

DEVELOPMENT AND INTERNATIONAL RELATIONS

"ROUGH-HOUSE" — THE WORKING AND LIVING CONDITIONS OF CHINESE FACTORY WORKERS

2015



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— Introduction

With the downfall and the economic changes in the communist bloc, the opening of the economy of China revealed an all-inclusive global labor market, which resulted in a very serious widening of payment diversity, with a difference of more than a hundred times between the topmost level in Western countries, and the bottom level which was found in China. These discrepancies in the normal payment level made productive fruitful investments in low payment countries very appealing for Western companies – notably in China. The stream of external direct investments to China was followed by a global restructuring of the global commodity chains.¹

As a result People's Republic of China has become the biggest manufacturer in the world. It also holds the first place in exporting. World famous companies like Apple, Sony, Microsoft, Nike, Hasbro and others use the low labor cost to produce their products which in turn increased their profits by a large margin, which is why many things that we buy are made in China – laptops (mine as well), TV's, phones, gaming consoles, clothes, shoes, toys and others. While these things are our own necessities for living and they make us happy I became really interested in the people on the other side – the workers who put all these things together for us. With the demand for mainstream products increasing yearly, workers are forced to work more in order to match the pace of popularity of the product they are manufacturing. And while the profits of a system like that are inevitable, the main workforce behind all these products is suffering the most. What happens behind closed doors is really disturbing. What I discovered is that Chinese workers are working excessive hours and overtime, have mandated overtime work, don't get paid for their overtime, don't have health and safety training, don't receive protective gear, bad air conditions in their working stations, lack of special protection for underage workers and student workers, zero experience in fire drills, they need permission to resign, the drinking water and the showers in the dorms are paid, hiring discrimination is present, long standing work, reduced rest periods, low quality of the meals, severe punishment measures, crowded living quarters and dependence on the overtime wages.

This topic became interesting for me as I became both curious and frustrated that working conditions like these still exist even in our modern age and despite the advance of technology, the continuous and steady transcendence of us and our machines and our decreasing role in manufacturing in favor of the computerization, human health continues to be sacrificed for progress which includes discrimination, abuse and mistreatment. What's so sad about this reality is that while we enjoy the products that we have bought for our own joy and entertainment, the people who have made them have worked under terrible conditions. What if something that you have bought was made under conditions that I mentioned above?

¹ Christensen, M. Peer, 2014, "Transnational Business NGOs and the Chinese Labor Contract Law", *Transnational NGO's: Creative Connections of Development and Global Governance,* Aalborg University Press.

The problem formulation of this project will be to seek and answer the following questions: What are the living and working conditions at the Catcher's factory in Suqian and how are they affecting the workers?

二 Methodology

In order to answer the main questions I am going to look into different aspects of the working and living conditions of the factory workers and will proceed to analyze an investigation report focused precisely on those two aspects I have mentioned above – what are their living and working conditions and how are they affected by them, while outlining my thoughts through the usage of the two theories I have chosen below. I'll do my utmost best to both learn as I am writing and to show an in depth look about what's happening behind closed doors at the factory in Suqian, China.

The main instrument in my methodology is going to be a report by China Labor Watch called "Two Years of Broken Promises". The report will assist me by providing me with raw informational data connected with the living and working conditions of Chinese workers, thanks to the undercover operative who took the role of a factory worker. Thus it is going to be my most important source of information.

I am going to use parts of the investigator's journal during his time at the Catcher's factory which is part of the report as it will help me by showing a perspective of someone who have experienced what I mentioned above as well as provide me with even more on the ground information about the working and living environments within the facility.

Academic sources (Daly, H., 2007, "Ecological economics: the concept of scale and its relation to allocation, distribution, and uneconomic health", p. 82-103 in H. Daly, Ecological Economics and Sustainable Development: Selected Essays of Herman Daly, Cheltenham, UK: Edward Elgar, Daly, H., 1999, "Uneconomic growth and the built environment: in theory and in fact", In C.J. Kibert (ed.), Reshaping the Built Environment: Ecology, Ethics, and Economics, Washington DC: Island Press. Daly, H, 2005, "Economics in a full world", *Scientific American* 293(3), p. 100-107., Christensen, M. Peer, "Transnational NGO's: Creative Connections of Development and Global Governance, Chapter 4, Transnational Business NGOs and the Chinese Labor Contract Law", *Aalborg University Press*) will be the foundation of my theoretical thinking and will assist me in the analytical part of the project.

And finally I will implement pictures, graphics and a short video clip at the end of the project about the human cost of electronics which I will use to visually present what I am writing about.

\equiv Theoretical perspective

In terms of my choice of a theory for this project I have decided to use the human development theory or more specifically I'll make use of the uneconomic growth and the theory of the embeddedness of the market from Karl Polanyi.

Human development theory is a way of thinking that combines older ideas from sustainable development, welfare economics, ecological economics and feminist economics. Just like ecological economics its main focus is on measuring well-being and exposing uneconomic growth. Furthermore it goes beyond that and tries to find ways to optimize that well-being.

Uneconomic growth in human development theory is economic growth that echoes or produces a deterioration in the quality of life. This approach was attributed to economist and Professor Herman Daly.²³ The cost, or fall in well-being, related with the extended economic growth has been debated to arise as an outcome of "the social and environmental sacrifices made necessary by that growing encroachment on the eco-system."⁴⁵ In other words, "uneconomic growth happens when increases in manufacturing come at the expense in resources and well-being that is worth more than the products made."⁶ Uneconomic growth usually is evident in cases where the planned growth process is poorly planned or developed.

Long before growth becomes unattainable it becomes uneconomic – it starts to charge more than its worth. It is indicated that growth in the economy is titled as "economic growth," – even after this kind of growth has become uneconomic or it is boosting illth faster than wealth. According to Herman Daly, this is where we are right now, but we are not capable of noticing it.

Illth is a term that was coined by John Ruskin and means the opposite of wealth in the manner of ill being the reverse of well.⁷

What is the reason for this incapability? Partially because our nationwide accounting system, GDP, is only responsible for the "economic activity", not the true income, and even less the welfare. Instead of disconnecting costs from benefits and measure them at the margin we just count all the final goods and services. And since no one is interested illth, it is usually overlooked, for example – taxing and unhealthy labor. According to classic economists the pursuit of growth sits at the center in regard to a healthy future. But does that growth makes us wealthier? For that was correct when 5 or 6 decades ago and the time before the world was far

² Daly, H., 2007, "Ecological economics: the concept of scale and its relation to allocation, distribution, and uneconomic health", p. 82-103 in H. Daly, *Ecological Economics and Sustainable Development: Selected Essays of Herman Daly*, Cheltenham, UK: Edward Elgar.

³ Daly, H., 1999, "Uneconomic growth and the built environment: in theory and in fact", In C.J. Kibert (ed.), *Reshaping the Built Environment: Ecology, Ethics, and Economics*, Washington DC: Island Press.

⁴ Daly, H., 1999, "Uneconomic growth in theory and in fact". The First Annual Feasta Lecture, Trinity College, Dublin, 26 April, Available from: <u>http://www.feasta.org/documents/feastareview/daly.htm</u>.

⁵ Daly, H and Farley J., 2004, "Ecological Economics: Principles and Applications", Washington: Island Press.

⁶ Daly, H, 2005, "Economics in a full world", *Scientific American* 293(3), p. 100-107.

⁷ Ruskin, J., "Unto This Last", Library of Congress, pp. 97-98.

less populated and the objective was full employment, instead of growth itself. Or has growth started to make us indigent in a world that currently is too crowded with us, and all our goods, added or not in GDP? Is growth right now increase illth swifter than wealth?⁸

Jevons paradox – is the idea that technological advance that boosts the efficiency with which a resource is used, is likely to boost (rather than shrink) the rate of consumption of that resource.⁹¹⁰ In 1865, the English economist William Stanley Jevons recognized that the technological progress that raised the efficiency of coal-use led to the raised consumption of coal in a lots of industries. He argued that technological advance could not be trusted to decrease the usage of fuel consumption.¹¹ In other terms, despite all the progress in the field of manufacturing which aims to reduce the usage of labor force, in the case of the Chinese factory workers, it only led to the constant race to match the increasing demand for products which is directly linked with the increase of their manufacturing activity which in turn lead to their health, both physical and mental being abused.

With the privatization of the State Owned Enterprises (SOE) which led to a very high growth of unemployment in China, in the period from 1996 to 2001, about 36 million workers in SOEs were left without jobs and in the same period of time collective companies fired 17 million workers. Because of the abolishment of the socialist social contract, working conditions in China declined drastically. In 2008, the International Labor Organization (ILO) disclosed that China had more deaths per capita from work-related diseases each year than any other country, and the number of Chinese workers who perished because of job-related diseases in 2005 was around 386 645. The migrant working force hired in the Foreign Investment Enterprises (FIE) or joint ventures in the Chinese Special Economic Zones (SEZ) experienced immensely hard working conditions.

Wang Shaoguang, who is a professor in the Chinese University of Hong Kong links what is happening in China with the market theory of Karl Polanyi.¹²

In consonance with Polanyi, the market lasted in all societies throughout the history of humanity. When a self-regulating market is given the opportunity to subordinate society under itself, it is bound to have a disastrous effect on people and the natural environment. Thus, markets have, in most known societies, been in the words of Polanyi embedded, or subordinated to society, and have not been permitted to manage themselves. The type of economy where the market is embedded can be called a moral economy, for the economic

⁸ Daly, H, "Uneconomic Growth Deepens Depression", *The Daly News*, [Online], Available: http://steadystate.org/uneconomic-growth-deepens-depression/.

