

**THE THEORY OF THE DEMOGRAPHIC TRANSITION AND ITS  
CULTURAL IMPLICATIONS**

An Undergraduate Research Scholars Thesis

by

**BRYSON THOMAS BASSETT**

Submitted to the Undergraduate Research Scholars program at  
Texas A&M University  
in partial fulfillment of the requirements for the designation as an

**UNDERGRADUATE RESEARCH SCHOLAR**

Approved by Research Advisor:

Dr. Stjepan Mestrovic

May 2019

Major: Sociology

# TABLE OF CONTENTS

|   | Page(s) |
|---|---------|
| ABSTRACT.....   | 1       |
| Literature Review.....  | 1       |
| Thesis Statement.....   | 5       |
| Theoretical Framework.....                                    | 5       |
| Project Description.....                                      | 6       |
| DEDICATION.....   | 7       |
| ACKNOWLEDGMENTS.....  | 8       |
| KEY WORDS.....  | 9       |
| CHAPTERS  |         |
| I.    THE TRADITION DIRECTED.....                             | 10      |
| II.   THE INNER DIRECTED AND THE WRITTEN WORD.....            | 14      |
| III.  THE SCREEN AND THE OTHER DIRECTED.....                  | 24      |
| IV.  THE CULTURAL IMPLICATIONS FELT IN THE UNITED STATES..... | 28      |
| V.   THE CULTURAL IMPLICATIONS FELT IN CHINA AND KOREA.....   | 42      |
| CONCLUSION.....   | 59      |
| WORKS CITED.....  | 62      |

## **ABSTRACT**

### The Theory of the Demographic Transition and Its Cultural Implications

Bryson Bassett  
Department of Sociology  
Texas A&M University

Research Advisor: Dr. Stjepan Mestrovic  
Department of Sociology  
Texas A&M University

#### **Literature Review**

David Riesman conceptualized three distinct cultural groups called the Tradition-directed, Inner-directed, and Other-directed. These groups mark three distinct shifts in how humanity absorbed information starting with oral-tradition, which led to written language, which has since transitioned to the screen image. Starting with the tradition-directed whom Riesman described as “The society based on oral-tradition, with its dependence on the memory of elders, links people together in small tribal groups and in their families. These people may be nomadic, but they are not socially and psychologically mobile in the modern sense; they are led by folk tales and songs to identify with the tribe as it has been and will be, or possibly with a legendary golden age, but they are not incited to imagine themselves outside of its comforts and coherence” (Riesman 1950,2001).

A shift occurs in society according to Riesman, when it transitions into a written society which he characterizes as inner-directed. Inner-directed societies are more mobile in both a geographic and a psychological sense. They are able to keep records and pass on knowledge to posterity. Riesman characterizes this shift by saying “The bookish education of these inner-directed men helped harden them for voyages: they wanted to convert the heathen, civilize them,

trade with them-if anyone changed in the encounter, it would be the heathen, while as they, moved about the globe or up the social ladder, remained very much the same men: The epitome of this was the Englishmen of the tropics who, all alone dressed for dinner with the home-guard ceremonial, toasted the queen, and, six months later, read with a proper sense of outrage the leader in the London Times. His ties with the world of print helped steady him in his course far from home and alone. (Riesman 1950, 2001)”

The last transition that Riesman describes is the Other-directed. This transition is marked by the movement away from physically printed media to digital media. Riesman suggests this of the other directed man :“They are men molded as much by the mass media as they are by their schooling; men who are more public-relations minded than ambitious; men softened for their encounters rather than hardened for their voyages; if they move about the globe it is often to win the love of the natives or to try to understand their mores, rather than to exploit them for gain or for the glory of God. Meanwhile, as we have seen the natives (as they used to be called) are themselves in many cases on the move, and the sharp differences between societies dependent on the oral tradition and those dependent on print are tending to become less important with the coming of radio and film (Riesman 1950, 2001).”

Riesman wrote at the same time as another key cultural theorist, Marshall McLuhan. His work on the different transitions in society will heavily mirror McLuhan’s work on different media and the message that each conveys to society at various stages. Marshall McLuhan was a cultural theorist who looked specifically at how media was dispersed and absorbed throughout key historic points across cultures. He emphasized the importance of various types of media is distributed with his famous quote “The medium is the message” (McLuhan 1964). He goes on to say that as the medium changes, we see key historic shifts in how society fundamentally adopts a

new way of absorbing information in a different medium. The first historical medium that McLuhan shows how humanity absorbed media through is the “acoustic space.” Put simply sounds transmit culture to the individuals living in said culture. He goes further to say “Acoustic space structure is the natural space of the nature-in-the-raw inhabited by non-literate people. It is like the ‘mind’s ear’ or acoustic imagination that dominates the thinking of the pre-literate and post-literate humans alike (rock video has just as much acoustic power as a Watusi mating dance). It is both discontinuous and nonhomogeneous. Its resonant and interpreting processes are simultaneously related with centers everywhere and boundaries nowhere. Like music, as a communications engineer Barrington Nevitt puts it, acoustic space requires neither proof nor explanation but is made manifest through its cultural content (McLuhan 1964).”

This historical medium of oral translation went virtually unchallenged throughout history until the advent of a technological innovation by Johannes Guttenberg in the mid 1400’s. McLuhan goes on to say that “The history of the western world since the time of Aristotle has been a story of increasing linguistic specialism produced by the flat, uniform, homogenous presentation of print. Orality wound down slowly. The scribal (or manuscript) culture of the middle ages was inherently oral/aural in character. Manuscripts were meant to be read aloud. Church chantry schools were set up to ensure oral fidelity. The Guttenberg technology siphoned off the aural-tactical quality of the ancients, systemized language, and established heretofore unknown standards for pronunciation and meaning (McLuhan 1964)”

This transition of different historical medium is finalized with a shift to screens. Although this was not finalized during his life, his prediction in this text about the medium that would next be absorbed by society has largely come true. “But since World War 1 and the advent of those technical wave-surfers Marconi and Edison the rumbles of aural-tactility, the power of the

spoken word, have been heard. James Joyce in *Finnegans Wake*, celebrated the tearing apart the ethos of print by radio, film (television), and recording. He could easily see that Goebbels and his radio loudspeakers were a new tribal echo. And you may be sure that emerging mediums such as the satellite, the computer, the data base, the teletext-videotext and the international multi-carrier corporations such as ITT, GTE, and AT&T will intensify the attack on the printed word as the 'sole' container of the public mentality, without being aware of it of course. By the twenty-first century most printed matter will have been transferred to something like an ideographic microfiche as only part of a number of a number of data sources in acoustic and visual modes (McLuhan1964).”

Both cultural theorists have observed the transition of society through both different mediums and what these different mediums ultimately mean to the individuals absorbing the media. These key transitions from oral through written to screen culture are linked to a different type of sociological theory, in particular the theory of the demographic transition. This transition has been discussed at length by noted demographer Warren Thompson. Warren Thompson is credited as being the first demographer to identify the theory of the demographic transition by observing global trends of birth and death rates in the late 1800's. This theory was expanded upon by other demographers and is linked by Riesman to theories of cultural development. It breaks down society into five separate transitions that a society goes through throughout its development economically. These stages are characterized by: 1) High death rate, high birth rate, 2) High birth rate, and a rapidly declining death rate, 3) A gradual decline in the birth rate, and a gradual decline in the death rate, 4) A low birth rate and a low death rate, 5) A very low birth rate and a low death rate. This transition is being felt globally and ties into what the aforementioned cultural theorists observed about societal trends.

## **Thesis Statement**

This study will attempt to show how the linkages between these two theorists relates to the massive demographic shifts demonstrated in the demographic transition theory. To illustrate these demographic shifts and their correlations with the types of media and culture we will be looking at countries that are simultaneously adopting Western technology pertaining to screen culture while undergoing dramatic downward shifts in birth rates and Total Fertility Rates.

## **Theoretical Framework**

The primary method for research on this project will be secondary data analysis of China, Korea, and the United States. There are several indicators of the demographic transition that reflect the changing cultures and the different ways that societies have absorbed media. For the purposes of secondary data analysis, demographic trends such as Crude birth rate (CBR), Total fertility rate (TFR), and percentage of rural population will be used. These demographic indicators will be measured with indicators on the transition from the different forms of media consumption such as mobile phone subscriptions per 100 persons and broadband subscriptions per 100 persons. In addition, this study will look at how urbanization particularly can exacerbate both the adoption of screen culture as well as the subsequent shifts in demographic trends. These demographic indicators should illustrate how with the rise in consumption of screens, subsequent screen/Other-directed culture connects with demographic trends.

## **Project Description**

This study will attempt to show how the linkages between David Riesman and Marshal McLuhan relate to the massive demographic shifts demonstrated in demographic transition theory. To illustrate these demographic shifts and their correlations with the consumption of media through different mediums and the transition to different cultural frames, this study will be

looking at countries that are simultaneously adopting Western technology pertaining to screen culture while undergoing dramatic downward shifts in birth rates and Total Fertility Rate. The primary method for research on this project will be secondary data analysis.

There are several indicators of the demographic transition that reflect the changing cultures and the different ways that societies have absorbed media. For the purposes of secondary analysis, demographic trends such as Crude birth rate (CBR), Total fertility rate (TFR), and percentage of rural population will be used. These demographic indicators will be measured with indicators on the transition from the different forms of media consumption such as mobile phone subscriptions per 100 persons and broadband subscriptions per 100 persons. The countries that this study will focus primarily on include China, South Korea, and the United States to illustrate countries that have both been the recipient of screen culture for a relatively short period of time as well as to illustrate the epicenter of screen culture. These should illustrate how with the rise of consumption of screens and subsequently screen/Other-directed culture link with demographic trends. The results show moderate to strong negative relationships with all of the aforementioned demographic indicators suggesting a link between the adoption of screen culture in a society and shifts in the demographic transition.



## **DEDICATION**

This is dedicated to everyone that has ever helped me out of a rough patch. To the various professors, teachers, mentors, friends, and family. Your words, actions, thoughts, and hours spent with me have made all the difference. Without you all, this paper would not have gotten off of the ground and I might have never gone to college. To all of you I owe a debt of gratitude I may never be able to repay, but hope that I may grow as a person and be there for you as you have been for me.

## ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to a number of different people that have directly or indirectly helped me write this thesis. To Dr. Stjepan Mestrovic who went above and beyond the role of a thesis advisor in guiding the literature review, and making sure I was on top of every installment due date, having an inner-directed thesis advisor is a rare commodity these days. To Christine Newberg and to Madison Weber, who sat through many hours of my non-substantive gibberish about demography and cultural linkages in order to improve my thesis. To my family; Mark Bassett, Marry-Beth Bassett, Roland Bassett, Adrienne Bassett, Thomas Steed, Mary Steed, Thomas Steed, Timothy Steed, Daniel Steed, and Stephen steed. For providing an environment where striving to excel was both encouraged and demanded. To Brian Griffith, Derek Zhou, Austin Mazzolini, Larsen Dempsey, Andrew Geyer, Taylor Allen, Lizzie Allen, Isaac Garza, Yessica De Leon, Austin McDougal, Andrew Weaver, and Zachary Thortenburg for going above and beyond to provide a social support system for which I have been greatly reliant on in college. To Emily Hall, Omar Saada, Aaron Metyko, Brandon Locklin, Chase Dolfi, Dominic Elzner, Kerry Callendar, Luis Araujo, Matteo Garofalo, Bailey Glenn, Cameron Bly, and Smythe Mullikin, for providing and continuing to provide a social support system and a variety of different perspectives throughout high school and beyond. To my scoutmasters Mr. Rouse, and Mr. Glenn, for instilling the tenants of the scout law and oath which were instrumental in completing this thesis. To Chester and Caesar who were always there to greet us every Sunday. Lastly to Henry, though you may have tried to eat this thesis and slept on my computer sometimes you were always there when I was writing it.

## **KEY WORDS**

|     |   |
|-----|---|
| TFR | Total Fertility Rate                      |
| CBR | Crude Birth Rate                          |
| CDR | Crude Death Rate                          |
| BBS | Broadband Subscriptions per 100 people    |
| PRP | Percentage Rural Population               |
| MPS | Mobile Phone Subscriptions per 100 people |

# CHAPTER I

## THE TRADITION DIRECTED

Pre-history is called pre-history for a reason. Merriam Webster defines prehistoric as “of, relating to, or existing in times antedating written history.” This is a particularly important segment of humanity because it dates from our earliest known ancestors of around 3.3 million years ago, to 5,300 years ago when the first written systems were established. The use of written language was kept to the educated, the social elite, and the tops of religious hierarchy for many years after it was initially established. It was not until the advent of the Guttenberg printing press that the use of the written language and the rates of literacy worldwide rose. The time from pre-history to the mid 1400’s is what cultural theorists David Riesman referred to as the “oral-tradition directed society” and demonstrates that it is represented by small tribal groups with no method for communicating or transmitting culture without passing it on through “folk tales and songs.” Marshall McLuhan, who was writing at a similar time as David Riesman noted something similar. He uses a different terminology going with the term “pre-literate.” He defines a pre-literate society as one that is entirely consumed by the “acoustic space” with acoustic space being defined as “sounds that transmit culture to the individuals living in said culture.” (McLuhan 1964, p.45) These conceptions by the two theorists are virtually identical and point out a number of different implications for the recipients of oral-tradition or the acoustic space. By transmitting culture acoustically through elders or designated people that are meant to keep track of the narrative of their people you have a dual effect wherein people are both collectively enriched by the cultural history of their people while being simultaneously indoctrinated into that culture. There is no room for people in an oral-tradition society to challenge the narrative, have

the narrative of their culture slowed down, sped up, or broken down into segments for better understanding. There is just room for rote memorization and recitation of the cultural narrative. This was how many cultural narratives throughout history were kept and passed down, from the Biblical teachings of Christianity, to epics such as the Epic of Gilgamesh, and Beowulf. Because humanity had this largely limited ability to transmit its culture it largely only allowed for small tribal bands or groups to exist. The ability of humans to learn from the mistakes of the past or to benefit from the learned lessons of the past were confined to a singular entity who transmitted his cultural narrative. As a result, there were no groups (outside of a limited number of examples in Africa) that could be psychologically mobile enough to form larger population groups.

