# From 'Made in China' to 'Invented in China'

# "Innovation" in Chinese Discourse



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#### **Abstract**

China is facing a slowing economic growth. The target for the years following 2016 is set to a yearly GDP growth of around 6,5 percent. Both researchers and politicians are saying that in order for China to to reverse the decreasing trend, Chinese companies will have to innovate in new ways. But what does *innovation* mean? Today, innovation has become a global buzzword that politicians and the media flaunt in speeches and in articles. But is it stripped of meaning, or does it refer to any concrete measures? This thesis looks behind the buzz and analyzes what innovation means in a Chinese context.

This thesis explores the term *chuangxin* (创新), "innovation", in Chinese discourse. It analyzes its meaning in official political documents and how it is negotiated by three other actors in Chinese society: the media, prominent business leaders and professionals working with innovation. The key questions addressed in this thesis are: What concretely are these actors referring to when talking about innovation, and why do they believe it is of importance for China's economic and political future?

By applying the theoretical framework of how globalization affects innovation in emerging markets, the thesis shows that *chuangxin* (包新) in Chinese discourse is similar to the common international and Chinese definitions of the term innovation. It refers to new ideas within science and technology that are translated into a good or service for which customers will pay. This in return genereates economic or social value. Furthermore, the thesis finds that innovation serves as an ideological symbol for China's future, as it is the combination of factors that are going to reverse decreasing economic growth and fuel the engine of China's continued development.

Although numerous studies on innovation in China have been conducted before, this thesis contributes with new insights to and aspects on how the term *chuangxin* is negotiated throughout several parts of Chinese society. In addition to showing how the government and the media deploy the term, the thesis contributes to the field by also taking into consideration the aspects of prominent business leaders and a selected group of people working with innovation and entrepreneurship in China.

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## 1 Introduction

This chapter introduces the relevant background for this study and presents the hypothesis and research questions. It also discusses methodological issues and the choice of analysis material and secondary literature.

# 1.1 Background and relevance of the study

At the time of writing this thesis, China's economic slowdown and current shift from a manufacturing-based to a service-based economy is a widely discussed topic. China is facing a slowing economic growth where the target for the years following 2016 is set to a yearly growth of around 6,5 to 7 percent of GDP (Bloomberg News, 03.02.16). Researchers and politicians alike are saying that in order for China to retain a stable economic growth, Chinese companies will have to innovate in new ways. As early as 2006, the Communist Party leadership declared to transform China into an innovative society by 2020 and to be a world leader in science and technology by 2050 (Abrami et. al. 2014, p. 2) Therefore, how Xi Jinping or Li Keqiang are going to transform China with innovation, thereby bypassing the so-called 'middle income trap', is frequently discussed in both Western and Chinese media (see Tian, 08.01.16; Cai, 04.11.15; China Daily, 17.03.16).

Googling "innovation China" yields around 348 million results. Today, innovation has become a global buzzword that is frequently flaunted by politicians and The media in speeches and articles. But what do these politicians and journalists really mean when they use the term? This thesis will try to look behind the buzz and analyze what innovation refers to in a Chinese context. I will look at how the term innovation is used in official political discourse and how it is negotiated by three other actors in Chinese society: the media, prominent business leaders and professionals working with innovation.

During the spring of 2016, the 13th plenum of the Chinese Communist Party gathered to complete the new five-year plan. The implementation of the policies in this plan will shape China's path from "Made in China" to "Invented in China" over the coming years. Many research reports (such as McKinsey&Company, 2015 and PricewaterhouseCoopers, 2013) postulate that China has the

potential to not only develop rapid, low-cost innovation for their domestic market, but their innovation systems might also have global impact and make China an innovation leader. I find these questions on what innovation will mean for China's future highly relevant as part of my master's degree on the current development of Chinese society and politics.

# 1.2 Hypothesis and research questions

My hypothesis is that innovation in Chinese official discourse refers to new ways of thinking, new products and new processes that will contribute to the needed shift in the economy away from investment and manufacturing towards consumption and services. In order to explore whether this is the case, or if there is maybe "innovation with Chinese characteristics", I will analyze political documents and news articles to see how the government and the media are using the term and in which context. In addition, I will analyze the personal opinions of a few, selected individuals in Chinese society in order to investigate how view innovation and why they believe it is important for China's future. My research questions are:

- What is the government, the media, prominent business leaders and professionals working with innovation in China referring to when talking about innovation?
- In their view, what is the importance of innovation for China's economic and political future?

#### 1.3 Thesis outline

The first chapter presents the methodology used in this thesis. It will introduce the chosen text material and discuss methodological issues before concluding with the choice of secondary literature. Chapter 2 explores the term "innovation" through different definitions and presents the theoretical framework of how globalization affects innovation in emerging markets. Furthermore, it summarizes and discusses the relevant contemporary literature on innovation in China. Chapter 3 presents the analysis of what innovation refers to in the chosen text materials and why it is of importance for China's economic and political future. The final chapter concludes that innovation is a new ideology of development for China that will modernize the country, lift it out of economic recession and make China reclaim its position as a global leader in inventions, science and technology.

## 1.4 Methodology

#### 1.4.1 Discourse analysis and choice of text materials

In order to analyze the term "innovation" in Chinese discourse I build this thesis on discourse analysis of original Chinese texts. To examine the different views on innovation among selected groups in Chinese society, I have chosen to compare four types of texts; political texts, media texts, prominent business leaders' opinions and interviews with a small number of business professionals. The starting point for this thesis was that the words a person chooses in his or her discourse reveal certain attitudes. Therefore, I have drawn a lot of inspiration for the analysis from Norman Fairclough's book *Critical Discourse Analysis* (1995). Like Fairclough, I acknowledge that the use of language reveals social structures and power relations within a society (Fairclough, 1995, p. 23-24). In order to understand what innovation means in a Chinese context, I therefore apply many of Fairclough's techniques in the text analysis. However, I would like to emphasize that I do not use critical discourse analysis as a specific method in this paper, I only draw inspiration from it. Thus, the analysis should not be read as an attempt to follow Fairclough's method step-by-step.

In order to analyze the term "innovation" in Chinese political discourse, I have chosen to look at selected parts of the 13th five-year plan of China. I am aware of the existing English translations of this document, however, this analysis is based on the original Chinese version, published on Xinhua's online platform on March 17 2016<sup>1</sup>. I chose to analyze the 13<sup>th</sup> five-year plan because it, at the time of writing this thesis, is the most recent Chinese guiding political document. The Chinese five-years plans are blueprints of the social, economic, and political reforms for the coming five-year period. They mix of ideology and strategic initiatives with new and existing policies. Most significantly they reiterate the government's overall vision for China that they wish to communicate to Chinese society, and the rest of the world. Consequently, these documents are particularly interesting when it comes to analyzing political discourse. In addition, innovation is a prominent theme of this five-year plan as it presents future development in China as being 'innovation-driven'. Therefore, this text is well suited to look at how and in which context the term "innovation" is used. I analyze only one political document because this thesis aims to compare the contents of the five-

Available here: http://news.xinhuanet.com/politics/2016lh/2016-03/17/c 1118366322.htm [last accessed 23.05.16]

year plan to views on innovation presented by the media, prominent business leaders and professionals working with innovation, not to other political texts.

The purpose of the analysis of media texts is not to comment on the organizations of the Chinese propaganda system, nor to analyze the role and development of the Chinese media. Instead I have chosen to analyze articles from three Chinese newspapers to see how different journalists deploy the term "innovation" and in which context. This is compare to how innovation is used in The media, to how it is deployed in the five-year plan. The fist article is collected from People's Daily, Renmin Ribao (人民日报)<sup>2</sup>, the official newspaper and mouthpiece of the Chinese Communist Party. The second article is from China Economic Times, Zhongguo Jingji Xinwen Wang, (中国经济 新闻网)<sup>3</sup>, a daily online newspaper sponsored by the Development Research Center of the State Council and also affiliated with the government. The third article is from Southern Weekend, Nanfang Zhoumo (南方周末)<sup>4</sup>, a commercial newspaper based in Guangzhou in Southern China, which is considered the most outspoken newspaper in China. I selected these three articles because they were published within the last year (2015-2016) and present three different views on innovation, but share the common theme of consumption as a mean to obtain innovation-based growth. I decided these three articles would be sufficient for the purpose of this thesis. However, a more in-depth discourse analysis of the term "innovation" in Chinese media would also have been interesting to do.

To complement and bring nuances to the more official views on innovation conveyed by the government and the media, I decided to analyze the opinions of prominent business leaders in China. My choice fell on an article from 2013, written by Yao Huan, for the online China Entrepreneur Network, *Zhongguo Qiyejia Wang* (中国企业家网). The article is titled "A list of China's ten major innovative entrepreneurs, Jack Ma: Innovation springs out of 'force'."<sup>5</sup>. I chose this article because it contains quotes from ten different businessmen, all of whom were featured on the 2013 Hurun Research Institute list of China's top ten entrepreneurs. The quotes in the article are collected from interviews with or speeches made by the ten businessmen. This allowed me to take a closer look at their choice of words and phrases as well as analyze what the term "innovation"

<sup>&</sup>lt;sup>2</sup> Song Xudong, 10.08.2015, http://politics.people.com.cn/n/2015/0810/c1001-27439823.html [last accessed 23.05.16]

<sup>&</sup>lt;sup>3</sup> Zhao Jianzhong, Liu Feifei, 05.05.2016, <a href="http://www.cet.com.cn/dfpd/jzz/tj/tj/1759362.shtml">http://www.cet.com.cn/dfpd/jzz/tj/tj/1759362.shtml</a> [last accessed 23.05.16]

<sup>&</sup>lt;sup>4</sup> Peng Liguo, 12.10.2015, <a href="http://www.infzm.com/content/111888">http://www.infzm.com/content/111888</a> [last accessed 23.05.16]

<sup>&</sup>lt;sup>5</sup> Available here: http://www.iceo.com.cn/renwu2013/2013/0516/267055.shtml [last accessed 23.05.16]

means to them, to their business and for China. I found the opinions of Jack Ma from Alibaba, China's biggest e-commerce company, and Ren Zhengfei from Huawei, the largest Chinese telecommunications equipment company, to be the most interesting. Ma and Ren are the two most famous names on the list, and their businesses are not only important for China, but hold global significance. I also want to mention that I chose to analyze this article partly due to convenience. The article summarizes the opinions of Ma and Ren on innovation through the aforementioned quotes from speeches and interviews, which means I didn't have to collect and siphon a multitude of original material myself. Thus, I must acknowledge that the quotes the author of the article obtained might differ from the ones I would have collected myself, and that the subsequent analysis would also have been different.

#### 1.4.2 Interviews and field work

To answer the research question of what professionals working with innovation are referring to when talking about innovation, I decided to use qualitative interviews to supplement the text analysis. Consequently, I conducted a field research trip to Shanghai during the last two weeks of March 2016. I went to Shanghai because I had undergone an internship at the Royal Norwegian Consulate General there the year before. Thus, with help of my former colleagues, I was able to get in touch with Zhou Jiaqi at Zhangjiang Hi-Tech Park. Zhou works for the Zhangjiang start-up incubator (*Zhangjiang Fuhuaqi*, 张江孵化器) and agreed to share her opinions with me. I conducted a qualitative, semi-structured interview with her in Mandarin Chinese at Zhangjiang Hi-Tech Park on March 24, 2016.

The interview was structured around a prepared list, but I wanted to facilitate interviewee participation and also allow Zhou to decide the progress of the interview. Within qualitative research, a semi-structured approach can be an advantage as it leaves room for initiation of topics outside the research questions, and leaves the interviewee free to give her own opinion and view on the subject (Silverman 2009, p. 195-96). This was quite important to me, as my goal was to collect as many different views on the meaning of the term "innovation" as possible. However, open-ended questions also proved difficult and made my interviewee provide very general information, so I often had to follow-up to get specific information. Towards the end of the

interview, I also asked my interviewee if she could confirm that she meant innovation was a mean in the process of changing the Chinese economy from export and production, towars services and consumption. This could be interpreted as asking my research question directly, which Silverman (2009, p. 272) discourages. I experienced that this made Zhou's answers confirmatory, which in turn may have influenced the analysis. A common trait among interviewees is providing answers that match what they think the researcher wants to hear (Silverman 2009, p. 128). Thus questioning reliability of the answers the informants provide is important. Because of limited time and resources, additional interviews were not possible to conduct. Instead, a questionnaire with three in-depth questions was distributed to Zhou's colleagues (from the same company) via e-mail. I received answers from three different persons to the questions:

- To you, what does "innovation" mean and how would personally define the term?<sup>6</sup>
- Can you give an example of an innovative idea or a product that you find particularly interesting?
- Do you think it is important for China to focus on innovation now and in the future? Why?<sup>8</sup>

I focused on making these questions as open-ended as possible. Consequently, the answers I received varied from very concrete definitions to elaborations on other topics that the respondents wished to share. This made the analysis more challenging, but also more interesting as it revealed topics I had not yet identified as important. Most importantly, I received three additional opinions on what the term "innovation" means, which I could to compare to the rest of my text materials. It is important to state that the selection of participants in the qualitative interview part of this research was based on the one person I managed to identify in Zhangjiang Hi-Tech Park, as a result of the contacts I had at the Norwegian Consulate General. I did not attempt to contact any other companies at Zhangjiang due to limited time. I note that the interviewees only represent themselves, not their company, and that they cannot be representative for Zhangjiang Hi-Tech Park employees, nor for the category 'professionals working with innovation in China' as a whole.