⁹ Javons, W.S., 1865. "The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of Our Coal-Mines", London: Macmillan and Co.

¹⁰ Czech, B., 2006, "If Rome is burning, why are we fiddling?", Conservation Biology 20 (6): 1563-1565.

¹¹ Alcott, B., 2008, "Historical Overview of the Jevons Paradox in the Literature", In JIM Polimeni, K. Mayumi, M. Giampietro, *The Jevons Paradox and the Myth of Resource Efficiency Improvements*, Earthscan., pp. 7-78. ¹² Shaoguang, W., "The Great Transformation: The Double Movement in China".

actions therein are subordinated to religious, social and political relations. During the 19th century, however, global economy steadily shifted from embedded to disembedded from society. Societies going through the rise of a competitive capitalist global economy gradually did what classical economic theory told them to do, specifically freeing the economy from the control of society. The disembedded market economy accelerated the demise of society and, as a result, what Polanyi names a countermovement to safeguard human beings, nature and productive organizations by the implementation of protective legislations, and other interventions by the state and the society arose.

The professor defines the economy of China until the outset of the economic reforms in 1979 as a moral economy. The market within this economy was not self-governing, but hold in control by collective and national interests, indicated by instruments: soft budget constraint and the "iron bowl". Actions by any economic organization which are not held back by its own resources constitutes the soft budget constraint. If the organization has an activity inside the planned economy, it does not matter if it experiences no surplus or loss. The loss would be reimbursed by the state through the distribution of resources from surplus-producing economic organizations.

"Iron bowl" – meant a lifelong, guaranteed jobs and social security for all people, not dependent on work performance. People's communes in agricultural areas and the danwei (work units) in towns were both social and political and economic institutions. So the "iron bowl" and the soft budget constraint "became the two pillars of the planned economic system because it gave priority to human subsistence and equality at the expense of efficiency".

When the Chinese leadership initiated the process of reformation and opening up, the Chinese moral economy was steadily altered into a market economy and the Chinese political leaders swapped the ideology of elementary welfare and parity with the pursuit for economic efficiency and the increase of GDP. Henceforth began the process of the disembeddedment of the market from the society which in turn made the market a power regulating the society.

Following the start of the new reforms and opening up, the Chinese economy experienced an exceptional increase in GDP, but this increase has in the form of side effects produced many issues for the people, like the increase in inequality and social polarization, the decay of the environment and more.

The reforms signified an absolute commodification of labor power. So labor power is sold and bought on a mostly self-ruling labor market, and fluctuations on this labor market might force workers and migrant workers out of their jobs or put a downward strain on their salary, and in that are diminishing their living environment. With the absence of regulations in regard to the working environments, employers pursuing a higher labor productivity and small costs might force the workers to their limit.¹³

I choose these theories because they match and align with what I am thinking and what my thoughts are overall, so they will be my main tools for the analysis.

四 Information, Data and Analysis

In 2010 18 Chinese workers attempted to take their lives – 14 succeeded. This occurred in a factory owned by Foxconn Technology Group – a supplier for Sony, Hewlett-Packard, Apple and other transnational companies which resulted in a wave of investigations where it was discovered that workers were working for overextended hours, insufficient salary and inferior housing.

Even though new reforms were introduced following the Foxconn scandal, thousands of people arrive young and healthy in Chinese cities every year only to encounter the health issues of working in factories with poor labor protection. It is really hard to guess how much are injured or sick; according to the Chinese government data the workplace injury rate is 115 per 10,000 workers – which is slightly above the US and far more than the European union. But there aren't many who trust China's numbers. The government doesn't report all injuries, and one study found that 7 out of 10 workers are not part of the China's workers' compensation system and they make up for a third of all the workforce.

In the last two years Wired has interviewed numerous experts and 70 workers at 15 Chinese factories. As stated by the investigation report, while some Chinese companies increased wages and slashed working hours, more issues with workplace health and safety continue to be unsolved. In a lot of cases, companies have transferred the issues outwards from their own factories to contractors and subcontractors, where an agreement is harder to enforce. The fundamental dynamic hasn't changed: clutched by global companies to manufacture evercheaper high tech products, Chinese factories continue to put safety last.

However, the issues don't end in the factories. Alterations to the Chinese compensation system for workers need companies to pay into a fund and then pay a part of the salary of an injured worker, medical care and living expenses. As a result companies have a motive to refuse that workers were injured while working. Corruption and meddling in the Chinese government produce more delays and hindrances for patients, who as a result are left on their own to pay for years or are trapped in long legal fights. Lots of Chinese factories are still dangerous, and a

¹³ Christensen, M. Peer, 2014, "Transnational Business NGOs and the Chinese Labor Contract Law", *Transnational NGO's: Creative Connections of Development and Global Governance*, Aalborg University Press.

chaotic health care system blocks workers from receiving help. In simple terms, China's factory workers are being red-taped to death.

Before 1994, the government of the People's Republic of China was in possession of most of the country's factories and covered the medical expenses of nearly every citizen. However, China went through a transition period which resulted in the steady transformation from a socialist economy to moderately privatized one, the "iron rice bowl" that was responsible for the coverage of the health care from cradle to grave has given way to private insurance. In order to safeguard the workers, the state needed all industrial companies to pay around 1% of each worker's income into the Industrial Injury Insurance Fund, with around 16.2 billion dollars in assets. The regional governments are responsible for the administering of the payments. When there is a situation in which a worker is injured, this fund is alleged to pay the medical and living costs and survivor benefits. Moreover, employers are supposed to continue to pay the worker's full wage, and depending on the nature and severity of the injury, might be required to pay a part of the medical bills.

As much as theory is concerned, the law defends the workers, but fails to do that in practice which results in its abuse. This is the conclusion of the professor of labor law and social security at Shenzhen University, Zhai Yujuan. Professor Zhai has studied job related injuries and workers' compensation in China for 10 years and has written various books on the subject. According to her estimations, the system is in a need of a reform. "In some cases the companies just pay 1%, but they don't want to pay for additional compensation," Zhai said. What's even worse is that, according to some estimates, fully 75% of companies decline to pay the wages and costs for an injured worker – an obligation it often tries to dodge. "It's a loophole in the system", she said.

In order for workers to succeed in claiming compensation, in accordance with the law, they need to possess two documents: a confirmation letter that they have worked in a factory and a diagnosis from a federally approved hospital that indicates that the injury is work-related. But even though the Chinese government reformed the system in 2012 to grant workers the opportunity to obtain both these documents at the same time instead of sequentially, the process in order to obtain these documents is arduous. Companies frequently block one or both of them and either refuse workers the evidence of employment or they put pressure on the hospitals to issue a less serious diagnosis (and in some cases deny that the injury was work-related). "If you get leukemia, they will say it's tuberculosis," Professor Zhai said.¹⁴

As I specified above, the report will play an essential part in this project as it will expose and help me in presenting the topic I am writing about. The report belongs to an organization which is constantly involved in uncovering what in reality are the working and living conditions in

¹⁴ Blanding, M., White, H., 2015, "How China Is Screwing Over Its Poisoned Factory Workers", *Wired*, [Online], Available: http://www.wired.com/2015/04/inside-chinese-factories/.

Chinese factories. The organization uses undercover agents which pose as workers in order to gather intelligence. This organization is called China Labor Watch.

It is an independent non-profit organization which was found in 2000. For the last 14 years, CLW has worked together with labor organizations, unions, and the media to conduct thorough investigations of factories that manufacture bikes, shoes, toys, clothing, furniture and electronics for some of the biggest multinational brand companies. The organization's office in New York makes reports from these investigations, informs the international community on supply chain labor problems and pressures companies to better the workers conditions. The offices in Sichuan and Shenzhen, communicates with factory workers, and is offering a free hotline service that provides advices and counseling to workers which experiencing any kind of abuse or mistreatment at their workplace. These offices back the labor movement in China by coordinating labor rights, collective bargaining, and capacity-building training courses for workers and labor rights supporters.¹⁵

China Labor Watch has interviewed workers and have sent undercover investigators into 14 Apple suppliers in China in 2012 and 2013. In spite of Apple's assurance to provide at least 24 hours of safety education, CLW has discovered that workers had only 8 hours at most and often less. In the late 2013, CLW found that around five workers had died at the Shanghai factory of Pegatron, a Taiwan-based supplier which is manufacturing the iPhone 5c. Pegatron ultimately responded that it would investigate, but when they were asked for results, the company refused to comment. The policy of Apple is to answer to all specific accusations, and in this case, after sending its own unit to examine the factory, Apple announced that it found "no evidence of any link to working conditions."

In 2012, CLW investigated 11 Samsung factories where six were mostly owned by the company. And while the group discovered labor violations in all of them, the issues were notably atrocious at some independent suppliers – no safety education, no masks for workers who work in a fumes infested environments. Samsung said that "corrective measures have already been taken" but didn't offer any details.¹⁶

The following is a case which has uncovered the environment in which Chinese workers operate and live.

¹⁵ "Who Are We", *China Labor Watch*, [Online], Available: http://chinalaborwatch.org/who_we_are.aspx.