In order for civilization to grow, information needed to be transportable and establish a record of humanity that would be able to encapsulate the knowledge of ancestors and be able to transcribe it to their posterity. As the written word was established roughly 5300 years ago there was massive improvement in both the quality of life as well as the quantity of people that were able to coexist within a societal group. Though the written word was established fairly early on in our history, the amount of people that had access to the knowledge that it possessed was still miniscule. Literacy was a sign of status in early humanity and the common man did not need to read in order to live his life. As a result, though there were some that could transcribe culture and were able to keep records, the vast majority of humanity stayed under the oral-tradition style of life. As a result, the ability for social mobility, career options, even independent thought were all heavily restricted to the circumstances of one's birth. If your father was a beet farmer you were a beet farmer, your children would be beet farmers, and any knowledge that you passed down to your posterity would be heavily restricted to the germination, cultivation, and harvest of the sweet root vegetable. Following this trend there was no knowledge of germs, limited knowledge

of agriculture, disease, or even architecture for most people. Children were needed as field workers, day laborers, and an assurance that family line would be carried on. People throughout both early and late oral culture had a large number of children and also died young after making said children. The oral-tradition society, when put in terms of birth and death rates would closely resemble stage one of the demographic transition theory which corresponds to high birth rates and high death rates. Though it took thousands of years, mankind was able to transition to the next phase of development with the advent of better access to literacy and a different cultural frame.

The United States has a notable absence in this part of cultural development. While the tribes of Native Americans had distinct cultural narratives that were passed down from generation to generation, the foundation of the modern-day United States was not built on these distinct cultural narratives. The United States began by systematically eliminating the Native Americans and subsequently teaching and reinforcing its own written-word inner directed cultural paradigm through Native American boarding schools. They took away fundamentally the idea of their own culture through not allowing children and young adults to learn the information from their ancestors through their oral tradition. They were put in school and taught to learn the dominant cultural paradigm. Because of this cultural intervention, the United States does not have an oral traditional root. It skipped this phase of cultural development and started with a different cultural paradigm entirely.

China and Korea to the contrary, have a deep foundation of oral-tradition. Particularly influenced through Confucian ideals that spread quickly and held absolute authority for those that believed in the ideals. Honor and respect for ancestors were valued seemingly above all else, which enabled both China and Korea to have a relatively safe social safety net with children

taking care of the elderly and the elderly telling the stories of the past and reinforced this idea through a rigid family structure that preferred sons and had a strict adherence to what the family unit themselves held valuable. Whether that was hard work, or educational attainment, the families of these tradition directed pushed their lifestyle on to their posterity who adopted it without thought to the contrary.

## CHAPTER II

### THE INNER DIRECTED AND THE WRITTEN WORD

Martin Luther stuck a nail right through tradition directed culture with his treatise against the Roman Catholic church. In 1517 Martin Luther had a number of grievances against the Catholic Church which he aired rather openly to the church at Wittenberg by nailing his famous treatise to the church's door. Though most pertained specifically to religion, the treatise addressed the idea that the Bible be translated into a common vernacular for the common man to understand. It was fundamental not only to more people being able to understand and interpret the word of God, but it also suggested that society as a whole needed to be able to understand grammatical rules, and become on the whole more literate. As a result of Luther, two massive historical shifts occurred nearly simultaneously. The early rise of literacy was the result of Luther's newly printed bible in a common German vernacular. This is in stark contrast to the way in which Christianity worked before, because the holy "text" was either stuck in oral tradition, or only available to people who had the luxury of being able to read more than the common vernacular. By subsequently being able to read physical copies of the text, one had the opportunity to go back, examine, and compare line by line how churches ran their congregations, versus how the word said to run the congregations. Some found that the Catholic Church did not teach according to the word, and through their own internal compasses, they were able to create religions that they felt were more adherent to the word of their lord. This would not have been possible without the advent of written language and a greater level of literacy among the populace which is the foundation of inner-directed culture.



Inner-direction marks some very distinct changes in humanity, while the dates of when the written word were first available to the masses and when literacy began to reach a critical enough mass for it to matter for societal change is largely up for debate. The mark of both the ability for quick reproduction, as well as more emphasis for education and literacy, begins around the late 1400's to the early 1500's with the invention of the Guttenberg printing press and the Protestant Reformation making great strides in both availability of information, and the ability for the information to be absorbed. While the religious movements of the early to late 1500's began to spring forward, the first ideas of globalization also begin to materialize. Ferdinand Magellan was the first person to lead the expedition to circumnavigate the globe. Though Magellan ran into some misfortunes along the way, the crew made it back three and a half years later meaning there was a new frontier both in the psychological sense and in the physical sense of expanding horizons and winning glory for one's self and one's country. New ships were chartered, maps were drawn, journals were kept and published about different cultures from across the globe. Rapid expansion of empires became the way of the world, with many people seeking to stake their claims for their country, and in the process bring honor to themselves and their families. We begin to see an uptick in nautical maps, accurate accounts of both timekeeping on the ships and astrolabes or cross staffs which were the only forms of navigational equipment available to these explorers. They were pushed on in their pursuits knowing that it would bring honor to themselves and their countries.

Because the ideas of predecessors were written down and were able to be easily transmitted to other people through books or charts, we see an increase in technological innovation throughout the inner-directed era. In stark contrast to the oral directed era, where if there were any innovation such as building techniques or mathematical formulae, it was largely

kept to the social or religious elite. With the advent of the written word being available to the masses, more and more people were able to expand upon the ideas of their predecessors and keep record all along the way of both success and failures. The 1600's marked this time with expansion into concepts such as astrophysics, gravity, and even more religious expression. Galileo Galilei was able to use the Copernican theory of heliocentrism to broaden the horizons of how humanity viewed space. He constructed a telescope and recorded a vast amount of information about the planets in careful records, and was able to contribute to the Copernican theory. This would not have been possible both without written records, and without the way that the written word came about. Because the foundation of written culture started with a challenge to authority figures that chose when and to whom to transmit the information. Even theories such as gravity and the historical roots to modern day calculus were founded by the men who may not have been allowed access to information in the oral traditional culture were now made possible through the advent of the written word. This cultural revolution helped shape events that would become the roots to the establishment of new countries, and change systems of government as we knew them.

The 1700's marked a time of political upheaval and a greater ability for people to have access to information. Newton's theories were translated from Latin into English giving many English-speaking scientists the ability to build off of the principles that Newton had transcribed. Samuel Johnson published the first widely adopted English dictionary which allowed for more standardization of grammatical rules, as well as allowed for the common man to yet again become more literate and be able to contextualize his thoughts more precisely on the printed page. Because of the vast body of knowledge that had been written down in the 15<sup>th</sup>, 16<sup>th</sup>, and 17<sup>th</sup>, centuries, the 1700's housed what many historians call the "industrial revolution." This

revolution saw yet more technological innovation, mechanization, and efficiency than there ever was before. Textile manufacturing skyrocketed, the first steam engines that would later power trains and automobiles were getting their start during this time period. Even gears, screws, iron processing techniques and paper machines were innovated and kept track of during the initial start to this revolution. Because of the advent of the written word, and the subsequent river of information, the ability for people to innovate and expand on predecessors' ideas had finally opened the flood gates to a wealth of technological innovations that would ultimately prove vital to improving quality of life around the world. This period was not without its troubles and turmoil, however. The Spanish lost the Spanish wars of succession in 1714 and were forced to hand over massive land tracts to England which would provide them with plentiful raw resources for the Industrial Revolution. The colonies of Brittan rebelled and declared war against the tyranny of British oppression, paving the way to the newest form of government; democracy. This new system of government was heavily based on political scholars and philosophers alike from John Locke, to Voltaire, and Rousseau. The new system of government was based upon the written word, and signed by representatives of the people for the brand-new nation, and it was soon called the great democratic experiment. Without fail, the written word impacted everything within society. Without it, all social movements, technological innovations, and even the need for grammatical rules or certain words would be heavily impeded or would lack the complexity to get off the ground. With new systems of government in place and increasing mechanization, the written word continued to proliferate the culture and absorb everyone in its path.

The 1800's saw an expansion of pre-existing written culture ideas, globalization began to take hold as a more welcomed concept with many immigrants that were experiencing famine, pestilence, or war from their home countries traveling on boats with greater efficiency than was

ever imagined. With an increasing number of people moving into urban centers, the first compulsory education laws begin to develop, and more people become acquainted with the written word and their ability to interpret the world around them changed drastically. With the rise in literacy, there was a rise in more technological innovations, with more and more epicenters of technological development being put on the map. America saw the advent of steel which paved the way for taller buildings and different construction techniques. The world itself became closer with the advent of the telegraph, which rapidly sped up the ability for humanity to exchange information. What would have been a thirty-day trip to send information and another thirty to receive it, the telegraph cut the time down to mere minutes. This allowed for greater still knowledge about current events and discourse about such events. The written word allowed for different people than previously to transmit culture and information to posterity. School teachers, community leaders, and above all the parents of those children had a greater hand in teaching their offspring not only information that they needed to know, but also allowed for them to control what they could and could not know by restricting the types of books, or newspapers that they had access too. Because of this, the written word allowed for the advent of what Riesman called the inner-directed social type. The inner directed have one thing in common according to Riesman, “the source of direction for the individual is ‘inner’ in the sense that it is implanted early in life by the elders and directed toward generalized but nonetheless inescapably destined goals (Riesman 1955).” The inner-directed man is instilled with values and morals through his or her upbringing which leads to the formation of a “psychological gyroscope” which enables them to “maintain a delicate balance between the demands upon him of his goal in life and the external buffetings of his external environment” (Riesman 1955, p.16). Through the advent of the written word and the shift in the dominant cultural paradigm from oral-tradition to inner

direction we see the delicate balance begin to shift, and over time shift due to the demands of the new inner-directed society change.

The early to mid-1900's sparked a veritable social revolution for many countries both new and old. With compulsory education now being the law of the land in the United States as well as several parts of Europe, the percentage of literate people continued to skyrocket. The world lost many to the written word during this time period. World War One was fought initially because of the death of one man but through the written word and treaties, country after country descended into years of bloody warfare. These treaties that each country signed with each other proved once and for all that the pen is mightier than the sword. With the twirl of a pen 16 million members of armed forces across the world were killed, 37 million people total would lose their lives. The same way the war escalated however is the same way that the war ended. In 1919 on the eleventh hour of the eleventh day of the eleventh month the Weimar Constitution was signed declaring hostilities of World War I at an end. The written word restored peace. World War I subsequently was written about as the "great war" or "the war to end all wars." The Treaty of Versailles cast blame on countries that many viewed as responsible for the bloodshed. Germany was first on the chopping block. They were ordered to disarm and lose many of their economic zones. To add insult to injury, the international coalition that made the Versailles Treaty ordered a massive 132 billion marks (the equivalent of roughly 500 billion dollars in today's currency). The outcry from Germany was massive. Many of its citizens felt that politicians through back door deals sold out their people, and many had not seen defeat on the battlefield and were unwilling to accept that it had been defeated. This allowed for a massive slew of people to disseminate vitriol and propaganda through local papers. What followed was the deadliest conflict in human history. In World War II 70 million lives were taken in a short amount of time

due to some of the most horrific acts of atrocity the world has ever known. What is however striking throughout this massive conflict is the role that the written word played throughout it, from the French being forced to sign the treaty for surrender in the same rail car that the Weimar Constitution was signed in to lend lease agreements in the United States and Britain. There was something very gripping about this written word and how the inner directed were constantly influenced by its power.

In the same way that World War One had ended with the twirl of a pen World War Two was no different. However, in addition to the treaty that ended both wars, the aftermath of World War Two brought something slightly different. The world needed to codify what had occurred and how to avoid history from repeating itself a second time. They painstakingly held trials in both Nuremburg and Tokyo to implement and establish an international law that had not already been established. They punished political and military leaders for crimes against humanity, and crimes against the peace. Nations came together and established an international union, that collectively signed a charter vowing not to make the mistakes of the past. With the United Nations charter signed, the inner directed could breathe a sigh of relief. They were tired and battle tested. But the wake of social reforms, and after a brief respite from the hostilities, the inner directed were ready to continue the track of innovation and modernization with a written down promise of peace among nations.

The written word influenced America in a big way. At the beginnings of the shift to the adoption of the written word, it was the dominant medium for transmission of culture. In the late 1400's, explorers from Europe came seeking new routes for trade and were pleasantly surprised to discover new land. The floodgates quickly opened up as conquerors from several different nations attempted to get gold and silver from their newly found land. The people discovered

there had little choice in the matter. They were quickly forced to adopt a monotheistic God and learn the language and grammatical rules from foreign lands or be used as laborers in a mine, or killed for being savages. Through conquest came colonizers who, through seeking a new opportunity in a new world, or escaping religious persecution, soon quickly established settlements in the new world. Each new settlement came with its own written out doctrine typically heavily influenced through religion that established the laws of their community. These written doctrines calibrated the gyroscope of the inner-directed people in these communities. For these inner-directed citizens the laws of the land established an absolute legal code with their monotheistic God as their absolute moral authority. The penalty for breaking either the legal or the moral authority of the community was severe. As a result, you see the first conceptions of solitary confinement, and literature such as *The Scarlet Letter* being influenced heavily through the very notion of breaking a steadfast and hardened moral and legal code. Because of the foundation set by the written word in the United States, the inner directed had a tangible document to look at as the law of the land. This quickly became solidified with the revolutionary beginning of the nation. Declaration was made solemn with the written word and backed up by the gyroscopes of the men that signed their names on a document that would be looked at as treasonous had it gone the other way. The government became dictated by a new word called the Articles of Confederation before another document called the Constitution was put into place, but through every iteration of change in the governmental structure of the United States, there was a written word to ensure that it would be transmitted to the populace and solidified as the law of the land.