Due to the scope of this research being very limited, and qualitative research in the form of interviews being very time consuming, a prominent limitation to this thesis is the low number of informants. However, few topics can be studied from interviews only (O'Brien 2006, p. 32) which is why the findings stand stronger in relation to the text materials analyzed in this thesis. The

<sup>6</sup> 对您来说"创新"有什么意思? 您个人怎么定义"创新"?

<sup>7</sup> 您有没有您觉得有意思的创新理念或创新产品的例子?

<sup>8</sup> 您认为中国现在和将来都应该注重"创新"吗?为什么?

examples of individual opinions reflected in the interview and the questionnaires are meant to complement the text analysis. Even if four informants are not many, I still believe their opinions are interesting and relevant for this thesis because they, as opposed to a quantitative study, give personal examples of what innovation means to the individual. They also go more in-depth on the person's perception of the term "innovation" and why it is considered important for China's political and economic future. The excerpts of interviews presented in this thesis are my own translations of the original material.

#### 1.4.3 Choice of secondary literature

The secondary literature I have chosen to discuss in this thesis is Western and Chinese academic literature on innovation in China. I have focused on finding contemporary literature, published in the years between 2008-2016, as I wanted research on China's current path from low value, manufacturing and export based production, towards high value, skill- and technology intensive industries. I tried to look for research that focused on the meaning of innovation rather than going deeply into innovation theory and other aspects that go beyond the scope of this thesis. The literature was mainly selected after initial searches for academic publications with the keywords "China innovation", whereupon I was able to identify some significant names and works. Then, I navigated further by reading the bibliographies in these publications, from where I selected a number of authors, books and articles to read. The collection of Chinese academic literature was done through keyword searches on *chuangxin* (创新), "innovation", in China National Knowledge Infrastructure database (CNKI or *Zhongguo Zhiwang*, 中国知网). The excerpts of literature presented in this thesis are my own translations of the original texts.

In general, I find the Chinese works to focus more on details, cases and policy suggestions, while the Western literature contains more critical analysis on a general and macro level. I did not manage to identify any Chinese qualitative research or critical research from a general social science perspective, but I account for the possibility that there are still works that I have not been able to find due to limited time and resources. The secondary literature still helps contextualize the discourse analysis of the selected original Chinese texts and interviews, which serves as the basis for the analysis of the term "innovation" in this thesis.

# 2 Exploring the term "innovation" in a Chinese context

This chapter explores the term "innovation" through different definitions and interpretations. Furthermore, it presents the theoretical framework of how globalization affects innovation in emerging markets, and discusses the relevant contemporary literature on innovation in China.

#### 2.1 Theoretical framework

#### 2.1.1 Definitions of innovation

Businessdictionnary.com defines innovation as: "The process of translating an idea or invention into a good or service that creates value or for which customers will pay" <sup>9</sup>. In this context, innovation is something that creates value because it satisfies one or several specific needs for the customer and thereby generates revenue. This means that an idea cannot be an innovation in itself, until it becomes "replicable at an economical cost and must satisfy a specific need" (Businessdictionnary.com). Furthermore, the business dictionary identifies two categories of innovation, both quite broad. 'Evolutionary innovations' are brought about through advances in technology or processes, while 'revolutionary innovations' are disruptive and new. I will come back to disruptive innovation in a Chinese context in the review of secondary literature. Firstly, I will look at some academics' and theorists' definitions of innovation, and analyze the lexical term for innovation, 'chuangxin' (创新), in Mandarin Chinese. Then, I will present the main theoretical framework for this thesis: Globalization and innovation in emerging markets.

Definitions of innovation in academic literature are many and varied, as innovation is addressed in fields ranging from business and economics to technology, policy and philosophy. A good place to begin is with the early theorists of innovation economics. In his book *Capitalism, Socialism, and Democracy* (1942), Joseph Schumpeter defines innovation as something that contributes to better and more effective processes and products. Exemplified, improving the quality, service, technology or price of a product, would be an innovation. What distinguishes an invention from an innovation

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<sup>&</sup>lt;sup>9</sup> BusinessDictionary.com's full definition: <a href="http://www.businessdictionary.com/definition/innovation.html">http://www.businessdictionary.com/definition/innovation.html</a> [last accessed 02.05.16]

is pronounced in an earlier work of Schumpeter's, the Theory of Economic Development from 1934: "As long as they are not carried into practice, inventions are economically irrelevant" (Schumpeter, 1934, p 88). What makes Schumpeter interesting is that he was one of the first to define innovation as a core and catalyst of economic growth. This is particularly interesting in the case of China. If innovation as defined by Schumpeter spurs economic growth, this might be a clue to understanding why innovation is important for China in the process of reversing economic slowdown.

More modern interpretations and definitions of innovation can be found in for example Frankelius, 2009. In his article "Questioning two myths in innovation literature" he analyzed extensive amounts of literature on innovation (his keywords in the search were 'innovation', 'innovative processes', 'innovative work' and 'innovation systems'). He found that innovation in literature is often confined to solely occur in the technology field, however, it can definitely be as important in other sectors, such as the arts or social care services. Frankelius writes that in order to be defined as an innovation "it must gain a foothold in society" (Frankelius, 2009, p. 49). This view contrasts to the definition of the business dictionary, because it acknowledges that innovation could also be a product or a process which has a significant impact on society other than just economically.

The Chinese language has several words that may be translated into English as "innovation". The two most common words in Mandarin Chinese are 'chuangxin'(创新) and 'gexin' (革新). This thesis will employ *chuangxin* as the chosen term, which is the word that is normally used by the Chinese government and the media. *Chuangxin* is also the direct translation of "innovation" from English to Chinese in Baidu's online dictionary. The term *chuangxin* consists of the words 'chuang' (创) and 'xin' (新) literally meaning 'to start doing something' and 'new'. In a broader context this refers to the process of bringing forth new ideas, which is consistent to the definitions presented in the previous paragraphs. Here, one could say that the Chinese definition is unique because it values the idea in itself, as opposed to other definitions underlining economic or social value in order for it to be called an innovation. However, Baidu's dictionary defines *chuangxin* as "to improve or create new things, methods, elements, paths or environments, and to get a beneficial effect from it." <sup>10</sup>, which also emphasizes the valuable outcome of the idea.

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<sup>&</sup>lt;sup>10</sup> Baidu Dictionary's full definition: <a href="http://baike.baidu.com/subview/15381/5375888.htm">http://baike.baidu.com/subview/15381/5375888.htm</a> [last accessed 02.05.16]

#### 2.1.2 Globalization and innovation in emerging markets

In order to further investigate the meaning of innovation in the Chinese context, I am employing a framework to help contextualize innovation in a global perspective. China is the world's leading emerging economy when it comes to market size and growth rate (Luo, Xue & Han, 2009, p. 69). Therefore, it is interesting to look at how innovation ability occurs specifically in emerging markets, as a contrast to in developed economies (although I will not go into the details of comparing these).

Gorodnichenko, Svejnar & Terrell (2010) presents in their article "Globalization and Innovation in Emerging Markets" a framework for looking at the innovation ability of emerging markets. Their analysis is based on a third factor in the equation, namely globalization as a catalyst for competition, which in turn leads to improvements and innovation. Their article is the result of a large quantitative research of economic data from companies in 27 market economies, as well as surveying various types of innovation activity from said firms. Therefore, Gorodnichenko et. al. are able to define innovation quite broadly as "the development and upgrading of new products, adoption of new technologies or obtaining quality accreditation." (2010, p. 198)

Gorodnichenko et. al. (2010) define three categories of innovation:

- New Product: A successfully developed new major product line or an upgrade of an existing product line.
- New Technology: An acquired new production technology
- New Accreditation: An obtained new quality accreditation ("process innovation" as well as "product/service innovation.")

While previous studies focus primarily on the effect of globalization on productivity, using as material patent data or measuring innovation in research and development (R&D) expenditures, Gorodnichenko et. al.'s study comprises a self-reporting factor of innovation activities submitted by the surveyed firms. This makes their model unique as they are able to test whether innovation is what actually makes globalization affect productivity. The initial assumption of their study is that companies in emerging markets are less likely to allocate resources into R&D and to produce inventions. Instead they are expected to engage more in "imitation and adaptation of already created and tested innovations" (ibid., p. 199).

However, one of their findings show a "positive relationship between foreign competition and innovation in emerging market economies" (ibid., p. 218). Defining globalization in this context as liberalization of trade and entry of foreign firms, the practical implications of this study are that for local firms trying to stay competitive in a global market, innovation is key. This confirms the relationship between globalization and innovation. More specifically, emerging market economies benefit from globalization because it pressures domestic companies to innovate rather than rely on low cost manufacturing to attract customers. Therefore, Gorodnichenko et. al.'s study helps bring context to why innovation has importance for China's economic future in the shift from manufacturing and export towards services and consumption.

# 2.2 Review of secondary literature on Innovation in China

The Chinese can take credit for papermaking, the compass, gunpowder and printing - four worldwide celebrated inventions contributing to the development of civilization. Also, more recently, the innovations and technology of companies like Alibaba, Tencent and Baidu not only draw attention, but contribute to communication in everyday life both in China and beyond. Still, many critics question whether China (and the Chinese culture) can or cannot innovate. In contemporary Western innovation literature on China, the question of innovation capability is central among several researchers (e.g Abrami et.al., 2014; Fan, 2014; Johnson, 2015; Rein, 2014; Yip & McKern, 2014; Xie & Li-Hua, 2008). Abrami et.al. (2014, p. 1-4) for example, argue that the reason China cannot innovate is because the government is suppressing creativity and failing to protect intellectual property rights. Similarly, Shaun Rein in his book "The end of copycat China" (2014, I. 868), explains the lack of innovation in the last 30 years of Chinese history as a result of economic development during the transition to market economy, together with government decentralization policies that deliberately slowed innovation.

Investigating whether or not the traits of Chinese culture are inherently able or unable to produce innovations and creativity is not the purpose of this literature discussion. However, there are numerous studies that have concluded that China, due to or regardless of its political system, definitely has the potential to develop rapid, low-cost innovation for their domestic market. Institutions like McKinsey&Company and PwC, along with scholars, research groups, analysts and

consulting firms, have in the last years published numerous analyses on China's path from "Made in China" to "Invented in China" (see for example McKinsey&Company, 2015; OECD, 2008; PricewaterhouseCoopers, 2013; Roland Berger Strategy Consultants, 2012; World Bank, 2012).

Research by Yip & McKern (2014) and Fu (2008) has focused specifically on how globalization has affected innovation in China through foreign direct investment (FDI) and presence of multinational companies (MNCs). Since its opening in 1979, China has become the second largest FDI recipient in the world. Large amounts of FDI is in general associated with increased overall efficiency and innovation capacity, however, 87 percent of total FDI comes to China's coastal regions. This creates a huge regional disparity with economic growth in the eastern regions and underdevelopment in the central and inland areas (Fu, 2008, p. 93). Also, with their large and low-cost work force, but growing excellence in technology development, China has become an attractive destination for large MNCs seeking to globalize their R&D activities. Because of their resources and advantages MNCs are leading in research and innovation, which brings innovative development into China. Yip & McKern write:

"As a company's commitment to China has deepened, the role of R&D centers has evolved from technical support for local operations, through developing products specifically for the China market, to using China as an innovation springboard for global markets." (2014, p. 9)

However, China does not need to rely on MNCs to invest in R&D. The report by Roland Berger Strategy Consultants (2012) reveals emerging countries invest a higher proportion in R&D, in addition to researching innovative techniques in order to produce new products. China, together with India, now account for almost 20% of global R&D spending, and between 2007 and 2012 China doubled its annual R&D investment to a record USD 200 billion (2012, p. 1). Around the same time as R&D investments started to increase, in 2006, the Party leadership announced the 'National Medium- and Long-Term Plan for the Development of Science and Technology' (2006–2020). This plan declared to transform China into an innovative society by 2020 and to be a world leader in science and technology by 2050 (Abrami et al., 2014, p. 2). Ren (12.07.2015) is positive towards the power of the Party to set regulations and incentives that local government officials then fall in line with from the top down. His examples of such measures when fostering innovation are investment funds specifically dedicated to targeted strategic industries, and state owned financial institutions such as policy banks and insurance companies. These are funded by other major SOEs and some private capital, and to raise even more money, they are then listed on the stock exchange (ibid.).

