# The Development of the Viennese Wirtshaus through the Commercialization of Veganism 

Bachelor Thesis for Obtaining the Degree

Bachelor of Science

International Management

Submitted to David Leonard, PhD

Nikola Konstantin Stupar

## Affidavit

I hereby affirm that this Bachelor's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed. The thesis was not submitted in the same or in a substantially similar version, not even partially, to another examination board and was not published elsewhere.
17.05.2023

Date


#### Abstract

With the help of a mixed-methods approach including a quantitative, longitudinal menu analysis of past and current Wirtshaus menus and a qualitative expert interview with the Austrian food critic Severin Corti, the aim of this thesis is to find out how the Viennese Wirtshaus culture has changed through the commercialization of veganism. While the menu analysis found a statistically significant increase in vegan dishes and a statistically significant decrease in beef dishes, the expert interview opened new questions and theories as to whether the broader cultural change of the Viennese Wirtshaus is driven by the commercialization of veganism. The conclusion is drawn that the Viennese gastronomy landscape is indeed being influenced by the rise of veganism, yet the cultural institution that is the Wirtshaus is developing due to other social, cultural, and economic factors.


## Table of Contents

Affidavit ..... 2
Abstract ..... 3
List of Tables ..... 6
List of Figures ..... 6
List of Abbreviations ..... 7
1 Introduction ..... 8
2 Literature Review ..... 9
2.1 Introduction of Literature Review ..... 9
2.2 Viennese Wirtshaus ..... 10
2.2.1 History and Development ..... 10
2.2.2 Culture and Society in the Viennese Wirtshaus ..... 13
2.2.3 Food Culture in the Viennese Wirtshaus. ..... 14
2.3 Veganism ..... 15
2.3.1 History and Development ..... 15
2.3.2 Veganism from a Social Aspect/ As a Social Phenomenon ..... 18
2.3.3 Veganism from an Ethical Aspect ..... 19
2.3.4 Veganism from an Environmental Aspect ..... 20
2.3.5 Veganism from a Health Aspect ..... 22
2.3.6 Veganism on a Global and Austrian Scale ..... 23
2.4 Commercialization ..... 24
2.4.1 Commercialization through Social Media and Influencer Marketing ..... 24
2.4.2 Commercialization of Food Culture ..... 25
2.4.3 Commercialization of Veganism ..... 27
3 Methodology ..... 29
3.1 Methodological Approach ..... 29
3.2 Sampling ..... 30
3.3 Data analysis ..... 31
3.4 Data Discussion ..... 33
4 Results and Discussion ..... 34
4.1 Results for Vegan Dishes ..... 35
4.2 Results for Vegetarian Dishes. ..... 37
4.3 Results for Beef Dishes ..... 39
4.4 Results for Pork Dishes ..... 41
4.5 Results for Poultry Dishes ..... 42
4.6 Results for Fish Dishes ..... 43
5 Conclusion ..... 45
Bibliography ..... 48
Appendices ..... 57
Appendix Interview ..... 57

## List of Tables

Table 1 Percentage of restaurants belonging to a specific price group ..... 34
List of Figures
Figure 1: Growth in Plant-based Categories Compared to Animal-based Categories

$\qquad$ ..... 18
Figure 2: Overall tone towards meat consumption in the Austrian newspaapers (Kronen
Zeitung, Kurier, Der Standard) ..... 22
Figure 3: Paired Samples T-Test for Vegan Dishes ..... 36
Figure 4: Paired Samples T-Test for Vegetarian Dishes ..... 38
Figure 5: Paired Samples T-Test for Beef Dishes ..... 40
Figure 6: Paired Samples T-Test for Pork Dishes ..... 41
Figure 7: Paired Samples T-Test for Poultry ..... 42
Figure 8: Paired Samples T-Test for Fish Dishes ..... 43

## List of Abbreviations

CO2...Carbon Dioxide<br>EU...European Union<br>FAO...Food and Agriculture Organization of the United Nations<br>IPA...Indian Pale Ale<br>NPD Group...National Purchase Diary Group (Formerly)<br>PBFA...Plant Based Foods Association<br>USA...United States of America<br>USD...United States Dollar<br>WHO...World Health Organization

## 1 Introduction

During the last decade, the food industry has been witnessing shifts and changes due to the rise of veganism, the practice of not eating or using animal products, including meat, milk, and all other animal related products. New products are entering the market, new restaurant concepts are evolving, and more and more people are opting for plant-based alternatives out of a variety of reasons (Vegan Society, 2023). In Vienna, a city famous for the Wiener Schnitzel and the Würstelstand, 42 restaurants officially offer only vegan dishes, while additional 53 also include vegetarian options in their menus (DerStandard, 2023). The aim of the thesis "The Development of the Viennese Wirtshaus through the Commercialization of Veganism" is to gain a deeper understanding of the Viennese gastronomy, in particular the Wirtshaus, its heritage, and its development in light of current food trends, as well as social and cultural changes within society.

