 'big' streamers, who sadly didn't want to participate, and shared among several facebook communities for streamers. This allows to gain information of the 'generic' streamer instead of the 'big' streamers, giving thus more reliable information for the whole of the community instead of the top few percent. This way I hope to gain insight in maybe special requirements these New Media workers might need that you wouldn't get information about from other sources like Taylor and Woodcock.

To link the streamer better to the idea of New Media worker and make it seem less of a special case Fersch's research is used in a comparison between the needs of streamers and freelancers. Fersch's research includes several interviews with freelancers, which give insight in their work and life styles. Comparing these interviews with the information that is gained from Taylor, Woodcock and the questionnaire a conclusion is reached on how much streamers relate to freelancers and thus other New Media workers.

Holliss' work is used to introduce the concept and history of workhomes, along with some examples of these type of dwellings. By using Holliss' book *Beyond Live/Work: The architecture of home-based work* a clear understanding of our current idea on workhomes along with what kinds exist nowadays is formed. Combining the information from Holliss' book with the information regarding the influence of New Media and the needs and wishes of New Media workers, as discovered with use of Fersch's interviews and the questionnaire, a conclusion is reached on the workhomes and their functionality towards New Media.

Similarly to the what happens on a literary scale this same concept of looking for compatible workhomes, that could cater to the needs and wishes of New Media workers, is done in the form of a case study. Four case studies are done to find out if something can be learned from these buildings that is applicable to the design of workspaces within workhomes, and thus workhomes themselves.

The chosen case studies consist of: Anna van Bueren Toren, Schiecentrale 4b, Treehouse and Tietgen Dormitory. These four case studies are all analysed on the same aspects, namely functions, accessibility, structure, size, dwelling and dwelling size. These analyses are then compared to the information found in the rest of the research in terms of how well they cater to the needs of the New Media workers.

Based on this last comparison a conclusion is reached in which all the findings that could serve as a reference or recommendation are listed that could either help improve the current dwellings or help in the design of new dwellings. These recommendations are not limited to just the dwellings, the overall structure and other interesting, and applicable, aspects of the buildings are used as well.

NEW MEDIA

CHAPTER I

I.I The essence of New Media

To properly understand how "New Media" influences our way of working and therefor our way of living, first it has to be explained. "New Media", as I call it here, has a variety of meanings, even authors often differ on the meaning of the term. For example Manovich, L. (2003) distinguishes that there is a difference between the new media and cyberculture. Manovich explains this by stating that cyberculture is defined by the social aspects associated with Internet and other forms of network communication. Manovich specifically mentions that online communities, online multi-player gaming, email and cell phone usage fall under this aspect of cyberculture, while new media is a sort of all-encompassing aspect that focuses on the cultural and computing aspect of the media, meaning both the influence it has on the population as well as the new hardware and functioning of this.

While this view isn't exactly shared by others it also isn't frowned upon either. Lister, M. (2009) states that even after 30 years of new developments on the front of new media, there still isn't a clear definition for the term New Media. However he does say that at the very least it is a combination of 'rapid and ongoing set of technological experiments and entrepreneurial initiatives' and the social aspect of the platforms that are created with the new media. He concludes by saying that according to him new media has a link with the following terms: digital, interactive, hypertextual, virtual, networked and simulated. (Lister, M., 2009, p. 30).

Even though they don't exactly say the same thing they elude that "New Media" is defined by more than just the aspect of new developments. It is a combination of, on the one hand, new advances in the way of computing, networking and connections between companies and people, and other hand the social aspect, and thus the interactions that happen due to these new developments.

However in my opinion the best description of New Media is still given by Manovich, who states that

"Rather than reserving the term new media to refer to the cultural uses of current computer and computer-based network technologies, some authors have suggested that every modern media and telecommunication technology passes through its "new media stage." In other words, at some point photography, telephone, cinema, television each were "new media." (Manovich, L., 2003, p.17)

In short New Media is a complex term, involving both the aspects of the interaction between the people, with the use of new advances in the way of networking and computing, and the technological advances on which these interactions take place. If we look at New Media in this light, meaning that every type of media, telecommunication technology at some point have had a "new media stage" then this term will always be applicable even in the future and be more easily understood.

For my research in particular I will use this last way of defining New Media, as a stage in the development of media and telecommunication technology. This way both the term and my research might be viable in the future. Additionally my research will focus on the aspect of workhomes, so the way people use the these new technologies and how these have impacted their way of working and living, rather than the social interaction that these people have on the various platforms of New Media.

I.II Changing the way we work

Since New Media is defined as a stage of development or 'newness' of the technologies of that time and new technologies offer new ways to do work, thus changing the way we can and how we work, New media can be perceived as changing the way we work. This is really well illustrated by a number of authors, who all draw examples from different occupations.

A quote from Howard, C.M. (2000) illustrates how influential New Media is and also shows the extend of how fast and far the internet spread in the early 2000's.

"As we enter the new millennium, more than 90 million individuals and businesses are connected to the Net. That figure, reached from a virtually motionless start less than five years ago, represents a rate of growth more than five times as fast as the acceptance of television two generations ago. Internet e-business is booming. As a result of the internet, every organization is new a 24-hour business, with customers – and journalists – expecting instant accessibility and immediate response." (Howard, C.M., 2000, p. 9)

As Howard explains this new type of media spread fast and had a massive impact in transforming, in this case, the journalist world into a 24-hour business rather than a 9-5. This same idea can be translated to today, with this new wave of New Media, which can be described as the increase in network speeds and new technologies, giving us more freedom to do our work the way we want it to where we want to do it. Law's explanation on how the new media changed the workday of the workers is in line with what Howard says. According to Law in the earlier years we were limited to the way of working of back then because the technology didn't allow us to work anywhere but at our workplace. Law states however that nowadays due to the new technological advancements "[...] the act of performing work is not limited to specific hours at a specific location." (Law, W.K., 2006, p.306)

To give an example of how New Media has impacted the way we work I would like to refer back to Manovich. Manovich writes about how new technologies have allowed us to do our jobs differently and even on different times, he explains this by introducing the example of the filmmaking industry. Manovich writes about how previously the type of camera's used by filmmakers didn't give them much to work with often being restricted by the amount of time they could film. Manovich explains this really well "[...] The smallness of DV equipment allows a filmmaker to literally be inside the action as it unfolds. In addition to adopting a more intimate filmic approach, a filmmaker can keep shooting for a whole duration of a 60 or 120 minute DV tape as opposed to the standard ten-minute film roll. This gives the filmmaker and the actors more freedom to improvise around a theme, rather than being shackled to the tightly scripted short shots of traditional filmmaking." (Manovich, L., 2003, p. 17)

Lister, M (2009) brings this idea back to the theme that we are discussing here, the New Media in current times. Lister underlines the fact that 'new developments online' especially in the early years of the century, like increased bandwidth and information processing speed of the Internet, have really changed the way we work and what is possible. Lister supports this statement by saying that it is especially easy to detect in the 'moving image services online', like Youtube or online TV services, with their massive growth of users over the years. Which are mostly thanks to the improvements of the bandwidth and processing speeds of the Internet making it possible for more people to visit and efficiently use these type of sites.

The growth of these sites is not just limited to these specific type of sites, as will explained in further detail in the next chapter, streamers and their platform have also gained a massive amount of following in recent times, showing that not only the amount of users (viewers) but also the streamers (employees) have increased.

To sum up a quote of Lister can be used, that really emphasizes the important aspects that the New Media and primarily the online network and new technologies have to offer.

Chapter I - NEW MEDIA

"The sheer flexibility of digital technologies, and the convergences between different media forms that digitization affords (for instance the promiscuities of USB) accentuate this complex nature of media technological development. Games consoles can also be DVD players or networked for online play and communication. A mobile phone can also be a games console, a text-based communication device, a camera, a web browser." (Lister, M., 2009, p. 273)

Not only do the improvements of the networks, as described by Lister, like the bandwidth and processing speeds have an effect on what we can offer it is also the technological advancements that can work with these new developments. This is, as shown, applicable to various occupations and not just limited to the online based work. Not only that, but because there are new ways of working and according to Law there is not real location restriction anymore, this gives rise to new type of jobs as well, an example being people primarily working from home.

I.III The current state of New Media

But why is the New Media and the change it brings, so important now if it has been around for so long already?

To answer this simply, it is because work and live are more intertwined now than they ever were in the past. To illustrate that nowadays work and live are very closely intertwined and almost inseparable, stressing the need for it to be addressed, is something written by Law and Lister. Both state that nowadays due to the better networking and our devices being able to do so much more than they originally could, think of a mobile phone being able to also connect to internet and check your email instead of just being able to call someone, the line between work and live blurs. This in turn blurs the line of where work and live should stop, should work stop at your work place or are they part of the same thing, for example your home is your workplace.

Law even supports this point of blurring the line between work and live by saying:

"Mobile technologies should also lead to an erosion of personal space. Eriksen (2000) supports his point by noting that people check voicemail at a busstop or even in a public bathroom. Brown (2002) observes that "cafés, bars, restaurants all become transformed into sites for work." This marks a further eroding of the work/nonwork boundaries, with third spaces (i.e., cafés) between home and work becoming legitimate places of work (Brown, 2002, p. 13). Even the car now has become a mobile office (Corbett, 1994)." (Law, W.K., 2006, p. 308-309)

Well specifically this last point is very relevant nowadays. I will explain this point more clearly with an example:

As an example of both the new jobs created, due to the possibilities that New Media offers, and work-live from home, streamers can be used. Streaming is a new type of job that is created with the rise of the New Media, where people record themselves or the things they do and broadcast this live over the 'moving image services online', like Youtube and Twitch. Twitch.tv especially is a well-known and dedicated streaming website. Twitch.tv has been gaining followers and users steadily over the last few years (see figure 1), even having over more than 6 million streamers per month, and an average concurrent viewers of 2 million.

As can be seen from figure 1, Twich.tv on its own has a lot of average visitors, these being both broadcasters and viewers. This shows that streaming can be seen as a legitimate job that has been made possible due to the new developments surrounding New Media, that also improved the performance and growth of similar sites like Youtube and online TV streaming websites.

TWITCH GROWTH



Figure 1: Twitch Games Statistics (z.d.). *Twitch growth* [Image]. Retrieved from https://twitchtracker.com/statistics/games

Okay, so work-live is hard to distinguish and are connected to each other. But why does it need to be addressed?

To answer this question I can bring about a topic well known to everybody during this time, Covid-19. Covid-19 has made the problems surrounding this blurred line between work and live more clear. As everybody has been instructed to work from home as much as possible, we all get to experience this work-live idea more.