¹⁶ Blanding, M., White, H., 2015, "How China Is Screwing Over Its Poisoned Factory Workers", *Wired*, [Online], Available: http://www.wired.com/2015/04/inside-chinese-factories/.

"A Story of Broken Promises"

What I am about to present are the findings of an investigator who worked at Catcher Technology in Suqian, China. This manufactory plant produces metal casings for electronic companies like Apple, Inc. The duties of the investigator were to work on parts for the new iPad. Catcher Technology also makes parts for the iPhone 6 in its facilities in Suqian and Taizhou. The undercover operative revealed broad violations of Chinese labor laws, along with violations of Catcher's policies and Apple's Supplier Code of Conduct, which display the standards for worker rights and environmental sustainability for all companies which have the responsibility to act as a supplier for Apple. Large number of the violations were akin to those discovered in a 2013 investigation of the same facility, the results of which sent to Apple by CLW.

Following 2005, Apple has advocated a Supplier Code of Conduct that lists major human, labor rights and environmental standards which all third-party suppliers for Apple should adapt. Apple incorporated internal (first-party) and third-party verification systems to observe whether the code is followed. The outcomes of inspection are usually followed by a plan for reform, or "corrective action plans", which regularly contain steps like paying the insurance in full, enhancing the hiring systems to forestall underage labor and scaling down the working hours. In recent years, the public was made more aware because of the release of this information.

Apple's supplier accountability standards, inspection releases, corrective action plans and yearly reports appear good on paper. With the absence of adequate transparency in regard to the actual factory labor environment, many in the public – counting policymakers, consumers and investors – may come to the conclusion that Apple provides the resources required to proceed with the corrective actions plans, and makes sure its supply-chain facilities follow the Supplier Code of Conduct. Ultimately, these are the primary legal and human rights standards, and Apple – in the role as the most successful electronics company in history and the third most successful company in the world – has the means to advocate them.

Sadly, after the examinations are finished and the disciplinary action plans are handed down to factories from Apple, there are usually no significant improvements in labor conditions and treatment of workers involved in the manufacture of Apple products. These findings reveal the absence of progress in a factory producing parts for Apple products, regardless of the clear confirmation of continuous violations of Chinese law and the Codes of Conduct of both Apple and its suppliers which in turn shows that Apple has a long way to go in order to guarantee that workers are working in a safe and just conditions.

In 2013, CLW undertook an undercover investigation of a facility named Catcher Technology Co., Ltd. In Suqian City, Jiangsu Province, China. The case unmasked major labor rights and safety violations, containing long shifts while standing, insufficient social insurance, steep

overtime work, absence of occupational safety education, heavy dust in the working place and a shortage of protective gear – especially for workers who are operating with likely toxic chemicals.

China Labor Watch gave this data to Apple in April 2013. In result Apple conducted a follow-up examination, after which announced that Catcher would undertake reforms, particularly those connected with occupational security.

Nevertheless, the outcome of the investigation carried by CLW of Catcher, performed 16 months later in August 2014 which will be used in this project, implied that Apple and Catcher have put forward an insufficient attempt to ensure that security standards and other conditions have got better for Catcher's workers. Actually, the undercover agent going into the facility in 2014 uncovered many more violations that weren't discovered in 2013, as well as repeating violations from year to year, indicating that conditions might actually be getting poor in the facility.

CLW's probe of Catcher Suqian took place at the same time as the peak manufacturing period, as this factory and one more in the same park were making the covers for the latest model of Apple's iPad as well as parts for the iPhone 6. Student workers at Catcher were getting ready to leave in order to carry on with their studies at school. For Catcher to meet its pressing need for workers during the high manufacturing period, the factory employed around 200 people daily – and sometimes as many as 800 per day. **Source:** China Labor Watch

Almost all workers in Catcher are employed in two ways: with straightforward application or through staff members or other workers. Candidates are recruited instantly if they meet some minor conditions: In age, they are ought to be between 16 or 40, able to read and write, and not have any tattoos (men are asked to remove their shirts so that that it is confirmed that they do not have tattoos). The uppermost age limit breaches the Chinese law. Workers who introduce new potential workers to the facility earn a bonus of 200 RMB (around 33\$), if the introduced worker remains on the job for a period longer than a month. New workers participate in an orientation training before starting to work on the same day. This training course lasts only 20 minutes. A staff



member usually reads from notes, explaining the rules of the facility and at the same time line officers begin to pick workers. At the time of this orientation course workers should sign a training attendance list. This list contains the name of the program, participants, organizer, time and location of training. All fields are left empty, and workers are enticed to sign their names on

three lists: Recruitment Training, Environmental Security, and Harmful Position Control Training. The last two trainings do not actually happen, which leads to workers not getting needed guidance to protect their safety and health, yet they sign the participation form. Following the orientation training, line officers from all units select workers for their posts. Workers are not selected for jobs according to their backgrounds or skills. They are not informed of what kind of work they will do on the manufacturing line. They are also oblivious to what product they will make or how to do their duty. The line officers just randomly choose workers.

Workers sign a labor contract, which is part of the recruitment phase. One contract is given two times for each worker. The copy of the worker is collected by a Catcher staff representative and is given back later with a Catcher's seal on top. Still, workers do not get their copy of the contract in an appropriate time, which results in some of them receiving after a period ranging from two weeks to two months. If a worker wishes to raise a dispute over the labor environment before she obtains her contract, she will not have the contract as proof of a labor relation. **Source**: China Labor Watch

The organization on the contract is penned as either Catcher Technology or VITO Technology (also Catcher Technology subsidiary). As it is drafted in clause 2.2 of the labor contract, the work area is the Suzhou-Suqian Industrial Park. But in accordance with the job explained in detail in other parts of the contract, the organization have the right to relocate the workers area of work under feasible conditions. In fact, relocation is not unusual at the facility. CLW's probe uncovered that workers are relocated from



Catcher to VITO facility in Suqian or the other way around if there is not enough working force at one of the factories.

As the production interest for the anticipated iPhone 6 was increasing, around 500 to 600 workers were transported from Catcher (Suqian) to the facilities of VITO (Suzhou) and Catcher (Taizhou), which are 447km and 281km from Suqian. The Catcher facility in Taizhou was responsible for the manufacture of parts for the new iPhone 6. Line officers are also granted the right to aimlessly relocate workers to other workstations for a brief period of time. Doing this, workers at Catcher are handled like accessories that can be rented and moved around.

The sixth article of the labor contract, along with statements 6.1, 6.2, and 6.3, details the regulations for labor protection, working environment, and occupational injury avoidance, but in reality Catcher does not follow these regulations, which will be later shown in the project.

The facility incorporates a two-shift system. Workers in every shift work at least six days a week, ten or more hours each working day. Shift times differ in relation to the different departments. Normally night and day shifts change every two to three months. Workers have a 24-hour rest in the event of a shift change. In the CNC (computer numerical control) department, where the inspector was appointed, workers worked on machine apparatus that was responsible for the manufacture of iPad covers established on computer-assisted designs. In the CNC branch, workers worked for 10 hours and 10 minutes every day, of which two hours and ten minutes were overtime. At the time of the high season, a normal worker will rack up between 90 and 100 hours overtime each month, as well as more than six hours of unpaid overtime.

Workers are ought to fill in an overtime agreement form every day, but only following that will they be informed whether they have to work overtime or not. Because the line officer implore workers to work overtime, he might even sign the form for them. The day shift occasionally contains two 10-minute rest periods, from 10:00 to 10:10 and 15:00 to 15:10. But, in the CNC branch, the rest periods were frequently removed, and the time was calculated into the working hours. Even at the time of the lunch break, production did not end, and workers were organized into two groups to eat so that the manufacturing process could maintained. Apparatus used for clocking work time enforced that cards cannot be used earlier than 15 minutes before work and no later than 15 minutes after work; else the time will not be calculated.

General workir	General working hours					
Day shift:	08:30-12:00	13:00-17:30	18:20-20:30			
Night shift:	20:30-00:00	01:00-05:30	06:20-08:30			
Total: 10 hours and 10 minutes per day Mandatory overtime: 2 hours & 10 minutes Additional unpaid overtime for pre- and post-shift meetings not included						

work overtime, they will be penalized by the line officer. If they do not do overtime work, workers will be regarded as not present. It is also very likely that if a worker requests from the line officer to not do overtime work, the line officer will not permit.

Source: China Labor Watch

The shift officer puts forward a meeting to take attendance 10 minutes before the shift de facto starts. Workers should be in the meeting and are not compensated for the time in it. Five to 10-minute post-shifts gatherings held by the shift officer are not compensated as well.

Workers are ought to meet manufacturing quotas every day. Only two people in a workplace are allowed to use the toilet or withdraw to get a drink of water at any given time. If a worker departs from his or her work post for a period longer than 10 minutes, the manager will shout at him or her.

In the CNC unit, a machine can achieve the production of 12 iPad covers each hour, and one CNC worker is in charge of for around 12 machines. In one hour, then one worker should make around 144 iPad covers. Each 25 seconds, the worker must make five movements, as well as opening the CNC machine door, withdrawing the cover, inject a new unit for processing, shutting the door, and moving on to the next machine. For more than 10 hours each day, a worker should constantly make these five movements while standing on concrete. If there is a case in which a worker fails to focus, his manager will yell at him. At the time of meal pauses, the machines do not halt, and workers should take turns while eating. During this time, one worker becomes accountable for another worker's 12 machines, so he has to handle the production for 24 machines. The labor severity leaves CNC workers coated in sweat every day. The CNC branch is one of the most strenuous positions for workers, and the turnover percentage is very big.