This trend went as far as making every amendment, Supreme Court decision, and congressional meeting transcribed onto paper and put into a national library (The Library of

Congress). Members of this written word society were able to reference and interpret their laws, how those legalistic decisions were made, and put them in the context of their lives. As a result, when they, began having children, they with their newly formed and newly calibrated psychological gyroscopes, were able to present them with their partially formed gyroscopes, which would be formed by life lessons and other authority figures as well as their parental influence. This helped lead these inner-directed men through complicated issues that faced early America such as slavery, land expansion, and interference from outside powers. This same gyroscope helped lead men to battle in both World War One and World War Two, and set up legal precedents following both wars that sought to punish those that threatened their gyroscopes or those that they believed did things that were so morally reprehensible that they needed to pay with their lives. The inner directed lasted through most of Americas history and it has only been through the advent of more technological innovation that it transitioned to a different cultural paradigm.

China and Korea seem to flip the United States pattern in their cultural progression. While both seemingly end up at the same place on the cultural continuum theorized by McLuhan and Riesman, they are notably absent in the inner direction. Many Chinese and Korean citizens alike still have the same traditionalistic values instilled by their parents and grandparents. This may be partially explained by how the values get instilled into the children. In America, there is a nuclear family that has increasingly pushed the grandparents out of the home and into the elderly community, whereas China and Korea have welcomed and continued to welcome the grandparents in with open arms. This has a number of implications culturally, because older people that have had more exposure to the traditional part of the cultural continuum, continue to teach the culture that they themselves have been taught. The audience, however, is not their



children but their children's children. Because of both the exposure that the grandchildren have to their grandparents and the societal lesson that is learned from being mentored by them, they have a greater understanding and a greater willingness to take care of their older relatives with a more hands on approach than that of Western society. This also means that there is less ability for a cultural shift to occur in a generation, because the tradition directed nature of these countries mean differences in culture typically will not deviate for two generations because of the multi-generational structure of child rearing in these nations.

Because of the massive advances in technological innovation, fundamental shifts in both literacy and governmental regulation, public health, and other factors, the shift from tradition to inner directed culture corresponds to stages two and three of the Demographic Transition Theory. Because the written word marked our ability to record and reference the works of the past, our ability to extend life expectancy and our ability to expand our knowledge of health and safe practices for child rearing allowed for the mortality rate within this time period to go down drastically reducing the death rate in society. At the same time as the death rate was lowered and we began to become increasingly urban with more cities popping up in areas opportune for trade near the sea, or areas that had infrastructure near manufacturing hubs that provided transportation and opportunity for jobs, the birth rate also began to decline. Because people worked more hours, and after the advent of child labor laws and compulsory education, people did not see the need to have more children. Instead, because urban centers were becoming increasingly more expensive to live in and with population density increasing to a rate that was previously unheard of, many families saw having more than 2-3 children as a burden. With more people living in one place and with the motivation to have large families feigning, society was poised to transition into the next and final phase of the cultural continuum.

## CHAPTER III

### THE SCREEN CULTURE AND THE OTHER DIRECTED

After the dust settled and the world fell into a relative peace following World War II, the world was gifted or cursed with an invention that would change everything as we know it. Started in World War II as a way to crack the German Enigma Code, the computer quickly came to the center of the forefront. This technological innovation came in two fundamental phases: the first phase was characterized by pure computing and had no functionality as an interface for socialization. The second phase was characterized by connection to other computers, making wireless communication not only possible but normative. Though this became the peak of screen culture that continues to persist today, the two foundational theorists that have been drawn upon throughout this paper were not alive to see the advent of the second phase of the evolution of computers. With this constraint in mind, they were ahead of their time in their ability to realize the ramifications of the screen culture and other direction. Riesman suggested that other direction begins in the metropolitan cities. He goes on to say: “The type of character I shall describe as other-directed seems to be emerging in very recent years in the upper middle class of our larger cities: more prominently in New York than in Boston, in Los Angeles than in Spokane, in Cincinnati than in Chillicothe. Yet in some respects this type is strikingly similar to the American whom Tocqueville and other curious and astonished visitors from Europe, even before the revolution, thought to be a new kind of man. Indeed, travelers’ reports on America impress us with their unanimity. The American is said to be shallower, freer with his money, friendlier, more uncertain of himself and his values, more demanding of approval than the European. It all adds up to a pattern which, without stretching matters too far, resembles the type of character

that a number of social scientists have seen as developing in contemporary, highly industrialized, and bureaucratic America: Fromm's 'marketer,' Mill's 'fixer,' Arnold Green's 'middle class male child' (Riesman 1955).” In the same breath McLuhan makes a prediction as to what will happen to the medium of media: “By the twenty-first century most printed matter will have been transferred to something like an ideographic microfiche as only a part of a number of data sources available in acoustic and visual modes” (McLuhan 1964). These two predictions suggest both that the genesis of other direction will be in the urban centers where there is a need for approval not from one's self but from one's peers, and that the future of media will present itself on some kind of microfiche and may use symbols instead of printed text to describe ideas.

Exploring McLuhan's idea of microfiche being the early predecessor of a new type of medium for transmitting ideas holds quite a bit of weight. Through the advent of computer technology, we were able to initially develop massive machines that could use their computing power to solve equations that would have otherwise have required a massive amount of man hours. One of the first computers post World War II had a processor that allowed for the computation of missile trajectories for the United States Army. It was called ENIAC and could do the work of one human in 20 hours 30 seconds (History of the Computing Project 1946). These early computers were large and expensive, making them difficult if not impossible to adopt for an American consumer. Through a massive evolution in computer technology, however, we were able to see the advent of computers for home use. Though initially a luxury item, they quickly became a household feature to the point where many homes now own one computer per person. What became almost as important as the size of these new computers was the portability of these computers. Through expansion in battery technology, computers became increasingly mobile to the point where they were known as “laptops.” This portability was

quickly expanded throughout the twenty-first century to fit a new type of product and consumer all together.

In 1993, the world made a transition into a new type of product, a portable screen that served both as a phone and as a personal computer. This invention called Simon was created by IBM and was the first of many products to address consumer demand for increasing portability as well as functionality. This trend was continued through several adaptations and has in large part blossomed into an almost necessary accessory in every developed country. This trend has been almost all consuming. According to the Pew Research Center, “68% of adults living in advanced economies report owning a smartphone” (Pew Research Center 2016). Because of this massive shift from physical print to a digital medium, we can see that there has been a transition in how the developed world now absorbs its culture. That medium has been trending towards the screen and will continue to trend toward the screen for the foreseeable future.

While McLuhan makes an argument about the future of information and how it will be absorbed, Riesman makes an argument about the shift in culture because of increasing urbanization. Big cities have always brought with them logistical problems, infrastructure, food management, safety standards, and social problems these have all played a part in making the city a testament to how humanity can cooperate in a confined space. This phenomenon is very new. Humanity has not had to cooperate with this many people in physical space so constrained since our genesis. What are the implications of constraining space for us? How do we handle the increasing amount of social interaction that becomes required when one is faced with an increased density of people? Riesman argues the implications of this trend that was beginning to be set in the 1950’s. Riesman notices shallower interaction, coupled with excessive spending, and dependence on other people’s opinions for how they interact throughout this new cultural

landscape. This has and will continue to have impacts on society as a society becomes increasingly urbanized. The implications of this are made more apparent as urbanization and economic development are positively related (Narayan 2014). If urbanized landscapes impact a new cultural paradigm as well as serve as a corollary for economic development, then we can assume that this will also impact the demographic transition as economic development is the driver for transitional shifts in the Demographic Transition Theory. McLuhan's theory of the transition from physically printed media to digitally re-created media along with a number of other social forces that when analyzed as a collective whole offer us some insight to the demographic trends to come.

## CHAPTER IV

### THE CULTURAL IMPLICATIONS FELT IN THE UNITED STATES

The United States was historically late for inner direction because we are still a rather recently founded country when compared to our European and Asian counterparts. As a result, it has been the dominant paradigm of culture for most of our history. America however, was not attached to it. When urbanization began and the physical distance between family and the community shrank, they were quick to adopt and create a new cultural paradigm of other direction. What, then, has been the impact of a country that initially started the cultural continuum on inner direction and quickly shifted to other directed, and what are the individual impacts that both have made on demographic trends throughout the United States?

Inner direction was the dominant paradigm from the United States' founding in 1776, and lasted until around the 1950's when Riesman and McLuhan observed a shift beginning in the urban cities. Although this cultural paradigm has lost its status as the dominant cultural paradigm the effects of it still linger in rural environments. This cultural paradigm also set many citizen's psychological gyroscopes, and led them to participate in an American society that went through many world events. The question remains, however: what is the quantitative impact that this cultural paradigm has had on The United States? While it would be nearly impossible to look at every societal impact, this paper looks at key indices of demographic trends across this time period to indicate the impact that inner directed culture has had on the United States. For this paper the demographic trends that we will be observing in the inner-directed era of the United States are crude birth rate (CBR), crude death rate (CDR), and percentage of rural population

(PRP). Beginning with crude birth rate in the United States which roughly defined is the number of live births per 1,000 of the population. Although some statistics exist from early states estimating roughly the number of children born in certain time periods, these are unreliable and may impact data quality. For this reason, I have decided to take the approach of Simon Kuntz and Michael R. Haines who report data from after the civil war (1870 onward,) and report them with a ten-year interval. In an attempt to be methodologically consistent, the crude death rate will be taken from the same study with the same interval year. The crude death rate is similar to the crude birth rate in that it takes the number of deaths per 1,000 of the population in a given year. The numbers that follow describe the second and third stage of the demographic transition nearly perfectly. Figure 1 illustrates high birth rates and declining death rates which results in a positive net growth in the population.

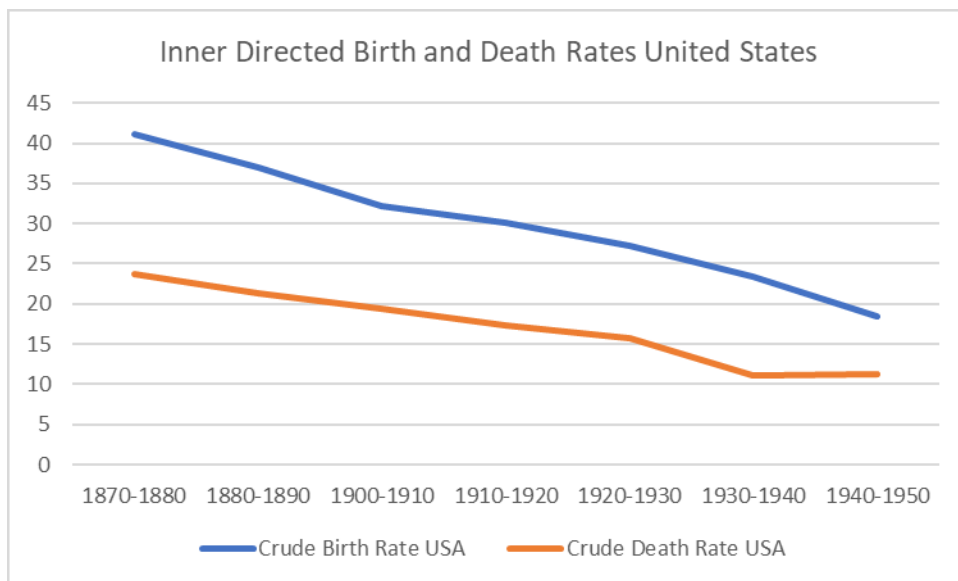


Figure 1. Birth and Death Rates from 1870 to 1940.

Source: NBER Working Paper Series on Historical factors In Long Run Growth. June 1994

The inner-directed era allowed for new technological innovations for humanity, because of the ability to now house and feed people closer to where they worked and no longer requiring that a larger percentage of the population be farmers, the city came to be. This increased density was

almost entirely due to the need for more housing and jobs caused by the massive population increase of the higher birth rates and lower death rates (illustrated in figure 1) which caused a massive increase in the urban population of the inner-directed era. Figure 2 displays the increase of the percentage rural population versus the percentage of urban population in the United States, City census data was more easily attainable and presented less data quality concerns than crude birth and death rates. As a result, the time period includes ten-year intervals from 1800 to 1950 giving a more robust description of data.

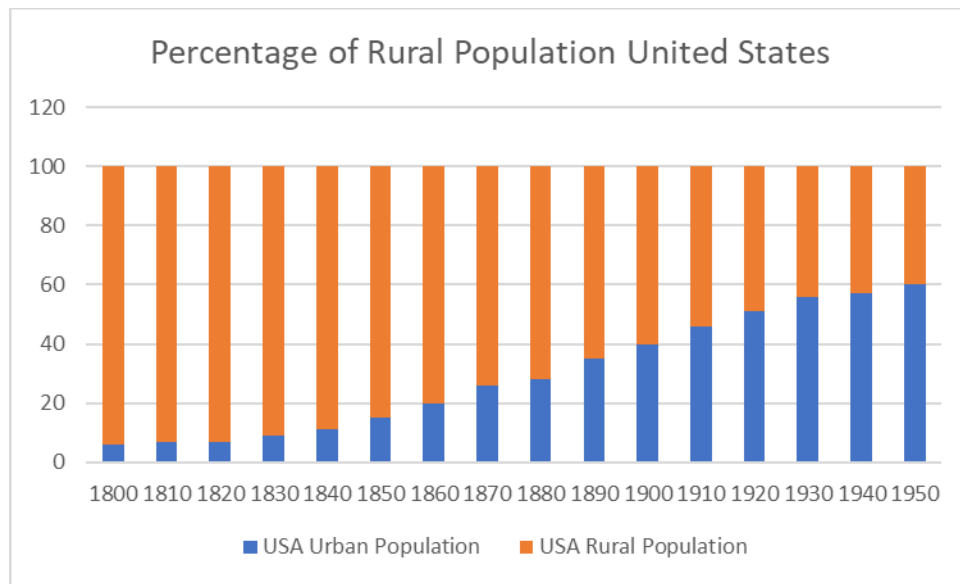


Figure 2: Percentage of Rural and Urban Population in the United States’ Inner-Directed Era  
 Source: United States Census Bureau

These two figures display the demographic shifts that the inner-directed paradigm of culture brought to the United States. With population expansion and urbanization on the rise there is a notable upward trend in social mobility as well as infrastructural and technological expansion that helped in many cases pave the way to these increases. The inner-directed era as observed by these two metrics enabled us to both expand our population and organize ourselves into urban centers.