Of course, as also is explained this is first of all only possible because we have the ability to work from home, because of the New Media (Law, W.K., 2006 & Manovich L., 2003). However as we all have experienced there are some issues with working from home, seeing as our society was mostly based upon working from a dedicated workplace, often for a company away from home, our current homes aren't well adapted to this new way of working.

Everybody has heard it before for example if you are student, being at and studying from home, you will once in a while hear your parent(s) complain about how they don't have the space that they require to do their work or that they "can't do this" or "can't do that". What I am trying to accomplish with this is to say that Covid-19 has shown us an issue that most people that are working from home will have a problem with and that is the lack of space in a dwelling, or to be more precise a private space for them to work in.

My tutor, Pierijn, had a good quote for this in a lecture we had a few weeks ago he said: "[...] having a space, where you can work and maybe have a meeting without a bra showing in screen or people bugging you, might be needed". My father also has similar responses to this he often goes to my sister's room, who is currently not living at home anymore, to work or hold meetings seeing as being at home and downstairs with my mother, who is also working, is very distracting for him. He often says: "I need a space where I can just have my meetings or work in peace, without you guys interrupting me.".

To conclude New Media is an integral part of how people nowadays work and live, and in some cases work-live. It is found in almost all types of jobs and in some cases, as highlighted by Covid-19, is the only reason some jobs are possible. However it is not without its own set of problems, as especially Covid-19 has shown, there is often an lack of space in the dwellings for people who work from home for their jobs. Meaning that the current dwellings aren't adapted to the New Media way of working and I wish to offer a solution for this problem with this research and my design.



The following scheme, shows the problem and the road to it in simple terms (figure 2):

NEW JOBS, NEW WORKING, NEW LIVING





II.I Streaming is the new work-live

To precisely known what the current issues in the homes of the people working the New Media jobs are, it is important to investigate a group that works in this new environment. As streaming got more and more popular and I, myself, including a lot of my friends have ties to streaming, either with a friend who knows a streamer or stream themselves, these people seemed an especially good example of the New Media way of working.

The idea of a streamer is a fairly new concept, it was only with the development of the internet that streaming became possible. Much like Lister, M. (2009) said it is due to the improvements in bandwidth and the information processing speed that sites that offer these kinds of services exist and are accessible to such a huge part of the population. New Media is the only reason these kind of jobs are possible.

Of course since streaming is still kind of new and in its growing phases, it would be weird to dedicate a whole research regarding work-live in New Media to just streamers. Therefore streamers will be used as an example for the potential future users of this new type of working and their needs. Based on this an estimate can be made on what could be the issue for people working from home, seeing as the basic needs are similar.

II.II Streamers as a type of freelancers

Aside from the obvious, like needing a house, food and water there are other aspects about streamers that are very comparable to freelancers nowadays. Freelancers can be seen as home-based workers, seeing as these people often work from any space they want, because the Internet gives them the freedom to work flexibly wherever they want. In a sense this would be the same as streamers, streamers only really need a few things to be able to stream their content, obviously based on what they broadcast this may vary. But these things often can simple be listed as: a good internet connection and a device to stream from. Freelancers, again depending on their jobs, can do this with the exact same low requirements.

Other than having almost the same requirements for them to be able to work, this being a good internet connection and a device to work on, they also have a similar problem regarding work stability and income. In both the circles of streaming and freelancing their income is based on the amount of work they get. In the case of a freelancer this is the amount of jobs they get offered by clients (Fersch, B., 2009), while the streamer is based on the amount of concurrent viewers they have (Taylor, T. L., 2018). Both deal with the issue that their income is not fixed and may fluctuate from day to day.

This way of working as is mentioned by several interviewee's of Fersch bring some uncertainties with it. These uncertainties don't just lie with only the income, but also popularity or how well-known they are. In both of these lines of work it is important that you are well known in order to get clients or viewers.

Interview in Fersch's research show the following:

"So, the advantage of being employed clearly is that you get the feeling of having a secure framework. Whether this is fake or not does not matter. It is a secure framework you are in. Your pension is taken care of. This and that.[...]" (2009, p. 139)

And

"I am not afraid of sinking into poverty. I am afraid, because it is so difficult to come back [...] in such a creative branch. If you have been dropping out, so, if you get on the wrong track, then there is not so much that sticks to you. And then that's just how it is. (case excerpt 8, appendix 1, p.116 / interview transcript 8, appendix 2) (2009, p.141) These same kind of worries can be found in the book of Taylor, T. L. (2018) called *Watch Me Play: Twitch and the rise of game live streaming*. In his book he defines not only how streaming came to be and why it is possible a new and more important source of entertainment much, like TV is currently, but he also explains some of the problems that streamers have to deal with. Much like freelancers, it is important for them to have a good network or popularity and be able to keep up with it, as to not fall out of frame. It is like the last quote of Fersch's research, it is important that you keep up and don't drop out, because there is a chance that you can't get back up. Meaning that if you don't keep up with your work in this case for both streaming and freelancing there is a chance your publicity will drop and you will not get any work / income.

Aside from the their income and their requirements to do their work there are some other similarities between the two that only became apparent after a questionnaire . From this questionnaire a few things could be concluded.

Firstly not all of these respondents are full-time streamers, only about 30,8% of them were fulltime streamers (see figure 3), meaning that their career/ occupation was solely streaming. However almost all of the respondents did mention the wish of wanting to take streaming further and seeing if they could make it their career, this in its own right shows that streaming indeed is a new way of working and living in the New Media.

Is streaming / content creation (Youtube) your career?





Streamers, much like freelancers, have a certain age group in which they are often on their own or otherwise called single. The questionnaire showed that out of the 13 respondents 12 are between the ages of 20-35, meaning that they often are fairly young and start streaming either after finishing or during their studies (see figure 4). Of the respondents 46,2% answered that they were either living alone or went back to live with their parents, saying that a lack of money is the issue. This again can be related back to their age, seeing as at this age they probably wouldn't have a lot of money to spent. A precise measure of their income can't be determined as this fluctuates too much depending on their viewer amount and their popularity, however it could be assumed they have an income that is comparable to students or starters, judging by their age and answers to the questionnaire.

Chapter II - NEW JOBS, NEW WORKING, NEW LIVING



Figure 4: Age results of questionnaire. (Machgeels, D., 2020)

Because these people, in terms of age and financial status, are comparable to starters, they don't have a huge amount of money. Often forcing them into cheaper rental dwellings, like studio's, 2 room apartments or even go back to living in their parental homes (see figures 5 & 6). Comparing these dwellings to those of starters and even students, the type of dwellings seem to overlap, with the only difference being that some of the respondents answered by saying that they feel the dwellings is sometimes too small. Of all the respondents over 53% has said to have a rental dwelling currently and prefer to have this, one in particular even said that this was an aspect that they look for when they look into a new dwelling (see figure 7). This preference for a rental dwellings is mostly due to the fact that their financial status isn't as steady as other jobs and the fact that buying a property would be out of reach. Renting a place also offers them the possibility of moving and thus scale up their dwellings according to their future needs and income.

Answers from the other respondents support this claim. Of all the respondents 23,1% is a parent with a family and 23,1% said to be living with their significant other (see figure 5). Especially these respondents showed that they valued a bought dwelling over a rental, because they are looking into a place to permanently stay. What was apparent was that when people reached this point they mostly were to the farther end of the age group, getting closer to the ages of 30-35. Along with their age these particular respondents reacted to these questions thinking not only of their own needs, but also the needs of their families. In contrast the people who were single they didn't just focus on their own needs

In contrast to these respondents, the respondents who are single didn't have to take this into account, thus only focusing on their own needs, focusing more on temporary stay until they can find something better. Along with this way of thinking their financial status also plays a big role in this decisions, as mentioned earlier their financial status isn't as steady as some one with a full-time job especially when they start out and try to amass a following, opting for a dwelling that is good enough for now with the flexibility of not being stuck to just one place when something better turns up.

Age

What are your living conditions?



Figure 5: What are your living conditions? results of questionnaire. (Machgeels, D., 2020)

What type of dwelling do you have now?



Figure 6: What type of dwelling do you have now? results of questionnaire. (Machgeels, D., 2020)

Is your dwelling a bought or rental property?



Figure 7: Is your dwelling a bought or rental property? results of questionnaire. (Machgeels, D., 2020)



This idea of putting their families' needs at the fore front is not only reserved to streamers, the interviews in Fersch's research pointed out the same thing. An interview with one of the freelancers named Jan shows that since he got a family his work habit and way of living have changed, having to organize work more around his daily life with his family rather than just being able to work whenever, wherever he wants.

Jan: Now it is important to me, that I also have spare time, that I can integrate it well, NOW I realise that you reach the limits of THIS field of work, that is problematic, right? But apart from that...

Interviewer: In what way? [...]

Jan: Well, you are not as flexible anymore. [...] Generally, if you have a family [...] and you share the tasks, that is household and childcare work, then the flexibility is extremely limited (case excerpt 5, appendix 1 p. 76 / interview transcript 5, appendix 2) (Fersch, B., 2009, p. 180)

Taking into account that both freelancers and streamers seem to think similarly when they have family, these people tend to not fit the group that currently is in the hardest need for a dwelling. Since these people often look for a bought property, that is more in line with a normal house often with a guestroom which can double as workroom, and have a more established fund to be able to afford such a dwelling. As one of my respondents Jay or Ki11ersix mentions he looks for a home where there is enough room for his whole family and on top of that "Space where myself and my wife can have time to ourselves and time together. Big kitchen, comfortable family room, guest room".

When asked where these people were working / streaming and what they feel was missing / lacking from their dwelling almost all of them answered the same thing. Aside from the parents, who owned their own bought property and already had a separate workroom, all of the respondents answered that they did work from their dwelling (see figure 8), but felt that they were lacking a dedicated space for their work. When asked specifically what they were missing in their dwelling, almost all of them answered that they would love to have a workroom separate from their other living spaces, that is meant for streaming. Interestingly enough this same answer was later often in their answer to the question "what do you look for in a dwelling?".



Where do you work / stream?