An ordinary worker normal salary is 247\$ each month and his or her transport allowance is 6.48\$ each month. So a worker's normal salary is 254\$ per month. At the time of an active season, the salary of a Catcher's workers can go up from 520\$ to 536\$. The facility buys social security for workers in the first month they start to work. A sum of 40\$ is subtracted from a worker's salary every month to pay for that worker's share of the social security cost. In accordance with the newest laws of the Suqian local government, a company must pay 40.5% of the worker's net monthly earnings to the government as social security, of which 30% is given by the company and 10.5% by the worker. In addition the worker have to pay 0.81\$ every month as subsidy for medical care in a case of severe illness. But in the current worker paystub collected by CLW, only 7.12% of the worker's net salaries were subtracted for social security. It is short of the 10.5% enforced by the law. Furthermore, the paystub does not even show the portion of social security compensated by the company, and workers are not aware if Catcher is paying their pension and other social security items in accordance with the 30% legal prerequisites.

In regard to the meals and housing, there is only one in the facility, and a number of catering companies within provide meals. The facility supplies day-shift workers with a working lunch estimated at 0.81\$ and night-shift workers with working dinner and breakfast estimated at 1.29\$ both. If workers decide not to consume these meals, they will not get any form of compensation. There is a shop located in the cafeteria. Workers are able to utilize an allowance credit on their facility-issued work card to purchase snacks and water. The water and snacks offered by the shop are generally more expensive than the products of the same kind sold in the outdoor general stores. For example, it normally costs 0.16\$ to purchase a bottle of Kangshi Boshan water, but the facility shop offered it at 0.24\$. Uni-President's red tea, instant noodles and green tea all cost 0.08\$ more than in the shops located outside the facility. On the day the workers were part of the orientation coaching, they had to buy the 0.81\$ meal offered by the facility in order to buy other food.

The cafeteria offers noodles, buns, steamed rolls and rice for breakfast, and two meat meals and one vegetable dish for lunch and dinner. The quality of the food is low and workers protest it is costly and not filling. Workers have to pay in cash in the cafeteria and the shop if they have used their food allowance on their work cards. **Source**: China Labor Watch

The dorm in which Catcher and VITO (Suqian) workers live is located around 5km away from the facility complex. The facility detracts 9.72\$ each 30 days from the worker's salaries for living expenses. The electricity and water bills are divided among the roommates and cost around 7.31\$ for each person per month. Eight workers in a room. In every room, there is a closet and a balcony. Every floor has a bathroom and a toilet. The communal water in the restroom sinks can only be used for brushing teeth, washing clothing and cleaning one's face, but cannot be used for showering and drinking. To get hot or cold water, workers have to pay. Workers also need to pay in order to use the shower and receive drinking water.

 Inside of a dorm room

The facility does not offer transportation for workers to and from the dorms. Workers must take public buses to reach the factory. But, only bus #805 drives to the gate

of the Catcher's facility, so the bus is always full. There are big number of motorcycle taxis outside the dorms and the factory. They cost 0.81\$ for each ride from the dorm to the factory.

In connection with the environmental health and safety, the facility organizes for workers to go through a physical test upon hiring as well as during their service, but workers do not go through a test upon resignation, which indicates that a worker might not know about an occupational illness upon resignation that might have been discovered by a physical test. Workers do not get a copy of the test they receive at hiring and the only way is to check the outcome by using the government internet site 20 days after the test. The facility compels workers to sign and validate that they have taken safety trainings, even if workers have not done these trainings. When questioned by the CLW's inspector, workers were unaware if there was an occupational protection committee in the facility. Team officers certify that workers have passed the test and signed the protection training form, without those workers having actually taken such test.

The facility accommodates various health and safety hazards. Shreddings from aluminummagnesium mixture, a substance used to manufacture the cover of Apple goods, are haphazardly dispersed on the floor. The big sacks used to carry the metal shreddings are too full, and in the process of moving the sacks or transporting the shreddings, metal parts are scattered along the floor. The grating and furbishing unit is also full of metal dust. After the lethal aluminum dust blast in the Zhongrong facility in Kunshan in early August, managers in Catcher's production factory explicitly mentioned the highly volatility of Catcher's aluminummagnesium mixture and the need to tread with care to forestall fires. But after this notice, no actions were undertaken to better the fire prevention or worker protection.

Source: China Labor Watch



Metal shreddings created during the production process of Apple product covers

Aluminum-magnesium mixture cutting liquids, CTC stainless steel polishing liquid, and aluminum-magnesium mixture emulsion cutting liquids – used in the processing of iPad covers and Apple keyboards – were stocked in the open without confined storehouse or any hazard or safety signs. Cutting liquids are utilized to lubricate and cool the equipment when forming metal. These liquids can hold synthetic materials, petroleum, or a combination of the two. The possible risks to workers using cutting

liquids involve the toxicity of the liquid; the combustibility of the liquid; and the vapor it produces during component manufacture, which can be breathed in or hurt worker's eyes.

When workers process product covers, their exposed hands come straight into contact with these cutting liquids without any securing gloves. After some time, this makes worker's skin to itch, peel and swell. CLW's inspector himself experienced these side effects. What's more, some workers protested against this liquid as it splashed into their eyes, which is very hurtful. In accordance with the Occupational Safety and Health Administration (OSHA), "Skin and airborne exposures to [metalworking liquids] have been involved in health issues containing irritation of the skin, throat, nose, eyes and lungs. Diseases like, asthma, acne, dermatitis, irritation of the upper respiratory tract, hypersensitivity pneumonitis and a number of cancers have been connected with exposure to [metalworking liquids]. The severity of health issues is reliant on a number of factors like the type of liquid, the degree and type of poisoning, and the level and duration of the exposure.

Along with not getting any protective training, lots of workers are not informed about the concentration of the chemicals with which they operate or the safe limits of exposure.

After processing is done, used cutting liquid is put straight into the sewage system. Water and oil that were used to clean smashed parts on the product covers are also spilled simultaneously into the drain. There is a river situated between Catcher's plant C and B plants. Rainwater shoves industrial wastewater and aluminum-magnesium mixture fragments into the river.

The safety exits of manufacture facilities are sealed, which is putting workers in a risk if a fire or blast happened in the facility. In the workplace responsible for the manufacture of iPads, safety exits and windows were all sealed, and in the case of a crisis there is no safe way for workers to flee the facility. Workers should pass by a security gate to both enter and leave the working place. And because the security gate is so confined, only one person can go through at a time.

The facility regularly does not provide protective gear to workers or does not provide it in a timely manner. Even when workers wanted the gear, workshop production officers said that they had already provided it and then declined to give the requested gear. This scenario was frequent during the night shift. On the first two days when CLW's inspector worked at the facility, neither the workshop officer nor the technician provided protective gear to workers. This gear must contain masks, gloves, earplugs and aprons. Masks and gloves were provided only every two days at the time of a specific distribution period instead of at the start of the shift. When night-shift workers get their protective gear, it is at 01:00 in the morning, which indicates that they do not have labor protection equipment during the shift from 20:30 to 01:00. Source: China Labor Watch



Used metal cutting fluid disposed of in the open

Even if machines in the manufacture facilities do not go through or pass safety investigation, management might still label them inspected. If a machine is damaged or needs a repair, there is no sign that shows that it needs a repair.

In the facility dangerous waste and normal waste are not divided. Gloves and masks were found in the cutting liquid.

Furthermore, as workers in the CNC unit are forced to work strenuously while standing for ten hours in severe heat. Despite the air conditioning being fixed to 16C, the temperature of the machines drives the temperature to up to 34C.

The main floor in the dorm area becomes slippery and wet if it rains, and there are no anti-slip mats. The dorm doesn't have a fire exit. Air conditioners are located in the balconies where workers dry clothes, and the heat produced by the air conditioners in close contact with clothes might lead to a fire. There is no appropriate location for smoking in the dorm, so some workers smoke inside.

There is no first aid kit in the dorm or the factory floor. Workers asked by CLW were unaware that the first aid kit was located in the office.

Catcher has not undertaken any fire exercises from January until August 2014. Even though Catcher launched fire exercises in the past, workers did not take part in them. Workers stated that the so-called fire exercises were just a procedure of facility security staff going through the motions. The facility undertakes constant examinations on hydrants and fire extinguishers, but in reality, they do not check the machinery thoroughly before signing the examination card.

Workers would not be capable to evacuate the Catcher factory in an event of a fire. Merchandise blockaded the workshop's fire escape paths that lead to the fire exits and the safety exits were sealed.

Some manufacturing sections at Catcher carry a real risk of a fire or a blast. There is a huge amount of dust in the air spawned by the polishing, grinding and CNC workshops. But the facility has not used effective control procedures to remove this incendiary metallic dust which accommodates parts of aluminum-magnesium mixture. The facility restrains workers from bringing lighters into the working place, but workers and managers do not submit to the regulation. Litter is piled up next to the smoking zone of workshop B12. There were lots of smoke butts all over the floor. The inspector uncovered that workers smoked cigarettes behind the CNC processing machinery and cigarette butts had been tossed into containers of cutting liquid. Cutting liquid in general is very combustible and industrial dust can be volatile when exposed to a flame (like a match or cigarette) – smoking in the working place is very hazardous.