Following this line of thought, Rein (2014, I. 789) argues that it is actually the modern Chinese environment that forces companies to innovate in order to survive. He points to several "Chinese styles" of innovation, where the mostly talked about are 'innovation in business models', 'innovation by necessity' and 'innovation of existing successful concepts". An example of the latter is Tencents messaging app WeChat. As explained in the words of Marc van der Chijs (founder of Chinese video sharing website Tudou): "What you see is that Chinese companies often copy a concept that is successful in the Western world, but then make it much better than the original concept. So they innovate existing successful concepts." (van der Chijs quoted in Rein, 2014, I. 789).

This might sound more like 'copycat-ing' than innovating. However, this extends to a phenomenon that can be called 'disruptive innovation', a term coined by Clayton Christensen in his book *The Innovator's Dilemma* (1997). The term describes an innovation which creates a new market that eventually *disrupts* the existing, established market leaders. Even if China owes a lot of its economic success to manufacturing and export of what is commonly referred to by the international community as "mass-produced imitation goods", one can actually argue that Chinese counterfeit brands and copycat products, such as the 'Starfucks' café or the 'HiPhone', could be innovations. An Honors thesis from The Australian National University called 'China's Shanzhai Entrepreneurs: Hooligans or Heroes?' (Smith, 2016), refers to the new market such products initiate. It portrays a sub-culture where consumers wear and use imitated brands as a lifestyle. It's called *shanzhai* (山寨), and has shaken and challenged the market for original brands. Therefore, one could argue that ut meets the Christensen criteria for being called a disruptive innovation. To me, this highlights the complexity as well as the simplicity of the term "innovation" and how it in contemporary literature on China refers to a diversity of products, processes and ideas.

Yip & McKern (2016) also claim there is innovation with "Chinese characteristics". In their newest book *China's Next Strategic Advantage: From Imitation to Innovation* they identify ten major ways in which Chinese companies' innovation activities differ from those of multinational corporations (2016, p. 75). These highlight three main traits by which China challenges established multinational innovation models: The large Chinese entrepreneurial class, a complex market nature and government intervention. These factors, they argue, enable China to accelerate the life cycle of a product, thus is moving a lot faster towards being an innovative country than expected (ibid., p. 99). Also, more of this technology and products are entering the world market. Therefore, this

might be a clue to understand how China's innovation race is motivated both by domestic needs for a new wave of economic growth, but also, by a new global ambition.

Xie and Li-Hua (2008, p. 11-14) identify four central challenges that hinder China's efforts to build innovation capabilities: Developing human resources, building innovative cultures, ensuring incentive systems appropriate for innovation and strengthening the protection of intellectual property rights. Among these, human resources make an interesting example. Zhong (2015) argues that enhancing the talent pool needs to start in the education system. Many China critics, especially in the West, like to paint the picture of a Chinese education system focusing only on memory and test scores leaving companies in the struggle for capable talent among university graduates (e.g in Rein 2014, I. 504, 526). However, education reform and increasing creativity and entrepreneurship in schools is an important topic among Chinese scholars. In Zhong's article, for example, problems and strategies related to innovation and entrepreneurship as part of higher education are discussed. The article stresses the great potential for improvement, and also reflects the researcher's argument that university talent development is an important national strategy for enhancing the quality the innovation ability:

"The effect of the current innovation education is not yet reflected; entrepreneurs need new goals, new visions, new ideas, and new initiatives, in order to strengthen innovation and entrepreneurship education at universities and improve the national innovation ability." (Zhong, 2015, p. 156)

Similarly, Zhang & Fu (2013) recognize that innovation and entrepreneurship has become an important measure to cultivate the creative ability of college students. They conducted a comprehensive study of students' innovation activities at six universities in Henan province in central China, albeit with rather disappointing results. Little time was spent by students participating in scientific and technical innovation, resources were insufficient and teacher guidance weak. This lead the researchers to the conclusion that more resources should be spent on constructing a "cultural environment" of scientific and technical innovation, and improving teaching methods and student participation (2013, p. 82). Constructing the right atmosphere or environment is particularly interesting here, as it is also something that is repeatedly referred to in policy documents. Also it challenges from a Chinese perspective the lack of an innovation "culture" that is also pointed out by Xie and Li-Hua (2008, p. 13) as a flaw hindering development of

<sup>&</sup>lt;sup>11</sup> "但当前创新创业教育的效果还没有完全体现出来,创业工作者需要用新的目标、新的视野、新的理念、新的举措来应对,才能使高校创新创业教育在提升国民创新能力."

innovation in China. I will show examples of addressing these issues of environment and culture in the upcoming analysis of the 13<sup>th</sup> five-year plan.

The samples of recent Chinese and Western academic literature I have collected show numerous perspectives on many topics related to innovation that I have not been able to address here, for example evolution of innovation policy (Du & Wang, 2015; Yang & Han 2010) and economic theory (Jia, 2014) to intellectual property protection (Chen & Wang, 2015). Based on the literature reviewed, innovation appears as a wide phenomenon that occurs differently in different sectors both in China and beyond. It is prominent in a Chinese context when discussing inventions in science and technology, but is also evident in non-tech sectors such as management, institutional structures, education, industry, finance and entrepreneurship. The literature presented in this chapter does argue that innovation in China is important because it reflects China's future path to sustain long-term economic growth. China's development has been carried out in a highly globalized economy, and fundamental changes in the Chinese economy will have significant impact globally (Fu, 2015, p. 4). This is not only of concern to the Chinese people, because countries around the world are being equally affected by the rate and direction of China's growth. (Zhou, Lazonick & Sun, 2016, p. 2). This is why globalization needs to be a part of the analysis that follows on what innovation means in Chinese society discourse and why it is important for China's economic future.

## 3 The use of "innovation" in Chinese discourse

This chapter presents the analysis of the findings of this study on what "innovation" refers to in different forms of Chinese discourse and why the actors in the materials analyzed believe it is of importance for China's economic and political future.

## 3.1 "Innovation" in official political discourse

The first text I will analyze is the  $13^{th}$  five-year plan of China, released in March 2016. The Chinese five-years plans are blueprints of the social, economic, and political reforms, and underline the focus areas for China in the coming period. They mix ideology and strategic initiatives with new and existing policies, but most significantly, they reiterate the government's overall vision for China that they want to communicate to the Chinese society, and the rest of the world. These documents are therefore interesting when it comes to analyzing political discourse. The five-year plan is organized in three levels; parts (pian, 9), under which there are chapters (zhang, 9) within which there are sections (ye, 9). I refer to these levels in the analysis below.

Innovation, *chuangxin* (创新), is a key theme of and a frequently used term in the 13<sup>th</sup> five-year plan. In part one of the document, called "Guiding ideology, main goals and development principles"<sup>12</sup>, the plan presents the six main goals that support and visualize the policies for China's future development. The first main goal is the idea of obtaining *chuangxin* qudong fazhan (创新驱动发展), "innovation-driven development". Here, *chuangxin* already appears as an ideological symbol by which the government will base its principles in order to reach its goals. *Chuangxin* is also presented as related specifically to development in chapter four, which states that *chuangxin* will be the main force to lead development"<sup>13</sup>. When understanding development as the overall development of the country, and *chuangxin* as the 'force' that will drive forward this development and change society, the use of the term *dongli* (动力), a motive power, is interesting. A 'motive power' is the energy (e.g. in the form of steam or electricity) used to drive machinery. This reveals that *chuangxin* is not referred to as one concrete measure – it is rather presented as the strength or

<sup>12&</sup>quot;第一篇: 指导思想,主要目标和发展理念"

<sup>13&</sup>quot;创新是引领发展的第一动力"

energy that will run China's 'engine' of growth. Understanding growth as economic growth, *chuangxin* would be the combination of the factors that ensure continued economic growth, like an increase in productive capacity, but also as an improvement in the quality of life to the people. Innovation can therefore be understood as a mean to change the focus from China's traditional industries towards high technology, shift China's economic structure into a higher-quality growth pattern and keep on modernizing the country. The same chapter states that the role of the government is to "put *chuangxin* in the core position of the overall development" and actively promote it in order to make innovation "run through all the work of the Party and the state" This underlines the impression that *chuangxin* in the ideological sense could be more of a symbol of a way of thinking that is supposed to form China's leadership and the country's development the next five years.

To go more concretely into which actions, reforms, policies, and industries are associated with *chuangxin* one can look at the words it it is found together with in the text. There are three main words that are frequently found together with *chuangxin* in the five-year plan: *Keji chuangxin* (科技创新), "scientific and technological innovation", *chuangye chuangxin* (创业创新), "entrepreneurial innovation" and *chuangxin nengli* (创新能力), "innovation ability". I will use these to organize the analysis into two main themes that contextualize how the government is going to obtain innovation-driven development, and thus which concrete initiatives *chuangxin* refers to in the five-year plan.

#### 3.1.1 Scientific, technological and entrepreneurial innovation

Part two of the five-year plan is called "Implementation of the innovation-driven development strategy" <sup>16</sup>. At its first main point it presents *chuangxin* to be put as the basis for development, with *keji chuangxin*, innovation in science and technology, as the core. <sup>17</sup> This part lays out how to strengthen the leading role of scientific and technological innovation by investing in and focusing on basic research within natural sciences. As underlined in chapter six of part two, the

<sup>14&</sup>quot;必须把创新摆在国家发展全局的核心位置."

<sup>15&</sup>quot;让创新贯穿党和国家一切工作."

<sup>16&</sup>quot;第二篇:实施创新驱动发展战略."

<sup>17 &</sup>quot;把发展基点放在创新上,以科技创新为核心."

strengthening of this sector will help "provide lasting power for economic and social development" Drawing upon the definitions of an innovation (see chapter 2.2.1) as something that produces commercial or economic value, I interpret this strategy as that by supporting research, more innovative technological products or services will be developed and commercialized. Then, these technological innovations are going to be the stabilizing factors in the economy and sustain long-term economic growth. Thus, innovation in science and technology in this context refers to investing in and strengthening scientific research at universities and other R&D institutions.

More concretely, section one under chapter six specifies in which research disciplines the implementation of major scientific and technological projects should be accelerated. These include information and communications, new energy, new materials, aerospace, biomedicine and intelligent manufacturing, as well as developing new technical solutions for modern agriculture, urbanization, environment protection, health care and public services.<sup>19</sup> Common for all is that there is a significant focus on getting an 'innovation breakthrough', a chuangxin tupo (创新突破). This will be achieved by means of developing what is called yuanshi chuangxin (原始创新), "original innovation", and dianfuxing jishu chuangxin (颠覆性技术创新), "disruptive technology innovations". This disruptiveness is the same as Smith (2016) addresses in his paper on the Shanzhai culture, only perhaps more related to technological inventions that disrupt markets, not just consumer products. Nevertheless, this focus on developing breakthroughs and revolutionary inventions highlights the ambition of the Chinese government to become leading in science and technology by 2050 (Abrami et. al. 2014, p. 2.). Section two under chapter six promises new R&D institutions conditions favorable to developing market-oriented, collaborative interdisciplinary research teams that produce innovations that can be commercialized. Such activities are to be "encouraged" (guli, 鼓励) through financial support in the form of reduced taxes and research expense deduction for companies willing to spend money on R&D activities.<sup>20</sup> The 13<sup>th</sup> five-year plan therefore positions itself as a giant first step on road towards the above-mentioned 2050 goal.

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<sup>18&</sup>quot;为经济社会发展提供持久动力."

<sup>&</sup>lt;sup>19</sup> "加快突破新一代信息通信,新能源,新材料,航空航天,生物医药,智能制造等领域核心技术. 加强深海,深地,深空,深蓝等领域的战略高技术部署. 围绕现代农业,城镇化,环境治理,健康养老,公共服务等领域的瓶颈制约,制定系统性技术解决方案. 强化宇宙演化,物质结构,生命起源,脑与认知等基础前沿科学研究." <sup>20</sup> Chapter 8, section 3: "落实企业研发费用加计扣除和扩大固定资产加速折旧实施范围政策,强化对创新产品的首购、订购支持,激励企业增加研发投入。强化金融支持,大力发展风险投资."

However, the contents are very general, with few concrete policy suggestions that go beyond the urge for reform or "change". Without more context on which research projects are to be supported, what is left in the discourse of the five-year plan is only an assumption that investing billions of yuan in anything that is labeled 'innovative scientific research and development' will automatically deliver a disruptive outcome. However, we can expect that the concrete policies will be developed and implemented by other institutions on the basis of the overall vision of the five-year plan.