Even the streamers who already had a workroom in their homes answered that they would love to have it improved in some way. Jay specifically answers it in the following way "Yeah currently the soundproofing for my studio isn't perfect so I'm unable to record content or stream at night. In a perfect world I could fix that". The research of both Fersch and myself point out that streamers and freelancers are alike on a lot of aspects and that they can be seen as having the same requirements for dwellings to a certain extend. From my own research it became clear that streamers in particular, which is also very applicable to other target groups as Covid-19 has shown, is that they have a need for a separate private workspace. The requirements regarding this workspace are however related to the occupation of the resident, which as Jay has pointed out would ideally be soundproof for more flexibility in working hours, in the case of streamers. Aside from these points it also seems that New Media workers in the age group of 20-35 are the most in need for dwelling adapted to the New Media way of working, as these people tend to have a financial status similar to starters. The dwellings currently occupied by these people don't offer all the things that these people would need or want in their dwelling, this being that private workspace. As the somewhat older people in this branch, this being above the age of 35, often have a family and have a dwelling that is comparable to a normal family home, these people don't seem to be in the biggest need for a new dwelling. Even though there is still an issue here in terms of lack of space, there is often in these houses a space for them to retreat to do their work, for example like in the case of my father the room of my sister.

II.III Streamers as an example

What can be concluded?

Firstly streaming is a one of many new jobs that has been created with the rise of the New Media, which has allowed these kind of jobs to be possible. The rise of popularity, both in terms of viewers and broadcasters, on the sites shows that they are in the growing phase of their kind of job. This idea of streaming becoming more and more important is shared by both Taylor, T.L. (2018) and Johnson, M. R., & Woodcock, J. (2019).

Streamers according to interview conducted by Johnson, M. R., & Woodcock, J., state that they feel that Twitch and live streaming as a whole is just in the beginning phase of its development and that it will grow out to be more than just a gaming platform.

"[...] All interviewees expressed strong agreement on two major points: firstly, the feeling that current streamers were in on the 'ground floor' of a massive new media platform and global social phenomenon, which made many streamers feel quite privileged; secondly, the common belief that Twitch and streaming would only continue to grow in future years, deploying a range of justifications for this belief, and that Twitch represented the earliest stages of a world-changing technological trajectory that would expand years or decades into the future." (2019, p. 346)

One of Woodcock's interviewees even drew the connection to how live-streaming and twitch in particular could be seen as the next big thing, comparing it to the invention of the telephone. In his own words:

"It's like the equivalent of Alexander Bell, I think his name was, laying down the first telephone lines back in the 1800s, 1700s, whenever it was. I think that's what we're doing right here, right now with Twitch, and that's something I want to be a part of." (2019, p. 347)

Chapter II - NEW JOBS, NEW WORKING, NEW LIVING

Other than streaming showing us that New Media indeed offers, at least at the moment, all kind of new jobs that have the possibility to grow out into massive new enterprises, streamers themselves also have ties to various other groups of people which are already known in today's society. As my questionnaire has pointed out streamers are fairly young, with the majority being between the ages of 20-35. These ages are comparable to that of starters, students and even freelancers.

Not only their ages are comparable, but also their living conditions. In terms of financial status streamers, especially starting streamers, don't have a lot of money. This is due to their unfixed income and the fact that they often start streaming in a time where they are a student or have just finished their study, thus leaving them without a big sum to spend. Because they lack the funds to afford the dwelling they want they often look for cheaper rental dwellings or go back to living with their parents until they have saved enough to move out. My questionnaire pointed out that there are two categories under which most of the dwellings fall in terms of size, these are 30-60 m2 and 60-100 m2 (see figure 9). Of the dwellings with a floorspace of 60 – 100 m2 and above the houses and parental homes take up the large portion, thus leaving 30-60 m2 as the major type of housing that streamers, if they are a single person household, have at the moment.

What is the size of vour current home?



Figure 9: What is the size of your current home? results of questionnaire. (Machgeels, D., 2020)

The preferred size of their dwelling changes however when their living situation changes, this being either living together with a significant other or starting a family. When their living situation changes the priority of the streamers, and the of course the other mentioned target groups, change. The priorities in the case of both the freelancers and streamers tend to shift to benefit the needs of their families rather than their own personal needs. Preferring to have a larger home with space for both them and their children, to receive guests, separate space for the parents and a workroom that is separated from the other living spaces but included in the home.

All of these different kind of people that have different occupation and vary in age have one thing in common. That is that almost all of the dwellings regardless of size have a need for a separate workspace in the dwelling, which in the case of streamers is soundproof. Especially the starting group of the New Media workers seem to have an issue of lack of space in the entire dwelling and would like to have an additional workroom in their home. If Covid-19 has shown us anything it is that in our current environment almost no dwelling is currently well enough adapted to handle this New Media way of working, where working from home or work-live has become a standard. Streamers and freelancers are a great example in showing this and thus should be taken as an example for future and potential users in terms of their needs and their wishes.

A PLACE TO LIVE AND WORK

CHAPTER IV



III.I The history of the workhome

The idea of a workhome isn't at all new, in fact the idea behind a workhome has existed a long time. It was at one point even the most normal thing in the world. In the Middle ages almost all type of homes were workhomes, think of weaver's, herbalists, shoemakers and farmers. All of t their homes doubled as their workplace and atelier during the day. They would often have space in the home reserved for working, or a room that doubled in function. During the day they would work in these spaces and would receive clients that went by to pick up orders or order something. As Holliss mentions it:

"The workhome has existed for hundreds, even thousands, of years. Examples can be found worldwide, from the Japanese machiya to the Malaysian shop-house, the Iranian courtyard house to the Vietnamese tube house, the Lyons silk-weaver's atelier to the Dutch merchant's house. Taking different forms according to culture and climate, workhomes are often so familiar that they are no longer noticed." (Holliss, F, 2015, p. 9)

In Industrial Revolution however the term of workhome became a bit less well known. As Holliss describes it "[...] the term house was to identify a building in which un paid domestic, rather than paid productive, work took place and which provided a base from which people could 'go out to work' to earn their livings." During this period the term workhome became lost, homes were in those days spaces where you would live and serve as a place from which you would depart to your work.

As working away from home was the norm the need for these workhomes became less. This trend continued for around two centuries. Even today the term workhome is hard to define, often the term of a 'dual-use' building is used. As Holliss explains that in English there isn't even a word that refer to all the buildings in which people both live and work. The terms that come close to the idea of a workhome are such as 'studio-house' or 'live/work unit'.

Even though the term workhome doesn't really exist, doesn't mean there aren't any examples of these type of workhomes. Often these type of homes do exist, but in small amounts and are catered to specific target group or even specifically made for a client. Holliss gives different examples of these workhomes in the second chapter of her book, however as mentioned these are mostly very unique examples that are all made for clients.

With the rise of the New Media and the current Covid pandemic, the need for workhomes has once again risen. Seeing as the New Media has allowed us to work differently and companies seeing the benefits of working from home, due to Covid-19, it is possible that we in the future will go into a more home based work society. With the change in our way of working and living, it is clear that we need to go back to something that was the former normal. Back to the time of the workhome.

III.I The history of the workhome

Of the, as Holliss describes them, current examples of workhomes there are a few types, that can be identified. None of the examples are exactly the same as they all seem to be some sort of commission for a client and thus don't all have a similar layout or look, but have certain similar characteristics.

Studio-house

One of these types is the 'studio-house'. Despite putting all of the examples mentioned by Holliss of 'studio-houses' under the same category the do have differences depending on for who it is designed. These differences mostly vary in terms of the size of the dwelling and the configuration of the whole building. For example the workhome apartements mentioned by Holliss are artists homes, where the building is designed in such a way that there is always enough room for the artists to move their creations from their ateliers, in their homes, through the building. For this all the hallways and staircases were given extra space as to make the handling of these creations a lot easier.

It is these kind of differences that identify each of these buildings. However the main theme of the 'studio-house' is seen in all of them. As the name suggests this type of dwelling focuses on the importance of the studio or workspace in the dwelling. In all of the given examples the workspace located in the dwelling takes up a two floor high space and is surrounded in a glass façade. The workspace here is used as a 'calling card' showing the work of the one using the dwelling. The living spaces therefore are conveniently placed around it or in Holliss' own words:

"An artist inhabiting one of these buildings, like a weaver in a Coventry cottage factory, lived at their workplace rather than working in their home." (Holliss, F., 2015, p.40)

As the groups that I try to represent don't necessarily need these kind of big spaces in their dwellings, these seem to be a bit too much for the target groups in question. However it does raise an interesting question regarding the importance of work opposed to living. If streamer answers are to be believed they hold a lot of value on entertainment and other things in the vicinity and having the dwelling for their living and working needs. However they deem their work to be important enough to dedicate a room to but not important enough to say that their whole dwelling revolves around this one aspect. For them this room just needs to be big enough for their as one respondent called it "A dedicated streaming room and soundproofing" and "extra space for a dedicated set up". Work does play an important role in the choice of dwelling and should be designed towards however as can be seen from the reactions and what is described in the book of Holliss it is definitely not to the same extend, with the past being more focused on this aspect of presenting yourself towards the public with your work as some sort of "calling card" rather than just a working space.

This idea of having just a workspace in the home that is isolated from the other living spaces, but not necessarily the front of your dwelling or 'calling card', but rather just a room in the home is supported by the answers given by several interviewee's in Fersch's research as well as mentioned by Law. Therefore this specific type of dwelling where the studio or workspace is the main focus of the dwelling is in this case not the best fit, seeing as the dwellings for both freelancers and the New Media type of working isn't just a glorified workspace.

Modernism

The second type Holliss defines is Modernism. Modernism focuses on the idea that *"its defining features are a rejection of historical precedent; the idea that form should be simplified (and generated from the inside out, by the functional spatial requirements of the building); an exploration of new materials (initially concrete, steel and glass) and a reduction of ornament. Despite the marginalization of home-based work many iconic Modernist buildings, both institutional and for individual/ family use, were designed as workhomes, but scant attention has been paid to their dual use. " (2015, p. 46-47)*

The examples given all share the resemblance of a workspace embedded in the home. However all these examples differ from each other, each of the chosen projects are designed specifically for one person only, the owner, and aren't in a real sense able to be connected to each other in terms of layout or the way they work.

All these homes incorporated spaces for the workers or housekeepers for them to stay in. In our current day and age these aspects don't seem necessary and even a little weird. It is thus that I claim that these buildings up until now, described by Holliss are part of the elite class of people who have a lot of spending money or stature within their respective societies.



The only common aspects these different homes have is the way they divide public and private. In the examples given most of the public functions of the, or the ones that the public may see, are located towards the sides where the public is. Entrance halls all facing outwards, while all the private spaces like bedroom and workrooms are located on the more secure and inner parts of the dwellings.

In short Modernism brought about the change in the way workhomes were viewed no longer was it necessary to have your workspace front and center in the home as a calling card for your business. It could be integrated in the home depending on how the owner liked it to be. The change in this time focused more on the adaptation of the owner / user rather than the presentation of the work of the person living there. The examples given are therefore also more unique and less broadly applicable like the studio-house is. Much like the studio house however there is only one aspect that could be taken into consideration for the creation of the dwellings for the current issues. That aspect is the way that they altered the dwellings in such a way that it was adapted to the way the user wanted it. This idea could be used in the creation of the dwellings for the New Media workers.