The United States, which began with inner direction is also the epicenter for other direction, which presents new trends demographically. In order to understand this shift, this paper will incorporate crude birth rate, crude death rate, and percentage rural population to demonstrate the difference in the demographic implications that the two cultural paradigms have. In addition to the demographic implications that other-directed culture has, we will be looking at how prolific the screen culture has penetrated throughout the United States. This will be measured by looking at the amount of high-speed Internet subscriptions (broadband) and mobile phone subscriptions per 100 people. Crude birth and death rates were both drawn from the world bank. Because the World Bank began recording data of crude birth and death rates in the 1960's for all of the countries that are analyzed in this paper the World Bank data will be utilized. Although this does allow a ten-year lapse on the United States as for crude birth and death rates, it is the most methodologically consistent way to report on the data provided. Figure 3 shows the crude birth and death rates from 1960 to 2016.

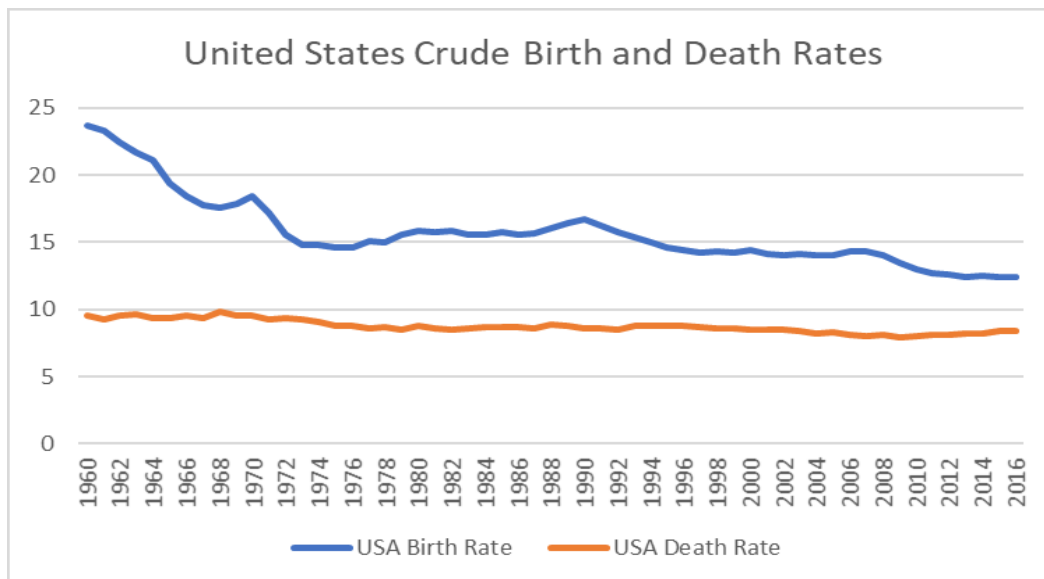


Figure 3: United States' Crude Birth and Death Rates for the Other-Directed Time Period  
Source: World Bank Open Data

Figure 4 shows the percentage of urban population in the United States from 1960 to 2016. It shows a continuation of higher urban population in the United States that figure two displayed.

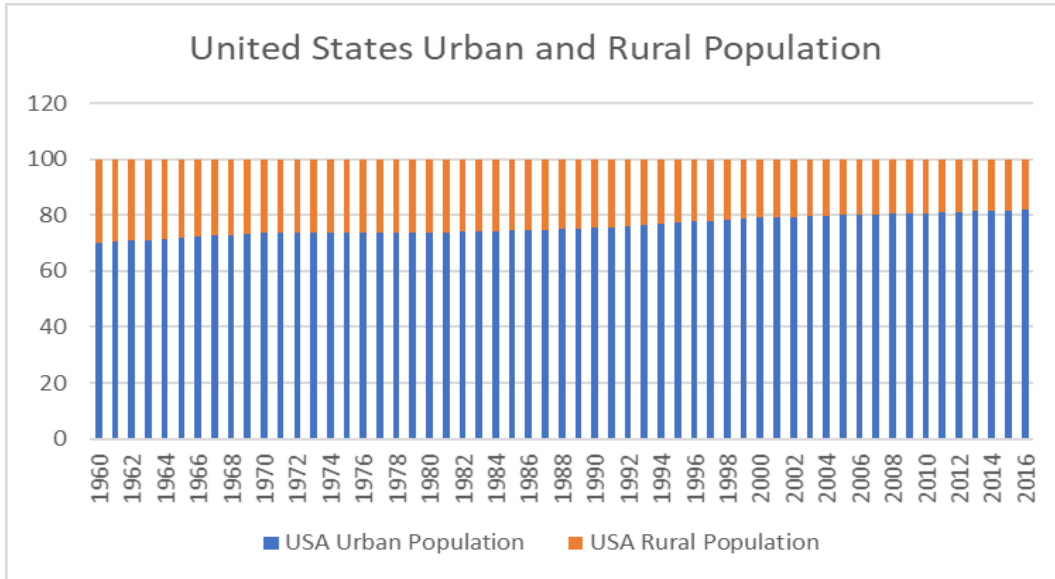


Figure 4: United States Rural and Urban Population in the Other-Directed Area. Source: World Bank Open Data

Figure 5 displays number of mobile phone subscriptions per 100. Through the advent of the smart phone it is crucial to understand that the number of hours spent on these devices and the “necessity” whether manufactured by the peer group, or genuine, that these devices have gripped the United States with a vice like grip in the other-directed era. The first mobile phones were distributed in the early 1980’s. The first available datapoint for the world bank is in 1984 and continues to 2016.

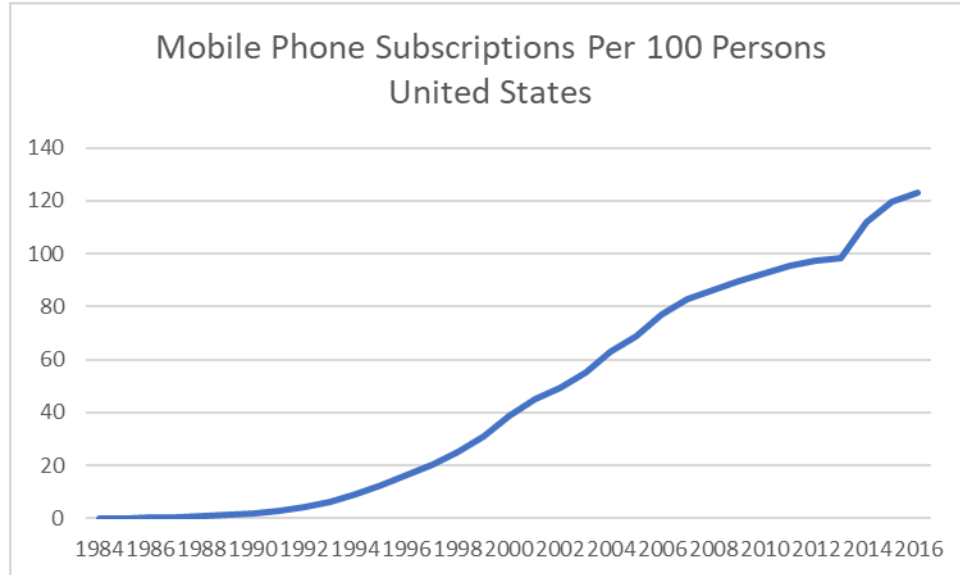


Figure 5: Mobile Phone Subscriptions Per 100 Persons United States  
 Source: World Bank Open Data

The final metric to show the adoption of screen culture in the United States is the number of broadband subscriptions per 100 people. Although there are a number of metrics for Internet usage broadband requires a larger level of infrastructural investment which provides higher speeds for users that require more data for their screens fixed or mobile. Investment in broadband also shows a demand culturally for a communications network that has the capacity to allow for relatively new cultural inventions such as social media networks to be available without delay. Figure 6 shows the increase in broadband subscriptions in the United states during the other-directed era. Broadband began to be installed by service providers in the late 1990's with data available as recently as 2016.

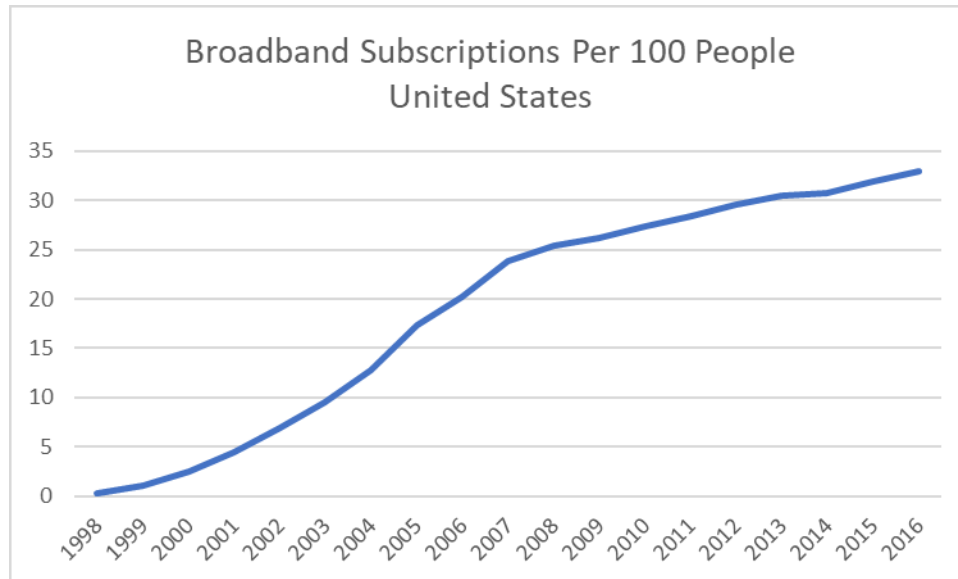


Figure 6: Broadband subscriptions per 100 people United States  
 Source: World Bank Open Data

The above metrics show a dramatic shift of the demographic trends in the United States from the inner to the other-directed eras of cultural progression. Although this seems trivial at first glance, with economic progression allowing for more innovation and a virtually unlimited amount of consumer goods for citizens of developed countries, what does other-direction bring to the United States? Though Riesman wrote at length about the cultural implications that this new cultural paradigm would have on the United States, he was limited by time and was unable to see truly how pervasive other direction would ultimately penetrate our very core as a society. Riesman argued that the peer group would begin to display increasing influence into how the other-directed person went about life. Coupled with McLuhan's idea of the ideographic microfiche taking over how we absorb media and you approach social media sites such as Instagram, Facebook, and Twitter with a need for the other directed to feel liked by their peers. We have gotten to the point of this necessity to where many who are now growing up in the era of other direction derive their value from their social media posts. They value their friend's

opinions of them so much so that they grow dependent on the devices that display the ideographic thumbs up, heart, or star, that they spend two and a half hours a day on their screens before the age of eight (Common sense media 2017). After the age of eight their usage increases to as much as four and a half hours. This time on screens is primarily encompassed by watching television and mobile devices.

This pattern of behavior continues into young adulthood with areas that were once face to face and emotional. Finding a partner in the other-directed era began with services that would video and mail your “best foot forward” or a short video of who you were and send it around the geographic vicinity of your choice to others who agreed to do the same. This progressed to the Internet when it became quickly apparent that the more physically mobile other directed were willing to go outside of friend groups and a relatively small geographic circle in hopes of finding love. Websites like Match.com, E-harmony.com, and JDate.com were at the forefront of online dating, matching people who have simply given up on the idea of finding someone in their daily lives and turning to the “friend” whom they spend more time with than anyone else. The friend who was with them through childhood and every step of the way since, their screen. This screen provides for them not only a way to find a connection to people that they may have never seen before but actually goes out of its way to narrow it down based on preference. Sites such as farmersonly.com, blackpeoplemeet.com, and christianmingle.com have created a peer group for these other-directed to choose against adventure and pick the people with similar ideological, dietary, religious, or most other backgrounds. The love that they find is pre-packaged and orderly with a short bio and a couple of pictures of them to make the decision to perhaps spend the rest of their lives together. These lives together are marked by less children as indicated by the crude birth rate, as well as increasing time with their screens.

Love aside, the impacts of other direction on mental health do not look promising, having to consistently be looking for likes and fearing missing out can have a dramatic impact on someone psychologically. From 1996 to 2013 alone the number of anti-anxiety prescriptions increased by 67%. In a smaller span of time (2002-2014) the number of overdoses of anti-anxiety medication quadrupled (Bachhuber, Marcus A. et al. 2016). This marks both two things for an other-directed society, both a rise in anxiety itself, but also a cure all. The other-directed want something pre-packaged that is meant to fix their problem without looking inwardly at any of the causes of stress or anxiety that lead them to that edge. The same is true for depression, between 1998 to 2008 the rate of prescription of antidepressants has increased by 400% (NCHS Data Brief No. 76). This means that there is both a rise in depression itself, and a desire to get on drugs to alleviate symptoms. The desire for drugs in both contexts is a desire to fix the problem quickly and at the surface level. How do the anxious and the depressed deal with these conditions aside from medication in an other-directed society? Drinking and suicide.

A 2002 study by the National Institute on Alcohol Abuse and Alcoholism found that the thirty-day prevalence of drinking among eighth graders was 19.6%, for twelfth graders that number rose to as high as 48.6%. By the time the other-directed enroll in college the thirty-day prevalence increases to 72.9% for males, and 64.5% for females (Windle, Michael 2003). Alcohol has long been a mechanism for people to escape reality, to numb the pain, or to simply make social gatherings more enjoyable, however alcohol has never been used this much by individuals so young. While establishing a causal relationship with alcohol use and a cultural paradigm shift is impossible, the rise of alcohol use in this period at least in part should be looked at as a symptom of other-direction.