Catcher utilizes a system of compensation and sanctions, depending on the worker demeanor. There are four types of rewards, containing salary increases, written awards, promotions and achievement awards. The six types of sanctions contain, oral punishment, minor violation, major violation, verbal discipline, demotion and layoff. The system enunciated 14 laws connected to oral punishment, 14 about minor violations, 20 about major violations, 31 arguments for layoff, and 48 arguments for demotion. Furthermore, workers who make iPads in workshop B10-B12 are searched when they come in and leave the facility.

CLW's inspector experienced that if a manager gets irked with the tempo of the workers, he will call an immediate meeting to yell at the workers for working too casually. This occurred three times during the time in which the inspector worked at Catcher's facility.

Catcher employs a large number of student workers around the ages of 16 and 18 at the same time as the summer break. Like grown-up workers, they work more than 10 hours each day, both on day and night shifts. Some of the students arrive from local schools, while others come from other locations. They are recruited by Catcher as a result of an introduction from schools, friends and agents. Catcher does not give any special protection for teen workers (under 18). The facility utilizes the same working standards for teen workers and grown-up workers and does not usually offer safety training for teen workers. In accordance with China's Regulations on Special Protection for Underage Workers, workers who are at the age of 16 or 17, cannot be put to work by employers in positions with a big risk for burns, highly chemical hazard, or a working place with high temperature. CLW could not discover any kind of information regarding a union or worker counselors at Catcher. Workers receive a Catcher Technology contact card. Workers with questions about personnel problems are advised to get in touch with consulting secretary Yuan Mengmei at 18936956309. CLW' inspector called the number and the person who was on the receiving end was not cooperative. The inspector said that he requested to report three issues, and before he could finish, the other person said that she was really occupied. She went on saying "We would be extremely busy if everyone reported problems like you." The inspector left his phone, name and work number for additional verification. The issue was submitted to the facility, but the personal data of CLW's inspector was also disclosed. The group officer and shift officer of the inspector's working place even held a factory-wide meeting and required all workers submit issues to the shift officer or, if he cannot resolve it, to group officers and Taiwanese managers. They announced that they hoped workers can avoid submitting complaints via the phone number on the contact card. The managers were displeased and used this circumstances as an excuse to conclude that the inspector was incompetent for his position and attempted to fire him.

Very small amount of people use the number on the contact card. Normally workers made reports to the squad officer regarding issues or other matters. Reports like these for the most part contain requests for resignation, requests for a leave, and complains relating to damaged machines. Machine failures are regularly solved, while the other inquiries are rarely allowed or acknowledged.

A number of workers told the inspector that Catcher makes it hard to resign and obtain unpaid salaries. If a worker desires to be laid off, shift and group officers normally do not allow that to occur; rather, shift officers request the worker to leave without going through legitimate methods, under which circumstances workers might not get their unpaid salaries. Chinese law demands workers to submit three days' notice to be laid off at the time of the introductory trial period of a job. After this trial period, workers are ought to give one month's notice to be laid off and collect all unpaid salaries. The management is required by Chinese law to allow workers to resign if they desire.

Managers at Catcher frequently deny workers' requests to be laid off, notably at the time of a busy season, as they need to meet quotas, and worker turnover might disturb the quotas. Student workers must notify shift officers of their request to leave at least one month in advance, while normal workers could not resign even if they had notified a manager one month in advance.

CLW's inspector informed the shift officer of his resignation three days after being employed, but the manager did not grant it. The inspector was instead instructed to leave the way other workers are asked to leave, without going through the process of resignation. After the inspector resorted to utilizing the complaint channel, the manager finally granted the resignation unhappily. The manager had the inspector fill out a resignation form employment completion contract. One article on the resignation letter is the stated reason for resignation, which contains the types: "personal reasons," "dissatisfaction with the shift officer", "family reasons," "dissatisfaction with the work environment," "unable to adapt to the work," and "other better opportunities". The inspector voiced his discontent with the working surroundings, writing reasons like the facility does not reduce the temperature in accordance with the regulations or supply protective gear properly. The next day, the squad officer requested the inspector to revise the reasons for resignation, saying "If you write it like this, the group leader and section chief will not accept it." The shift officer had the inspector modify the reason to: "concern for my parents; I have to go home and take care of them." The group officer approved this without additional verification and wrote, "We verified the situation, and after having communicated with this worker several times, it's meaningless to keep him."

The following are extracts from the chronicle of CLW's inspector at the time of his employment at the Catcher's facility.

On the first day during the hiring examination, they didn't ask for basic personal information or family history, rather they only asked for his ID. He got a proposal letter when the interview ended.

The second day contained a physical test and employment processes. Workers were compelled to purchase a boxed meal at the factory for lunch. It was bitter for him to see the discontented look in the eyes of the workers when they were not permitted to leave the facility to eat outside. One of the workers said, "Working at Catcher is the same as being Catcher's servant; workers are even forced to eat at the factory." Two meat meals and one vegetable dish are hardly enough for lunch, and they don't usually taste great. What's even worse is that the water machine in the employment hall is damaged, and water tastes awful. The thick blanket of dust residing on the water jug was horrific. Lots of workers used their lunch packs as water containers.

Both the physical test and the employment processes were full of administration yelling at workers. One worker was scolded for talking during the physical test; another one was yelled at for writing wrong information on the hiring application. Another worker didn't submit an application, and a Catcher employment staff member asked her to purchase another one or give up on the job at the company. The employment staff were at fault as they did not hand out the application, but the worker had to pay for that error. The inspector could not take this situation much more and proposed to the worker to just get another application, but she didn't want to take further risk. The inspector took an opportunity to take an application for the worker and succeeded without trouble. Indeed, all of the employment staff enjoy scaring workers, letting out their anger on them.

The third day was about job assignment, orientation training and actual manufacturing work. For the most part the 20-minute orientation training contained time recording processes and working discipline. But workers had to sign three training pages. One personnel member requested of the workers: "Please, everyone sign your work number and name on the training forms." The CLW's inspector did not want to do that, but he was scared that he could be caught and might not work in the facility. The most engaging part was the draft and assignment of workers. The squad officers did not question the workers for their personal information and instead just picked them randomly. People who have been employed at Catcher before and were aware of the squad and group officers behaviors and knew the working environment in the facility. For example, they would avoid on purpose work like grinding, CNC, or cleaning because they are more dirty and more exhausting than other posts. Sadly, the inspector was chosen by one of the squad officers in these units, and this officer did not disclose what kind of work he could be doing after the inspector questioned him. The officer said: "Are you going or not? It's fine if you don't. Then you can just wait for the worst position." Later he discovered that workers handpicked by this squad officer would operate in the grinding unit, which is no better than the CNC unit. Even though the grinding is accomplished by a machine, the whole facility is full of dust because workers have to move around components.

Albeit the air conditioner was fixed on 16C degrees in the facility with CNC activities, the heat coming from the cutting process was really high, which made the temperature rise to 34C degrees. Occasionally the cutting fluid spattered into worker's eyes, which is hurtful.

In the course of the working period, in the afternoon on the third day, the inspector was borrowed by another squad officer to work on machines in a different area. When hearing the squad officer of the other unit wanting to borrow the inspector from his squad officer, he felt

like he was being used like a tool. He was returned by the squad officer at around 17:30, after the shift was over. He learned how to operate the machine on his first working day. Every worker was accountable for ten machine tools, all the while pushing small pushcart around, working continuously.



Tired workers sleeping in the cafeteria and behind the machines in the workshop

Source: China Labor Watch

He said that there was hardly any time to think besides working. If there is a situation where someone is caught losing focus for even a moment, he would be scolded by the managers. Other than operating the machine, workers just sleep after their shift is over. It's insufferable to not being able to eat until you're full. Every meal demands 0.81\$ in the facility cafeteria. The

time to eat is 1 hour, and walking to and from the cafeteria and waiting in line together measures up to 30 minutes. The taste of the meals was awful; soup was not given. Workers even had to purchase water, abused by the high prices of small stores. A number of workers said it might be because Catcher accumulates high rents from these stores, and there is no other location to get water in the facility. Although there are small shops in close proximity to the facility gate, it would take 20 minutes to walk from the cafeteria to the facility gate.

It was raining on the day the inspector left the Catcher facility. He said that he sighted as he was done with this type of life which he experienced there. After some workers in the dorm discovered that he was leaving they walked him downstairs and waved farewell.¹⁷

Violations	2013	2014
Discriminatory hiring practices †		\checkmark
Workers must wait up to 2 months to receive their labor contract *		\checkmark
Excessive working hours and overtime * +	\checkmark	\checkmark
Mandated overtime work * †		V
Unpaid overtime wages * †		\checkmark
Punitive wage deductions †		\checkmark
Long working hours while standing †	\checkmark	\checkmark
Lack of occupational health and safety training $*+$ $^{\odot}$	\checkmark	\checkmark
Fraudulent training verification documents *		\checkmark
Protective equipment not given out in a timely manner (or at all) †	\checkmark	V
Dense metal dust in workshop (fire and explosion risk) $+ \mathbb{C}$	\checkmark	\checkmark
Lack of safety signs		\checkmark
Fire exits and windows locked shut (emergency risk) $\ddagger \mathbb{C}$		\checkmark
No special protections for underage workers and student workers *	\checkmark	V
T Workers do not participate in fire drills †	V	√
Environmental pollution † ©		V
No functional union †		
Workers need permission to resign *		V
Social insurance underpaid *	V	V
No functioning grievance channel †		V
Workers required to pay for drinking water and showers in dorms †	V	V
No worker health and safety committee †		V

The following is a summary chart of violations of labor and law in the Catcher's facility.