Live/work unit

The last type introduced by Holliss is the live/work units. One of the live/work units that came to be were loft style units of 200 sq meters. These lofts would have a fully open floor plan and have no boundaries like kitchen, bedroom and living room often being in some sort of studio configuration. This allowed the user to have their own layout in these dwellings and often personalizing them in interesting ways. In some way this is comparable to how Modernism handled the idea of workhomes for the specific clients.

These loft type dwellings were in this time sold as the ideal place for artists. As they offered the ability for the buyers to change these dwellings into these type of live/work units, it often didn't turn out this way. High-earning middle class would buy up these apartment and turn them into luxury lofts. This sort of thing was later on encouraged by the government and thus written off as a scam.

The live/work units as described by Holliss had a different approach to the idea of the workroom than the 'studio-house' or 'Modernism' dwellings. These units can be more or less compared to what we currently call studio's, offering little in terms of separation in rooms and more in terms of the freedom to with as you want, being able to determine your own spaces.

Much like the idea behind the live/ work units also it applicability to the New Media way of working is better than the other types given by Holliss. From the interviews of Holliss' research, my questionnaire and comments made in *Watch Me Play* by Taylor, T.L. it is clear that the New Media way of working doesn't always have a need for 2 floor high working space, or a dwelling completely dedicated to the idea of a workroom, like the 'studio-house' is. Besides this point also the size of these units is way bigger than needed. As seen from my questionnaire it became clear that the most common size lies anywhere between 30-100 m2.

Even the size of these workspaces and the size of these dwellings is questioned by Holliss herself when she goes into the idea of 'computer-based work', what could be defined as a New Media way of working. She stated the following:

"Does computer-based work count as work in these circumstances, if it could just as easily be carried out in a bedroom?" (Hollis, F., 2015, p. 64)

If we go back a hundred or even thousands of years, we would find that our origin of dwellings is that of the workhome. In the Middle ages almost all type of homes were workhomes, think of weaver's, herbalists, shoemakers and farmers. All them had their homes that doubles as their workplace and atelier.

We only started to change this way of living when the Industrial Revolution came to be. In a short period of 2 centuries we started living according to the 'go out to work' mentality, where the house was nothing more than a place where only domestic and non-productive work was conducted.

With the changes over time in technology and thus offering new ways of working, in this case New Media and Covid-19, we once again have a need for workhomes. The idea for workhomes however isn't as well-known as it once was, and our attempts in to making workhomes all try to put the emphasize on the working aspect of the dwelling. As Holliss puts it:

"An artist inhabiting one of these buildings, like a weaver in a Coventry cottage factory, lived at their workplace rather than working in their home." (Holliss, F., 2015, p.40)

These kind of dwellings are not needed, often focusing to much on the workspace rather than the dwelling, because functions are more or less conveniently placed around the workspace rather than being a coherent and hybridity within the dwelling.

Regarding the use of these types in relation to the New Media way of working the only option that comes close to the needs and current use of the dwellings of the target groups, as is explained in Chapter II, is the live/work unit. The live/work unit is very similar to the housing type that some of the interviewee's and streamers use, namely the studio dwelling. In this type of dwelling there is a lack of separation between function and most of it is an open floor plan concept, where bedroom, living room and sometimes workroom are integrated in one.

Despite the fact that Holliss offers a lot of options, most of them being the result of a commission of a client, all of them focus on the importance of the workspace rather than the dwelling or the hybridity of the two. In the examples given, with the exception of the live/work units, all of the workrooms have some sort of prominent function in the dwelling, either as 'calling card' or as the core of the home. This type of dual-use of a dwelling is out of balance and not suited for the needs that the New Media way of working is asking for.

There is a shortage problem of workhomes adapted to this new way of working, and especially in the case of the lack of private / separated workspace within the homes, however the examples given by Holliss do not suffice as examples that could be used to solve this problem, seeing as the idea of the importance of the workspace in the dwelling differs from the view that the future users have. As seen from the answers from the questionnaire most of the future users deem it necessary to have a separate room for their work, in the case of the streamers one that is soundproof, however they do not mention that this room should have extreme big proportions or is the focus of the dwelling, they deem this workroom to be a just a separate room, cut off from the other living space, but still embedded in the dwelling.

Even Holliss herself mentions that the type of workhomes, that she mentions, in her book may not be the solution for 'computer-based work'. This in combination with the various conflicting points of interest between the examples given by Holliss and the needs of the New Media way of working, shows us that we currently do not have what it takes to solve the problem of the workhomes in the New Media.



In this chapter a plan analysis is performed in which the analyzed building serve as an example of the current workhomes that exist. These buildings may not all be specifically labeled as workhomes however they either serve a similar function or have a similar way of dealing with the problems that accompany workhomes. In this chapter the reason of their choice and how they fall into place will be explained.

Each of the projects is analyzed on the same points: functions, accessibility, structure, size, dwelling and dwelling size.

To identify the buildings each has been given icons to represent; typology, functions, dwelling types, dwelling size, amount of rooms in a dwelling and the structure type. The icons and their meanings are listed below.

Icon legend





Architect: Mei architects and planners Address: Schiehavenkade, Rotterdam Client: Municipal Development Company Rotterdam Design-Completion: 2003-2008 Purpose: Residential and commercial building Number of floors: 17 Amount of dwellings: 156 workhomes, 20 quayside houses and 7000 m2 offices





27 m 12,8 m 13,6 n 2.6 m 2,2 m 4,5 8,8 m 4,5 r 5 m 8 m 2,2 m 4,2 m 4,2 n 4 m 4 m 7,6 n 7,6 m 4,5 m 4,5 m 7 m 7 m * ' 5,4 m ' 6,6 m 5,4 m 1 5,4 m . (-~~)

Structure Ground floor

Figure 10: *Structure Ground floor Schiecentrale*. (Machgeels, D., 2020) Analysed from Ground floor plan (Mei architects and planners, 2020)

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Structure Slab (5th-16th floor)



Figure 11: Structure Slab (5th-16th floor) Schiecentrale. (Machgeels, D., 2020) Analysed from Framework high plate (Mei architects and planners, 2020)

Floorheights





Figure 12: *Floorheights Schiecentrale*. (Machgeels, D., 2020) Analysed from Section (Mei architects and planners, 2020)

Accessibility and functions Ground floor plan



Figure 13: Accessibility and functions Ground floor plan Schiecentrale. (Machgeels, D., 2020) Analysed from Functions ground floor (Mei architects and planners, 2020)

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Accessibility and functions First floor plan



Accessibility and functions Fourth floor plan





Figure 15: Accessibility and functions Fourth floor plan Schiecentrale. (Machgeels, D., 2020) Analysed from Functions fourth floor (Mei architects and planners, 2020)

Accessibility and functions Fifth floor plan





Accessibility and functions Sixth floor plan



_____25m

Figure 17: Accessibility and functions Sixth floor plan Schiecentrale. (Machgeels, D., 2020) Analysed from Functions sixth floor (Mei architects and planners, 2020)

Accessibility and functions Slab floor plan



Figure 18: Accessibility and functions Slab floor plan (9th-16th floor) Schiecentrale. (Machgeels, D., 2020) Analysed from Completion (Mei architects and planners, 2020)



Accessibility and functions Section



Figure 19: Accessibility and functions Section Schiecentrale. (Machgeels, D., 2020) Analysed from Section (Mei architects and planners, 2020)



Figure 20: 145 m2 workhome in slab (9th-16th floor) + bathroom Schiecentrale. (Machgeels, D., 2020) Analysed from Workhome (ninth-sixteenth floor) in high-rise slab, representation (west) (van Gameren, D., Kuitenbrouwer, P., & Schreurs, E., 2019)
85 m2 workhome in slab (9th-16th floor)



Figure 21: 85 m2 workhome in slab (9th-16th floor) + bathroom Schiecentrale. (Machgeels, D., 2020) Analysed from Schematic view completion (Mei architects and planners, 2020)

470 m2 workhome in slab (9th-16th floor)



-



Figure 22: 470 m2 workhome in slab (9th-16th floor) + bathroom Schiecentrale. (Machgeels, D., 2020) Analysed from (Unnamed) (Mei architects and planners, 2020)



(Ground, first, second and third floor)



Ground floor



Second floor

Third floor



Analysed from Quayside houses with private garage (ground floor, first, second and third floors) (van Gameren, D., Kuitenbrouwer, P., & Schreurs, E., 2019)

IV.I Schiecentrale 4b

The Schiecentrale located in Rotterdam has a few interesting aspects that could be taken as a good reference into making workhomes. First off all the buildings offers workhomes and rentable workspaces, that all make use of the same structure within the building. These workspaces and workhomes can be changed in size according to this structure and thus make it possible to create all kinds of dwellings and sizes.

The building itself is mostly collective, only for the residents and workers, however it does have a public plinth with public parking garage, grocery store and bike garage. The upper part of the building starting from the roof of the 4th floor is seen as collective. The roof itself doubles as space where activities can be held. From this rooftop access is granted to the slabs where the first two floors act as rentable office space and the remaining floors above it as work/live units, varying in size. These dwellings are accessed by the gallery placed along the East side of the slabs. Along the galleries several small storage boxes are place, whose number is the same as the number of dwellings. Each of the dwellings has the same size and amount of storage boxes regardless of the size of the dwelling. (figure 18)

The Schiecentrale has 2 main dwelling types and rentable offices spaces that make up the majority of the building.

The first being quayhouses (see figure 23), unlike many of the other examples that will be given here these dwellings are not located inside a building, as to say that the main entrance to these dwellings is located on the street, or rather quay, than alongside a gallery or corridor within the building. The quayhouses consist of a repeating floor plan over 4 floors. One of the floors is cut short creating a double floor high space. The size of these dwellings is around 119 m2 and have a personal garage of 30 m2 on the 3rd floor which can be accessed either through the dwelling or via the public parking garage. This dwelling has no integrated workspace and it seen as a family home.



The sheer size and the way that the dwelling is configured, is in the case of the New Media way of working a bit excessive. Of the questioned New Media workers most of them seemed to be single, fairly young and have no need for a large dwelling, often opting for a smaller dwelling that covers their needs with a separate workroom. The quayhouse dwelling in this case would be better suited for a family and not for this particular group of people.

The second type is a work/live unit as they describe it. These dwellings (see figures 20, 21, 22) are found in the slabs that stand atop of the base, that is filled with a grocery store, gym and parking garage. Moving on from this mostly public area, one can get access to the collective rooftop, where various activities can be held. From this rooftop access is granted to one of the slabs containing both the office spaces and work/live dwellings.