As the Wirtshaus is not particularly known for its offer of vegan dishes and no prior research on this specific topic has been done, it will be interesting to see how the offer of dishes on Viennese Wirtshaus menus has changed over the course of time and if the rising trend of veganism has influenced that change. Furthermore, the following research is important as to see whether veganism, a concept embedded in various cultural and social norms across the world, has had an impact on the culture of the traditional Viennese Wirtshaus. Through a mixed-methods approach, including a quantitative and qualitative part, as well as the collected, filtered, and restated literature, the thesis aims to find an answer to the question "How is the Viennese Wirtshaus culture changing over time?"

The thesis will commence with the literature review that will depict and explain concepts and aspects of veganism and its commercialization, as well as give an insight on the Viennese Wirtshaus, its history and its cultural meaning. It will then present the methodological approach, analyze the results received from the conducted quantitative and qualitative research, and complete with a conclusion of the findings and an answer to the posed research question.

## 2 Literature Review

### 2.1 Introduction of Literature Review

Reading through the title of the thesis introduces the reader to two terms that seem not to fit together very well: namely, "Viennese Wirtshaus" and "Veganism". Even though one might not be familiar with the exact offer in restaurants that fall into the Wirtshaus category, it will be evident to the reader that, looking at it from a historical point of view, a Viennese Wirtshaus has not found its popularity by being a pioneer in vegan cuisine (Kos \& Spring, 2007).

This thesis, beginning with this literature review, intends to depict the impact of veganism through its commercialization on a global scale and its influence on the Viennese Wirtshaus gastronomy, especially the change in what is offered in Viennese restaurants today in response to the rising number of Austrians and tourists living on a vegan diet.

Additionally, an analysis of Viennese Wirtshaus menus will be conducted that will seek to find evidence in regard to the commercialization of veganism and its impact on the offerings in this particular type of restaurant. By comparing past menus to present menus, information on if and how much these have changed during the examined time period, will be gathered. Previous studies documenting restaurant menu analysis have shown that the menu sits at the core of a restaurant's strategy. Out of all the aspects, from reputation, over customer service, to interior decor, the menu is what ultimately convinces a customer to eat at a restaurant. Not only does it outline a restaurant's strategic marketing plan, but it also serves as a first impression for the consumer (McCall \& Lynn, 2008).

Although menu analysis have been broadly discussed in scientific papers, there has been drawback in previous research, as the attempt of incorporating all aspects of menu management, including planning, pricing, designing, and distributing, has not been achieved successfully (Ozedmir \& Caliskan, 2013). Nevertheless, a menu analysis is an important measure to better understand the supply and demand relationship between a restaurant and its customers, especially in regards to dietary shifts and food trends that include vegan and plant-based dining, as well as sustainable dining. As there has been a shift in consumer preferences toward plantbased diets, restaurants have taken the opportunity to incorporate vegan options to create a broader range of potential customers (Khachatryan, 2023).

### 2.2 Viennese Wirtshaus

As a place of sociability, the Viennese Wirtshaus established itself as a benchmark centuries ago, developing its own microcosm in the daily lives of many people. Famous for its wood-paneled walls, the classic Viennese meat-dishes, first and foremost the Wiener Schnitzel, the broad selection of regional wines and beers, as well as the owners that often acted as an important role while serving food and beverages and entertaining the guests, the Wirtshaus became a public place where many gathered not only to eat and drink, but to talk politics, humor themselves, and escape reality for a short moment (Kos \& Spring, 2007).

The term Wirtshaus itself is comprised of two different German words, namely the "Wirt", referring to the owner or host, and "Haus", the physical place that hosts the guests (Duden, 2020). Although different terms, including "Gasthaus" and "Lokal" in the German language share the same meaning, the thesis will mainly use the term Wirtshaus out of simplicity reasons.

### 2.2.1 History and Development

The Viennese cuisine finds its roots in the Middle Ages with a lot of different influences from many parts of the world, thus making it a fusion kitchen with a long history that spans for centuries.

While people with aristocratic descent had the privilege and the means of hunting, thus allowing them to base their diet on game, the majority of the population, living off regional products that they could harvest, mostly ate soups or mush made from grains and vegetables, making meat an exception for special occasions only (Pohanka, 2005).

Due to ongoing wars and famines, conserving food was crucial. Methods including vegetable fermentation and meat smoking became essential for survival, eventually becoming the vanguard of the beloved Viennese dish "Geselchtes mit Kraut und Knödel", smoked beef or pork with cabbage and dumplings (Pohanka, 2005).

After the exploration of the Americas, new products including potatoes, tomatoes, peppers, and cacao were introduced and have ever since been a vital part in the Viennese cuisine (Vocelka et al., 2003).

Rice dishes, including risotto and risipsi, as well as Mediterranean ingredients including olive oil, parmesan cheese, and herbs were adopted from the Italian cuisine throughout the $17^{\text {th }}$ century.

During the last third of the $18^{\text {th }}$ century the term "Wiener Küche", which translates to Viennese kitchen, meaning the Viennese cuisine, first appeared in a cookbook, making it the only cuisine to date that is named after a city (Haslinger, 2018).

The political, social, and technical changes in the 19th century also left their mark on the Viennese cuisine. The rise of parts of the bourgeoisie was reflected in food culture. Cookbook production experienced its first flowering, and cookbooks were increasingly aimed at a middle-class audience. Food that had long been the preserve of the aristocracy now reached bourgeois kitchens. Viennese cuisine was rightly described as "bourgeois court cuisine" or "refined peasant cuisine" (Erben, 1987). The typical menu of the bourgeois cuisine consisted of four to five courses: Soup, beef, vegetables with saddle, meaning fried or baked meat, fish or sausage, pastry and sometimes still poultry, which enjoyed particular popularity in the Biedermeier era.