Hot on the heels of these uplifting topics is suicide. Suicide is defined by a number of different of data collectors to mean a number of different things. Some data sources describe attempted suicide and distinguish it from “successful” suicide, others define it as purely the act of taking one’s own life. Suicide has been used by sociologists since its founding beginning with Durkheim in 1897 to show the effects of social disintegration on its individual members. Suicide rate is a metric that measures the amount of deaths from suicide per 100,000 people in the population. Typically, suicide is the final and devastating effect of a number of separate conditions and risk factors including the aforementioned anxiety, depression, and alcohol use.

Emile Durkheim wrote a book in 1897 entitled, *Suicide A study in Sociology*, that posited four different types of suicide. These types of suicide included egoistic, fatalistic, altruistic, and anomic which served different functions for the individual but when aggregated displayed a metric by which sociologists could measure if a society was displaying symptoms of dysfunctionality in various forms (Durkheim 1897). With suicide rates in the United States quickly and steadily rising, the metric that Durkheim posited to examine society could prove instrumental in addressing in part, the reason for the increase.

Each type of suicide served a different function for the individual, beginning with Egoistic Suicide which reflects a prolonged sense of not belonging, of not being integrated in a community. It results from the suicide's sense that the individual has no tether. This absence can give rise to meaninglessness, apathy, melancholy, and depression. Fatalistic suicide occurs when a person is excessively regulated, when their futures are pitilessly blocked and passions violently choked by oppressive discipline. This type is more common among elderly and disabled populations who have felt as if they have lost their agency. Altruistic Suicide is characterized by a sense of being overwhelmed by a group's goals and beliefs. It occurs in societies with high

integration, where individual needs are seen as less important than the society's needs as a whole, which they feel to a high degree. Their needs create a burden on society, and they are integrated enough in society to both realize this burden and want to stop being a burden on their society. Lastly, Anomic Suicide reflects an individual's moral confusion and lack of social direction, which is related to dramatic social and economic upheaval. It is the product of moral deregulation and a lack of definition of legitimate aspirations through a restraining social ethic, which could impose meaning and order on the individual conscience (Harriford, Diane Sue; Thomson, Becky W. 2008). What is unique about the contemporary other-directed society is that it involves all four rising. This meaning both that there is a lack of societal integration emerging as well as moral regulation in an other-directed society.

Beginning with Egoistic Suicide, which is indicative of not being integrated to a community, shows symptoms beginning with apathy and depression. In order to avoid an ecological fallacy, this study will not assert why individuals commit suicide in an other-directed era. Rather, this study will look at the rise in suicide and demonstrate its rise in relation to the adoption of other-directed culture.

For the United States, suicide has risen in every state except Nevada since 1999, with the average suicide rate increase being 25% (CDC vital signs, 2018) With depression on the rise in an other-directed era, suicide is the final effect for depression cases. Egoistic Suicide may be a reasonable metric for addressing the outcomes of what other direction means as a societal paradigm. The same may then be said about Anomic Suicide, while medical literature only began using the term “anxiety” and “anxiety disorders” in the DSM-III in 1980 (Crocq, Marc-Antoine 2015). Durkheim does not mention the clinical term “anxiety” in his book *Suicide*. He mentions a period of the unknown typically categorized by economic upheaval or social unrest and that



unrest manifesting itself within the individual. He also uses throughout his book an old word “neurasthenia,” which has some similar symptoms as anxiety, but is ill-defined with modern day understanding of human psychology. While anxiety is not a catch-all term of Durkheimian Anomic Suicidal causes, anxiety as far as we know it medically today could be a possible medically diagnosable symptom of said unrest. With anxiety on the rise within the United States, it follows that a possible effect of increased anxiety is the rise of anomic suicide in society, particularly in an other-directed society. The two aforementioned types of suicide are noted by low societal integration. Instead of getting an identity and a sense of boundaries, moral or ethical, from parents and inner-directed authority figures, individuals rely instead on the peer group. Instead of having their gyroscopes set, they instead rely on something that Reisman called a “psychological radar” (Reisman 1955). which does not enable them to have a consistent status quo but instead continually changes and has multiple points to follow, making it difficult to integrate into society.

The two types of suicide associated with a lack of moral regulation are Fatalistic and Altruistic. Altruistic Suicide has some prevalence in an other-directed society particularly among online forms and discussion groups. Altruistic Suicide is described by Durkheim: “Having given the name of egoism to the state of the ego living its own life and obeying itself alone, that of altruism adequately expresses the opposite state, where the ego is not its own property, where it is blended with something not itself, where the goal of conduct is exterior to itself, that is, in one of the groups in which it participates. So, we call the suicide caused by intense altruism Altruistic Suicide (Durkheim 1897 p.220).” The meaning of altruism has shifted a great deal in an other-directed society from a place of ultimate charity or selfless sacrifice to where the fragile ego of the other-directed person is so dependent on the peer group that they are susceptible to suicidal

ideation through their online peer group. The instances of cyber-bullying continue to rise in America, and because of the increased emphasis on the online peer group for the other-directed the egos that the other-directed have developed are heavily susceptible to their peer group. They lack agency and are integrated into their online world so much that an attack on their virtual life represents an attack on their real life. The rates of suicide from cyber-bullying remain unclear, with a lack of a uniform definition across legal structures, and suicide being caused by a number of different risk factors make it impossible to isolate the suicides caused by cyber-bullying. While there is not a concrete number in suicide statistics, victims of cyber-bullying were recently found to be 2.57 times more likely to attempt suicide (Ann, John. et al. 2018). A rise in screen usage and an overall online trend of targeted harassment and bullying online suggests that the suicide rate in an other-directed culture will rise.

The last type of suicide that Durkheim describes is Fatalistic Suicide: “It is the suicide deriving from excessive regulation, that of persons with futures pitilessly blocked and passions violently chocked by oppressive discipline” (Durkheim 1897 p.276). Though this type of suicide was relegated to a footnote and had little contemporary significance at the time, the United States has begun to see the rise Fatalistic Suicide. The long-term prison population in the United States is the highest in the world. Many people that are imprisoned here feel deprived of their agency and eventually engage in Fatalistic Suicide. Because of legal system changes and policy orders like the war on drugs, and mandatory minimum sentencing, perpetrators of non-violent drug crimes are given harsh sentences. Through this process of incarceration and the denial of freedoms that most people take for granted, they feel robbed of their agency, and decide that the only agency afforded to them is the choice to take their own life. The suicide rate of prisoners has begun to take a sharp rise after holding steady for many years. what was a relatively high 17

per 100,000 in 2005 increased to 20 in 2014 (Grinberg, Emanuella 2017). While Fatalistic Suicide still does not hold as many examples as the other ones because loss of agency in the United States is still fairly uncommon the rise of it as well as the rise in suicides of all other types paints a negative picture for the future of the other-directed in America, Figure 7 displays the rise in suicide. As the adoption of this cultural paradigm continues the societal implications must be studied in greater depth.

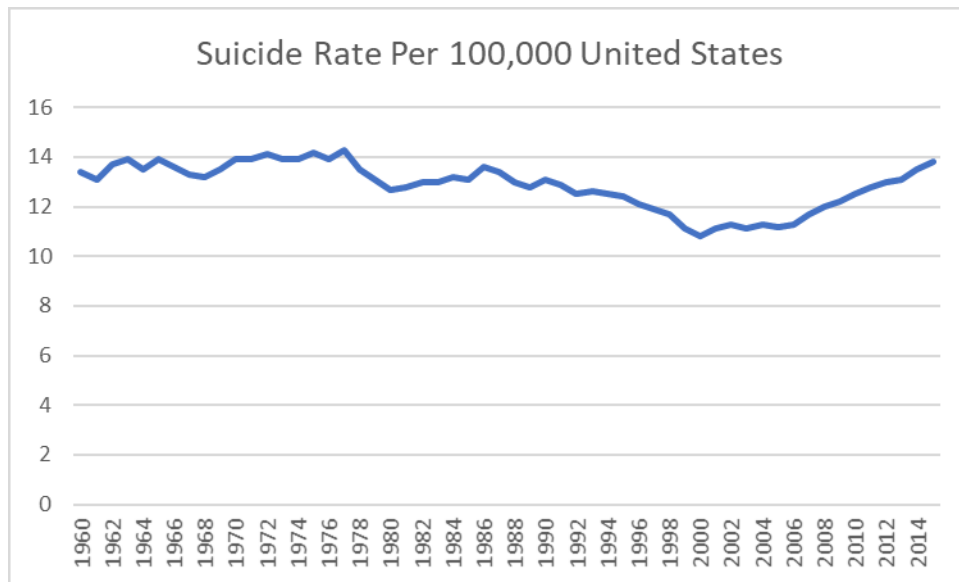


Figure 7: Suicide Rate Per 100,000 United States  
Source: OECD data

## **CHAPTER V**

### **THE CULTURAL IMPLICATIONS FELT IN KOREA AND CHINA**

Korea and China, while different countries with different cultures, share some similarities in how they have progressed along the cultural continuum. Both countries started with traditional cultures based upon Confucian ideals that heavily influenced the populaces of both nations. Each country has also progressed through the cultural continuum with an apparent skipping of inner-direction. Although the ways in which they went about getting into other-direction have been somewhat different both have displayed interest with both governmental policy and through interactions with Western nations to rapidly adopt Western practices. What has followed in both countries is a rapid adoption of other-direction which has shown some trends similar to the United States that have gone with the adoption of other-direction as the predominant cultural paradigm.

Korea's predominant cultural paradigm has been tradition directed. In contrast with the United States, Korea has a long history with tradition direction drawing on influences such as Buddhism and Confucian ideals that have largely been practiced throughout the country's history. Because of those traditional paradigms, the country has had son preference, respect for education, and an imperative for work ethic, and respect for one's elders. Because of this long history with tradition direction, the demographic trends will largely reflect stages one and two of the demographic transition for a longer period than when compared to the relatively short time period of the United States and its corresponding demographic phases. The exact data and metrics for the Korean peninsula for the tradition-directed time period, however, are nearly impossible to attain. Though there are some rough population growth estimates, much of the data

has been lost for a number of different reasons. To begin with, throughout its history Korea went through several territorial redefinitions with the most recent one being the Korean War which ended with an armistice in 1953. It also was part of Japan's colonial rule both before and during World War II. In addition, it saw several political upheavals in the time periods where data collection and data quality preservation mechanisms themselves were being created and codified. Because of this, demographic data is missing for a large portion of its history. However, it can be assumed through the Theory of the Demographic Transition that Korea progressed through stages one and two when it developed economically throughout its history.

The data that can be displayed for Korea begins with the other directed. Korea is a particular case of other-direction because of how rapidly it adopted the cultural paradigm. After the Korean War Armistice, Korea adopted the technology and culture of the West in a number of different ways. It became increasingly urban, the crude birth rate began to trend downward, the crude death rate began to shift downward, and the subscriptions of both broadband and mobile phones skyrocketed. This was due in part to massive aid given to Korea immediately after the Korean War. Because of this aid, trading partnership, and military bases in Korea the United States has had great influence on the culture of Korea and might have helped lead them to a more rapid adoption of the other-directed paradigm. Shortly after the Armistice, the same trend that began in the United States was shortly followed by Korea.

Beginning with Crude Birth Rate and death rates which show a similarity to the United States it begins relatively high, trends downward, and finally stagnates at a low number. Figure 8 shows the crude birth and death rates for Korea during the other-directed period.

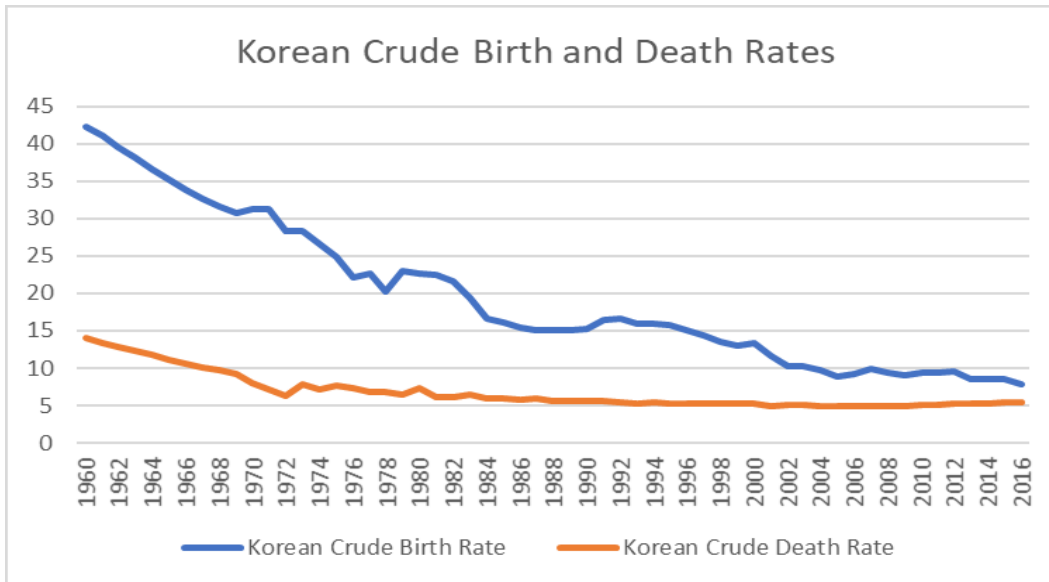


Figure 8: Korean Crude Birth and Death Rates per 1,000 persons  
Source: World Bank Open Data

Similar to the United States, Korea has also engaged in a massive urban push during this time. This mass rush to the cities has led to greater infrastructural investment in order to support the influx. Figure 9 shows the increase in the percentage of urban population during this time.