The dwellings have various sizes and are placed along a gallery system, where all the galleries face East-wards. The various sizes of the dwelling are explained due to the repeating structure of the building dividing the slab horizontally in dwellings with a depth of 14,5 m. Depending on how the structure is used smaller dwellings of 85 m2 can be created up to an undefined maximum (see figure 24), the largest dwelling currently in the building reaches a size of 470 m2, being the largest found floor plan in the drawing of Mei architects and planners.



Figure 24: Schematic view completion & Flexibility. (Mei architects and planners, 2020)

All the sizes that could be found on the floor plans are 85 m2, 145 m2 and 470 m. Though more sizes are given as possible configuration options, no drawings could be found of these types. However as the size of 470 m2 is very large compared to the other examples it can be assumed that these dwellings can be configured however big you want them to be as long as the structure dividing the dwellings is used to configure this size.

Each of the dwellings have a set core in the middle containing all the essential functions, such as a bathroom, kitchen, breaker box, boiler and small broom closet (displayed as a fully colored in black box in figures 20 & 21). The placement of this core divides the dwelling in 2 sides, one more open side facing the gallery and a more private side, which is thus blocked off by the core, in the back of the dwelling.

The dwellings are called work/live units however from the given floorplans no real workspace could be found in the predetermined layout. As the dwelling is big enough to house at least two bedrooms and in some cases even three, adjusting one of these rooms into a workroom would suffice into making it a workhome. These type of dwellings and the way the configuration works is an interesting concept to apply to the idea of New Media workers, this way dwellings could grow to accommodate the future needs of the residents.

As mentioned before on the two lowest floors of both of the slabs rentable workspace can be found, which use the same typology as the work/live units in the slab. These workspaces much like the work/live units can be seen as configurable, each of the workspaces can be altered in size as long as they keep to the structure of the building. It is unclear whether these workspaces are meant for the residents or for anybody to rent. Much like the idea of changeable dwellings, floors dedicated to workspaces are a good idea to take to mind. If certain dwellings do not have the option of providing a workspace in the dwelling a collective work floor might be good for the New Media workers to have some sort of workspace close to home, where they can also try and expand their network. (see figures 16 & 17)







TREEHOUSE - SEOUL

Architect: Bo-DAA Address: Seoul Yeoksamdong 791-15, South-Korea Client: Kolon Global Common Life Design-Completion: 2016-2018 Purpose: Community Housing and Commercial Number of floors: (-)2 - 8 (from sub 2 to 8 floors) Amount of dwellings: 72 units Typology





Structure Ground Floor

Figure 25: *Structure Ground Floor Treehouse*. (Machgeels, D., 2020) Analysed from Ground floor plan (Treehouse / Bo-da Architecture., z.d.)

Structure principal all floors



Figure 26: *Structure principal all floors Treehouse*. (Machgeels, D., 2020) Analysed from 3F Femme plan (Treehouse / Bo-da Architecture., z.d.)

Floorheights



Figure 27: *Floorheights Treehouse*. (Machgeels, D., 2020) Analysed from Section 1 (Treehouse / Bo-da Architecture., z.d.)

5m

Accessibility and functions Ground floor





Accessibility and functions 2F





Accessibility and functions 3F



Figure 30: Accessibility and functions 3F Treehouse. (Machgeels, D., 2020) Analysed from 3F Femme plan (Treehouse / Bo-da Architecture., z.d.)

Accessibility and functions 4F



Figure 31: Accessibility and functions 4F Treehouse. (Machgeels, D., 2020) Analysed from 4F Nomad plan (Treehouse / Bo-da Architecture., z.d.)

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Accessibility and functions 5F



Figure 32: Accessibility and functions 5F Treehouse. (Machgeels, D., 2020) Analysed from 5F Cat Life plan (Treehouse / Bo-da Architecture., z.d.)

Accessibility and functions 6F



Figure 33: Accessibility and functions 6F Treehouse. (Machgeels, D., 2020) Analysed from 6F Terrace plan (Treehouse / Bo-da Architecture., z.d.)



Accessibility and functions 7F



Figure 34: Accessibility and functions 7F Treehouse. (Machgeels, D., 2020) Analysed from 7F Minimal plan (Treehouse / Bo-da Architecture., z.d.)

Accessibility and functions 8F



Figure 35: Accessibility and functions 8F Treehouse. (Machgeels, D., 2020) Analysed from 8F Pent plan (Treehouse / Bo-da Architecture., z.d.)



Accessibility and functions Cross section



Figure 36: Accessibility and functions Cross section Treehouse. (Machgeels, D., 2020) Analysed from Section 2 (Treehouse / Bo-da Architecture., z.d.)



Figure 37: Accessibility and functions Longitudinal section Treehouse. (Machgeels, D., 2020) Analysed from 7F Section 1 (Treehouse / Bo-da Architecture., z.d.)

Accessibility and functions Longitudinal section

3F Femme dwelling



Figure 38: *3F Femme dwelling + bathroom Treehouse*. (Machgeels, D., 2020) Analysed from 3F Femme plan (Treehouse / Bo-da Architecture., z.d.)

5F, 6F & 7F dwelling





Figure 39: 5F, 6F & 7F dwelling + bathroom Treehouse. (Machgeels, D., 2020) Analysed from 5F Cat Life plan, 6F Terrace plan & 7F Minimal plan (Treehouse / Bo-da Architecture., z.d.)





Figure 40: *8F Pent dwelling + bathroom Treehouse*. (Machgeels, D., 2020) Analysed from 8F Pent plan (Treehouse / Bo-da Architecture., z.d.)

IV.II Treehouse

One of the reasons that this building is included in the comparison regarding the plan analysis is for the configuration and size of the dwellings, which are meant for single persons. The way these dwellings are divided in the building along with their size and the included functions in them are all learning points or good references to the possible solution for the New Media way of working.

Because of the limited budget of the streamers and freelancers it can be said that coliving is an option into attaining a dwelling that has all the requirements that they look for in a dwelling, with the downside of having to share only the living spaces and kitchen. In the aspect of affordability this type of housing would be optimal for this target group.

The way that the workspaces in Treehouse are placed, located on the ground and first floor, is less optimal being completely communal and shared by the residents. The respondents of both my questionnaire and the research done by Fersch indicated that they do like to have a personal workspace, rather than a communal workspace. When asked if they would like to live in a coliving environment where they would have access to more equipment they wouldn't otherwise be able to afford, like a big streaming room with a green screen and other filming equipment, at the expense of having to share certain facilities like a kitchen, living room and laundry room, almost all of them reacted positively. People that didn't initially like this idea either had a family, in which case this is not applicable, or would only consider it as long as they had a personal bed, bathroom, workroom and live with people that value hygiene and cleanliness. Other than that they would be willing to share a coliving environment. For this reason Treehouse was chosen as an example of coliving with personal space that has all the required functions, as mentioned in the questionnaire.

Much like Schiecentrale Treehouse houses more than one type of dwellings. Each of them also only varying in one dimension, however unlike the Schiecentrale, the dwellings in Treehouse vary in depth depending on the floor they are on. As the name of the building suggests Treehouse appears from the outside as a tree, getting progressively smaller towards the top. Using an internal atrium and hallways/ galleries to get from and to the dwellings. The dwellings had to get progressively smaller as to still fit within the tree shape of the building. (see figure 36)

The idea of treehouse is that of coliving, everyone in the building has their own bed-, bathroom and small kitchen. However functions such as a laundry room and lounge area are all communal spaces shared with all the residents. Certain floors even have a bigger kitchen or sitting arrangement placed as to have a meeting space on the floor for the residents.

The building itself seems to serve only the resident as all the functions taking up the ground and first floor, seem to be for the residents. Functions such as a laundry room and pet wash, don't seem to belong to public functions. The only function on the ground floor which seems to have a public functions is the restaurant, which is indicated by its own separate entrance towards the outside, despite being directly next to the lounge area. (see figure 28)

Because the building gets progressively smaller towards the top in order to stick to the tree shape, multiple dwelling types had to be created. Keeping the same width for all the dwelling except the top floor dwellings. In total there are three different dwelling size to be found in Tree-house. (see figures 38, 39 & 40)

The first are located on the biggest floors in the building, or the lowest part of the tree, namely 3F and 4F. These dwelling have a size of 23m2 and are created using a spacing of 3,7 meters between each of the dwelling. This grid of 3,6 m is used as the structure of the building and divides the dwellings in homes of all the same width. (see figure 26)

The dwellings on the 5F, 6F and 7F are located on the middle and thus smaller part of the tree. The dwellings here even though the floors are not all the same size are all kept to the same depth. Much like the dwelling on the 3F and 4F these dwelling have the same width of 3,6 meters, following the structure of the building. Considering that these dwellings are less deep the overall size of these dwellings is also a bit smaller with an floor space of 18 m2. The sleeping area of these dwellings, unlike the dwellings on the 3F and 4F are located on an off level within the dwelling. Taking this sleeping area into account with the floor space of the dwelling the total available floor space of the dwelling becomes 23 m2, like the dwellings on the lower floor. (see figure 41 for an interior impression of the dwellings)



Figure 41: the interior spaces of the living units on the different floors (Treehouse / Bo-da Architecture., z.d.)

Lastly are the bigger dwellings on the top floor. These dwellings aren't that much bigger but are a more square shaped. Because these dwellings are to be fitted within the tree shape of the building, the size of them is a bit restricted in terms of both depth and width. Being 5,4 m in width and 4,6 m in depth they are by far the widest and least deep of all the dwellings. Similar to how the rest of the dwellings are configured the dwellings has a dedicated core in the corner of the room containing their bathroom and small kitchen. Like the dwellings on the 5F, 6F and 7F this dwelling also has their bedroom on an off level within the space. (see figure 36 & 39)

Even though the idea of affordability and the way the size of the dwellings in handled is very well executed here, these dwellings do not suffice as a single persons unit. Even though Treehouse seems to know that they are a coliving environment, offering a collective kitchen on the ground floor, they seem to try and make the dwellings as independent as possible by including a small personal kitchen. The sizes of these dwellings are about 23 m2 and this according to my research seems to be a bit too small for the average New Media worker. Most of the questioned answered saying that their current dwelling were between the sizes of 30-100 m2, with 30 m2 being a little too small, seeing as these people all found that they lacked the space for a separate dedicated workroom. The dwelling size shown in Treehouse would be better suited for the idea of coliving as this would probably be a good example of a size for a bed-, bathroom and workroom type of dwelling, where all the other functions such as kitchen and living room are shared. Treehouse tries to more or less fit an entire single person household in a, for the New Media way of working, too tiny space.