* Violation of Chinese legal regulations

† Violation of Apple's Supplier Code of Conduct

© Violation of **Catcher's** Environmental Safety and Health Policy or Corporate Social Responsibility Policy

Source: China Labor Watch¹⁸

 ¹⁷ China Labor Watch, 2014, "Investigative Report of Catcher Technology Co. Ltd (Suqian), an Apple Parts Manufacturer", *China Labor Watch*, [Online], Available: http://www.chinalaborwatch.org/report/99.
 ¹⁸ Ibid.

When CLW initiated its first investigation in the Catcher's facility in Suqian City, Jiangsu Province, China in 2013, various problems concerning the well-being, security and safety of the workers were uncovered. And despite CLW's handling the data it found out to Apple later in 2013, 16 months later little has changed or it has gotten worse.

Starting with the hiring process at the factory, men applying for a job have to take off their shirts so it is ensured that they do not have any tattoos, which makes this process discriminatory. Workers don't go through environmental and hazardous position control training and what can be understood from that is that administration of the factory does little to care about the health or the security of its own workers, and treats them like a tools tasked only with production, thus increasing dramatically the chance of the rise of uneconomic growth as prime focus is placed on the economic growth factor. Worker's backgrounds don't matter as they are picked randomly, they receive no information about their future job, and they don't know what product they are going to produce. This further reinforces my stance that the workers are just tools used for labor on the manufacturing lines without even taking into consideration their past experiences which also indicates poor production planning, because they fail to take advantage of assigning workers into areas which they are familiar with and by using the method of randomly picking them it only accelerates the appearance of uneconomic growth. Another issue discovered during the investigation was that the labor contract, which is part of the recruitment phase is given to the workers after a period ranging from two weeks to two months. Thus, if a situation arises where the worker gets ill or injured while working he cannot raise a dispute as he/she will not possess the contract, which counts as a proof for a labor relation. So for this period while working the well-being of the workers is completely disregarded. The focus falls completely on the economic growth which is pursued while workers are fooled by the administration which results in their health being compromised.

According to the labor contract, the location of the job is Suqian, but the organization has the right to relocate workers under feasible conditions. Because the demand or iPhone 6 was increasing, hundreds of workers were transported to facilities as far as 447km's from Suqian. Also line officers have the right to randomly move workers to other workstations. This further supports my claim that workers end up being tools that are constantly moved around.

The department where the investigator was placed is called CNC (computer numerical control) and was tasked with the production of iPad covers. In this branch workers worked for 10 hours and 10 minutes every day, so that amounts to 2 hours of overtime work and when there was a high season a regular worker would amass somewhere between 90 and 100 hours of overtime work each month, as well as six hours of unpaid overtime. This means that if a worker has 90 or 100 hours overtime work a month, he has worked for 13-14 every day.

Workers fill out an overtime form every day, and because the line officer wants workers to work overtime, he might even sign the form for them. There are two 10 minute breaks, but in the CNC branch they were often removed. During the lunch break, manufacturing processes don't stop, as workers are organized in two groups so that production can be maintained. Other penalties include, scolding from the line officer if workers decline to work overtime, and if they do not work overtime they are regarded as absent. It seems that overtime is just incorporated into the normal working hours and workers have no choice but to work more than they have to, to boost the production which results in one long, tiring and stressful manufacturing robotic process where workers are forced to operate machines for extended periods of time, which increases the economic growth of the factory, but at what cost?

The machine for clocking work can only be used 15 minutes before work and 15 minutes after work or the working time will not be calculated, so if a worker wants to leave early for any reason his working hours won't be added.

In regard to the production process, workers are under stress to meet the daily quotas. Rest room rules are enforced, where only two people in a workplace are permitted to use it, or to go and drink water at any given time. And if they are away from their workplace for a period longer than 10 minutes, they receive a verbal punishment from the line officer.

In the unit where the investigator was placed, the stress was even bigger as each worker there was accountable for around 12 machines, have to make 144 iPad covers in one hour. Workers are forced to perform multiple actions in a very short window of time to keep up with the production needs. They work more than 10 hours every day while standing on concrete. They are also not allowed to lose focus or they will experience scolding from the manager. During meal breaks because production mustn't stop, workers are split into groups and take turns, so one worker has to handle the production of 24 machines during the meal break. All this work results in being extremely tiring and strenuous for the workers who have to perform this every day.

All this contributes to the deterioration of the quality of life of workers, which are forced to work in order to accomplish an extended economic growth. These are prime examples of how human health is being used, sacrificed and abused by the administration of the factory which in turn reveals that uneconomic growth is present, but carefully concealed by Catcher's management.

Workers are also forced to buy food only from within the facility or they do not receive compensation. The food and drinks are also more expensive then outside the facility. The food according to workers is tastes awful, costs a lot and is not filling and they have to use their own cash if they have expired their allowance from their work cards. And during the orientation day workers had to buy a meal offered by the factory as they weren't permitted to leave the factory to buy food. This clearly indicates a system which the factory management have installed to ensure that they both have to spend less money on the food for its workers as it clearly shows that workers are unhappy with the food they are served and also to make them use their own money as the food and drinks are expensive.

The workers living quarters are 5km's away from the factory and the factory does not provide transportation to and from the dorms. They have no choice but to use public transportation.

What's even worse is that only one bus goes to the factory so it is always at full capacity, so workers are forced to use motorcycle taxies which cost 0.81\$ for each ride to the factory. Then you have internal limitations and enforced rules in the dormitories such as using the public water from the communal sinks only for washing clothing, brushing teeth and cleaning ones face, but cannot be used for showering and drinking, so for workers to get access to a drinkable water and hot water for showering they have to pay. They also have to pay for the usage of the shower. This way of the administration to manage the living quarters of its workers is again utilized to extract not only their cash but their convenience as well. The dorm also doesn't have a fire exit. And because the air conditioners are located outside on the balcony where clothes are left to dry, this could lead to a fire. Workers also smoke inside as there is no area designated for smokers.

On the subject of occupational hazard safety, the factory does a poor job of ensuring the safety of its own workers. Workers go through a physical examination before starting to work in the factory as well as while they are still working, but they do not do that when they are leaving the factory. This indicates that the factory tries to conceal the possibility that a worker might have gotten a disease during his time before he was let go. This is leaving workers with the risk of getting and carrying a disease which could have been discovered during that test.

Then you have the health hazards within the factory or the poor management of the aluminummagnesium mixture used for the manufacture of Apple products, which is extremely combustible, toxic and the vapor resulting from it which can be inhaled or hurt the eyes of the workers. This occurs because the shreddings from this mixture are carelessly on the floor; sacks which are supposed to carry these shreddings are too full and when moved, they leave metal parts on the ground. The workplace is full of metal particles. The aluminum-magnesium mixture and its emulsion cutting liquids were placed in the open, not inside a storehouse, and there weren't any safety or hazard signs. This is yet another evidence of the poor governing of the facility which directly affects the workers as the risk for injury, getting a disease or a blast which could lead to mortalities is very high.

The health of the workers is yet again exposed as their unprotected hands come in direct contact with these cutting liquids, which results in their skin being itch, peel and swell. The investigator working in the factory went through this as well. Some workers even got some of this liquid splashed in their eyes, which was said to be very painful. And the diseases which workers might get infected contain acne, asthma, dermatitis, various kinds of cancer and more. The management does not inform the workers in relation to the concentration of chemicals with which they operate or the safe limits to prevent exposure.

What follows is that all the waste from the processing is dumped into the drain. And because there is a river in the vicinity of the factory, rainwater shoves the infected water and the remains of the aluminum-magnesium mixture into the river and depending on the location of the river and if it is being used for something it will affect even more people in the future. Another major safety issue is that the fire exit doors located in the producing facilities are locked, which is directly putting the workers in mortal danger, should there be a blast. The workplace responsible for the making of the iPad, its exits and windows were all locked, which leaves no way for workers to get out in a crisis situation. In order for workers to leave the, they are required to go through a security gate which is also used to enter the facility, and due to the gate being so narrow, only one person could go at a time.

Not only the workers aren't provided with protective gear on time, but they are often turned down when asking to receive the gear. According to the CLW's inspector during the night shift, masks and gloves were supplied every two days and not in the beginning of the shift but in a specific distribution time. Workers receive their gear at 01:00, but their shift starts in 20:30, so this is resulting in four and a half hours in which workers health is potentially exposed.

It is unknown whether the machines in the production facilities have passed or went through a safety inspection, because the administration just labels them examined anyway. Therefore there is no way to tell whether a machine needs fixing or if it's damaged. This yet another way for the management to cut on their overall spending's, but this is affecting not only the quality of their production but the safety of their workers. The normal and hazard waste are not separated. Protective equipment is regularly found in the cutting liquid. It isn't enough that workers are forced to work more than ten hours every day but they work in extreme working temperatures of around 34C.