What is prominent in the plan is a pronounced global ambition. According to the same section as above, China is going to "actively put forward and lead the organization of international major scientific projects and construct international innovation cooperation platforms"<sup>21</sup>. In a global perspective, this can be interpreted as China recognizing that organizing international projects is a mean to gain reputation as a country with world-class scientific quality. This means China is moving away from letting globalization affect research, competition and innovation as an emerging economy, to stepping up and taking a leading role in initiating and organizing international projects. This indicates an ambition to let innovation in science and technology lead China toward modernization of society and towards the subsequent shift of economic structure into a higherquality growth pattern. Again, the concrete examples of how this is to be done are not clear. This also makes me think that even if the ambition is pronounced, there are still questions regarding academic freedom and bureaucratic challenges that needs to be addressed to make this ambition come true.<sup>22</sup> Nevertheless, this section indicates that globalization is affecting emerging markets more than just sparking domestic competition and affecting productivity, as concluded by Gorodonichenko et. al. (2010). As a country modernizes, globalization may provide it with the opportunity to have its products, services, science and technology enter the competing global market.

The innovation-driven development strategy further states that it is the combination of innovation in science and technology and mass entrepreneurship that is going to "create a new engine for

<sup>&</sup>lt;sup>21</sup> "积极提出并牵头组织国际大科学计划和大科学工程,建设若干国际创新合作平台."

<sup>&</sup>lt;sup>22</sup> I will not go into further discussion on academic freedom in China, but refer to for example He, 2002 and Altback, 2001 who both discuss this issue thoroughly.

development"<sup>23</sup>. Thus, the Chinese government's understanding of *chuangxin* is similar to the dominant global understanding of the term: An innovation is when a new finding in science and technology is commercialized and generate economic revenue (see the definitions in chapter 2.2.1). Chapter seven in part two addresses how the government is going to promote entrepreneurship among the people. Here, two different terms are deployed to describe entrepreneurial activity. The first is *dazhong chuangye* (大众创业), which is the Chinese translation of "public entrepreneurship". A 'public entrepreneur', as defined by Mack et. Al (2008, p. 234) is an elected official, bureaucratic employee, nonprofit manager or private citizen that is "fully capable of encouraging and using innovation to modify the way that public entities operate and can be instrumental in fostering change among their colleagues and friends." The other expression is *wanzhong chuangxin* (万众创新), "mass innovation", which refers more to the people or the masses and the independent innovation they may produce in an entrepreneurial business. What is prominent is that these terms are usually put together to describe the broader picture of entrepreneurial activities, and both expressions are prominent as part of the strategy for constructing an innovative public service platform.

Section one under chapter seven explains both the state and private sectors' role in developing and funding entrepreneurial innovation. Large enterprises are encouraged to provide technical support to entrepreneurs, while the government should play the role of venture capital fund<sup>24</sup>, but collective funding and investment such as crowdsourcing and crowdfunding are also encouraged<sup>25</sup>. Furthermore, this section encourages cooperation between enterprises and research institutions and promoting integration of research into the private sector.<sup>26</sup> This is meant to ensure that research is not something only done in institutions, but rather is integrated into companies and enterprises so that they also carry out in-house innovative research. There is a continuous encouragement throughout these sections regarding entrepreneurship that the public, the private and the individual cooperate in order to develop what they in chapter seven attempt to define innovation as: "Various types of development of new technologies, new products, new formats and new models"<sup>27</sup>. In sum, innovation in this context refers to the concrete outcomes of increased

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<sup>23 &</sup>quot;打造发展新引擎."

<sup>24 &</sup>quot;向创业者提供技术支撑服务","更好发挥政府创业投资引导基金作用."

<sup>25 &</sup>quot;全面推进众创众包众扶众筹."

<sup>26&</sup>quot;鼓励企业开展基础性前沿性创新研究."

<sup>27 &</sup>quot;各类主体开发新技术、新产品、新业态、新模式."

investments and upgrades of science, technology and entrepreneurial activity, that in turn will be a central part of China's engine of future economic growth.

#### 3.1.2 Cultivating innovation capability and talent development

In order to achieve the global ambition of being at the forefront of international science and technology, a solid foundation for innovation needs to be laid. This needs, according to the plan, to start with cultivating what is called *chuangxin nengli* (包新能力), "innovation capability". Section three under chapter six in part two addresses how to "enhance basic innovation capability"<sup>28</sup> through laying a groundwork of infrastructure and innovation systems. This means supporting enterprises, universities and research institutes in the construction of a national science and technological innovation center, setting up technology centers within enterprises, as well as enhancing infrastructure and innovation resources of said universities and research institutes.<sup>29</sup>

Furthermore, *chuangxin nengli* is also about the innovation capability of human resources. Chapter nine of the five-year plan presents the implementation of the "talent first" development strategy.<sup>30</sup> This comprehensive new policy aims at improving and developing talents in order to become an innovative country with a powerful talent force. It focuses on three stages of talent development: Finding, cultivating and retaining.<sup>31</sup> Here, they deploy the term *rencai* (人才), to describe the word "talent". The translations of *rencai* in the Online Dictionary CC-CEDICT (1997) and the Far East Chinese-English Dictionary (Zhang, 1993) span from "a man of ability", "talented person", "good head" and "accomplished", to CC-CEDICT specifying *rencai* as "a talent worth head-hunting". The history of the *rencai* concept is difficult to trace, however Ya-pei Kuo (2009, p. 133) mentions the usage of *rencai* around year 1900 briefly in her book about the worship of Confucius and ritual planning in the Xinzheng educational reforms. Here, the term *rencai* was used with the meaning of "men of talent", in the process of producing high quality civil servants and state bureaucrats. In other words, a *rencai* was a person educated to be a capable official and leader in the Chinese imperial bureaucracy (ibid.). In modern Chinese, *rencai* is used to describe the top students that are

<sup>28 &</sup>quot;第三节: 提升创新基础能力."

<sup>&</sup>lt;sup>29</sup> "依托企业、高校、科研院所建设一批国家技术创新中心,支持企业技术中心建设。推动高校、科研院所开放科研基础设施和创新资源."

<sup>30 &</sup>quot;第九章:实施人才优先发展战略."

<sup>31&</sup>quot;着力发现, 培养,集聚战略"

the most desired and qualified for the job market, both to private companies and to Chinese stateowned enterprises. These are the *rencai* that the "talent first" development strategy are targeting.

The strategy of constructing of a large-scale talent force specifically encourages lifting young talents within science, technology and entrepreneurship. In addition, a goal is to include talents in social and political science. In this sense the rencai term is also traced back to its roots in the imperial bureaucracy examinations to "foster a new groups of government personnel with excellent political, professional and management skills – and with an international perspective"<sup>32</sup>. The global perspective is particularly prominent in section three under chapter nine where both exchange and international cooperation is encouraged through improving immigration and residence management to attract foreigners to China. 33 In the text, foreigners are given the same talent mention as the Chinese and are called haiwai rencai (海外人才), "overseas talent", revealing that the contributions of foreign talents are still strategically important as part of the innovation-driven growth strategy. It also reveals a larger picture of improving geographic mobility in China. Instead of encouraging short-term stays for foreigners, the focus is now on improving permanent residency, combined with policies on lending more Chinese rencai to international organizations and improve facilitation of their eventual return. This reveals an attempt to reverse the talent outflow that has been prominent in China in the last years<sup>34</sup> and an embrace of globalization as a strategy for growth. Through these policy suggestions they also implicitly paint a picture of a modern and developed China, with a certain quality of life and interesting career possibilities, that make the country an attractive final destination for both foreign and local rencai. Therefore, finding, cultivating and retaining rencai so that they in return contribute to the scientific and technological development of China (as opposed to abroad) seems to be a prominent part of the "talent first" strategy.

The talent first strategy is also about educating more high-skilled personnel and generally improving the overall education level of the people. Section three under chapter nine goes into details on how to create a good environment for this talent development.<sup>35</sup> Here, the use of the word *huanjing* (环境), "environment", refers to a social atmosphere or surroundings — an

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<sup>32&</sup>quot;培养一批讲政治懂专业,善管理,有国际视野的党政人才."

<sup>33 &</sup>quot;完善外国人永久居留制度."

<sup>&</sup>lt;sup>34</sup> For more on talent outflow, see this article from Bloomberg News, 03.02.16: http://bloom.bg/10HtaLA

<sup>35 &</sup>quot;营造良好的人才发展环境."

environment that allows talents to develop skills and knowledge, but also encourage each other and "carry forward the spirit of dedication" <sup>36</sup>. This huanjing is explained as a new learning environment initiated by the government. Here, talents will continuously meet new challenges and have constant development, named jixu jiaoyu, zhongshen xuexi (继续教育、终身学习), "continuing education and lifelong learning". In chapter fifty-nine, section three, four and five promote reform and modernization of education. These initiatives are part of what is called constructing a xuexixing shehui (学习型社会), a "learning society". Here, the government acknowledges the need for a comprehensive educational reform that improve the institutions' "ability to cultivate innovative talents" in order for China's sophisticated talent pool to grow. The policies and reforms presented in this section include several institutional mechanisms such as lifting teachers' competency, reforming the national examination and enrollment systems (although the plan does not go into detail on how this is to be done). They also promote modern information technology and its integration into teaching through for example increased use of digital learning resources.<sup>38</sup> In addition, there is a specific focus on cultivating students' attitudes and abilities like creativity, innovative spirit, practical ability and entrepreneurship as well as enhancing their sense of social responsibility and lawfulness.<sup>39</sup> In sum, one could say that innovation in this context is educational reform. Chuangxin also refers to the innovative abilities that talents are supposed to develop in order for China to achieve its goals of developing worldclass science and technology to sustain future economic growth. Still, how this is to be done while at the same time suppressing regime critique and political debate is an interesting thought. Is it realistic to encourage creativity and innovation in some areas, but not in others?

#### 3.2 "Innovation" in media discourse

For China to achieve the shift in the economy away from investment and manufacturing, we have seen that the five-years plan lays out a path promoting innovation also as a mean to achieve increased growth through a more consumption-based economy. <sup>40</sup> This presupposes that innovation is needed in order to change consumer behavior across different social classes in China.

<sup>36&</sup>quot;鼓励人才弘扬奉献精神."

<sup>37 &</sup>quot;创新人才培养能力."

<sup>38&</sup>quot;建设一流师资队伍","深化考试招生制度和教育教学改革","推动现代信息技术与教育教学深度融合".

<sup>&</sup>lt;sup>39</sup> "着力培养学生创意创新创业能力","增强学生社会责任感、法治意识、创新精神、实践能力"

<sup>&</sup>lt;sup>40</sup> Chapter ten, section one: "第一节: 促进消费升级", "不断增强消费拉动经济的基础作用".

Exemplified, I interpret this as that for the wealthy it entails a change from traditionally saving the majority of the income, to an increase in consumption. For the less wealthy, on the other hand, elevated living standards will allow for more personal spending. This overall increase in consumption will be part of the so-called 'engine' to drive Chinese economy forward and sustain economic growth. In this chapter, I will analyze three news articles from different media platforms in order to look at how innovation is portrayed by Chinese media. I will not analyze the role of the media in promoting innovation, but rather compare the interpretation of *chuangxin* in the media to that of the five-year plan. I have chosen texts that contextualize consumption in relation to innovation and I attempt to discuss how they largely convey the same message of what innovation means as the one presented by the government in the five-year plan.