In short Treehouse is better suited as an example for bedroom type rooms, that include a bathand workroom in a coliving scheme rather than a full-fledged single person household. Treehouse adopts this idea of coliving to a certain degree, but to fulfill the wishes of the New Media workers the way that this is organized should be changed.



Architect: Lundgaard & Tranberg Architects Address: Rued Langgardsvey 10-18, Copenhagen, Denmark Client: Fonden Tietgenkollegiet, Nordea Danmark Fonden Design-Completion: 2003-2006 Purpose: Dormitory (shared kitchen, utility and common room) Number of floors: 6

Amount of dwellings: 360 rooms





Structure Ground floor



Figure 42: Structure Ground floor Tietgen Dormitory. (Machgeels, D., 2020) Analysed from Ground floor plan (Sánchez, D., 2019)

Structure Dwelling floor



Figure 43: *Structure Dwelling floor Tietgen Dormitory.* (Machgeels, D., 2020) Analysed from Floor plan (Sánchez, D., 2019)

Floorheights





Figure 44: *Floorheights Tietgen Dormitory.* (Machgeels, D., 2020) Analysed from Section (Treehouse / Bo-da Architecture., z.d.)

Accessibility and functions Ground floor





 $\left(\begin{array}{c} \\ \\ \\ \\ \\ \\ \end{array} \right)$

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Accessibility and functions Dwelling floor



Accessibility and functions Section



Figure 47: Accessibility and functions Section Tietgen Dormitory. (Machgeels, D., 2020) Analysed from Section (Sánchez, D., 2019)



Figure 48: 24 m2 dwelling + bathroom Treehouse. (Machgeels, D., 2020) Analysed from Dwelling floor plan; Floor plan (Sánches, D., 2019)

27 m2 dwelling





Figure 49: 27 m2 *dwelling + bathroom Treehouse*. (Machgeels, D., 2020) Analysed from Dwelling floor plan; Floor plan (Sánchez, D., 2019)

30 m2 dwelling







0 5m

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57

Figure 50: 30 m2 *dwelling + bathroom Treehouse*. (Machgeels, D., 2020) Analysed from Dwelling floor plan (Sánchez, D., 2019)



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Figure 51: 48 m2 two room dwelling + bathroom Treehouse. (Machgeels, D., 2020) Analysed from Floor plan (Sánchez, D., 2019) & The layout. retrieved from http://tietgenkollegiet.dk/en/the-building/the-rooms/

0

5m



Figure 52: Communal kitchen Treehouse. (Machgeels, D., 2020) Analysed from Floor plan (Sánchez, D., 2019) **Communal room**



0 5m

Figure 53: Communal room Treehouse. (Machgeels, D., 2020) Analysed from Floor plan (Sánchez, D., 2019)



Figure 54: *Laundry room Treehouse*. (Machgeels, D., 2020) Analysed from Floor plan (Sánchez, D., 2019)

As my research has pointed out many of the streamers, and thus the people that will work in New Media, have similar dwellings, at least at the moment, as starters and students. This student dormitory is a perfect example of student coliving and is chosen to represent the student type of coliving as an option for creating workhomes for New Media workers. Unlike Treehouse however Tietgen Dormitory adopts this idea of personal bed-, bathroom a bit better, offering just these spaces as personal while all other living spaces are shared.

Tietgen dormitory is a circular building based in Denmark. It consists of a ground floor which is accessible from 5 sides, where also the rising points up to the upper floor of the ring are located. This ground floor houses several collective functions such as a music room, bike storage and laundry room. As the building is meant for students most of its functions are collective and thus not meant for the public, however its inner courtyard is publicly accessible. (see figure 45) The rest of Tietgen is as mentioned accessible through one of the five rising points located along the circle. To reach the dwellings one has to take the gallery / hallway walking along the inside of the circle that gives access to both the dwelling and the communal rooms attached to them. (see figure 46)

In Tietgen most of the dwellings are the same, in order to create some sort of playful façade the depth of the dwellings has been altered. The depths of the dwellings vary between 10m, being the deepest, 9 meters, and 8 meters (see figures 48, 49 & 50). The square meters are as follows: 30 m2, 27 m2, 24 m2. Each of the dwellings has their own dedicated bathroom and adjustable bedroom compartment, that can be folded up and used as a workspace. In terms of flexibility within a smaller room this concept is very intriguing.

Besides the single person dwellings, there are also double bedroom versions. In these versions an extra bedroom is added using the same width of a normal dwelling, this being the standard of all the dwelling namely 3,5 meters at the widest point and, 2,8 at the smallest. The bedroom addition can function either as second bedroom or as separate workroom and has a floor space of 18 m2. (see figure 51)

As mentioned before like Treehouse Tietgen Dromitory is a coliving environment where functions such as a kitchen and communal rooms are shared between the residents. In the case of Tietgen dormitory there is per 12 dwellings one kitchen, one communal room and one laundry room. These rooms are on the other side of the hallway facing inwards to courtyard. Unlike Treehouse however these dwellings are not equipped with their own tiny sink / kitchen and thus all cooking has to be done in the communal kitchen. Of the 3 communal spaces the kitchen is the largest, being about 9 m x 7m = 63 m2. The communal room is 5,3 m x 6,9 m = 36,5 m2 and the laundry being the smallest of the three is 3,1 m x 4,8 m = 15 m2. (see figures 52, 53 & 54)

Even though I mentioned it earlier the student housing in Tietgen do not have their own dedicated workspaces, the dwellings can be altered in such a way that wardrobe can be moved (see figures 55 & 56) in order to make room for a small desk area. However this type of workspace might be applicable to freelancers, who only need a laptop and internet connection, to their work a streamer with their full computer setup, including camera, microphone and lights might not have enough space to do their work, additionally this room wouldn't be very soundproof.

In this case these type of dwellings would be applicable to a part of the potential new job types that will be created with New Media and therefore be interesting. However it will not be able to fit everyone's requirements for a workhome, as primarily its size is a downside in this regard.



Figure 55 (left): moveable wardrobe. Retrieved from http://tietgenkollegiet.dk/en/the-building/the-rooms/





Figure 56: Dwelling floor plan (Sánchez, D., 2019)

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ANNA VAN BUEREN TOREN - DEN HAAG

Architect: Wiel Arets Architects (interiors: Studio RTM, Rotterdam) Address: Anna van Buerenplein, Den Haag Client: Anna van Buerenplein BV Design-Completion: 2010-2013 Purpose: Vertical Campus (dwellings, café, university) Number of floors: 22 Amount of dwellings: 396 Typology



Structure Ground floor





Figure 57: *Structure Ground floor Anna van Bueren Toren*. (Machgeels, D., 2020) Analysed from Ground floor / Anna van Buerenplein (van Gameren, D., Kuitenbrouwer, P., & Mooij, H., 2014)





Figure 58: *Structure Apartment floor (5th-14th floor) Anna van Bueren Toren.* (Machgeels, D., 2020) Analysed from Typical apartmenet floor (5th-14th storeys) (van Gameren, D., Kuitenbrouwer, P., & Mooij, H.,2014)

`*)

63

10n



Figure 59: *Floorheights Anna van Bueren Toren.* (Machgeels, D., 2020) Analysed from Cross section (van Gameren, D., Kuitenbrouwer, P., & Mooij, H.,2014)

10m

Accessibility and functions Ground floor



Figure 60: Accessibility and functions Ground floor Anna van Bueren Toren. (Machgeels, D., 2020) Analysed from Ground floor / Anna van Buerenplein (van Gameren, D., Kuitenbrouwer, P., & Mooij, H., 2014)

65

Accessibility and functions First floor



Accessibility and functions Third floor



Figure 62: Accessibility and functions Third floor Anna van Bueren Toren. (Machgeels, D., 2020) Analysed from Third floor, auditorium and teaching areas (van Gameren, D., Kuitenbrouwer, P., & Mooij, H., 2014)



Accessibility and functions Apartment floor (5th-14th floor)

Accessibility and functions Cross section



Figure 64: Accessibility and functions Cross section Anna van Bueren Toren. (Machgeels, D., 2020) Analysed from Cross section (van Gameren, D., Kuitenbrouwer, P., & Mooij, H.,2014)





Figure 65: Accessibility and functions Longitudinal section Anna van Bueren Toren. (Machgeels, D., 2020) Analysed from Longitudinal section (van Gameren, D., Kuitenbrouwer, P., & Mooij, H.,2014)



Anna van Bueren dwelling (5th-22nd floor)



Figure 66: Anna van Bueren dwelling (5th-22nd floor)+ bathroom Schiecentrale. (Machgeels, D., 2020) Analysed from Typical apartmenet floor (5th-14th storeys) (van Gameren, D., Kuitenbrouwer, P., & Schreurs, E., 2019)

Classrooms



Analysed from Third floor, auditorium and teaching areas (van Gameren, D., Kuitenbrouwer, P., & Schreurs, E., 2019)

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IV.IV Anna van Bueren Toren

Anna van Bueren is the last of the examples. It is duped a vertical campus and houses not only classrooms, but also student dwellings. The reason for the addition of this building is simple, it offered yet another perspective into student dwellings, which can be considered as affordable single person dwellings. Besides the possible single person household the building offers floors within the building that are dedicated to classrooms, which can be seen in a different daylight, where the classrooms could be interpreted as workrooms, thus transforming the building from a vertical campus into a vertical work/live building. (see figures 64 & 65)

Anna van Bueren is a special kind of building, mostly taking inspiration for it shape from the already existing trainlines going literally through the building. The first few floors of the building, namely the entrance hall and lobby, really take their shape from this trainline. The real building, as I would like to call it, start at the tower part. The "L-shaped" tower is a stacking of student dwellings.

The dwellings located in the tower are all copies of each other with the exception of the ones on the corners, due to the odd shape of the building these dwellings have been altered to fit the shape (see figure 63). The main dwellings are all similar to a standard little studio type dwelling. Each of them consists of a living / bedroom combination with their own small bathroom and small kitchen. The dwellings are all 30 m2 and are divided by the structure of the building which has a span of roughly 4 meters between construction elements (see figures 58 & 66). Additionally each of the floor have a communal kitchen and eating room where they can cook together. However as each of the dwelling includes their own small kitchen, this kitchen is more or less an addition rather than an example of coliving. (see figure 63)

The classrooms in the Anna van Bueren Toren are based on this same grid of 4 meters. Unlike the dwellings these classroom take up the width of 2 dwellings, while keeping the same depth. The size of these classroom vary slightly, depending on where the walls for the classrooms are placed. There are 2 variants in the tower that are reoccurring. The first being 8,4 m x 7,4 m = 62 m2 and the other being 6,2 m x 8,4 m = 52 m2. (see figure 67)

From Anna van Buerent Toren much like Tietgen dormitory the minimum size for a single person dwelling can be led back to around 30 m2, however as mentioned by many of the questioned streamers, this would be a little small if a separate workroom were to be included. However the idea of a floor dedicated to communal workrooms is very appealing as this could be an alternative to having your own workroom. This would in turn much like the Tietgen Dormitories example shows be a solution for maybe a part of the people who will work in the New Media.