In the second half of the 19th century, the vegetarian movement had arrived in Vienna. In 1881, the Vienna Vegetarian Association was founded, at that time still under the name "Verein für naturgemäße Lebensweise", which translates to "Association for Natural Way of Life" (Kos \& Spring, 2007). The members of the association pledged to abstain from food derived from dead animals, alcohol, and other products harmful to health, and to resort only to natural healing methods.

The motivation for the vegetarian diet was on the one hand of ethical consideration, on the other hand the health aspect played a role. Meat consumption, like alcohol, was often blamed for civilization-related diseases, which is why vegetarian restaurants did not serve alcohol as a rule. The beverage menus included tea, malt coffee and fruit juices. These pubs were therefore popular with social democratic activists such as Viktor Adler, who recognized a social problem in alcohol consumption (Kos \& Spring, 2007).

It was mainly members of the middle class who voluntarily turned to vegetarianism, while for the low earning working class vegetarian pubs offered a cheap alternative to high meat prices around 1900 (Kos \& Spring, 2007).

The first half of the $20^{\text {th }}$ century was marked by two devastating wars in which food shortages were common and people often relied on meat substitutes. Soup was propagated from soup cubes, sausage skin or fish bones. Moreover, the meat of animals that had not been on Central European tables for centuries, such as crows, jackdaws, and magpies, was eaten again (Pfoser \& Weigl, 2013).

During the second half of the $20^{\text {th }}$ century Viennese Wirtshäuser slowly started disappearing, making space for banks, post offices, pizzerias, Chinese restaurants, and Doner Kebab joints (Haslinger, 2018).

In some parts of Vienna so-called "Edelbeisl", Viennese Wirtshäuser with a decadent touch, have established. However, during the last two decades traditional Viennese Wirtshäuser including Reinthaler, Griechenbeisl, Ofenloch, Grünauer, Pfudl, and Zum Renner, have been taken over and revitalized, while keeping old traditions alive.

The latter cook Viennese cuisine, hearty, as well as light, while the Edelbeisl puts creative twists on traditional recipes (Haslinger, 2018).

The thesis will narrow down its research on the Viennese Wirtshaus by only taking the last decade into consideration. The history and development of the Wirtshaus in its different stages and centuries is mentioned to better understand the situation it finds itself in now.

### 2.2.2 Culture and Society in the Viennese Wirtshaus

The terms culture and society must be predefined and narrowed down before they can be projected onto the Viennese Wirtshaus. Although both terms can be interpreted in various ways, for this thesis the term culture will be defined as "...the set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next" (Matsumoto, 1996, p. 16) and the term society, a group of people living in a particular social system together (Cambridge Dictionary, 2019).

The Viennese Wirtshaus has both cultural and societal aspects to itself, as is has developed to become a place where people, regardless of their ethnical background, gender, and age meet to eat, drink, and communicate with one another (Langer, 1996). As it is described above, culture is predominant in a Wirtshaus, as the Wirtshaus is a melting pot of different values, beliefs, and ideas that is spread throughout the Viennese society.

Due to these differences, the Wirtshaus often became a place to host debates and a stage for promoting social and political issues (Kos \& Spring, 2007).

The German term "Wirtshauskultur" describes the special form of culture in such establishments. It represents a specific attitude and style of conversation of the guests and the hosts, where the hosts acted as a reliable contact person, while the guests spilled their desires, thoughts, and secrets (Bina, 2000).

### 2.2.3 Food Culture in the Viennese Wirtshaus

On a broader scale, the term "Food Culture" includes the practices and beliefs, as well as the networks and institutions surrounding the production and the consumption of food (Long, 2015). In the case of the Viennese Wirtshaus, food culture is not only a substantial part of the restaurants itself, but it also reflects the city and the Viennese people and their mentality on an international level.

Food culture is embedded into various aspects of life, including identity, heritage, ethnicity, tradition, as well as community and health (Fox, 2016). Just as the term culture was described above, food culture can also be communicated from one generation to another to keep traditions that range from the interior of a Viennese Wirtshaus to the preparation of dishes, alive.

On an individual level, food plays an important role in each person's own identity. Preparing, sharing, and consuming food are physical as well as symbolic actions that connect people to their own histories. Many people find that eating dishes they grew up with takes them back to those memories, creating a positive environment (Fox, 2016).

On a societal level, food is a way to connect to others in a community, regardless of them being strangers or close family members. Eating in a Wirtshaus can boost social bonding and enhance feelings of well-being. People who frequently visit the Wirtshaus become a Stammgast, a regular.

Sometimes such regulars come to the Wirtshaus by themselves, expecting to meet someone they know there, or to have a glass of wine with the hosts, thereby extending their living room to a open and social space (Haslinger, 2018).