The first article that I address is an article from the online version of *Renmin Ribao*, People's Daily. *Renmin Ribao* is the official media of the Chinese Communist Party, and the direct mouthpiece of the government, which means we can expect them to express the same attitudes as the government does in the five-year plan. The article I have chosen is written by editor Song Xudong and published in August 2015, titled "Li Keqiang: An innovative economy must first have an innovation 'engine'"<sup>41</sup>. It summarizes different statements that Li Keqiang has made in 2015 regarding the so-called 'innovation engine'. To explain what this engine is, Li Keqiang uses the expression "double *chuang*" as a mean for increased consumption and economic development. This "double *chuang*" refers to *chuangxin* (创新), "innovation", and *chuangye* (创业), "entrepreneurship". The paper quotes Li Keqiang on the following:

"The prosperity of a country is its people's creative play and the vitality of an economy also comes from a variety of employment, entrepreneurship and consumption. We need to promote the "double *chuang*", to let more people become wealthy and realize the value of life. This helps to adjust the income distribution structure, promote social equality, but also to allow more young people, especially children of poor families, to have more ways to move upward."<sup>42</sup>

Here, the use of the words *chuangcaoli* (创造力), "creative play" and *huoli* (活力) "the vitality" express Li's underlying faith in the combination of people's creativity and the market.<sup>43</sup> He says that ideas in combination with modern technology will lead to new businesses that produce consumer

<sup>41 &</sup>quot;李克强:创新经济须先创新"引擎"

<sup>42&</sup>quot;国家的繁荣在于人民创造力的发挥,经济的活力也来自就业、创业和消费的多样性。我们推动'双创',就是要让更多的人富起来,让更多的人实现人生价值。这有助于调整收入分配结构,促进社会公平,也会让更多的年轻人,尤其是贫困家庭的孩子有更多的上升通道。"

<sup>43&</sup>quot;我们要相信市场,相信老百姓有无穷的创造力"

products, which in return will result in wealthier people, adjusted inequality and economic growth. Here, Li Keqiang's view on *chuangxin* is obviously similar to the goals presented in the five-year plan, which states that innovation is to be put in the core position of the overall development of the country, both economically and socially.<sup>44</sup>

That consumerism is important for the Chinese economy, especially in a period of economic transformation, is confirmed by Mei Kaiwei (representing Home Credit Group's board of directors), quoted in the second article that I analyze. <sup>45</sup> This article is written by journalists Zhao Jianzhong and Liu Feifei in May 2016 for the online paper *Zhongguo Jingji Xinwen*, China Economic Times, an economy-based daily newspaper sponsored by the Development Research Center of the State Council. The article is titled "Tianjin: Speeding up the pace of consumer financial innovation" and reports from the launch of a complete paperless business in Tianjin giving consumer loans via online applications. The journalists report data from the people's Bank of China which indicate that the market size of consumer loans grew from 10 trillion yuan in 2012 to almost 19 trillion yuan in 2015. This accounted for about 18 percent of China's overall credit and consumer financial market, and is expected to grow more than 20 percent a year in the next five years. <sup>46</sup> The article states:

"The proportion of consumer loans is increasing; more people choose consumer loan services to buy needed goods or enhance their quality of life. Increased consumption and optimization of economic structure are becoming engine of economic growth in China."

This quote not only specifies increased consumption as part of the engine of growth, but also underlines the consumer finance industry is blooming. The numbers point to the fact that China is well on the way toward a more sophisticated and modern consumer-driven economy, revealing a new trend of consumer loans is becoming popular among the Chinese. In the quote, consumption is also put together with the term *tisheng shenghuo zhiliang* (提升生活质量), "enhance the quality of life", which reveals a general attitude that consumption is equal to happiness, and that strengthening the consumer leads to the person's prosperity and wealth. This attitude is also reflected in the People's Daily article where consumerism is promoted by Li Keqiang and the

<sup>&</sup>lt;sup>44</sup> Part one, chapter four: "必须把创新摆在国家发展全局的核心位置"

<sup>&</sup>lt;sup>45</sup> "捷信集团董事会董事梅恺威先生表示,消费金融对中国经济来说是非常重要的,尤其在中国经济经历转型期间"

<sup>&</sup>lt;sup>46</sup> "据中国人民银行数据显示,2012 年我国消费性贷款规模为 10.44 万亿元,2013 年为 12.98 万亿元,2014 年 为 15.38 万亿元,2015 年则达到 18.96 万亿,占中国整体信贷规模约 18%,且消费金融市场未来 5 年将以每年 20%以上的增速扩张。随着市场规模的增长,相应的金融服务升级也随之而来."

<sup>&</sup>lt;sup>47</sup> "消费性贷款的比例进一步增加,更多的人选择消费金融服务来购买所需要的商品,提升生活质量,而消费升级和经济结构优化成为拉动我国经济增长的新引擎."

government as the path to prosperity for both the individual ("to let more people become wealthy"<sup>48</sup>) and the country ("the vitality of an economy also comes from consumption"<sup>49</sup>). It also mirrors the five-year plan, which emphasizes strengthening the foundation for a consumer-driven economy.<sup>50</sup>

In addition to the focus on consumerism, and the government encouraging stimulating the economy through consumer loans, the innovations in the consumer financial services industry also contain a second dimension. The story in the China Economic Times article was about the company Gitzo Consumer Finance. The company launched a paperless office that helps consumers more rapidly process loan applications. In addition to rapid service, the paperless office reduces the impact of paper documents with regards to business cost, environmental protection and other factors. This implies the paperless application and review processes is not only an innovation with the purpose of reducing cost and developing a convenient way for individuals to be approved for consumer loans. It also comprises a sustainability aspect that is a prominent part of the Chinese discourse on innovation. The article quotes:

"We in Gitzo adhere to sustainable development to become a respected business, which is how we can be responsible business leaders in the lending market. The paperless office is the best interpretation of Gitzo's development goals and principles." <sup>52</sup>

Here, the paperless loan application is specifically mentioned as a sustainable and responsible business idea. The company has formulated development goals and principles that they not only expect, but *know* they must adhere to, in order to obtain the benefits that the reputation as a conscious business will give. This makes consumer power expand from just the demand for a specific product to also cover business responsibility. The story of Gitzo and its successful innovation can in this context be seen as a concrete example of innovation that the newspaper is highlighting. It presents innovation as already happening in China, in line with the overall strategy of the five-year plan and reflecting its intentions.

<sup>48&</sup>quot;让更多的人富起来"

<sup>49&</sup>quot;经济的活力也来自[…]消费"

<sup>&</sup>lt;sup>50</sup> Chapter ten, section one: "不断增强消费拉动经济的基础作用".

<sup>&</sup>lt;sup>51</sup> "捷信消费金融迎合市场和客户需求推出了无纸化办单模式,帮助消费者更快速办理贷款申请和审核,且减少了纸质文件对于业务成本和环保等诸多因素的影响."

<sup>52 &</sup>quot;我们捷信秉持着可持续发展和成为一家被人尊敬的企业经营着业务,这就是我们在市场上能成为负责任贷款商领头羊的原因。无纸化办单模式的推出,是对捷信发展目标和理念的最好诠释."

The third article in this excerpt is chosen from the online version of *Nanfang Zhoumo* (南方周末), Southern Weekend. This is a commercial newspaper based in Guangzhou in Southern China considered the most outspoken newspaper in the country. The selected article rises another example of what innovation is contextualized with in Chinese media discourse. Written by journalist Peng Liguo in October 2015, the article is a summary of a video-taped discussion led by the journalist, where he talks about food innovation with researchers and food industry company leaders. During the discussion several examples of product innovations related to food are presented, with topics spanning from sustainability and global food issues to affordability, health and security in industry and production. For example, Zhang Ling, Vice President of Coca-Cola Company in Greater China, presented the company's new beverage bottles as an example of an innovation for sustainable development in foods. Instead of making plastic bottles from oil, Coca-Cola found a way to reuse the sugar cane bagasse and corn stalks left after soda production and process it into bottles. By taking the waste through an enzyme treatment, a plant-made and environmentally friendly bottle could be produced, which reduced the carbon emissions by 30 percent to 50 percent compared with plastic bottles made from oil products.

Another example highlights consumers' concerns for the health aspect of food. The demand for low energy and low fat foods, but without the want of sacrificing good taste, leaves room for creative innovations. An example of such innovation as presented in this article comes from the food company DuPont. They have been able to produce a beef substitute, a meat look-alike, where the use of technology processes soybean protein into simulated beef. According to DuPont's China president, Dr. Li Yongjing, this technology ensures the soy beef is both "chewy, healthy and delicious" <sup>54</sup>. It even has the color and taste of beef, but is made with vegetable protein instead of animal protein, which means consumers do not have to worry about getting saturated fats and can stay healthy without compromising taste and texture. <sup>55</sup>

<sup>53&</sup>quot;甘蔗和玉米是做饮料的主要原料,曾经,甘蔗渣和玉米秸秆往往都被视作废物,现在,可口可乐将"废物"经过酶处理,最终加工成植物环保瓶。经过生命周期分析,一个用甘蔗渣做成的环保瓶可以比用石油产品做成的塑料瓶减少30%-50%的碳排放."

<sup>54 &</sup>quot;今天,低能量、低脂肪已经是人们健康饮食的共识。然而,这往往意味着牺牲味道,而创新食品可以实现二者的平衡。杜邦用大豆蛋白加工工艺制取的仿真牛肉即是一个典型案例,利用技术和其他原料把大豆蛋白做成纤维状仿真牛肉,从而确保能够有牛肉的嚼劲,既健康又美味."

<sup>&</sup>lt;sup>55</sup> "有牛肉的色香味却不必担心摄入过多的脂肪,以植物蛋白替代动物蛋白,这只是杜邦营养与健康事业部的诸多创新之一."

Another important issue that the article reveals is food quality and security. It states that people's pursuit for food has evolved from the traditional focus on quantity to a demand for quality. 56 It also argues that food innovation is necessary for deep rooted social and economic reasons. Because of the geographic separation of production and consumption areas, as well as increasing import of foreign foods brought about by globalization, the requirements for food preservation and nutrition security are becoming higher.<sup>57</sup> Therefore, food innovation is not just about bringing about new foods, it comprises the whole industry chain from raw material production to food processing, and from packaging to storage and transportation.<sup>58</sup> As an example, the article points out that yogurt earlier had to be immediately consumed or put in the refrigerator, but now it can endure long-term storage and long-distance transport. Thanks to these types of innovations today Chinese consumers can easily enjoy fresh foods from all corners of the world.<sup>59</sup>

As the article points out, globalization plays a large role here. Not only in terms of bringing the world of foods into China, but also for Chinese innovations to be part of solving global food issues. The journalist asks:

"The need for food innovation goes beyond contemporary needs. In 2050, the global population will exceed 9 billion, and how are we going to use limited resources to feed a growing population has been a prominent issue for all countries. What can the large food innovation companies do?"

The article states that this issue requires innovations in all parts of the food chain, from reducing production costs in order to ensure affordable foods<sup>61</sup>, to innovations such as nutrition bars to provide village school children with adequate amounts of energy<sup>62</sup>. Dr. Li Yongjing concludes in the article that: "We believe that this is something a company can't do alone [...] We need to be innovative, which requires the government, companies, schools and research units to do so in unison"63.

56"人们对食品的需求已经从原来对量的满足过渡到对质的追求."

<sup>57&</sup>quot;食品创新如此必要还有其深层的社会经济原因。农耕时代的自给自足、就近消费已经被城镇化消解,生产区 与消费区的隔离、甚至是国际化带来的外部食品增多,都对食品的保存和营养保全提出了更高要求."

<sup>58&</sup>quot;食品创新并不只是针对食品本身,整个食品工业的产业链,从原料生产到食品加工,从包装到储藏、运输"

<sup>59&</sup>quot;以前的酸奶做好以后要立刻消费或者放到冰箱里,但现在的酸奶可以做到长期存放和远距离运输。正是得益 于食品贮藏和运输环节的诸多创新,今天的国人可以很容易品尝到来自阿拉斯加的海鲜、来自全球的乳制品."

<sup>60 &</sup>quot;食品创新的必要性不止着眼于现在,2050年,全球人口将突破90亿,如何利用有限的资源哺育不断增长的 人口已经是一个摆在各国面前的共同命题。作为食品创新主体的企业能做什么?"

<sup>61&</sup>quot;如何通过创新降低生产成本,从而生产出消费者买得起的实惠食品."

<sup>62&</sup>quot;学生奶、营养棒等的创新即是如此,既让山村学校的孩子可以及时补充能量,又方便易获得."

<sup>63&</sup>quot;我们相信这件事情一个公司是做不成的[…]要创新,这需要政府、公司、学校及科研单位一起来做."

With these examples, I argue that the topics covered in these media texts to a large degree reflect the ideology and strategy of innovation in the five-year plan. They show examples of innovative projects that have already been developed on a local level (Gitzo's paperless loan process) and in larger companies (Coca-Cola and DuPont). In addition to addressing the importance of consumption for economic growth, the articles also reveal a meaning of the term chuangxin that goes deeper that just new and exciting products that can be bought and generate revenue. Innovation for social progress is clearly pronounced in these media texts. In the Southern Weekend article, Dr. Li Yongjing is quoted on saying: "Spending money means taking risks, but if you do not innovate, society will not progress"<sup>64</sup>. To me this also highlights the reason why the government's involvement in the five-year plan focus more on investment in technological innovations and reducing taxes for companies willing to spend money on R&D activities. 65 Incentives for companies to be willing to invest in research and development, and taking the necessary risks embedded, are crucial for China to be able to develop enough innovations. In sum, innovation in media discourse means new consumer products to lift domestic consumption, or innovations for social progress that help solving local and global problems and continue modernization of society. The examples also reflect the ambition of the Chinese government, as mentioned in the five-year plan, to become a world leader in science and technology and be part of initiating the solutions to several global issues.

#### 3.3 Prominent business leaders' view on innovation

To complement the discourse of innovation in Chinese media and to bring nuances to the more established official views on innovation as conveyed by the government, I review the opinions on innovation of two prominent Chinese business leaders. These are Jack Ma from Alibaba, China's biggest e-commerce company, and Ren Zhengfei from Huawei, the famous Chinese telecommunications equipment company. For this part, I am analyzing an article from 2013 written by Yao Huan for the online China Entrepreneur Network, *Zhongguo Qiyejia Wang* (中国企业家网), called "A list of China's ten major innovative entrepreneurs, Jack Ma: Innovation springs out

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<sup>64 &</sup>quot;花钱要冒风险,但如果不去做创新,这个社会就无法进步."