IV.V Conclusion

From this chapter a few things can be concluded regarding the already existing types of workhomes and the adaptability of these specific examples to the New Media workhomes.

Regarding the building that will house the dwellings, the shape of the building in most cases doesn't play a massive role in how the dwellings are made, often following some sort of grid in which dwelling sizes are determined. The only exception to this rule is Treehouse, and possibly Tietgen, where the dwellings vary in size in order to stay in the specific shape of the building. However despite Treehouse all of the other examples mostly use the structural grid within the building to determine the size of the dwellings, often making the different dwellings very similar, either always having the same depth in the case of Tietgen, Anna van Bueren and Schiecentrale or the same width like Treehouse. This concept of having a structural grid dictating the size of the dwelling for the New Media workers, without tailoring them too much to a specific line of work.

These dwellings especially the single person households have a minimum size as the examples and my research have indicated. This minimum size seems to be around 30 m2. However as

my research has indicated this size is in most cases a bit too small for the wishes of at least one group of the New Media workers, saying that they often lack the space for a separate workroom. Dwellings therefore need to be a bit bigger than 30 m2 for a single persons workhome, however the plans here show are a good reference in how these dwellings could be laid out, namely the placement of essential function cores, like in Schiecentrale for example.

Considering the idea of adaptability and to cater to a larger group of New Media workers than solely the single person worhomes, the concept used in Schiecentrale can be used. The idea behind this concept is that dwellings can be altered in size as long as they stay within the structure of the building (see figure 24). This concept is also used in Tietgen Dormitory with the additional bedroom and in Anna van Bueren Toren, where the classrooms take two times the width of a dwelling. This concept helps to not restrict dwellings to one single size, but also make the building more flexible, allowing the possibility of the growth of dwellings, as the needs of the residents grow.

Aside from the stand alone single person households, coliving can also be seen as an option for workhomes. Seeing as described in Chapter II, not all the people who work in New Media have a lot of money to spend, coliving can be option in which they have less personal spaces, in exchange for more affordability. From what Tietgen Dormitory showed us and my questionnaire pointed out is that, at least the questioned streamers, the basic necessities such as a bedroom and bathroom need to be personal, but all other spaces within the home, such as a kitchen, living room or even communal workroom could be collective. Tietgen Dormitory is a great example of this coliving scheme where 12 people, each with they own personal bed- and bathroom of about 30 m2, share a kitchen, communal room and laundry room. As mentioned before this space is a bit limited in terms of the inclusion of a personal workroom, which according to my questionnaire is a preference. However as the dwellings in Tietgen are fairly narrow (see figures 48, 49 & 50), this could be solved with a different configuration or with the addition of an extra room, like the 2 bedroom dwellings in Tietgen (see figure 51).

Lastly the student housing and coliving examples, namely Anna van Bueren, Tietgen Dormitory and Treehouse, showed that communal workspaces could also serve as an extra function in the building in order to keep down the cost of the dwelling. Instead of including workspaces in the dwelling floors or spaces could be dedicated to communal working and even be added to buildings who do include personal workspaces as a space to meet people. In these spaces people with different occupations would be able to rent equipment and spaces, which they normally wouldn't be able to afford, to conduct their work. Seeing as these floors would be open to the whole building or even the public this would also serve as a good place to extend the network of the people working in New Media.

In short a few things can be used as a reference for the New Media workhomes. Firstly the idea of structuring the dwellings along a set grid, making all of them similar in their layout and thus refraining from designing it for one particular type of people. Secondly using this structural division allows for flexibility, allowing dwellings to grow as long as they stay within the structure of the building. Thirdly the minimum size of single person workhome should be bigger than 30m2. Fourth, coliving can be seen as a solution for people who have less to spend, as long as the dwellings have a personal bed- and bathroom, and preferably a separate workroom. And lastly dedicated work floors could be added to the building to lower the cost of dwelling by not including personal workroom. This communal workspace would be a place where they can rent out equipment and spaces, which they normally wouldn't be able to afford, while also having the possibility of expanding their network, which is an important aspect for people working in New Media.

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CONCLUSION

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CHAPTER V

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V Conclusion

Starting this research I firstly had to define what I meant by New Media before I could conclude what influence this new way of working has had on the way we live and work. The first chapter of this research has shown that New Media is a really universal term, it is as I would like to call it timeless. As Manovich explains "[...] every modern media and telecommunication technology passes through its "new media stage." (Manovich, L., 2013, p. 17).

It is with every type of New Media that our way of working changes and even our way of living. Especially now this is very urgent, as Covid-19 illustrates there is a lack of workspace within the current homes for home based work. This type of working that we are experiencing now is very similar to how New Media workers work, from home. Both the research of Fersch, B., (2015) and my own questionnaire show that almost all of the interviewed / questioned work from the confines of their own home.

Especially the questionnaire goes more into depth about this as the question "is there anything missing / lacking in your home?" was always answered with the same answer, namely "a separate space for my set up" or "separate workroom". Additionally these people would answer on the question "where do you work / stream from?" that they worked from either their living or bedroom and always from within their dwelling. From this point it is clear that the lack of workspace in the current dwellings is indeed an issue, that not only Covid-19 has introduced us to, but among the New Media workers.

Streamers in this case are a good example of this New Media work, as their jobs wouldn't exist without New Media, as we know it now. This research has pointed out that streamers themselves are not the main focus of this New Media way of working and nor are they a special kind either, they share an awful lot of similarities with other New Media workers. Freelancers for example are closely relatable to streamers in terms of their living conditions, needs, age and financial situation.

The current need and thus lack of workhomes and workspace in homes is quite surprising, seeing as we originate from a workhome base society. Especially in the Middle Ages this type of workhome was the most normal thing in the world, think of a tailor or a herbalists whose house would double as their workspace. This idea of working from home only changed in the Industrial Revolution when the new norm changed to a 'go to work' mentality. During this period the term workhome became lost, homes were in those days spaces where you would live and serve as a place from which you would depart to your work. It was here that the idea of workhomes became lost.

With the rise of the New Media and the current Covid pandemic, the need for workhomes has once again risen. Seeing as the New Media has allowed us to work differently and companies seeing the benefits of working from home, due to Covid-19, it is possible that we in the future will go into a more home based work society. With the change in our way of working and living, it is clear that we need to go back to something that was the former normal. Back to the time of the workhome.

As explained by Holliss there is currently not something as a workhome, or atleast not purposefully mass produced mostly just client commissioned buildings. The best examples of workhomes that are applicable tot the New Media way of working can be found in the examples given in Chapter IV. However these aren't 100% correct in their way of dealing with the issue of working from home. Certain aspects of these buildings can be used as a reference of how to deal with the issue of lack of space.

These being:

Firstly the idea of structuring the dwellings along a set grid, making all of them similar in their layout and thus refraining from designing it for one particular type of people. Secondly using this structural division allows for flexibility, allowing dwellings to grow as long as they stay within the structure of the building. Thirdly the minimum size of single person workhome should be bigger than 30m2. Fourth, coliving can be seen as a solution for people who have less to spend, as long as the dwellings have a personal bed- and bathroom, and preferably a separate workroom. And lastly dedicated work floors could be added to the building to lower the cost of dwelling by not including personal workroom. This communal workspace would be a place where they can rent out equipment and spaces, which they normally wouldn't be able to afford, while also having the possibility of expanding their network, which is an important aspect for people working in New Media.

To summarize currently even though we come from a history of workhomes there are no good examples of workhomes that are well enough adapted to the current needs of the people working in New Media. The dwellings that are currently used by these groups are standard typologies, like studio's, 2 or 3 room apartments and family homes, however as my research has pointed out, especially the questionnaire, these do not cover all the needs of the New Media workers.

Buildings that come close to the idea of workhomes the ones analyzed in Chapter IV, do not fully encompass all the required aspects to fully function as a New Media workhome. All of the examples given in this chapter have interesting aspects that can be taken into account while creating the workhomes for the New Media way of working.

To answer the question stated in the beginning of my research: "How do you make a high-quality, affordable workspace in a workhome?"

Sadly from my research no clear cut answer can be given, the research up until now has given a lot of insight in to how workhomes can be created and what can be done to meet the requirements the New Media worker may have. However recommendations can be given on how to make sure that the idea of workhome that is fit for the New Media worker can be realized. There are various possibilities to tackle this problem, as my research has shown the most common solution as indicated by the questionnaire is for people to have their own individual workroom, preferably soundproofed in the case of the streamers, that is separate from the other living spaces and situated in the home. Another option would be to adopt a similar approach to what Anna van Bueren Toren uses. By implementing floor dedicated to workspaces it is possible to remove a dedicated workspace from the home, in order to reduce costs of living. This way a workspace is still offered very close to the home of the resident.

A few aspects that will prove useful in improving not only the quality of the dwellings, but of the overall building these dwellings will be a part of are also found within the examples of the plan analysis. This in first instance doesn't directly influence the quality of the workhomes, but improves their flexibility and future-proofness. These aspects include the use of a set structure of the building, in which all the dwellings are the same in width, using this structure the dwellings can be altered in size. This ability to change the dwellings allows for the dwellings to possibly grow with the growing needs of the resident or even change according to the needs of a future resident. Secondly the idea of coliving, in which each person in the building has at the very least their own bed- and bathroom, while all other living spaces, like the kitchen and living room are shared. Using the idea of coliving will allow people with lower income, seeing as they are primarily starters, to live in a dwelling that caters to all their needs, all be it at a lower cost and a bit less personal spaces, Tietgen Dormitory is a good example for this.

There is no clear way to distinguish how you make high-quality, affordable workspaces in a workhome, however there are several buildings that try to do this and can thus serve as a good reference into developing this new kind of dwelling. Just as workhomes were at one point our primary form of dwelling, now again comes an age in which this might be the case, and just like

back then this issue can be resolved by trial and error. The examples mentioned in this research and by Holliss in her book *Beyond Live/Work: The architecture of home-based work* show our road to figuring out this New Media workhome, in which the workspace plays a big role. A road that is only just at its starting point as we figure out all the possibilities that New Media brings with it.