On a gastronomic level, the Viennese Wirtshaus distinguishes itself from other restaurants by its offerings that mainly consist of hearty meat dishes. Although the Wiener schnitzel might be the most famous export from the Wirtshaus, dishes including the Zwiebelrostbraten, a roast beef with fried onions, and the Schweinsbraten, a slow roast pork served with sauerkraut and dumplings, have been crucial elements of a Wirtshaus menu.

Furthermore, the Wirtshaus is home to a variety of offal dishes, including fried and roasted liver, tongue, beef tripe, and Beuschel, a Viennese delicacy in the form of a ragout made from lung, heart, and kidneys, served with cream sauce and dumplings (Plachutta \& Plachutta, 2008). In addition, the Wirtshaus will only serve regional wines and traditionally produced beers, including Helles, Zwickl, Dunkles, and Gemischtes (Kos \& Spring, 2007), compared to other restaurants in Vienna that attract customers with their rich variety of international wines and micro-brewed IPAs.

### 2.3 Veganism

According to the Vegan Society, an organization founded in the United Kingdom in 1944, veganism is "a lifestyle that avoids all animal foods such as meat, dairy, eggs and honey..." (2023) and as "a philosophy and way of living which seeks to exclude as far as possible and practicable - all forms of exploitation of, and cruelty to, animals for food, clothing or any other purposes..." (2023). This thesis will take both definitions as guidelines when analyzing the choice of living on a vegan diet and additionally reflect on other aspects, namely social, ethical, environmental, and health, that influence the choice of becoming and being vegan.

### 2.3.1 History and Development

Dating back to Victorian programs of religious reform, veganism and vegetarianism are some of the oldest alternative practices to meat-centered Western food cultures (Klocke \& Maurer, 2003).

Tracing back even further, it was the Greek philosopher Pythagoras who entailed the abstention from eating meat and teaching his students that it was not justifiable to kill any animal, as this act would diminish the human itself (Campbell, 2014).

Although several proponents throughout the second millennial repeatedly advocated vegetarianism and veganism, it was Donald Watson who first founded the Vegan Society, pathing the way for Catherine Nimmo and Rubin Abramovitz who followed in the United States in 1948 (The Vegan Society, 2023).

During 1960s and the 1970s a vegetarian food movement that focused on dietary and environmental issues as well as mistrust of food producers in the United Stated evolved, eventually leading to a broader audience that seemed accepting and interested in the topic. The second half of the $20^{\text {th }}$ century saw a lot of research done in the field that argued that vegetarian diets were beneficial for not only one's health, but also for the environment (Sexton et al., 2022).

Throughout the 2010s, the vegan lifestyle gained popularity. Chain restaurants started to indicate vegan options on their menus, and supermarkets expanded their assortment of processed vegan food (The Vegan Society, 2023). This shift can be traced back to globalization, which is described by the Peterson Institute for International Economics as "...the growing interdependence of the world's economies, cultures, and populations, brought about by cross-border trade in goods and services, technology..." (2022).

Through international trade, it has become possible for people to buy a variety of products from around the world in the same store. The avocado for instance, a highly popular fruit that, due to the climate, cannot grow in Austria, has seen a huge rise in popularity throughout the last years. In 2021, the import of 12600 tons of avocados into the Austrian market was valued at just above USD 49 million (Freshela, 2023).

The avocado, in the case of this thesis, represents all sorts of vegetables and fruits that, due to globalization, have found their way into the Austrian food market, broadening the access to plant-based products that were unknown or very hard to get hand on before. Although buying products from across the world does not necessarily fit to the attitude or moral of a vegan, who is trying to reduce carbon emissions, choosing to buy fruits and vegetables instead of animal-based products, is still considered the lesser evil. In addition to fresh, exotic produce entering the Austrian food market, other plant-based substitutes that are products from companies like Beyond Meat and Impossible Foods have quickly found their way into Austrian fridges through globalized trade (PBFA, 2018).

In a forecast of global market trends, the Economist, an internationally acclaimed newspaper, predicted that 2019 would be the year when veganism becomes more popular, which led to international business and cultural commentary on how to "veganize" existing companies (Parker, 2018). In fact, 2018 already showed the massive economic potential of the vegan industry when the US retail market for plant-based foods grew by $20 \%$ to over three billion dollars in sales (PBFA, 2018).

The economic growth of vegan products can be directly linked to a rise in people living on a vegan diet. According to a poll commissioned by the Vegetarian Resource Group in 2006 2.3\% of Americans were vegetarian and 1.4\% were vegan, while in 2022, $3 \%$ of the US population was vegetarian and $3 \%$ was vegan (2022). Furthermore, the International Lifestyle Survey found that 3.4\% of Europeans indicated they live on a vegan diet (Euromonitor, 2021).

In addition to vegans purchasing plant-based products, statistics show that the growth in the market is also due to people that do not follow a vegan or vegetarian diet. Through the gathering of data on the consumption of plant-based foods in the US, the NPD Group, a leading global information company, suggests that there is significant growth in figures by a variety of consumer types (2023). A recent survey conducted by the NPD Group found that $14 \%$ of consumers, over 40 million people, in the US regularly use food items free from animal products, including almond milk, vegetable burgers, and tofu. From these $14 \%$, over $80 \%$ do not consider themselves as vegans or vegetarians (Webber, 2020). Other sources even suggest that almost one third of the US population is flexitarian (Friedrich, 2019).