<sup>&</sup>lt;sup>65</sup> Chapter 8, section 3: "落实企业研发费用加计扣除和扩大固定资产加速折旧实施范围政策,强化对创新产品的首购、订购支持,激励企业增加研发投入。强化金融支持,大力发展风险投资."

of 'force'."<sup>66</sup>. This article was written in connection with the publication of the 2013 Hurun Research Institute list of China's top ten entrepreneurs, and collects the views on innovation of all ten nominees. The quotes in the article are collected from speeches and interviews made with the said businessmen, which allows us to take a closer look at their choice of words and phrases and what the term *chuangxin* means to them, to their business and for China. With this analysis, I aim to examine what those who run businesses acclaimed for being innovative actually think of being awarded with the title "a successful innovator". I found the opinions of Jack Ma and Ren Zhengfei to be the most interesting as their businesses are not only significant for China, but have become global actors. Huawei for example is claimed by the journalist to be China's most successful multinational enterprise<sup>67</sup>, while Alibaba, with their brands Taobao, T-mall and Alipay, not only dominates the Chinese e-commerce market, but are now growing bigger than international sites like E-bay, Paypal and Amazon<sup>68</sup>.

It is interesting to read that Jack Ma and Ren Zhengfei both present a different and nuanced view on innovation compared to the ideological and ambitious discourse in the media and the five-year plan. Jack Ma's statements are taken from a speech called "The source of innovation" and one of the first things addressed in the article is Ma's saying that companies need room to innovate without the pressure of having to innovate. As the title of the article suggests, Ma explains that innovation springs out of 'force' (bei 'bi' chulai de, 被"逼"出来的). However, the word bi (逼), translated as 'force', does not mean that innovation happens because it is being forced to happen though a preassigned innovation plan. 'Force', in this context, rather refers to progress in new products and services happening through a driving force to fill a need, or for the company to solve a problem that occurs due to market circumstances. Here, the innovative outcome is the result of the problem-solving. To illustrate this, Ma uses an example from when Alibaba developed Alipay:

"Alipay is also a very successful innovation, but honestly, it was also "forced" out. That year, Taobao was really busy, but we had no way to handle the transactions, and the internet integrity situation in China also forced us to solve the payment issue. However, when this required a national license, the question was should we do it or not? Big state-owned banks did not want to get involved in this area, but Citibank, HSBC and other foreign banks would. [...] [Then] I told my colleagues that we are going to do Alipay. But I would report to the Central Bank and other relevant departments every quarter how we did. We had to do it clean and transparent." <sup>70</sup>

<sup>66&</sup>quot;盘点国内十大创新企业家 马云: 创新是被"逼"出来的"

<sup>67 &</sup>quot;但华为已经成为中国最成功的跨国企业"

<sup>&</sup>lt;sup>68</sup> See Loeb, 11.04.14: "10 Reasons Why Alibaba Blows Away Amazon And EBay" here: <a href="http://onforb.es/1Xqj8oS">http://onforb.es/1Xqj8oS</a>

<sup>69&</sup>quot;创新的源泉"

<sup>&</sup>lt;sup>70</sup> "支付宝,现在看来也是一个很成功的创新,但在我这里,也是被"逼"出来的。当年,淘宝做得很热闹,但是没办法交易,中国的网上诚信现状倒逼我们必须解决支付的问题。但是,这个事儿得国家发牌照,我们做还

When people call Ma "an innovator" (*chuangxinzhe*, 包新者), his answers underline that he is not really a planner, nor a genius, he is just running his business and developing new solutions and ideas "as-he-goes". This is his main point regarding innovation: "[With Alipay] we didn't want to create a new business model, just solve a very real problem. Whether or not it had any potential of being a technological innovation was not a topic of our concern"<sup>71</sup>. Ma says he owes the success of Alibaba to exactly this: He had an idea that he followed, to create an internet company and e-commerce platform, and that the lack of alternatives in the internet segment, persistence and market necessity led him and the company down the path to where they are today.<sup>72</sup> There was no pre-assigned innovation strategy, investments or expectation that they had to produce something innovative. He says:

"Innovation is definitely not designed in advance; you want to go step by step down. Innovation has no theory, there is no formula, and there is not one way to solve a problem. I believe that there are a thousand problems in the world, and there are also a thousand answers." <sup>73</sup>

With this, he argues that there is no law determining what innovation springs out from, because innovation cannot be designed in advance. The opinion that one cannot decide to innovate, that it must come naturally, which Ma implies, therefore contrasts with the idea of the five-year plan where innovation is explicitly pre-planned and decided to happen. The five-year plan argues that the focus on and investment in anything labeled innovation will lead to an 'innovation breakthrough', the *chuangxin tupo* (创新突破), that is going to drive forward China's continued economic growth. It is this determination on how innovation is supposed to happen that Ma is skeptical about. He underlines that he himself never talks about a "model of innovation", because it doesn't exist. He says there is no way of shaping a company's trajectory from the first day. In his opinion, the primary driving force of his company is not the pressure to innovate, but following 'customer demand' (*kehu xuqiu*, 客户需求). I interpret this as a devaluation of the arguments that disruptive innovations can be created with government willpower. Ma underlines that being

是不做?大的国有银行不愿意涉足这个领域,但是他们不做,花旗银行、汇丰银行这些外资银行就会做。[···]所以我告诉同事们,我们做"支付宝"。但是我会每个季度向央行等有关部门报告我们到底怎么做的。要做得干净,做得透明."

<sup>&</sup>lt;sup>71</sup> "但是我们不想去创造一种新的商业模式,只不过是为了解决很现实的问题,至于它在技术上有没有创新,那不是我们关心的话题."

<sup>&</sup>lt;sup>72</sup> "如果你要问我,阿里巴巴怎么这么厉害,怎么这么早就预测到电子商 务?我要告诉你,其实当时我们没有其他路可走。当时的网络经济模式只有三种:做门户网站,没钱没资源;游戏网站,我不想要小孩子们泡在游戏里;所以我们只 能做电子商务."

<sup>&</sup>lt;sup>73</sup> "创新绝对不是提前就设计好,按图索骥地一步步走下来。创新没有理论,也没有公式,就是一个个地解决问题。我相信,天下有一千个问题,就有一千个回答."

<sup>74&</sup>quot;无法给出创新的定律,因为创新不是设计出来的."

consecutively adaptable to whatever in customer demand at any point is what really results in innovative solutions. However, I believe he doesn't necessarily mean that a pre-assigned innovation strategy is meaningless or counterproductive. Indeed, a five-year plan that values openness in education and science in the way that Jack Ma suggests, would definitely be of value for fostering innovation. Also, Ma is clearly not arguing against financial support, whether sponsored by government or private companies, since research and development obviously relies on funding. This is merely an example of innovation in Ma's experience appearing indigenously from focusing more on producing something valuable for the customers, not on reinventing the wheel to produce 'anything' innovative and disruptive.

Ren Zhengfei from Huawei is even more critical than Jack Ma in his view on innovation. Although number three on the list of China's top ten innovative entrepreneurs, Ren, in the excerpts of Yao Huan's article, points out several problems that he argues prove that China is actually lacking a culture favorable for fostering innovation. In 2012, when asked about why China had not yet produced a Nobel Prize winner, Ren answered that China has no innovation 'soil'. 76 Figuratively, Ren is pointing to a lack of innovation culture or capability that, as mentioned during the discussion of secondary literature, is a central question among a number of Western critics (e.g Abrami et.al., 2014; see more on page 11). However, by using the character turang (土壤) in this context, Ren also literally refers to the soil, in Chinese, tu ( $\pm$ ). The use of this character is interesting here as it places a reference to Chinese sociologist Fei Xiaotong's classic text From the Soil, the foundations of Chinese Society. In this text, Fei's theory begins with the soil being one of the most intrinsic characteristics of rural Chinese society, because "historically, wherever people from those agricultural regions migrated, they took with them their tradition of making a living from the soil" (Fei, 1992, p. 37-39). By using this character, Ren thus draws the parallel from traditional people's livelihood being dependent on soil, to modern Chinese society needing a similar soil or foundation, in order for the seeds of innovation to be planted and grow.

The lack of soil or inadequate foundation that Ren points out refers to three main problems.

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<sup>&</sup>lt;sup>75</sup> Indeed, Chinese innovation is already happening. A very recent example from May 2016, is this new Transit Elevated Bus bus prototype that was exhibited at the 2016 19th China Beijing International High-Tech Expo. The elevated bus is cheap, easy to build, carries up to 1200 passengers and will help combat China's pollution challenges and traffic jams. Watch the video here: <a href="https://www.youtube.com/watch?v=LeLAidJI5aw">https://www.youtube.com/watch?v=LeLAidJI5aw</a>

Primarily, he criticizes the lack of a system of intellectual property rights protection, which also Xie and Li-Hua (2008, p. 11-14) have pointed out as a challenge that hinders China's innovation capabilities. Without the *soil* that protecting property rights represents, he claims all innovation impulses will be suppressed.<sup>77</sup> To explain, he compares the Chinese system to the American system:

"The US has a strict intellectual property protection system; you cannot copy because there are billions of dollars in punishment. Such a strict protection system ensures the awareness that people cannot infringe on each other. Actually, protecting intellectual property rights is our own interest, because then we will not let others suppress our methods. Thus, if we recognize this, there is hope for our country's science and technology in decades and even hundreds of years to come."

Secondly he sheds light on an "innovation barrier" in the Chinese academic environment. He claims that professors in mainland China have to be too concerned with reaching the required number of published papers for them to find time to produce something creative or think outside the box. Here, he implies that a big part of publishing papers is reviewing, replicating and summarizing earlier research, and therefore asks rhetorically: "How could you get a Nobel Prize for copying?" Thirdly, he addresses what he calls a lack of tolerance for failure. Here, he does not only mean tolerating loosing face if one's idea or business fails, but rather to lower the barrier for trial and error in most fields. Ren underlines that recklessness of course is not possible in business fields where a lot of money is at stake, but generally encourages thinking more openly and outside the box as well as engaging in discussion and brainstorming with others. When influencing others, he believes one can create value and creating value is one of the main words Ren associates with innovation. He says:

"Regarding the question of innovation in our company, firstly we must emphasize the theory of value, we can't have innovation for the sake of innovation, it must be in order to create value." 82

Here, drawing upon the definitions of innovation presented in chapter 2.2.1, one would interpret 'value', (*jiazhi*, 价值) in this context as something that is useful, has the ability to be commercialized or otherwise generate economic revenue. However, Ren in this article also emphasizes 'value' as

<sup>&</sup>quot;"没有产权保护,创新的冲动就会受抑制."

<sup>&</sup>lt;sup>78</sup> "在美国有严格的知识产权保护制度,你是不能抄的,你抄了就罚你几十亿美金。这么严格的保护制度,谁都知道 不能随便侵犯他人。实际上保护知识产权是我们自己的需要,而不是别人用来打压我们的手段,如果认识到这一点,几十年、上百年后我们国家的科技就有希望了"

<sup>79&</sup>quot;中国在"创新"问题上是有障碍的."

<sup>&</sup>lt;sup>80</sup> "中国内地的大学教授, 否则你要比论文数量,你又产不出这么多来,就只能去抄,你去抄论文还有什么诺贝尔奖呢?"

<sup>81 &</sup>quot;有一些区域并不是模糊的,就不允许他们乱来,比如说工程的承包等都是可以清晰数量化的,做不好就说明管理能力低。但你们进入的是模糊区 域,我们不知道它未来会是什么样子,会做成什么。因此,你们在思想上要放得更开,将你可以到外面去喝咖啡,与人思想碰撞,把你的感慨写出来,发到网上,引 领一代新 人思考." 82 "在我们公司的创新问题上,第一,一定要强调价值理论,不是为了创新而创新,一定是为了创造价值."

being something that contributes to society. <sup>83</sup> This is equal to the discussion of the different themes in the media texts previously analyzed, which reveal a notion that an innovation not necessarily has to be commercialized for economic profit. It could also contribute to the development of society, for example through reducing environmental impact or feeding the world. Nevertheless, both Ma and Ren acknowledge that real value takes time to create – it is not something done overnight. Ren says that: "a theoretical breakthrough or real social value contribution takes twenty or thirty years to form" <sup>84</sup> and similarly Ma highlights the persistence for "so many years" <sup>85</sup> as the main contribution to Alibaba's eventual success, rather than a designated plan to innovate.