Parts of the sections tasked with the production processes could fall a victim to a fire or a blast, as there is huge amount of dust in the air produced by the processing of materials and the facility administration has done nothing to reduce or remove it. The factory is against bringing in lighters, but neither managers nor workers follows this. The investigator found out that workers smoked cigarettes behind the processing machinery and cigarette butts had been dropped inside containers with cutting liquid. This is liquid is extremely combustible and industrial dust can be explosive when exposed to a flame (like a match or cigarette) – which results in making the factory vulnerable to hazards.

A good example of how dangerous the aluminum-magnesium mixture is the blast that occurred at Kunshan Zhongrong Metal Products Co. facility. The fatal explosion took the life of at least 75 workers and injured 185. The explosion was caused by small aluminum-magnesium parts that caught fire. According to Li Qiang who is the New York-based director of CLW, what happened was not a random accident and it wouldn't have happened if appropriate safety measures have been implemented. He said that it was a fire hazard waiting to occur. The explosion was so strong that it blew the ceiling off the factory.¹⁹

¹⁹ Cho, Y.S., Krishnamoorthy, A., 2014, "Chinese Plant in Fatal Blast Described as Dusty Deathtrap", *Bloomberg*, [Online], Available: http://www.bloomberg.com/news/articles/2014-08-05/fireball-on-chinese-factory-floor-exposes-dirty-workplace.

When you take into account what happened in Kunshan and compare it to the working environment at the Catcher's factory the conditions are very favorable for a blast like the one that took so many people to occur.

The factory uses student workers from the ages of 16 to 18, but their daily working hours are the same as the adult workers, which means that they are working more than 10 hours a day. And the factory does not supply them with any kind of protection gear. It just treats them as normal workers and they also get not safety training and you have to take into account that according with China's laws on Special Protection for Underage Workers, students at the ages of 16 or 17 who work cannot be put by their employer in a work posts with a high chance for burns, highly chemical hazards, or working in a place with high temperature. Clearly these laws have fallen on deaf ears at the Catcher's factory. Making underage children work for excessive hours while standing, with no safety equipment, operating with hazardous machines in a working environment with temperatures reaching 34C is truly horrifying and unacceptable in modern times. The administration goal is obvious – cut corners from every possible way to ensure a maximum output of Apple products so that an economic growth is maintained and the high demand is reached, with full focus on the product itself and with little to no care for the people responsible for making it. In other words the production and the increase of that production comes at the expense of the well-being of the working force, thus manifesting uneconomic growth.

The factory fails to provide an adequate support in the form of a union or a counselor. The CLW's inspector himself contacted a secretary which information was on a card given to all workers if they have questions in regard to working at the factory only to be told off. According to the officers at the factory it is unadvisable to call that number which is again ridiculous and so very small number of people actually use that number which is really bizarre and asks the question of why are even these cards distributed among workers when they start working?

And if a worker desires to be laid off its might actually not happen, or rather they can leave but not through a legal way which results in them not receiving their unpaid salaries. According to the Chinese law workers who have just started working have a right to submit 3 days' notice or if the worker wants to leave after this first month or more he have to submit that notice 1 month in advance. The Chinese law requires the administration of the factory to give permission to workers to leave should they want to. None of these laws is applied in Catcher's and during a high season workers are not permitted to leave if they want to. The only ones who have the chance to leave are the student workers if they submit a notice one month in advance, but if an adult worker tries to use the same method it is declined. The CLW's investigator went through exactly this. In order for him to be laid off he ultimately used the forbidden card for the secretary and when he wrote in his resignation form the reasons for his leaving (high working temperature and not being provided with protective gear) he was forced to change them to worry for his parents and that he have to leave in order to take care of them. And indeed according to the writings from his journal which I have included in this project it was a horrible and awful experience for him during his time at the Catcher's factory.

The case about the Catcher's factory is not the only one gazing upon the working and living conditions and the mistreatment of workers. CLW has dozens of reports including:

"Investigative report of Quanta Shanghai Manufacturing City" – Hiring discrimination for people that are aged 30 or more, having tattoos or long hair, all training plus only 10 minutes of safety training is only 7 hours, when according to the law it must be 24 hours long, despite the fact that the factory utilizes a number of hazardous chemicals for its production processes. Resigning or taking a leave is very difficult as workers are often declined in their requests. Workers who are sick and are living far from the factory must come in person to request their leave. The factory also employs child workers and does not provide them with protective gear and they are forced to work the same hours and work night shifts as regular workers. Overtime hours are enforced. Workers work 12-hour long shifts each day and it amounts to 80 hours of overtime a month which is twice over the limit. They are also unpaid for around 30 minutes of overtime every day, building up to more than \$1.8 million of unpaid salaries per month. The salaries are handed with delays up to 13 days after the payment period is over. The factory gates are locked during the work shifts and workers are not able to eat outside in spite of a lacking cafeteria meals. The dormitories are overcrowded and poor as each room houses up to 12 workers leaving only 2 square meters of space for each worker. All male workers occupying 5 dorms are forced to share one public bathroom and it requires a walk. The factory does not provide protective gear in a timely manner and workers must ask for it first. The chance of a fire or a blast is very high due to the workers never participating in fire drills or receiving proper training on fire forestalling. There is a lack of grievance channels as workers have no clue if there is a labor union in the factory. There is also an abusive administration where team officers insult workers for the sake of pressuring them.²⁰

"Another Samsung supplier factory exploiting child labor" – The factory hires children under 16 which is in violation with the Chinese Labor Law. They do not have a labor contract, work for the same hours as adult workers but are paid 1/3 less. They are paid for 10 hours of work even though they work for 11 hours. The situation also fits with the International Labor Organization's interpretation of child labor, plus working conditions which are physically or mentally hurtful to children. Absence of safety training, even though they are working with hazardous chemicals like industrial alcohol and thinners. Workers do not get supplied with protective gear (gloves, masks), they need to ask for it. Discrimination in regard to the hiring process where the factory restricts the employment of male candidates. The factory also employs hundreds of temporary workers who are paid in a flat hourly rate with no regard to the overtime hours worked, which is against the Chinese labor regulations. The factory does not buy social insurance for temporary workers which again in violation with the legal regulations

²⁰ China Labor Watch, 2014, "Investigative Report of Quanta Shanghai Manufacturing", *China Labor Watch*, [Online], Available: http://www.chinalaborwatch.org/report/72.

and does not fully buy the insurance for other workers. Special equipment is not provided to child workers. Workers are forced to sign blank labor contracts which violates China's Labor Contract Law, and are oblivious to the terms of their employment. A finished contract is given to them only after a month have passed since the beginning of their employment. In order for a worker to be laid off a management approval is needed, but in consonance with Article 37 of Labor Contract Law, the worker is only required to give a 30 day notice; approval is not needed. Workers are forced to work 11 hours each day, building up more than 120 hours of overtime a month which is 3 times in excess of China's legal limit of 36 hours. The factory then conceals the extreme overtime hours from inspections of documents by listing the overtime pay for all overtime beyond 80 hours as benefits on worker's pay stubs. The workers are also punished for almost any kind of behavior because of the instituted restrictions that establish the pretext. There is no union that could represent the workers' needs and interests. The living quarters are crowded, hot and do not have hot water.²¹

"iExploitation: Apple Supplier Jabil Exploits Workers to Meet iPhone 6 Demands" – Law violations include hiring discrimination, discrimination against pregnant women, unsafe working conditions, workers are ought to fill out a number of documents without a competent explanation, hiring fees, absence of occupational safety training, sketchy training, forced and extreme overtime work, poor sanitation, poor payment for the social insurance, standing work, high labor intensity, decreased break pauses, orally abusive administration, absence of effective grievance channels, difficulties in the pursuit to be laid off, poor quality of the meals, waste water in the workshop, severe punishment measures, crowded living quarters (8 workers in one room), workers are dependent on their overtime salaries and day and night shifts are put in the same room, thus disturbing the sleep of others.²²

"Barbie, Mickey Mouse, Optimus Prime, Thomas the Tank Engine: Who Else Continues to Exploit Toy Makers" – Law violations from 4 factories which the CLW investigator worked in – hiring discrimination as restrictions on age and ethnic group of the candidates were discovered, detention of personal identification documents where two of the factories illegally hold workers' personal identification documents at the time of the employment process, one factory for 24 hours and the other for 5 hours, three of the factories do not offer any physical examinations to workers before or after being employed, which makes previous conditions undiscovered before starting to work and if a worker catches an occupational disease, he/she might not have the required evidence to prove that it was connected with the work at the factory and while the 4th factory does offer physical exams, workers do not receive their exam results. Lack or absence of safety training – in 3 of the factories, workers receive 30 to 120 minutes of pre-job training, and for the most part it is unconnected to occupational safety. The 4th factory does not organize any pre-job training. Three of the factories force workers to sign

²¹ China Labor Watch, 2014, "Another Samsung supplier factory exploiting child labor", *China Labor Watch*, [Online], Available: http://www.chinalaborwatch.org/report/90.