Source: Nielsen custom defined data set, xAOC + WFM. 52 weeks ending $8 / 11 / 18$
nielsen
Figure 1: Growth in Plant-based Categories Compared to Animal-based Categories

Furthermore, as Figure 1 indicates above, the individual categories of plant-based products are rapidly overtaking the sales growth of animal-based products, reaching from plant-based creamer and yoghurt to plant-based meat and butter. Although the consumption of plant-based foods is spread throughout the entire population, especially households with an income above USD 70000, current college students and college graduate households, as well as people in the age groups 30-34 and 5564 tend to buy these products (Cameron \& O'Neill, 2019). These statistics could lead to the assumption that people with a higher educational level, that is linked to a higher paying job, on the one hand are more aware of the benefits of plant-based products, and on the other also have the monetary means to purchase them.

### 2.3.2 Veganism from a Social Aspect/ As a Social Phenomenon

Throughout the past decades, people have been influenced by different factors that made them choose to live on a vegan diet. In the past, veganism has often been conceived as a trending lifestyle movement, but many people agree that it is actually a piece of a much bigger social movement that focuses on the value alignment choice within social and political structures (Ahlgrim, 2018). A social movement can be described as movement that exists outside of institutional structures with the goal to mobilize through the unification of participants based on shared beliefs (Packwood Freeman, 2015).

In this case, veganism could be seen as the result of numerous incidences related to ethical and environmental disparities or as a response to global social failure.

Veganism can also be seen as an anchor for one's own persona. Through the choice of food, people can often better express who they are and what they believe in, thereby constructing a personal profile (Giddens, 1991). Vegan identity does not only reflect shared beliefs and politics of people (Greenebaum, 2016), but also enables the establishment of local communities by sharing recipes and providing guidance about adopting vegan lifestyles (Christopher et al., 2018).

Veganism has also broadly been advertised in the media, from the Veganary, a charity motivating people to eat vegan in January (Miceli, 2018) to the presence on many TV shows and social media channels, which will be discussed in a later chapter.

### 2.3.3 Veganism from an Ethical Aspect

Choosing not to eat meat can be an element of religious practices, Buddhism being the most famous example (Fraser, 2003), but being vegetarian or vegan can also be grounded in non-religious motivations (Whorton, 1994). Studies have found an assortment of non-religious motivations for people to swap their meat-based diet for a meat-free diet (Beardsworth \& Keil, 1992).

From an ethical perspective, the predominant factors for choosing to live on a vegan diet are animal cruelty and the environment. As the next subsection is devoted to the topic of veganism and the environment, this section will disregard the factor.

Ethical vegans, who consider different motivations for avoiding meat consumption than health or environmental vegans, see their diet as a moral obligation not to harm animals for food and other reasons. Therefore, Lindeman and Sirelius (2001, p.182) have suggested that ethical veganism is widely linked to humanistic commitments that involve personal sacrifice in order to prevent animal cruelty.

According to a survey conducted by Veggly, a dating website designed for vegans and vegetarians, with 8500 participants from across the world, almost $90 \%$ of the respondents indicated that animal welfare was a key reason for adopting a vegan diet (2021). Alex Felipelli, founder of Veggly, commented on the research findings, stating that he was pleased to see animal welfare in first place as "...veganism ultimately gives a voice to the voiceless".

### 2.3.3.1 Animal Cruelty in Austrian Meat Market

Although it must be stated that the Austrian meat market, on a global scale, is far more advanced in terms of livestock keeping, animal right activists still complain about and protest against the current standards set by the Austrian government. According to Four Paws, an Austrian animal welfare organization, more than $97 \%$ of produced pork meat derives from conventional livestock breeding, where pigs up 110 kilos are kept on 0.7 square meters (2021). Furthermore, a recent article from February published in the Austrian newspaper Der Standard detailed the reality of an Austrian chicken farm, where livestock was kicked and skidded to death (2023).

### 2.3.4 Veganism from an Environmental Aspect

Globally, due to increasing average individual incomes and population growth, the consumption of different meat products is still rising, while having major negative effects on the environment. The meat industry clears forests to make pasture and arable land to supply livestock feed, while the raising of the latter, places a significant burden on some regions' limited water supply and is also a substantial contributor to greenhouse gases (Godfray et al., 2018).

The production, processing, and consumption activities add up to $30 \%$ of human-caused climate emissions and additionally exacerbate biodiversity degradation (Clark et al., 2019). In a report published by the Austrian Ministry of Climate Action and Environment, statistics show that, on a national level, the sector "Food and animal feed production" account for nine percent of the country's material footprint, only ranking behind the sectors "Construction" and "Mining and quarrying" (2020). According to Poore and Nemecek there is a significant difference in climate impacts between animal-based and plant-based food.

Additionally, there may potentially be a 100-fold difference in emissions between a meat-based and plant-based diet (2018). Therefore, dietary choices matter immensely for climate change related considerations with activists and researchers calling for a reduction in meat and dairy consumption and urging a shift to a planetary health diet (Willet et al., 2019). Poore even went as far as to say that "...a vegan diet is probably the single biggest way to reduce your impact on planet Earth, not just greenhouse gases, but global acidification, eutrophication, land use and water use" (Petter, 2018). On the other hand, it is also important to keep in mind that although empirical findings have confirmed that abstaining from meat improves the climate-friendliness of a diet on average, it does not guarantee a positive impact in general, as high-protein foods, regardless whether vegan or not, have high carbon footprints that result in high climatic impact.