In sum, Ren prerequisites that the soil, the foundation, in China needs to change in order for innovation to appear. As mentioned earlier, the question of the Chinese "culture" being able to innovate or not is not a discussion I will enter, however Ren's statement regarding a change of attitude and strengthening a common foundation is clearly comparable to what is addressed in the five-year plan on strengthening intellectual property rights and building a new environment for talent development. <sup>86</sup> Therefore, this discussion is both prominent and important in Chinese society discourse. Also, with Jack Ma's opinions, the order of how innovation is achieved is problematized and discussed. This gives a nuanced picture on how the Chinese government should best facilitate to implement the innovation-driven development strategy.

## 3.4 Opinions of professionals working with innovation

In the fourth part of this analysis, I explore the opinions of a few selected Chinese business professionals who are working with innovation and entrepreneurship. Here, I analyze the results from my field trip to Shanghai in March 2016. I use as material the transcription of one qualitative interview with Zhou Jiaqi, who works with a start-up incubator in Zhangjiang Hi-Tech Park in Shanghai. Also, I use the questionnaires filled out by three of her colleagues from the same

<sup>83&</sup>quot;我们是要给社会做贡献的."

<sup>84&</sup>quot;一个理论的突破,构成社会价值贡献需要二三十年."

<sup>85 &</sup>quot;坚持这么多年"

<sup>&</sup>lt;sup>86</sup> Chapter 8, section 1: "深化知识产权领域改革,强化知识产权司法保护." and chapter 9, section 3: "营造良好的人才发展环境".

incubator. The purpose of this part is to take a look at the views on *chuangxin* (包新), "innovation", of those who are actually working with innovation and entrepreneurship on a daily basis. I attempt to see how they, the grassroots, define *chuangxin* in comparison to how it is perceived by the government, and understand why they believe innovation is important for China's economic future.

Firstly, I will introduce Zhangjiang Hi-Tech Park, which is a large 'innovation and technology park' situated in the Pudong New Area in Shanghai. It covers an area of 80 square kilometers, between the two metro stops Longyang Road and Zhangjiang Hi-Tech Park, and houses 4000 companies that research and produce within the life sciences, software, internet, ITC and other technological fields, all together employing over 300.000 people. According to their website, the park is one of China's first state-level high-tech zones, established as early as July 1992, and is one of several innovation parks in China. Eagle et. al. (2011) published an interesting paper on the role of high-tech parks in China, where they found that Chinese high-tech parks differ from other countries' national innovation parks on one specific factor. They write that one of the main functions of the Chinese high-tech parks is that they are "designed to attract foreign investment and to function as hubs for integrated regional economic development" (2011, p. 43). Their study found that Zhangjiang succeeds on this point, attracting investments and contributing to raising the technological level and economic development of the region. However, they claim the park it is still too dependent on foreign technology to be stimulating innovation. (lbid., p. 50-51)

Zeng et. al.'s paper was published several years ago, and I have no basis to evaluate whether Zhangjiang succeeds or not in producing innovation. However, China's investment relationship with foreign companies is an important point to bear in mind. China is moving away from investment and production towards consumption and services, and that as we have seen, producing their own innovations is the mean to achieve this goal. However, in her interview, Zhou Jiaqi addressed an issue concerning the presence of foreign companies in China. The presence of foreign companies is not a problem in itself, on the contrary they have played a large role in lifting China's economy. However, in Zhou's view they represent a barrier for indigenous Chinese innovation because of how they employ local staff and because they disappear the moment profit declines. She compares multinational companies in China in the traditional pattern of investment and production in a low-

<sup>&</sup>lt;sup>87</sup> Interview with Zhou Jiaqi, Shanghai, 24.03.16

<sup>88</sup> See http://www.zjpark.com/rules/about [last accessed 22.05.16]

cost country, to the modern pattern of globalization of research and development institutions, as such:

"The rapid economic growth of the past ten to twenty years we have to admit have really been a great economic achievement for China. But this is largely dependent on some big enterprises and their background. Why did they come to China at that time and how did they pull China's economy up? Evidently, because China is a low-cost country, and especially human resources are very cheap. I ensure you that these big companies did not come for charity, they came to make money off China's cheap labor. Moreover, a lot of things are cheap, so they came here to make investments. Their investments were not only powerful for the companies, but also good for China. At that time, [the Chinese society] were lagging behind, but after twenty years' presence of these large foreign enterprises, our entire Chinese economy has come up, and we have learned a lot. But our government is very clear on this; these big companies can come, but they can also leave, and there is no way to control this. They're independent and they're not ours. Then, what really belongs to us? China's own enterprises. And therefore, the government is encouraging them. And even if foreign companies put their Asian Research Center in Shanghai, it does not mean that technology will definitively transfer to here, that's just a possibility. The labor resources they use in China are workers on the production line. The people that deal with the innovations and technology related concerns, who master these technologies, are recruited from abroad, and the Chinese workers do not have the opportunity to get in touch with it. Even if I worked in this company for 10 years, as a regular worker, doing simple work, I couldn't say that I would master the company's technology. Therefore, our government absolutely wants us to innovate ourselves."89

This could be interpreted as an indication that China still has a long way to go to be independent enough from foreign companies to start to produce their own innovations. However, this could seem like an isolationist attitude toward innovation, and I do not interpret isolation and independence from multinational companies as being the intention for China's government. Zhou also told me during her interview that the success of a high-tech park lies in the correct composition of companies. The mix between large multinational corporations, medium-sized upand-coming Chinese companies and start-ups together create the special ecosystem needed for fostering cooperation and innovation. The multinational companies contribute with knowledge. They also push the medium-sized companies to take the risk of spending money on innovations, and they play a large role in funding, for example by buying the start-ups' patents. 90 According to

<sup>\*\*</sup>Interview with Zhou Jiaqi, Shanghai, 24.03.16: "对很重要,其实也很清楚,因为中国的前十年,前二十年,它经济发展也是非常高速的,不得不承认中国这个经济 10 年时非常有成绩的,但是这里面很大程度是依赖一些大企业的,那么那些大公司的背景,它为什么那时候会到中国来,把中国的经济拉上去呢?那是因为中国当年是一个什么都很便宜的国家,特别是人类资源很便宜。我相信这些大的公司他们不是来做慈善的,他们是来赚钱的,是因为中国的劳动力很便宜。很多东西也很便宜,所以他们到这来做投资,他们的投资,对他们而言是有力的,对中国而言也是好的。当时我们确实也是比较落后的,那二十年有了这些国外的大企业,我们整个中国的经济也是起来了,我们也学到了很多。但是我们的政府也是非常清楚,这些大企业它可以来,但是它也可以走,这个你没有任何办法去控制它们,它们是自由的,它并不是我们的,那什么东西才是真正属于我们的?那还是我们中国自己的企业。所以说,政府是会鼓励我们。而且这些外企即使它把亚洲的研究中心放在上海,但是并不意味着说它会真的把技术 transfer 到这里,有可能的。它在中国用的劳力资源都是在做生产线上的工人,这些菜式中国人。而真正涉及到和创新和技术有关的还是他们从国外招的这样一些人,掌握着这些技术。中国工人是没有机会接触的,不会说我在这家公司工作了 10 几年,我就是一个工人,就做很简单的事,不会说掌握了这家公司的技术。因此来讲,所以我们政府会想一定要我们自己去做创新。"

<sup>&</sup>lt;sup>90</sup> Interview with Zhou Jiaqi, Shanghai, 24.03.16

Zhou, this is the ultimate success story of a start-up: They develop a creative new product, a big company sees the potential, buys it and commercializes it. She underlined that she believes that commercialization is what every entrepreneur wants, and what separates success from failure.91 Here, her opinion is consistent with the definitions of innovation presented in chapter 2.2.1 that emphasize the value output of an innovation – it has to generate revenue. It is also interesting to note that the media texts previously analyzed indicated a line of thought that emphasized innovation to solve domestic societal issues and global challenges. Zhou, however, claimed the focus on social and human innovations are nonexistent in Zhangjiang Hi-Tech Park. She said that among the entrepreneurs she frequented it was all just about products that could be commercialized and turned into capital. 92 Her personal definition of innovation was also about meeting demand. She said:

"I believe that innovation is a new product that is based on the detection of an unmet customer demand. Innovation is new products, products that can fill a need that has not yet been met." 93

The three others who answered the e-mail questionnaire also had their own and unique definitions of innovation. Mr. Bai (not his real name, he preferred to remain anonymous), who was the first to answer the questionnaire, put *chuangxin* quite simply as the opposite of status quo:

"Innovation is trying to do what others have not done well or simply haven't done at all. Innovation is the opposite of the traditional, moderate, neutral, conservative and too observant of conventional standards." <sup>94</sup>

Zhuang Xueyan, on the other hand, explained that she thought a good chuangxin needed three particular elements in order to deserve the term:

"Innovation is a kind of reformation, it is new ideas, new theories, new ideas, new methods, the hope to find new discoveries, new research fields, and new perspectives to understand known things. I think that innovation itself has three elements: creativeness, originality and progressiveness."95

She explained that creativity can be understood as "starting something from scratch or a technological upgrading", while originality was having a good market prospect or technical

<sup>&</sup>lt;sup>91</sup> Interview with Zhou Jiaqi, Shanghai, 24.03.16

<sup>&</sup>lt;sup>92</sup> ibid.

<sup>&</sup>lt;sup>93</sup> Interview with Zhou Jiaqi, Shanghai, 24.03.16: "我个人认为创新是基于对于还没有被满足的客户需求的一种察 觉之后产生的新的产品,新的产品就是创新。它可以用于满足现在还没有被满足的用户需求。我觉得创新适合 未被满足的需求."

<sup>&</sup>lt;sup>94</sup> Questionnaire from "Mr. Bai", 29.03.16: "创新就是尝试别人没有做好、没有做好或者根本不干做的事情。创新 的反义词是传统、中庸、中立、保守和循规蹈矩."

<sup>95</sup> Questionnaire from Zhuang Xueyan, 29.03.16: "创新是一种革新,提出新观点,新理论,发扬新思想,弘扬新 方法,希望找到新的发现,开辟新的研究领域,用新的视角来重新认识已知事物。 我觉得创新本身具备了造性, 新颖性和先进性三个元素。"

application value, and progressiveness referred to the level of technical content, or the question of whether it could fill the domestic or international gaps in science and technology. <sup>96</sup> However, the most important for Zhuang was the combination of the three elements, which she claims was what "gives it vitality!" (shengmingli 生命力), made up by shengming 生命, which in Chinese means life itself, and li 力, which is a power or force, implies that an innovation has a life-force, a power that makes it generate energy. In this way, this can be interpreted as an innovation needs a certain vitality in order to generate either commercial or social value. Also, it can confirm the relationship between an innovation and the continued growth of the economy. When Li Keqiang uses the word "vitality" to describe the economy<sup>98</sup>, he refers to a vital economy being living economy, one that grows and doesn't stand still. A vital economy is also a vivid economy; consisting of different types of sources so that it stands steady on multiple legs. The same goes for an innovation – it has to be vital to live and grow and generate value, and it has to be vivid and consist of several elements. Finally, Mr. Long (not his real name, he also preferred not having his real name on print) summed up what he thought *chuangxin* was is as such:

"Innovation is everything that can affect human life style and thought, new science, new technology, new discovery and new definition." <sup>99</sup>

The notion of innovation affecting human lifestyle and thought is also why my informants believed it is of importance for China's economic future. China is rapidly modernizing, living standards rise and labor costs increase. This is obviously a step in the right direction for China, but consequently, foreign companies are moving their production out of the country. Zhou Jiaqi, therefore, linked the importance of innovation to it being a mean to get through the transition from a production and export based economy, towards consumption and services. She explained:

"The most important reason [for innovating] is economic development. Also, you now see many foreign companies leaving China, to cheaper places like the Philippines, Cambodia etc. because their costs are even lower than in China. They'll go anywhere in pursuit of profit and don't really care where they are. They won't contribute to innovation here; they don't do charity. [...] Therefore, our government absolutely wants us to innovate. [...] Only recently I think we have really started to do our 'Chinese innovation', we have started to think about what innovation really is, not just talking about it. But we need to really learn how to have an open

<sup>96</sup> Questionnaire from Zhuang Xueyan, 29.03.16: "创造性可以理解为从无到有,或者技术更新换代;新颖性可以理解为具备很好的市场推广前景或者技术应用价值;先进性则可以理解为技术含量的高低,是否能填补国内空白或者国际空白."

<sup>&</sup>lt;sup>97</sup> Questionnaire from Zhuang Xueyan, 29.03.16: 我觉得一项好的创新必须同时具备这三个元素,才是有生命力的!"

<sup>&</sup>lt;sup>98</sup> See page 24 for how Li Keqiang uses the word.