APPENDIX. THE QUESTIONNAIRE

Dwelling Research

The research is about advanced housing, in which I have to design a building with a new type of dwelling tailored to the target group I choose. Therefore the information I am after will mostly be about your living conditions. Think of what kind of dwelling; is it an apartment? Are you in a house? What is the size? That sort of questions. So to be precise just the general information of the dwelling, I don't need to know anything regarding where you live, the address or anything like that. Some of the questions might go a bit more into why and how you started streaming / content creation and if this changed the way you live, so the type of dwelling you have or want. These questions will help me establish connections to other audiences, this will tell me if the dwellings that I will design could be used by other people as well, or address a larger target audience so to say.

All the information I gather will be used in order to make the research, my teacher and other students of the university will therefore read it. If you would rather remain anonymous I would be able to provide an alias, so that it won't be traced back to you, however my teacher would need to know who I actually talked to or got the information from, so he would be the only other person to know about who I am talking.

Personal Information

Name

.

Streamer name

.....

Would you like to be anonymous?

- [] Yes [] No
- Age

Age

What are your living conditions

- [] Living alone
- [] Living together with others (e.g. friends or people with same occupation)
- [] Living together with significant other (e.g. girlfriend, wife)
- [] Parent (wife / husband and kids)
- [] Single parent
 -]

Content Creation

Γ

Is streaming / content creation (Youtube) your career?

If you feel like it isn't currently your career but you want to make it into a career, or atleast try to take it further than doing it for fun, please not it down at the option for "other". If you are both please use the option "other" and type it there.

] Yes, I am a full-time streamer

- [] Yes, I am a full-time content creator (Youtube)
- [] No

Γ

]

How did you start out?

What was your situation like when you started streaming / creating content? For example did you live in your parents' house? Did you stream / upload only in your free time? Where you a student? Just the general information about what your living conditions and daily routine looked like before you started streaming.

APPENDIX. THE QUESTIONNAIRE

What changed?

Similar to the last question, but then for your current situation. Did you change home / dwelling? Has your career significantly changed? Did it change your daily routine?

Do you feel constrained to only do "what you are known for"?

For example certain streamers and Youtubers are known for only one thing, Take Tyler1, I personally know him for his LoL gameplay and don't really watch anything besides that, but he has a big enough fanbase that will watch him do other stuff. Is this also applicable to you, or are you constrained to what you are known for?

Do you have a set daily routine or does this vary?

Do you have a set routine you do every day that doesn't really change, for example going to the gym every morning, having breakfast and starting stream or do you feel like streaming is flexible so your days are always different? More or less tell me about your day, if you don't feel comfortable doing that provide whatever information you feel comfortable with to disclose.

Your Home / Dwelling

What kind of area do you live in?

If you want you can be more specific with saying suburban or near the city center. However this is not required, but if you are willing to disclose this information more option can be selected and this could be noted down under "other".

What type of dwelling do you have now?

If you have a room in a shared apartment please choose the option of collective dwelling and note down in "Other" what this entails. If you can elaborate more on for example a house, this can be done by selecting the option "other" as well and noting down specifics there.

- [] Studio apartment
- [] 2 room apartment
-] 3 room apartment
- [] Collective dwelling
- [] House
- [] Parental home
-]

Is your dwelling a bought or rental property?

- [] Rental
- [] Bought

APPENDIX

What is the size of your current dwelling?

As I am from the Netherlands the measurements are in sqaure meters (m2). I provided each of the respective size behind the square meters in brackets like so: 30 m2 (330 sq ft)

- [] Smaller than 30 m2 (330 sq ft)
- [] Between 30 60 m2 (330 660 sq ft)
- [] Between 60 100 m2 (660 1100 sq ft)
- [] >100 m2 (1100 sq ft)

What do you look for in a home?

For example do you search for bought property or rental? Does it need to have certain facilities near it? Close to the city or rather a good connection to public transport? Answers regarding these aspects. (can just be a simple summation of preferences)

Is there anything missing / lacking from your current home?

Are there aspects of your house that you feel should be included that you don't have at the moment or even that are unnecessary for your personal needs. I know for example that soundproofing often is an issue for content creators and that this always needs to be added, this could be one of the answers as well.

Where do you work / stream?

If streaming or content creation isn't your job please answer the question based on where you stream / create content. If you have work next to streaming / content creation please note it down in "other" and if you work in the same environment or differently.

What is most important for you in a home?

A little different from what you look for in a home, but rather are there deciding factors that are a must have in or near your home. Think of supermarket close (within 1 km / mile) to your home or 15 min (with the use of public transport) from the city center.

.....

Collective Living

If something like a streamer house would have existed back when you started or in the future would you have considered / consider it?

With streamer house I mean a dwelling where each has their own bed- / workroom, but otherwise shared living spaces. Additionally this dwelling or building would have a communal workspace with equipment for streams or content creation on a bigger scale (think a green screen room or soundproof room).

[]	Yes	
[]	No	
[]	I am part of a streamer house	
[]		

If not, what would it take for you to consider it?

Think in terms of possibility of a personal bed-, work- and bathroom. If you are part of a streamer house or think it is interesting please also mention if something could be improved upon or what you would like to see in such a type of house.

Thank you

I want to thank you for participating in my research. The answers to these questions really help me in my graduation.

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Introduction

The current Graduation Studio of Advanced Housing Design this year is focusing on creating an urban master plan in the Rotterdam harbour for the area of M4H. Since the industrial hub of M4H is located between the harbor and the city it is a perfect place to create a place where both these aspects can come together. The way in which Rotterdam has envisioned this is in a combination with both work and living, focusing on attracting the new makers, a creative group of people that innovate and make.

Due to the scale of the M4H site the studio is focusing specifically on the area of Keilekwartier, an area envisioned to house both industry and residential dwellings. The goal being to develop a new urban master plan for this specific part of the M4H that is in accordance with the already established ideas for this site. To fit our studio approach better Keilekwartier was divided into four quarters and split between four groups of four students. The north east quarter was marked as "QA" or "quarter A", south east QB, south west QC and north west as QD.

In order to come up with a successful master plan each of the groups had to partake in a typology transfer where they looked into different urban plans to see how these could be amalgamated onto their respective quarters. These projects being;

"Strijp S" in Eindhoven for QA, "Binckhorst" in Den Haag for QB, "Kop van Zuid" in Rotterdam for QC and "Katendrecht" in Rotterdam for QD.

For this typology transfer the four different reference projects had to be researched and their workings and key features had to be determined to see how they would be successfully integrated in M4H. Having analyzed the plans and chosen the typology, they were, with the use of various site analyses, altered to better fit the current location. To represent the current Master Plan each of the groups has made a map, 3D views, sections and elevations to elaborate on their choices and typologies.

To tie this all together a mass model was made to show the new urban master plan in its surroundings.



Methodology

As mentioned in the introduction the methods that were used were: typology transfer, massing studies, analysis and architectural drawings. The typology transfer being the main method for achieving the final outcome of the new master plan, while the others played a supportive role in terms of being used more for elaboration.

Trial-and-error showed that a literal translation of the typology onto the Keilekwartier was not possible. Therefore the choice was made to identify the key features of each of the projects and apply these to Keilekwartier instead. The Master plan that came out of this typology transfer is inspired by the reference projects, but is not a literal translation of the typology of these projects onto M4H.

Alterations that were made to tailor the typologies to the current situation included:

The change of buildings dimensions

The placement within the urban framework of the buildings that were used as inspiration.

It was important however to keep the essence of the original plan in mind, meaning to use the key features that each of the reference projects presented. These key features include the typologies of the buildings and average distance between buildings, in other words the framework of the plan. These aspects were of great assistance in creating the new Master plan.

To ensure that the typology transfer would be successful, first the key feature of each of the reference projects had to be determined. This meant that they had to be analyzed on various topics, ranging from history (to see if anything of historical importance was influencing the current plan) to a problem map, showing all the negative aspects that the site is plagued with.

Having determined the key features and the typology that was to be transferred to M4H, other analyses were performed to see how the typology would react to the new situation. The sun analysis was an important aspect in this process, allowing the students to see the impact these buildings would have on the area in terms of shadow and sunlight permeability. These analyses were a reason to alter the dimensions and position of buildings.

Lastly, to elaborate on the plan in more detail, architectural drawings and a mass model were made depicting the relationship between the various quarters and the whole of the new Master plan.

Master plan - 3D overview



Master plan - Plan



Master plan - Zoning and respective FSI



Master plan - Historic buildings of importance



Master plan - Circulation



Master plan - Commercial plinth



Master plan - Specification



Master plan - Typologies



MASTER PLAN

Master plan - Sections



Master plan - Overview





Master plan - Typologies





Reference warehouse height in plinth of the building

Quadrant - Typologies





Master plan - Overview

Longitudinal section

0 10 20 30 40 50

Cross section - Building NR 5

 أ
 0
 10
 20
 30
 40
 50

Cross section - Building NR 6

رک ل

Cross section - Building NR 7

0 10 20 30 40 50

MASTER PLAN - QUADRANT

South elevation

 \bigcirc

0 10 20 30 40 50

North elevation

 $[] \bigcirc \qquad \neg$

0 10 20 30 40 50

Quadrant - Overview

Street impression



Park impression





Shape transformation



Original shape



Keep the base and thus warehouse height





Add Treehouse under same angle as previous tower







Create a more uniform shape



Reduce floorspace



Widen sides of the X to create bigger space for dwellings



Final shape

DESIGN CONCEPT



Structure option 1 - 5 meter structure





Single person dwelling



3 room apartment



Couples dwelling



DESIGN CONCEPT

Structure option 2 - 7,2 meter structure











Couples dwelling 2



Structure option 3 - 7,2 meter structure





Couples dwelling





5m





Family dwelling 1



Structure option 4 - 3,6 meter structure





5m

Single person dwelling


Couples dwelling 2





Couples dwelling 1







Ground and first floor













4th and 5th floor



6th and 7th floor



Legend:









8th, 9th and 10th floor







11th, 12th and 13th floor







20m

Legend:



DESIGN CONCEPT

DESIGN CONCEPT

0

14th and 15th floor







Cross section

28300 50000 65000 Legend: 15000 Collective Collective workspace Public Public workspace t Collective space Dwelling 0 20m 5 Public space Bathroom

8th, 9th and 10th floor



11th, 12th and 13th floor







Legend:





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DESIGN CONCEPT

Impression entrance



Impression atrium inside the X-shaped building



Building in location



Sketch layout option 1







DESIGN CONCEPT





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DESIGN CONCEPT