In spite of people living on a vegan diet or not, the topic received a lot of attention during the last years, which can be reflected in the media coverage about meat consumption and alternative protein sources. Austrian newspapers published 21 articles on meat consumption in the year 2000 in comparison to 153 articles in 2019. The high increase is primarily ascribed to the higher level of reporting on environmental issues with a focus on meat consumption and its effect on climate change, as well as strategies to overcome this development (Hundscheid et al., 2022).

Furthermore, as shown in Figure 2, the increase in articles is mostly due to the increase in articles with a negative tone towards meat consumption, while the articles with a positive tone remained low.


Figure 2: Overall tone towards meat consumption in the Austrian newspapers (Kronen Zeitung, Kurier, Der Standard)

### 2.3.5 Veganism from a Health Aspect

As previously discussed, the choice of a dietary change can be influenced by different factors (Beardsworth \& Keil, 1993) that reach from personal motives to moral standards, the health aspect belonging to the former.

In addition to nutritional decisions, health-conscious vegans frequently attain their personal health goals through a variety of lifestyle choices (Hoek et al., 2004) including being more active physically and drinking and smoking less (Appleby et al., 1998). Therefore, a diet that is predominantly plant-based is advocated as part of a healthy lifestyle (Willet et al., 2019).

Although the elimination of all animal products could result in an increased risk of particular nutritional deficiencies, including calcium and omega-3, the benefits that come with a vegan diet outweigh the downsides (Craig, 2009). A vegan diet seems advantageous for increasing the intake of protective nutrients while reducing the intake of dietary elements linked to various chronic illnesses (Dewell et al., 2008).

According to a report initiated by the World Health Organization and the Food and Agriculture Organization, the association of cancer risk reduction with a high consumption of fruit and vegetables was assessed as probable or possible (Craig, 2009). Furthermore, the fiber, folic acid, and anti-oxidants contained in fruit and vegetables are associated with lower blood cholesterol concentrations, a lower incidence of having a stroke, and a lower risk of death caused by a stroke (Alissa \& Ferns, 2015).

### 2.3.5.1 Veganism and Mental Health

Depression, which results from a complicated interaction of social, psychological, and biological factors, is the fourth leading cause of disease burden, affecting 4.7\% of people in the world. As mental health disorders have a critical impact on personal health, society, and the global economy, it is important to understand potential preventative strategies to soothe the consequences of such (WHO, 2020).

As this field of research is relatively new and evidence is limited, a review from 2022 by Jain et al also revealed rather conflicting evidence with one study finding that vegan diets do improve depression indicators, and on the other hand, two crosssectional studies showing that vegan diets can be associated with depression (Norwood et al., 2019).

### 2.3.6 Veganism on a Global and Austrian Scale

Although it is difficult to give an exact answer as sources vary from one another, Statista states that in 2021 an estimated 79 million people globally identified as vegans. On a national level, the amount of vegetarians and vegans has increased from six to eleven percent from 2017 to 2021, 2 percent living fully vegan. Nevertheless, Austria, with 99 kilos per year, had the highest meat consumption per person in the EU region in 2020 (Statista, 2021).

While the global vegan food market size was at around USD 23 billion in 2020, it is projected to grow to over USD 60 billion by 2028.

According to market research done by Fortune Business Insights, it is anticipated that increased customer demand for dairy and meat alternatives, especially through the younger generation, will accelerate product adaption and the launch of new products in the market. In the US, for example, millennials account for $40 \%$ of the total consumers (2022).

This statistic endorses the assumption of the predicted growth of the vegan food market in the future.

### 2.4 Commercialization

The Cambridge Dictionary defines the term commercialization as "the organization of something in a way intended to make a profit" (2019). From the product's early introduction to its mass production and adoption, commercialization is divided into several stages, including distribution, marketing, sales, and customer service, until it eventually seizes commercial success.

This chapter will explore how food cultures, in general, and veganism, in particular, have been commercialized throughout the years, with particular focus on social media and influencer marketing and the development of how people perceive veganism through these types of advertisement. The aspects of production and distribution will not be examined in detail, as they do not play an important factor in this thesis.

### 2.4.1 Commercialization through Social Media and Influencer Marketing

Social media platforms like Facebook, Instagram, YouTube, and more recently, TikTok have established themselves as a stage for marketing and selling a variety of products within the last decade. Many users have achieved online fame, expressed by a considerable number of followers, through appealing social media profiles. Through a strong online identity that is created by sharing interests and opinions, social media stars, also referred to as influencers, (Gaenssle \& Budzinski, 2020) have a strong impact on their followers' decision-making. As a result, marketers frequently approach influencers, asking them to promote goods, companies, organizations, or ideas on their social media platforms.

This form of marketing is known as influencer marketing (De Veirman et al., 2017) and has become a commonly used strategy. Today, it is estimated that the value of the influencer market is worth roughly USD 15 billion (Business Intelligence, 2019).