 $<sup>^{99}</sup>$  Questionnaire from "Mr. Long", 30.03.16: "创新是对所有能够影响人类生活方式和思想的新科学、新技术、新发现、新定义"

Learning open-mindedness is something also Mr. Bai means is a prerequisite for innovation. He was quick to blame the traditional education system for the "whole nation" lacking creativity:

"We have seen too many traditional things, accepting traditional culture of education for example, which is understandable, but the existing education system certainly constrains the creativity and vitality of people. The more we grind our standardized products and tools, the more we rub down our individual original shapes and contours. The whole nation is short of creativity." <sup>101</sup>

However, rather than underlining what China is lacking, it is also possible to think about the importance of *chuangxin* as what it is able to contribute with. In her questionnaire, Zhuang Xueyan focused on the positive effects that focusing on innovation can bring to China and how this in turn will affect the economy. She wrote:

"I think China should implement the national policy of innovation at the core. Not only to encourage innovation, but also to respect innovation. Innovation can bring intellectual property rights, it can bring higher added value, and it can bring high quality economic growth. This we have seen from the development process of the United States. The world's most valuable company at the moment is Apple, which is enough to explain the value of innovation. If China's innovation policies are able to cultivate more BAT [best available technology], then China's economy can someday develop a quality close to or beyond that of the United States, and we can have our own voice on the international market!"

Here, she underlined what innovation brings to China, and that this is what will be the driving force of economic development. The fact that she compared the course of development to that of the United States also emphasizes her focus on the global ambition. Here, we see that this is not only a government ambition, but an ambition shared by people working with innovation in a Chinese technology park. As mentioned before, China is known for inventing significant contributions to the development of civilization, such as papermaking, the compass, gunpowder and printing. This could be interpreted as these individuals are sharing an ambition that China reinstates itself as a leading

<sup>100</sup> Interview with Zhou Jiaqi, Shanghai, 24.03.16: "最重要的是因为经济发展. 而且确实现在你看也有很多外企他们都走了,离开中国了,去更便宜的地方比如说菲律宾,柬埔寨啊这些地方,因为他们的成本已经要比中国更低了,他们就跑去那里了,它们是追求利益的,所以它们才不会在乎在哪里,为这里做出创新的贡献,他们不会的,他们不是做慈善的。[…] 因此来讲,所以我们政府会想一定要我们自己去做创新。[…]所以这个时候我觉得我们开始真的做我们中国的创新了. 我们 真的要学会要开拓思维,才能做到创新。所以我真的觉得我们开始去思考什么是创新了,不是只谈论这个词。"

<sup>&</sup>lt;sup>101</sup> Questionnaire from "Mr. Bai", 29.03.16: "我们已经看了太多传统的东西,接受了传统文化的教育,这无可厚非,但是现有的教育制度的确制约了人的创造性和活力,更多地把我们打磨很了标准化的产品和工具,磨平了个体原有的形状和轮廓。整个民族都缺乏创造力."

<sup>&</sup>lt;sup>102</sup> Questionnaire from Zhuang Xueyan, 29.03.16: "我觉得中国应该实行以创新为核心的基本国策。不仅要鼓励创新,更要尊重创新。创新可以带来知识产权,可以带来高附加值,可以带来高质量的经济增长。这点从美国的发展历程就可以看出。全球市值最大的公司是苹果,就足以说明创新意味着价值。中国的创新国策如果能够培育出更多的 BAT,中国的经济才能够有朝一日在发展质量上接近或者超越美国,在国际市场上才能有自己的话语权!"

innovative power. Furthermore, an innovation-driven development does not only refer to the economy, but also development and modernization of the country. This is addressed by Mr. Long in this manner:

"China is a developing country, and the leading power of development is science and technology, but in order for it to blossom, science and technology innovation needs to be in a creative culture ecosystem. There are still many problems regarding development in today's China; imbalance in regional development and the imbalance of industrial structure etc., but in order to solve all the problems we must rely on development, and innovation is the great driving force of development, therefore there is no doubt about it." 103

In sum, it seems like the three surveyed professionals working with innovation refer to innovation as both the solution to China's challenges during economic transition, and the mean to achieve it. Innovation is both the starting-point and the goal, and it is as much about the inner driving force as the actions undertaken. This is reflected in the five-year plan's vow to make innovation "run through all the work of the Party and the state" 104, suggesting that innovation is China's modern-day guiding ideology. This ideology promises that it is innovative developments that will lift China up and out of economic recession, modernize the country and make China reclaim its position as a global leader in science and technology.

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<sup>&</sup>lt;sup>103</sup> Questionnaire from "Mr. Long", 30.03.16: "中国是发展中国家,发展的第一动力是科学技术,而科技的创新也必须在一个具有创新文化的生态系统中才能绽放出来。目前中国的发展仍然存在诸多问题,地区发展不平衡,产业结构失衡等等问题,而这一切问题的解决必须靠发展,而创新是发展的巨大推动力,这点毫无疑问。" <sup>104</sup> "让创新贯穿党和国家一切工作."(See page 17.)

### Conclusion

This thesis has shown how the term "innovation" is used in Chinese discourse through analyzing how it is negotiated in the 13<sup>th</sup> five-year plan, in the media, by important business leaders and by professionals working with innovation. With this focus we have seen that *chuangxin* (创新) in Chinese discourse is similar to the common international and Chinese definitions of the term "innovation". It refers to new ideas within science and technology that are translated into a good or service for which customers will pay, and creates value for society, either economically or socially. Secondly, we have observed how innovation serves as a new ideology of development for China. Innovation is the combination of factors that are going to reverse decreasing economic growth and fuel the engine of China's continued development. According to the five-year plan, consumption of newly developed innovative products will ensure the foundation for a new economic model, solve global and local challenges and increase prosperity and wealth for the Chinese people.

Thus, I can answer the first research question, "What is the government, the media, prominent business leaders and professionals working with innovation in China referring to when talking about "innovation"?", as follows: Innovation in the five-year plan and in the media texts analyzed refers to the concrete outcomes of investing in and strengthening scientific research at universities and other R&D institutions. The outcomes can for example be new products that are commercialized through entrepreneurship. Also, innovation in the five-year plan refers to educational reform and the innovative abilities that talents are supposed to develop in order for progress in scientific research to happen. The prominent business leaders talk about innovation in a similar way, but underline that innovations must come naturally as a result of customer demand, as opposed to being pre-designed. Finally, the professionals working with innovation defined innovation more abstractly as new perspectives, ideas and discoveries that are the opposite of the traditional, moderate, neutral and conservative. In sum, it seems that by large they all agree on what innovation is, with just minor differences in interpretations.

The second research question aimed to explore the importance of innovation for China's economic and political future. Here, the findings are consistent with the hypothesis that innovation is used as a symbol to express what needs to happen in order to shift China's economic structure into a

higher-quality growth pattern and keep on developing China towards a modern country. The analysis shows that technological innovations are important because they are going to be the stabilizing factors in China's new consumption-based economy. By combining new products and solutions with mass entrepreneurship, innovation is seen as a mean to achieve increased growth through an overall increase in consumption. This will in return result in wealthier people, adjusted inequality, social progress and the modernization of Chinese society.

An important part of this thesis has been to try to investigate what the term "innovation" refers to and means in Chinese discourse. The starting point of the thesis was that innovation has become a "buzzword" that is practically stripped of meaning. The term is often flaunted in speeches, but who knows what it actually represents? This thesis shows that the word is actually not as 'empty' as one would think. The analysis has yielded many concrete examples of what innovation refers to in Chinese discourse, such as education reform, new technological commercial products and social inventions to better people's lives. However, the analysis has also contributed to a better understanding of the term *chuangxin* in a more abstract and ideological sense, that is indeed fit for use in speeches and visionary documents such as the five-year plan. This, in turn is not very different from how the term innovation is used in other countries and contexts.

To link this to an example from the five-year plan, I'll highlight the comprehensive educational reform as a mean to realize the innovation-driven development strategy. This planned reform is not laid out in detail, but it clearly communicates a focus on developing students' innovative and creative abilities. Since the term "innovation" is closely linked with 'creating' and 'creativity', for which the ability to reflect and think critically and outside the box is a prerequisite. But how is the government going to encourage free thinking, creativity and innovation in some areas like natural science and technology, but not equally in social sciences? Of course, this discussion on the contents of education has been going on for many years and is not new. But if we presuppose that the Chinese government will continue to suppress regime critique and political debate, is the innovation-driven development strategy then a realistic one? What will be more important - encouraging free thinking to unleash innovation or upholding tight social control?

Also, I want to shed light on modernization in regards to democratization. David Shambaugh recently published his book *China's Future*, which problematizes modernization in relation to

democratization. In his preface, Shambaugh claims that not a single country to this date has developed a modern economy without a simultaneously democratizing society (2016, p. xi). He also says that the link between economics and politics is important for economies to "transition up the added-value ladder", implying that authoritarian regimes are not prepared to facilitate a developed economy and the demands of a growing wealthy population (ibid., p. 13). Therefore, he claims that democratization is not only a consequence of modernization, but also a facilitator for it. But what if they are not as mutually exclusive as Shambaugh claims? Will the Chinese government find a way to be successful in innovation with 'Chinese characteristics' while preserving the authoritative one-party system? Will innovation be the new national ideology legitimizing the rule of the Communist Party? Many other similar challenges arise, for example regarding the degree of academic freedom for Chinese researchers. I believe both bureaucratic challenges and freedom of speech need to be addressed by the Chinese government to make its ambition of an inspirational learning environment that fosters creativity come true.

Furthermore, in this thesis the theory of how globalization affects innovation in emerging markets has served as an important framework for understanding innovation in a Chinese context. We have seen in the analysis that globalization is affecting emerging markets in more ways than just sparking domestic competition and affecting productivity, as concluded by Gorodonichenko et. al. (2010). As a country modernizes, globalization may also provide it with the opportunity to have its products, services, science and technology enter the competing global market. Globalization also affects China differently than other emerging markets such as small Eastern European countries and the former Soviet states in Central Asia. Since China's economy contributes to such a large part of global economic growth, a stagnation will have significant implications worldwide. This is not only of concern to the Chinese people, because countries around the world are being equally affected by the rate and direction of China's growth. Therefore, China's government knows they have to keep the economy growing, albeit at a slower pace than before.

My thesis has several limitations. It only studies a few selected political and medial documents combined with an analysis of interviews. Apart from the obvious methodological limitations, which are discussed more thoroughly in chapter 1.4, there are several things would I do differently that would also have affected the outcome. I think the most interesting part of this thesis is the discourse analysis of the five-year plan and the study of the opinions of the prominent business

leaders. Therefore, I think it would be fruitful to go deeper into the opinions that were quite different from the official view, such as the argument that disruptive innovations cannot be created with government willpower, but has to come naturally. I was at one point thinking about putting the five-year plan as the basis of the thesis, only supplementing the official discourse with other people's point of view. This would have permitted for a deeper analysis of the plan, but consequently also excludes more analysis on the personal opinions. I also felt at the end of the research period that it would have benefited from more views on innovation from those who work with it on a daily basis. More interviews would have allowed me to further investigate the role of an innovation park as an innovation system to see whether its employees deem it successful or not.

Although numerous studies on innovation in China have been conducted before, this thesis has contributed with new insights to and aspects on how the term *chuangxin* is negotiated throughout different parts of Chinese society. In addition to showing how the government and the media deploy the term, this thesis also contributes to the field by also taking into consideration the views of prominent business leaders and a selected group of people working with innovation and entrepreneurship in China. A suggestion for further study could be to look at whether innovation and modernization will bring about democratization, or if we will see innovation "with Chinese characteristics" in the future. The implementation of the strategies of the 13<sup>th</sup> five-year is also a good starting point for further research on innovation in China. Furthermore, a comprehensive study on how the term *chuangxin* is perceived by Chinese people would be interesting, in order to explore whether they have different views on innovation than the government.

At the 2014 Cross-Strait CEO Summit in Taipei, Jack Ma held a speech urging his listeners to never give up. He said: "Today is hard, tomorrow will be worse, but the day after tomorrow will be sunshine" 105. With these reflections, I conclude that innovation is a new ideology of development in China. Innovation is both the solution to China's challenges during economic transition, and the mean to achieve it. The ideology promises that by means of innovation the day after tomorrow will be sunshine. It is the innovative developments that will lift China up and out of economic recession, modernize the country and make China reclaim its position as a global leader in inventions, science and technology.

<sup>&</sup>lt;sup>105</sup> See an excerpt of the speech here: <a href="https://www.youtube.com/watch?v=T3rn-cANZKk">https://www.youtube.com/watch?v=T3rn-cANZKk</a>

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#### Interviews and questionnaires

Interview with Zhou Jiaqi, contucted in Shanghai, China, on 24.03.2016

Questionnaire from Zhuang Xueyan, received by email on 29.03.16

Questionnaire from "Mr. Bai", received by email on 29.03.16

Questionnaire from "Mr. Long", received by email on 30.03.16