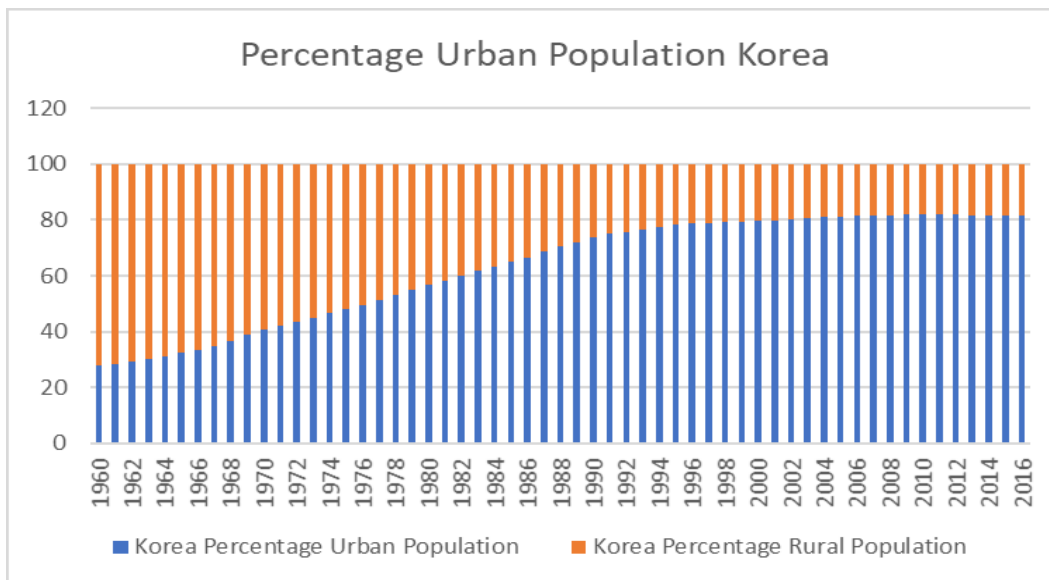


Figure 9: Korean Percentage of Urban and Rural Population  
Source: World Bank Open Data

Through the adoption of other-direction as a cultural paradigm in Korea the trend continues to mirror the United States with increased use in mobile phones. Figure 10 shows the mobile phone subscriptions per 100 persons in Korea.

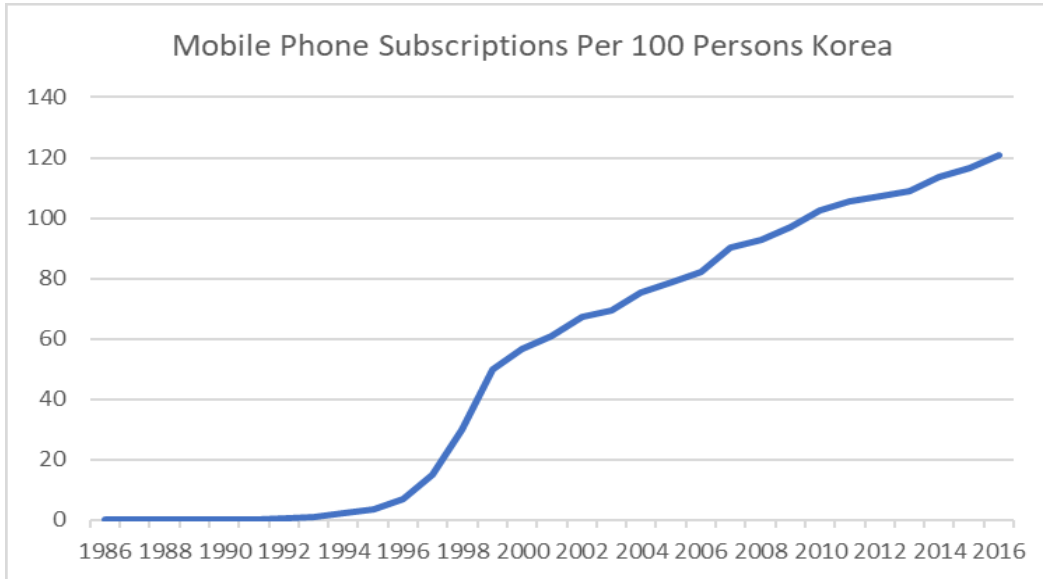


Figure 10: Mobile Phone Subscriptions Per 100 Persons Korea  
Source: World Bank Open Data

Broadband subscriptions per one hundred persons demonstrates both the demand for Internet as well as the country's infrastructural capability to provide its citizens with high speed Internet. This trend not only mirrors the United States but actually shows how quickly Korea has adopted high speed Internet. Korea surpasses the United States in broadband subscriptions per hundred persons demonstrating both the demand for it and the countries ability to supply it.

Figure 11 shows the trend of broadband subscriptions per 100 persons in Korea.

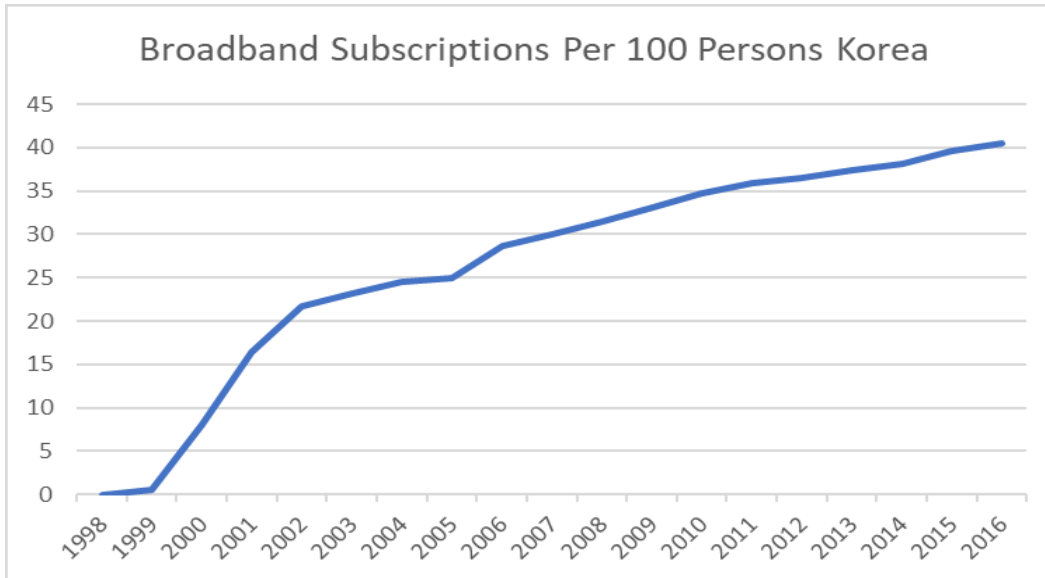


Figure 11: Broadband Subscriptions per 100 persons Korea  
Source: World Bank Open Data

The above metrics display a dramatic shift in the demographic and cultural make up of Korea. These trends are all similar to the changes displayed in America, which suggests that the cultural paradigm shifts that started in America could be transposed on to other countries that adopt similar trends in both demographic shifts as well as infrastructural changes. Korea may be the most rapid country to adopt other direction, and its sudden and rapid adoption has particular cultural consequences. In order to understand these consequences, we need to first also observe a country that is adopting the same paradigm but is doing so at a slower pace. Fortunately, there is a country that is slower to adopt other-direction but has begun to demonstrate the same demographic trends, and is in a similar Region to Korea. China is also adopting other direction and is beginning to display similar although not quite identical trends to both the United States and Korea.

China has more data from its traditional directed era than Korea. Though it has been through several territorial redefinitions that have occurred more recently (including the addition of Hong Kong) because of its large size and relatively good record keeping throughout the years



older records of crude birth rates are attainable. Though these only go as far back as the 1800's it should provide an understanding of the baseline of demographic characteristics within tradition-direction. This should provide us with a useful tool to see what societies that were in the first and second stages of the demographic transition might have looked like as far as crude birth rates were concerned. Figure 12 shows the Chinese crude birth rates as estimates from Gap minder. These estimates include both a low and high estimate as these numbers are largely based on estimated fertility rates, however the range they provide is the most accurate and most complete source of Chinese crude birth rates available.

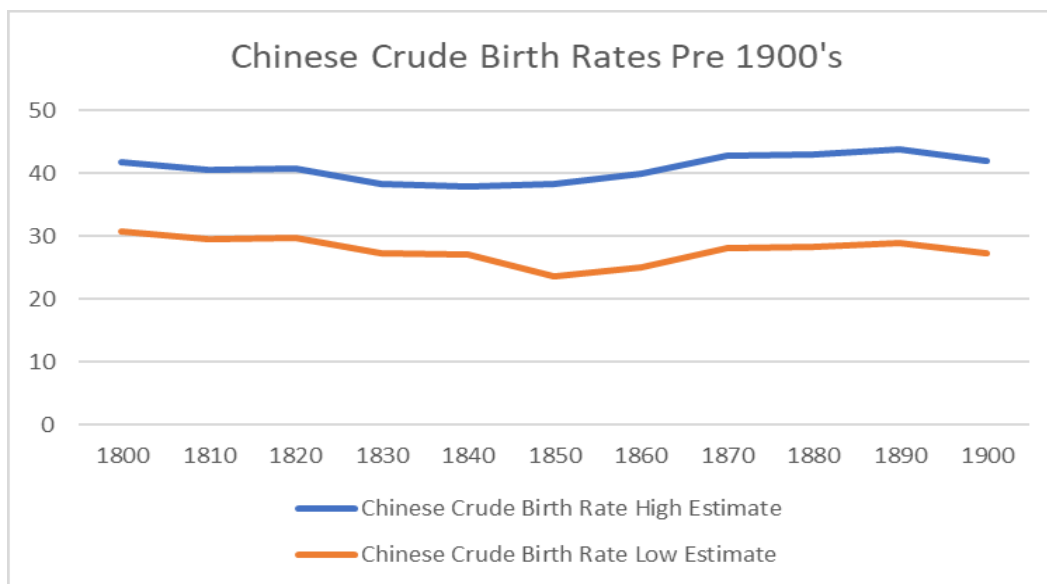


Figure 12: Chinese Crude Birth Rates Pre-1900  
 Source: Gapminder fertility dataset 2010

The crude birth rate in tradition directed china lines up very consistently with both stages one and two of the Demographic Transition Model which is associated with high birth rates. Unfortunately, with an unknown age structure during this time period the exact delineation between the first and second stages of the Demographic Transition Model during this time period. However, both of these stages occurred under the tradition directed cultural paradigm, which continued long before the above data was collected. The shift to the other-direction in

China again might be somewhat due to United States influence in China. In the communiqué of the Third Plenary Session of the 11th Central Committee of the Communist Party of China the Chinese government attempted to distance itself from the great leap forward and even helped put in the ground work for special capitalist economic zones. As a result, capitalism flourished in China. As the United States became a more substantial trading partner the Chinese market began producing United States consumer goods. These consumer goods also fell into the hands of a Chinese populace that had just begun to experience a greater expansion of the market and the middle class. As an end result there was a draw toward the consumer goods that their Western counterparts had. These goods included mobile phones, computers, and many of the modern technologies that the United States consumer has grown accustomed to. This successful transplant of a new capitalist market in China may have paved the way for China to inadvertently adopt the other-directed cultural paradigm. Beginning with crude birth and death rates Figure 13 demonstrates that through this economic development they have also transitioned into the third and fourth phases of the Demographic Transition Model with lower crude birth and death rates, followed by stagnating birth and similar death rates.

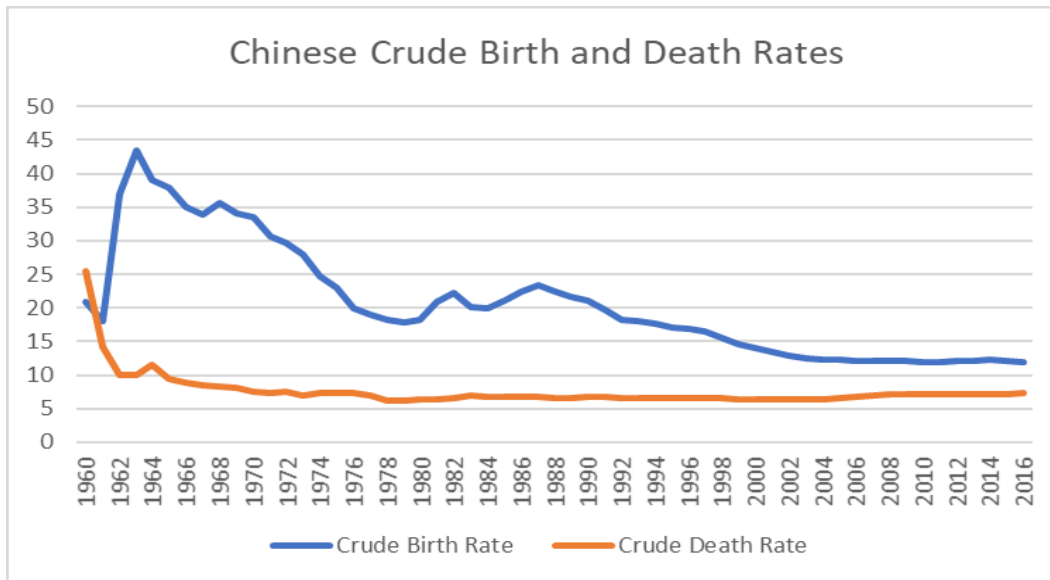


Figure 13: Chinese Crude Birth and Death Rates  
 Source: World Bank Open Data

What makes China different from Korea and the United States in the trends explored so far is that the country still maintains a large rural population. This is primarily because of the policies in the country that dictate where people can move but this has implications about how widespread the phenomenon of other-direction can be in China. Remember that Riesman suggested that the other-directed person begins to lay roots in an urban environment, and while China has expanded its cities with rapid urbanization there is still a tension between the more tradition-directed rural areas, and the more other-directed urban areas. This trend may have more implications as China increasingly heads toward two separate cultural paradigms which may divide and alienate the urban from the rural and the rural from the urban. Figure 14 shows the rural and urban populations of China as an overall percentage of the Chinese population. Note the disparity in the urban population for China versus the other two nations of interest, it has only recently come to even half of the population to live in urban environments.