There are several different content strategies in influencer marketing and it is important for the influencer to decide on how they want to present themselves to their audience. As influencer marketing is advancing and strategies are evolving, marketers particularly seek influencers who speak directly to their target audience and develop expertise in a certain sector, instead of concentrating on influencers with a wide audience (Hudders et al., 2021). This shift is linked to a decrease in trust due to social media stars buying fake followers. Studies have shown that influencers are highly concerned to establish an intimate bond (Abidin \& Thompson, 2012) and to create a desirable image (Duffy \& Kang, 2020) in order to build a dependable relationship with their followers.

Although there are a lot of pros to influencer marketing, there are also risks imposed by using social media influencers as they can attract negative publicity, which could directly affect the brand's reputation they are representing (Hudders et al., 2021).

Nevertheless, influencer marketing will further shape the future for commercial purposes and, as studies show, will increasingly be used by the public sector to influence public opinion (Hudders et al., 2021).

### 2.4.2 Commercialization of Food Culture

As defined earlier, the term "Food Culture" includes the practices and beliefs, as well as the networks and institutions surrounding the production and the consumption of food (Long, 2015). Through social media, people are exposed to different food cultures every day. Food representations in the form of photos through various channels, but especially Instagram, have created a better understanding of the diverse global food production, distribution, and consumption. Moreover, food photography websites and food blogs have been produced as a result of pop culture's fascination with food aesthetics and the social and cultural factors that shape it (Ranteallo \& Andilolo, 2017).

With more than 300 million photos, food is Instagram's second-most popular topic, ranked only behind selfies. People are encouraged by this tendency to glamorize the food they are preparing or consuming by uploading such images online (Amato et al., 2017). 27\% of Instagram users share food content, while almost 40\% view the content shared (Taher, 2019).

Due to this rising interest in food and its preparation and heritage throughout online media, new trends tend to develop constantly, bringing recipes from around the world onto a single device. Users can now watch Italian grandmothers prepare handmade pasta on one profile, and learn how to serve a traditional Kaiseki on another (Kostyo, 2023).

Culinary tourism, although older in its existence than social media, has also established itself as a growing trend because of people that promote regional cuisines while traveling on social media.

The term describes food as a subject for tourism, urging people to travel to new destinations for the sake of the food that is offered (Long, 2015). According to Le Cordon Bleu, a prestigious culinary school, celebrity chefs, from Anthony Bourdain to Gordon Ramsay, have influenced the increase of culinary tourism (2016). People are drawn to eating dishes they see on social media and on television. By sharing meals when traveling on different social media sites, it persuades friends and followers to visit the same location in the future (Tan, 2016).

Austria, and Vienna in particular through its traditional coffeehouses, its wine that is grown at the outskirts of the city, and its Wirtshauskultur, has become a popular destination for culinary tourism. The supply of food walking, the events hosted around food and beverages, as well as the diversification of cuisines are all indicators that the city is looking to become more attractive when it comes to dining experiences (Statista, 2022).

### 2.4.2.1 Digital Food Culture

Today, the entire lifecycle of food, from production and distribution to consumption and representation, is influenced by digital technologies. While robots and artificial intelligence help monitor crop conditions and livestock health (Saiz-Rubio \& RoviraMás, 2020), YouTubers share their recipes and influencers detail local restaurant scenes via Instagram and TikTok (Atkins, 2021).

Since the introduction of personal computing, digital media have presented a variety of new possibilities for both representing food cultures and producing content. People use online applications to show where they eat, rank and rate their food, share dietary and cooking practices, engage in food activism, and connect with people who share similar dietary beliefs (Lupton \& Feldman, 2020).

### 2.4.3 Commercialization of Veganism

As defined earlier, veganism is a lifestyle choice and movement that is becoming increasingly popular, especially among millennials, who are drawn to social media in their everyday life (Horn et al., 2022). As a growing number of food bloggers and influencers publicly endorse their vegan diet to an audience of several million followers, Phua et al. analyzed that such advertisement can motivate the consumers to improve or maintain their quality of life by being health conscious (2020). Furthermore, they found out that more than 100 million Instragram posts have been associated with hashtags that relate to veganism, including \#vegan, \#veganism, and \#veganfood.

A survey by Horn et al. that focused on a person's motivation and influence for following a vegan diet also showed that more than two thirds of the respondents answered positively when being asked if they followed vegan food accounts or influencers (2022). This can lead to the assumption that veganism and social media are interrelated.

Although veganism has become a trend and more people are adopting the diet every day, not everyone seems to be in accordance with the inclusivity achieved through it (Sexton et al., 2022). A dilemma unfolds between critics that warn against the increasing adoption of health veganism as the commercial path through which big corporations could increase prices on vegan products targeted at wealthier people, thereby neutralizing the movement's anti-establishment goal of a more ethical and sustainable togetherness and resulting in a world of "corporate veganism" (White, 2018).

Nevertheless, the plant-based food market that ranges from startups to the world's largest meat companies is growing, from plant-based meat, over plant based cheese, to plant-based seafood, protein bars, and ready-to-drink beverages (Ignaszewski, 2022). Parallel to the market growth, food trends, including seaganism and clean eating, will extend and expand themselves throughout 2023 (Hunt, 2023). Furthermore, the challenge of veganizing recipes to adapt them into culinary repertoires will follow chefs, amateur cooks, as well as researchers and companies on a global level in 2023 (Rützler \& Reiter, 2023).