²² China Labor Watch, 2014, "iExploitation: Apple Supplier Jabil Exploits Workers to Meet iPhone 6 Demands", *China Labor Watch*, [Online], Available: http://www.chinalaborwatch.org/report/103.

training forms despite never actually receiving one. Three of the factories force workers to sign incomplete labor agreements while offering very short time to read the agreement and hurrying workers to sign it. Workers then wait one or two months to receive copies of their contracts which is in unlawful according to the China's Labor Contract Law. All 4 factories underpay the workers social insurance at a rate below the legal limit. All of the factories incorporate extreme overtime work and workers build up to around 100 hours of overtime work a month, with one factory laboring over 120 hours of overtime work a month. One of the factories rotates workers between day and night shifts one time each week and another factory does that one time every two weeks. Shift rotations like these might be unhealthy to the workers well-being. All of the 4 factories did not supplied workers with adequate protective gear despite the fact that they work involves coming in close contact with hazardous chemicals. Three of the factories failed to organize timely inspections of the manufacture apparatus, established upon the lack of inspections records. The living conditions that the factories are maintaining are extremely poor as the dorms are crowded and hot with 8 to 18 people living in one room, five showers for 180 people, negligent dorm administration leading to continual theft, and fire safety concerns. One of the factories shuts the emergency exits, and the fire escape passages are blocked. All of the factories fail to offer adequate fire prevention training to its workers. Environment pollution is also present as industrial water is dumped into a general sewer system and a failure to disconnect industrial waste from general waste was discovered. Some of the factories have a hotline for the workers to use in case they want to fill a complaint, but the number offered is doesn't always work or workers are usually told to by the operator to simply address their issues to their manager. The factories does not have an effective unions, as they exist only on paper and because of that workers are not represented. Furthermore, union representatives are not chosen by workers and the union leader is a member of the company's administration team. Three of the factories need workers to get a management approval before being laid off. The administration frequently orally abuse workers and an example of that would be a case where a manager in one of the factories told a worker with sick parents that "even if someone dies in your family you'll not be allowed to resign". Two of the managing companies were discovered to implement deceitful methods during social investigations. In one of the factories, workers are forced by the administration to conceal the truth about the working environment. Another factory was discovered to design a special zone for investigation that has better conditions than the other manufacturing facilities.²³

These are all reports from 2014 only, where almost all the issues I have covered collide on the realms of similarity, thus portraying a picture which engulfs more than its frame which is my project. It is a situation which has its roots in the past during the reforms period in China. It was

²³ China Labor Watch, 2014, "Barbie, Mickey Mouse, Optimus Prime, Thomas the Tank Engine: Who Else Continues to Exploit Toy Workers?", *China Labor Watch*, [Online], Available: http://www.chinalaborwatch.org/report/104.

then that it was decided that the economy should focus on efficiency and performance instead of human support and quality in the pursuit of GDP.

A model of governing like the one exhibited at the Catcher's factory in Suqian and the other factories is unacceptable. While their goal of pursuing economic growth is completely ordinary, the way they chose to do that is cruel. When you have practices like - discrimination during the hiring processes, workers are forced to wait up to 2 months for their labor contracts, excessive working hours and overtime, forced overtime work, unpaid overtime salaries, disciplinary wage deductions, long working hours spent standing, lack of environmental health and safety training, deceptive training authentication documents, protective gear not supplied in a timely manner (or at all), metal dust in the workshop (which carries the risk of an explosion or fire), no safety signs, fire exits and windows locked, no special protection for underage student workers, environmental pollution, lack of working union, the permission to be granted the right to be laid off (often declined), workers forced to pay for drinking water and showers in the dorms, lack of worker health and safety committee, it leads to one thing - an environment where the workers are discriminated, abused, mistreated and both their mental and physical health is being depleted and sacrificed so that economic growth is achieved at the lowest cost possible which is indeed a well-placed model which conceals the duality of the term economic growth.

The uneconomic growth produced in both past and present, the harsh working and living environments, the mistreatment and abuse of workers, the sacrifice of the workers well-being, these are happenings of the choice China made when it was decided that the economy would move on from being moral to being market focused.

When the State Owned Enterprises were privatized it lead to the abolishment of the socialist social contract and brought forward the decline of the working conditions in China. 386 645 is the number of people who have perished because of work-related disease, according to the data released by the International Labor Organization in 2008. How many thousands have lost their lives in this manner since then? Workers employed in factories which have contracts with international companies experienced extremely harsh working conditions, which is exactly the case with the Catcher's factory.

I think that this have happened and is still happening because of the market being left to selfgovern itself. It comes as no surprise that in an event where a market is left to control itself or subordinate the society under itself, it was going to have a disastrous effect on the people and the environments surrounding them. And that's why according to Polanyi the market have sustained itself throughout most of its history by being regulated or embedded within the society or subordinated to it. This type of economy is called a moral economy and China was using this model until the reforms in 1979. During these past times the Chinese market was managed by collective or national interests and was supported by two instruments: the soft budget constraint and the "iron bowl". The soft budget constraint meant that actions by any economic organization which are not held back by its own resources and in an event of a loss it would be reimbursed by the state. The "Iron bowl" constituted a lifelong, guaranteed jobs and social security for all people, not based on work efficiency. So these two instruments became the foundation of the planned economic system as it focused on human support and equality at the cost of efficiency.

Then 1979 came and a new era began settling in as the Chinese economy changed in a way which led to the enormous increase in GDP, but as one of the most fundamental sayings in politics states that in order to get something you have to give something in return, it makes it fairly easy to gaze upon what was sacrificed – the rise of inequality, social polarization, the decay of the environment, the mistreatment of workers and the decline of their working environment.

As a result of the new reforms the labor power became an absolute commodification and it was/is sold and purchased within the borders of a self-governing labor market where changes within this market force workers out of their jobs or put downward strain on their salary. And with the absence of rules in regard to the working conditions, employers in their pursuit of a higher labor productivity and less and less costs will force workers to their limit thus sacrificing their well-being.

The choice to pursue a market based economy was not a false one, it was a natural evolution which has seen most of the world's economies change in order to follow the path of globalization. It was and still is the intensity with which the Chinese chose to carry out this choice, choice which ushered the inevitable emphasis that was about to be put on the GDP growth and the role of Chinese workers who would be installed in working environments which demand their well-being, evident in the reports by CLW and the report this project was based on.

五 Conclusion

"It is a confusion of ideas to suppose that the economical use of fuel is equivalent to diminished consumption. The very contrary is the truth." – William Stanley Jevons

While the quote above was correct for a time period 150 years ago when an English economist William Stanley Jevons described and recognized that furthering the technology of the coal industry and its efficiency as a resource would not shrink its consumption but would lead to the exact opposite, today his words still carry weight and fuel can easily be replaced with any other resource like labor force. According to him bettering the efficiency with which coal is utilized could not be trusted to lower its usage. His paradox truthfully explains that despite all the technological advance in the field of manufacturing where our role should be steadily decreasing as we give our burden to the machines we built, it is not always true. In the case of the workers at the Catcher's factory and the others where the pursuit to match the increasing demand for products is the only priority and the well-being of the workers is not, led to the drastic increase

in their work load, them being mistreated, abused and their physical and mental health being sapped away as the administration looks upon them as nothing more than tools.

The investigator from CLW uncovered truly horrendous working and living conditions throughout his experience from the period he was embedded in the factory. Discriminatory hiring practices, workers being made to wait up to 2 months to get their labor contracts, extreme working hours and overtime work which is mandated, uncompensated overtime payments, punitive wage deductions, long working hours whiles standing, absence of occupational health and safety training, deceptive training verification forms, protective gear not offered in a timely manner (or at all), high risk for a fire or an explosion due to the dense metal dust present in the workshop, lack of safety signs, high emergency risk as both fire exits and windows are locked, underage workers and student workers aren't offered special protection, workers do not go through fire drills, environmental pollution is present, lack of operating union representing the workers, workers need permission to be laid off, absence of grievance channel, workers being forced to pay for hot and cold water and for the usage of showers and receiving drinking water – these are conditions which are forced upon the workers at the Catcher's factory where each day is an ordeal and their health is of no importance to the administration.

And that's not all. Workers also cannot eat outside and are forced to eat inside the factory where they have to pay for food which is more expansive than outside. The temperatures in the factory reach 34C degrees making the standing and prolonged work oven more unbearable. The cutting liquid with which the workers operate often is splattered into their eyes, which is not also painful but hazardous as well because of its nature and that could lead to an infection with a disease. Workers are often borrowed by their officers and are moved between workstations which reinforces the idea that they are treated like tools. With abuse managers who yell and scold workers when they lose even a bit of focus, there is almost no time to think about anything else besides working. Workers are unable to eat normally as the allowed time to do so is 1 hour and walking to and from the cafeteria and waiting in line takes up to 30 minutes. The food offered was awful and not fulfilling by the words of the workers.

Taking into consideration all the above it is not hard to come to a conclusion about the feelings of the workers in the Catcher's plant in Suqian as they go to work every day only to experience extreme working conditions and an abusive and mistreating administration and going back to a crammed dormitory where hot and cold water, showers and drinking water are considered a payment service.

Sadly, even though this project was focused on the Catcher's factory and few others were briefly mentioned, it is hard to believe that many more workers in various factories across China do not share and face the same unfortunate circumstances. It is hard for things to get better in my opinion, for as long as the country leadership puts emphasis on GDP growth, economic efficiency and the market remains disembedded, a great number of workers will continue to experience tremendous hardship while working, the economic growth will continue to be contaminated, thus becoming uneconomic and the sacrifice of human health will go on.

六 Video

Even though my work on this project is exhausted I decided to include a short 9 minute video which is closely related to the project as it further reveals the human cost of electronics: https://www.youtube.com/watch?v=ns-kJ5Podjw.

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