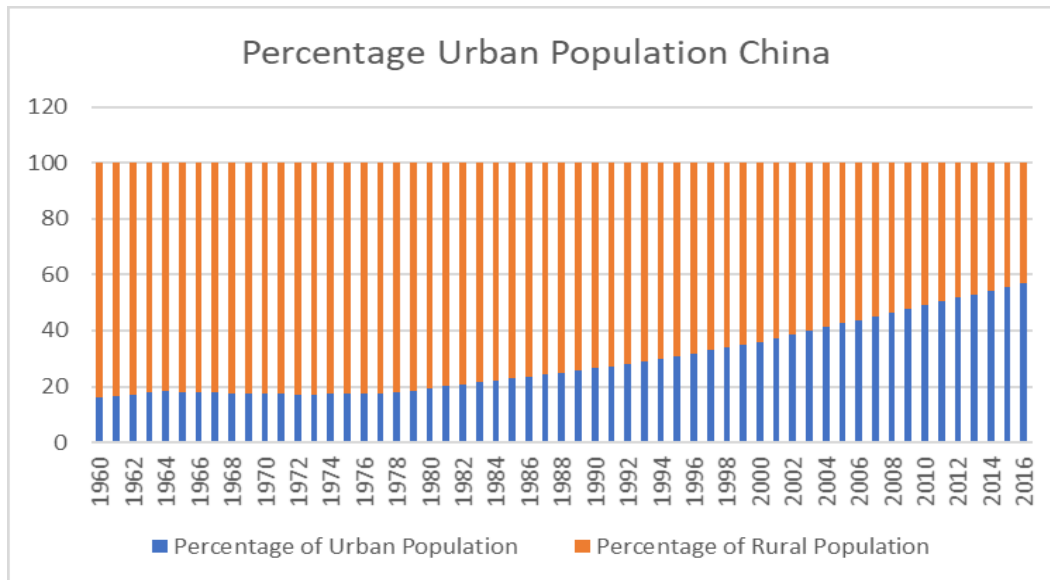


Figure 14: Chinese Urban Population  
 Source: World Bank Open Data

Through the adoption of consumer goods, as well as improvement in civil infrastructure the adoption of mobile phones as well as broadband Internet have skyrocketed under this time frame. Though there is an initial lag behind the United States and Korea, China is adopting both at a similar rate. This adoption of technology with such rapidity allows for a rapid transition from the tradition-directed to the other-directed. Figures 15 and 16 show both the mobile phone subscription rate per 100 people and the broadband subscription rate per 100 people.

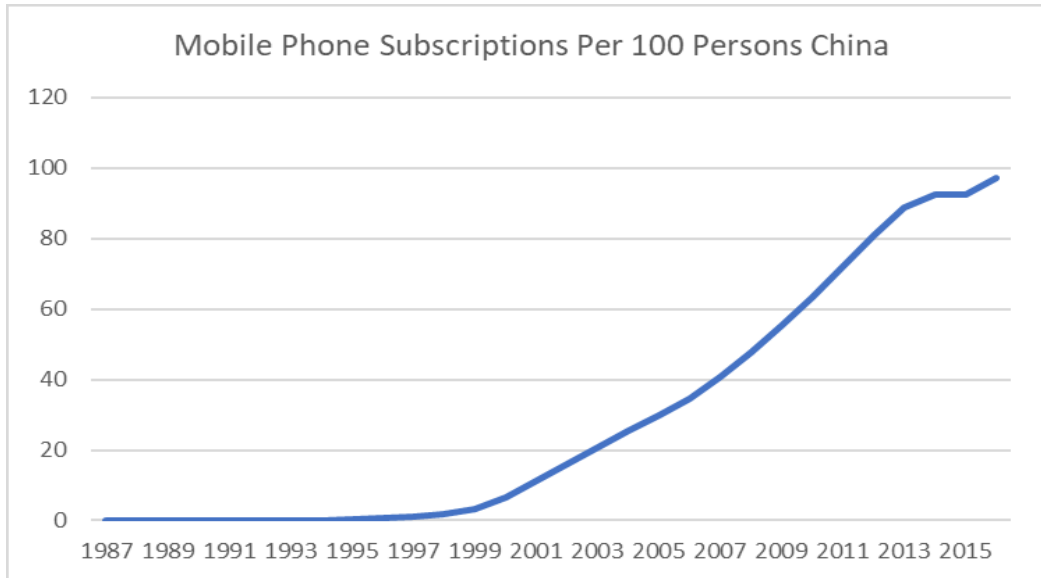


Figure 15: Mobile Phone Subscriptions Per 100 Persons China  
Source: World bank Open Data

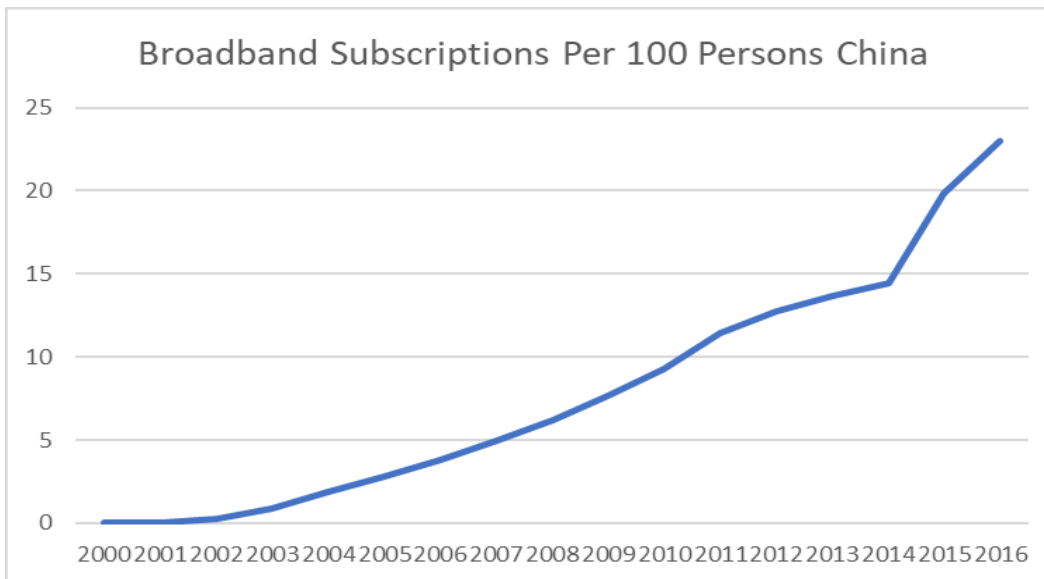


Figure 16: Broadband Subscriptions Per 100 Persons China  
Source: World Bank Open Data

These demographic and consumer trends represent the adoption of the other-directed cultural paradigm in China and Korea. But what have the cultural implications been because of this adoption? While both countries display similar trends both countries have taken other-direction in two different ways. To begin with, Korea which has surpassed even the United

States as far as broadband Internet and mobile phone adoption. This rapid adoption of technology has led to some alarming trends in Korea. To begin with the children of Korea are becoming alarmingly addicted to screens at younger and younger ages. The Korean ministry of education reported “more than 70 percent of tenth graders have eyesight problems, something doctors attribute to xerophthalmia, or dry eyes, which results from prolonged staring into screens without blinking (Rodgers, John M. 2017).” In addition, 25.5 percent of students in Korean education have been diagnosed with smartphone addiction. This has a number of disadvantages as far as school performance as well as social functionality, but it has manifested some health problems that were previously only seen by more elderly patients. Indeed, VDT syndrome which is a back problem caused by poor posture is ever more prevalent at younger ages because more and more children are using computers for functions that they were previously not used for. Textbooks for instance were quickly replaced with computers for schooling. The addiction to screens, whether for study or pleasure has gotten bad enough that Korea was the pioneer of the shutdown law which forbids children under the age of 16 from being on computers from the hours of 12 am to 6 am in an effort to help public health (Sun-Yeong, Kim 2015). The youth of Korea demonstrate a clear pattern of an increasing dependence on screens, which is a key characteristic of other-direction. The end result is an ever-increasing reliance on screens, the peer group, and the “psychological radar”.

The increasing reliance on screen usage has done something similar to young people seeking their other half as the United States. The marriage rate in Korea is the lowest it has been since statistics have been recorded. This is due in part because of the increasing educational status of women in the country, increased costs associated with urbanization, and a maternity leave structure that matches the United States offering no paid leave (Poon, Linda. 2018). This

presents an alarming picture for Korea, 29% of singles have met their partners through online dating apps, and that number will presumably increase with greater investment and a population that increasingly spends more time on their screens. However, as seen in the United States, though the number of finding people with similar interests and similar dating preferences may go up, there is no indication of social connections that are more than screen deep. Similarly, with both men and women delaying marriage and child birth the crude birth rate can be expected to drop with the adoption of the other-directed cultural paradigm.

The trends in mental health are alarming to say the least in Korea. Unlike the United States which prescribes people with a “cure all” to cure anxiety and depression but fails to look at the cause of the growing levels of anxiety and depression Korea does not do either. Korea has the lowest rate of prescribed antidepressants per 1,000 people. Korea also has the highest suicide rate in the developed world (Gould, Skye. 2016). This is where we see dynamic tension between the two cultural paradigms that Korea has had throughout its longevity as a country. Tradition-directed Korea views mental disabilities as a personal weakness which puts up barriers to many who are seeking treatment for mental health disorders. At the same time, with the rise in stress and anxiety that has been observed by an increase in screen time in the United States, Korea may be subjected to more cases of anxiety and depression that go undiagnosed. This results in a complex interchange where you are simultaneously more stressed by the increased interaction through your peer group on screens, and you are faced with a traditional mindset of viewing your stress as an individual weakness. For some Koreans the answer is self-medication with Alcohol, with the average Korean of drinking age consuming 13.7 shots of any spirit per week. This trend is similar to the United States, although with an average of 3.3 shots of spirit per week the Korean trend dwarves its American counterparts (Ferdman, Roberto A. 2014). The suicide rate

has gotten so far out of hand that their ministry of health is rolling out new initiatives to curb the suicide rate to 17 by the end of 2022. One particular plan of note is to address the issues of cyber-bullying which is becoming ever more prevalent with the adoption of screens and the other-directed cultural paradigm (Miller, Steve. 2018). But the suicide rate remains the highest in the developed world. Of the Durkheimian types of suicide the ones of particular note would more than likely be Egoistic and Altruistic. Egoistic, because of the increasing apathy and depression being felt as the society begins to trend toward an increasingly less social and more social-media oriented way of interacting. Altruistic, because of the stress that parents place on students to perform. Part of the Korean education system is a process by which taking an examination is the soul metric to determine which college or university a student gets admitted to. Because of this, students call their senior years in high school the “year of hell.” Not passing this test or getting into a less prestigious college or university causes many students to feel as if they have shamed their families which indicates a high level of societal integration. This phenomenon also suggests that the burden of getting a good education is so stressed in Korea that the very idea of not getting into a prestigious college or university brings students so much shame that their egos simply do not belong to them, but are instead grouped with their families with the “punishment” for disappointing the family unit is Suicide (Lee, Jiyeon. 2001). Figure 17 displays the Rise in Korean suicide rates.



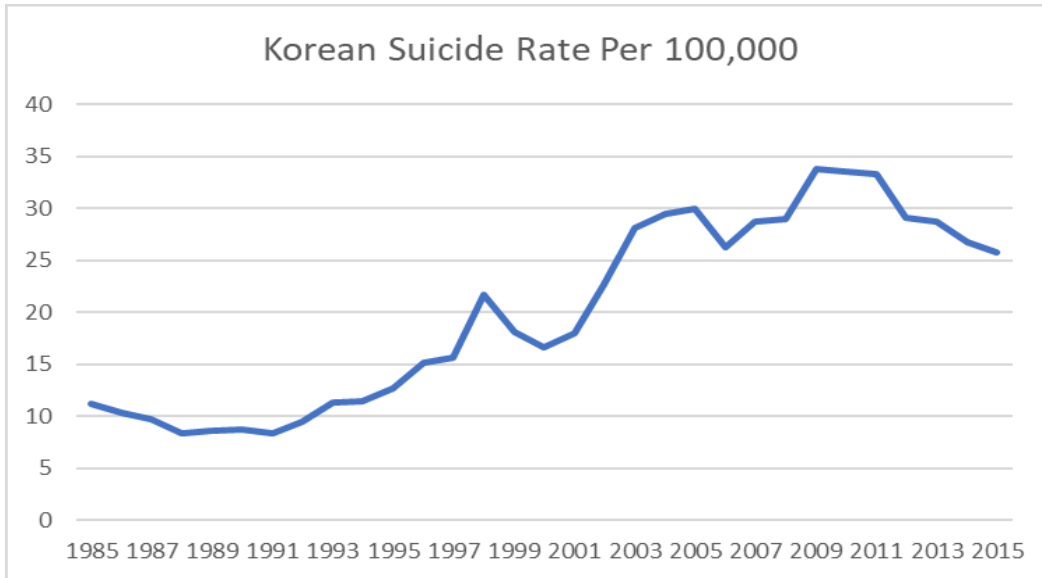


Figure 17: Korean Suicide Rate Per 100,000

Source: OECD Data

China is more complex than Korea and the United States as far as cultural analysis. There is in a sense two China's for analysis of cultural implications. Because China still has a significant rural population that largely still demonstrates similarity with the tradition directed, and because rapid urbanization has occurred primarily in select geographic regions, the cultural implications of the two cultural paradigms and their selective adoption have created a more dynamic system in regards to cultural analysis. To start with, the urban population of China has had a remarkable expansion of consumer goods similar to both the United States and Korea. Mobile phones and broadband have been hastily adopted by the urban Chinese consumer. No longer is China's technology market a multi-billion dollar industry, it has reached trillion-dollar valuation in the country (Soo, Zen. 2016). It has gotten so prevalent in the lives of Chinese citizens that there now exists a social credit system. The implementation of this social credit system has remained for some time a mystery as to how it will be done but it will in essence use a person's online data as well as reports via facial recognition and other technology in conjunction with government databases to assess a full profile and rate them on how good they

are as citizens. While the nature of how this rating will happen are kept secret the implications of this are dramatic to say the least. For starters it is mandatory for every citizen to have a social credit rating by the year 2020, meaning that even an individual sworn off of screens becomes directly affected by the culture of screens whether they want to be or not. The direct consequences of being badly rated in this credit system include but are not limited to; banning you from flying or getting a train ticket, reduced Internet speeds, banning you and/or your children from certain schools, stopping you from getting certain careers, keeping you out of hotels, taking your dog away from you, and finally being placed on a blacklist where you are publicly named a bad citizen (Ma, Alexandra. 2018). The reasons for having this system of social credit are numerous and include increased transparency and building trust in the government and its citizens.

This is worrying for a number of reasons. For starters, it requires that everyone (both rural and urban China) to adopt an other-directed paradigm by force, and it gives them a mandatory time to adopt it, something never done before. In addition, it allows for behaviors that are “good” to be rewarded and “bad” behaviors to be punished, but who decides these behaviors and will they be enforced equally for every citizen that uses this credit system? While both of these implications of the social credit system remain to be seen, the adoption of it may be extremely disruptive for the rural parts of China who have yet to adopt other-direction in their day to day lives that may soon be forced to adopt an entirely different cultural paradigm in which they need to appeal actively and openly to their peer group, something that many rural Chinese citizens have never had to do.

Mental health in China gets rather tricky for the purposes of analysis. Durkheim noted in 1897 a trend of men committing suicide more frequently than women, and suicide occurring

more commonly in more urban areas. China however, is one of the only countries that exhibits the exact opposite statistics and is the only country of this magnitude that appears to do so. A scholar by the name of Wu Fei has done an extensive ethnographic study into why Chinese citizens commit suicide and the societal mechanisms that influence the individual citizens that carry suicide out. Though his study is ethnographic and involves a few in-depth case studies in Mengzhou China, the ethnographic field work highlights the tension felt by rural citizens and the changing dynamic of familial structures. Fei uses terminology of “domestic injustice” which he defines as family members having expectations such as affection, love, interdependence, or duty and those expectations not being met. Fei also argues that the changing hierarchical structure of the family unit puts a great deal of strain on the interdependence of the family unit. Though Fei uses a few case studies in one region of China, the expectations of domestic life on citizens do not appear to change in the rural regions of China. The rural parts of China are still largely gripped with tradition direction: there is son preference from Confucianism, and there are still expectations on family to respect and not question elders. Yet none of these seemingly universal expectations are written down. There is a clear code of behavior that rural Chinese are expected to follow, but the exact expectations are not codified and readily available to review. The result is a strain felt in each individual that has committed some form of domestic injustice, they feel the need to “punish” themselves for breaking a traditional domestic code and in some cases this punishment is to commit suicide. These case studies imply that the primary reason for the higher suicide rate in rural than urban areas is a tradition-directed code that prompts altruistic suicide.

This opens up questions for rural regions in China. Will the forced adoption of other-direction with the new social credit system change the suicide rate in a way that makes China more like other countries with men and urbanites committing more suicide? Or will the forced

adoption of a new cultural paradigm simply make the problem worse? With greater turbulence in Chinese family life, which may cause more domestic injustice and thus more altruistic suicide within the rural regions of China. Figure 18 shows the Chinese suicide rate, note that this rate is lower than both the United States and Korea.

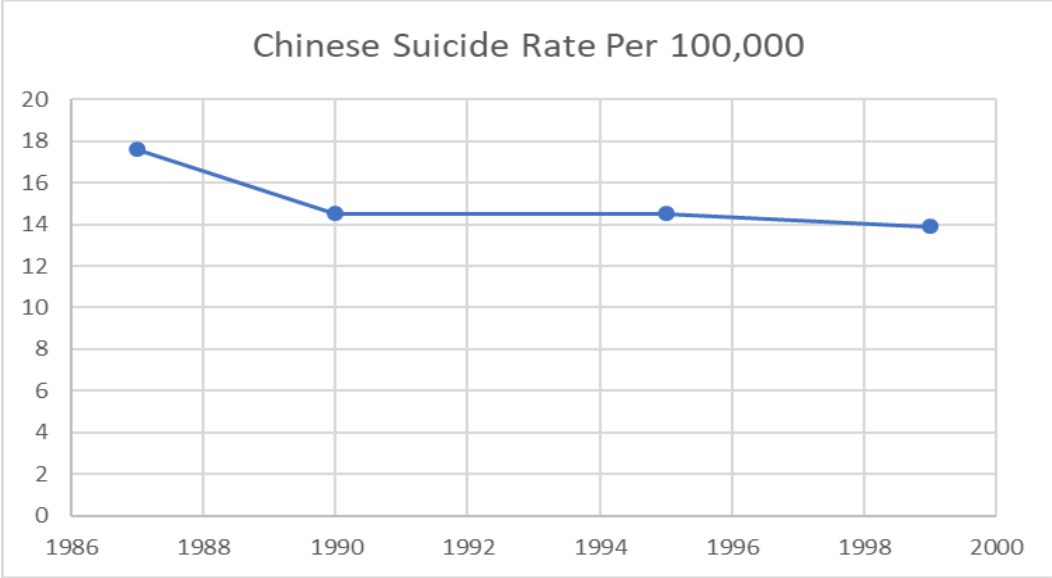


Figure 18: Chinese Suicide Rate Per 100,000  
Source: WHO

## CONCLUSIONS

While the current cultural paradigm has only been demonstrated in urban areas of developed nations the “status quo” so to say of other-directed societies do not paint the best picture. Although progressing economically is a hallmark of the demographic transition, which presents a number of different benefits including: regional stability, human rights, medical care, less malnourishment, and access to clean drinking water. Progressing economically cannot be slowed, the benefits of doing so vastly outweigh the demerits of not progressing economically. The issue then becomes that of the cultural paradigm that through progressing through the demographic transition the more urban and more developed countries have created. Other-direction has had a notable reduction on crude birth rates. This is not necessarily a bad thing because in several developing nations there are problems with overpopulation. The problem arises, however, when countries such as the United States, which have built pension programs (social security) on the idea that there will be a younger working base that will take care of an elderly population, that has contributed to the labor force when they were their age. Without a young working base there is no pension program. This raises a number of issues for a nation that has prided itself on the idea that if you work hard and contribute you can live an “American dream.” The idea that you will be taken care of for your efforts to help make that American dream possible for other people by helping to contribute to the GDP. Other countries with a similar pension system will have similar issues. The issue of the pension system problem, is just one of many problems with other-direction. Suicide, depression, and other medical problems associated with long term use of screens that have been illustrated in Korea, China, and the

United States are warning signs that should be monitored for evaluating whether or not countries should adopt this cultural paradigm.

What becomes of us as we transition from face to face interaction to screen interaction? Humans are predominantly social creatures. We have built society and have developed cultural systems based on interaction between humans. As we progress willingly into a screen culture where interactions are primarily based not on interaction but on a digital representation of interaction does that change interaction, and by extension our systems? Further research on just how digital interactions effect both human nature in terms of socialization, and how digital interactions affect society and culture will be needed. If our demography is destiny, certainly our culture will adapt to suit our needs, but a watchful eye should be kept out for the potential maladaptation's of culture.

## WORKS CITED

- Ajus, Ferenc. “*Documentation for Children per Woman (Total Fertility Rate) for Countries and Territories.*” The Gapminder Foundation, Edited by Mattias Lindgren, 4 Dec. 2010, [www.gapminder.org/documentation/documentation/gapdoc008\\_v2.pdf](http://www.gapminder.org/documentation/documentation/gapdoc008_v2.pdf).
- Bachhuber, Marcus A et al. “*Increasing Benzodiazepine Prescriptions and Overdose Mortality in the United States, 1996-2013*” *American journal of public health* vol. 106,4 (2016): 686-8.
- Chassang, Sylvain, and Christian Zehnder. “*Rewards and Punishments: Informal Contracting through Social Preferences.*” *Theoretical Economics*, vol. 11, no. 3, 29 Oct. 2016, pp. 1145–1179., doi:10.3982/te2063.
- Crocq, Marc-Antoine. “*A history of anxiety: from Hippocrates to DSM*” *Dialogues in clinical neuroscience* vol. 17,3 (2015): 319-25.
- Durkheim, Émile, and George Simpson. *Suicide : A Study in Sociology.* by Emile Durkheim ; Translated by John A. Spaulding and George Simpson ; Edited, with an Introduction by George Simpson. New York : Free Press, [1979], 1979. EBSCOhost, [ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=catalog03318a&AN=tamug.2669634&site=eds-live](http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=catalog03318a&AN=tamug.2669634&site=eds-live).
- Ferdman, Roberto A. “*South Koreans Drink Twice as Much Liquor as Russians and More than Four Times as Much as Americans.*” *Quartz*, 3 Feb. 2014, [qz.com/171191/south-koreans-drink-twice-as-much-liquor-as-russians-and-more-than-four-times-as-much-as-americans/](http://qz.com/171191/south-koreans-drink-twice-as-much-liquor-as-russians-and-more-than-four-times-as-much-as-americans/).
- Grinberg, Emanuella. “*Prison Suicides Are on the Rise Nationally and It's Pretty Bad in Massachusetts.*” *CNN, Cable News Network*, 20 Apr. 2017, [www.cnn.com/2017/04/19/health/prison-suicides-massachusetts-trnd/index.html](http://www.cnn.com/2017/04/19/health/prison-suicides-massachusetts-trnd/index.html).
- Haines, Michael R. “*The Population of the United States, 1790–1920.*” *The Cambridge Economic History of the United States*, June 1994, pp. 143–206., doi:10.1017/cho19780521553070.005.

- John A, Glendenning AC, Marchant A, Montgomery P, Stewart A, Wood S, Lloyd K, Hawton K  
 “*Self-Harm, Suicidal Behaviours, and Cyberbullying in Children and Young People: Systematic Review*” J Med Internet Res 2018;20(4):e129 DOI: [10.2196/jmir.9044](https://doi.org/10.2196/jmir.9044)
- Kaiman, Jonathan. “*China Starts to Turn to Drugs as Awareness of Depression Spreads.*” The Guardian, Guardian News and Media, 20 Nov. 2013, [www.theguardian.com/world/2013/nov/20/china-depression-antidepressants-drugs](http://www.theguardian.com/world/2013/nov/20/china-depression-antidepressants-drugs)
- Miller, Steve. “*South Korea Takes Aim at High Suicide Rate.*” VOA, 14 Nov. 2018, [www.voanews.com/a/south-korea-suicide/4657846.html](http://www.voanews.com/a/south-korea-suicide/4657846.html).
- Narayan, Laxmi. (2014). *Urbanization and Development*. 1. 901-908.
- Poon, Linda, et al. “*South Korea Is Trying to Boost Its Birth Rate. It's Not Working.*” CityLab, 29 Sept. 2018, [www.citylab.com/life/2018/08/south-korea-needs-more-babies/565169/](http://www.citylab.com/life/2018/08/south-korea-needs-more-babies/565169/).
- Pratt, Laura A, et al. “*Antidepressant Use in Persons Aged 12 and Over: United States, 2005–2008.*” Centers for Disease Control and Prevention, 19 Oct. 2011, [www.cdc.gov/nchs/data/databriefs/db76.htm](http://www.cdc.gov/nchs/data/databriefs/db76.htm)
- Rodgers, John M. “*South Korea's Smartphone Obsession.*” The Diplomat, 27 Dec. 2017, [thediplomat.com/2017/12/south-koreas-smartphone-obsession/](http://thediplomat.com/2017/12/south-koreas-smartphone-obsession/).
- Se-Hoon Jeong, HyounGee Kim, Jung-Yoon Yum, Yoori Hwang,  
 “*What type of content are smartphone users addicted to?: SNS vs. games, Computers in Human Behavior,*” Volume 54, 2016, Pages 10-17,
- Sha, Feng et al. “*Suicide rates in China, 2004-2014: comparing data from two sample-based mortality surveillance systems*” BMC public health vol. 18,1 239. 13 Feb. 2018, doi:10.1186/s12889-018-5161-y
- Skye Gould, Lauren F Friedman. “*Something Startling Is Going on with Antidepressant Use around the World.*” Business Insider, 4 Feb. 2016, [www.businessinsider.com/countries-largest-antidepressant-drug-users-2016-2](http://www.businessinsider.com/countries-largest-antidepressant-drug-users-2016-2).
- Soo, Zen. Hong Kong Edition. South China Morning Post,” *China leads Asian consumption of technology*” 25 May 2016, [www.scmp.com/tech/china-tech/article/1945563/china-leads-asian-consumption-technology](http://www.scmp.com/tech/china-tech/article/1945563/china-leads-asian-consumption-technology).



“*Suicide Rising across the US* | VitalSigns | CDC.” Centers for Disease Control and Prevention, 7 June 2018, [www.cdc.gov/vitalsigns/suicide/](http://www.cdc.gov/vitalsigns/suicide/).

*THE COMMON SENSE CENSUS: MEDIA USE BY KIDS AGE ZERO TO EIGHT*. 2017, [cdn.cnn.com/cnn/2017/images/11/07/csm\\_zerotoeight\\_full.report.final.2017.pdf](http://cdn.cnn.com/cnn/2017/images/11/07/csm_zerotoeight_full.report.final.2017.pdf).

Thompson, Warren Simpson. *Population Problems*. 1st Ed. by Warren S. Thompson. New York : McGraw-Hill, 1930., 1930. EBSCOhost, [ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat03318a&AN=tamug.517095&site=eds-live](http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat03318a&AN=tamug.517095&site=eds-live).

“*Time Online Leads to Rise in Physical Ails*.” Korea JoongAng Daily, 1 Aug. 2015, [koreajoongangdaily.joins.com/news/article/article.aspx?aid=3007328](http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=3007328).

World health report 2000. “*Suicide rates (per 100,000), by gender, China (mainland, selected rural and urban areas\*)*, 1987-1999.” Geneva, World Health Organization, 2002.

Wu, Fei. *Suicide and Justice : A Chinese Perspective*. Wu Fei. London ; New York : Routledge, 2010., 2010. EBSCOhost, [ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat03318a&AN=tamug.3555847&site=eds-live](http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat03318a&AN=tamug.3555847&site=eds-live).

Zhao S., Qu G., Peng Z., Peng T. “*The sex ratio of suicide rates in China*.” *Crisis*. 1994;15:44–48.