On a national level, the city of Vienna announced their plans of becoming carbon neutral by 2040, with urban farming and sustainable agriculture playing a major role in making it happen.

The advantages are most apparent in Vienna's restaurants where the typical meatheavy dishes associated with the city are being replaced with menus focused on fresh and local ingredients (Ortile, 2023). According to the Vegane Gesellschaft, the Austrian branch of the global Vegan Society, Vienna offers over 250 restaurants, coffee shops, bakeries, and ice cream parlors that offer vegan options and additional 65 locations that are fully vegan (2023).

Furthermore, Vienna is home to Tian, a vegetarian Michelin starred restaurant that is among the top three vegetarian restaurants in Europe, and the top five of the world (Tian, 2023).

## 3 Methodology

As this thesis will make use of a mixed method approach, using both quantitative and qualitative research (Creswell, 2014), it is important for the following methodology section to depict the exact steps that were taken in the process of finding the data that were used to support the thesis. Furthermore, this section will explain what specific aspects of the data gathered will be analyzed and define the approach for the evaluation of the data.

### 3.1 Methodological Approach

The quantitative approach of the methodology section is supposed to support whether the commercialization of veganism has had an impact on the Wirtshaus, while the qualitative part is supposed to help and answer why and how the Wirtshaus has changed in regard to veganism. While the quantitative part is a longitudinal study (Caruana et al., 2015) that will compare and analyze data from old and current restaurant menus, the qualitative part will be a one-on-one interview with the Austrian food critic Severin Corti.

Historically, menu analyses have been used in prior research to examine customers' food choices, as such models enable a systematic evaluation of individual as well as collective menu items by comparing each item or group of items based on pre-selected criteria (Taylor \& Brown, 2007).

Holmes et al. examined the effect of different menu designs for children's dishes on total calories selected by families by making use of a longitudinal study approach (2013). This method was also used by Scourboutakos and L'Abbé while researching the changes in sodium levels in chain restaurant foods in Canada (2014) and by Min and Min's research on measuring the service performances of fast-food restaurant franchises in the USA (2011).

Furthermore, the research article by Shani and DiPietro discusses how vegetarians have impacted the foodservice industry in general and the menu development in restaurants specifically.

It analyzes the needs of vegetarians when dining out and rebuts the assumption that the vegetarian market and gastronomy is simplistic and homogenous (2007).

### 3.2 Sampling

The first step in the process of gathering the data, menus from Viennese Wirtshäuser, was to define a population. As there are dozens of restaurants that fall into the category of a Viennese Wirtshaus, and several websites, including TripAdvisor, Thefork, Falter, and the Michelin Guide, that list such restaurants, it was decided to use Google Maps as a reference for creating the population. By using the term "Wirtshaus" on the search engine's map of Vienna, a selection of 129 restaurants was generated. Although the list created might not include all Wirtshäuser in Vienna, it was decided that this number would be sufficient as to represent the entire Viennese Wirtshaus sector. At this point, it must be stated that there is no source that lists all restaurant that fall into this category. The use of Google Maps as a source for the examined population was chosen, as it was more precise in the filtering of what a Wirtshaus is than the other platforms, namely a typical, Viennese restaurant that offers regional, traditional dishes and local wines and beers.

After defining the complete set, an excel spreadsheet was created that included the name, address, price range, and Google rating of all 129 restaurants. The price range was included, as the initial idea was to find restaurant menus from three price categories ( $\$$ Wirtshaus overall, but to see if there is a difference in offerings when dining at a less expensive and a more expensive Wirtshaus. However, this aspect will no longer be of relevance for this particular research, as the number of menus received through the data gathering was not sufficient to analyze such differences.

The next step in the process of gathering the data was to contact the restaurants included in the population in order to create a sample of initially 32 restaurants, roughly one quarter of the entire set.

Throughout a two and a half month time period, all restaurants were contacted via phone, resulting in three rounds of calls, as some did not pick up the first time, and two rounds of email reminders, when the restaurants had menus that they were willing to share, but had forgotten to do so. Most of the calls followed the same procedure: an introduction of who I am, an explanation of why I am calling, and a request of old menus for the purpose of this research.

The received responses varied from people being very engaging and sharing the menus, over people having old menus, but not wanting to share them, to people not having old menus due to various reasons, including re-openings by new owners, data loss, or overwriting. This part of the data collection was also the most challenging, as the lack of old menus was not expected to be as high as it turned out. Ultimately, 15 restaurants shared over 50 menus from different years. Additionally, one old menu from a restaurant was found in the subcategory "Speisekarten", which translates to menus, of photos on Google Maps, resulting in 16 restaurants with old menus from the years 2003 to 2018.

As some restaurants supplied menus from several years, a mode had to be found, resulting in 2017 being the year that would be compared to the current menu from 2023. If a restaurant did not supply a menu from 2017, either the menu closest to 2017 was chosen, or, as for three cases, the only menu that had been supplied was considered.

This process ultimately led to the sample of 16 restaurants, supplying eleven menus from 2017, one menu from 2010, one menu from 2014, two menus from 2015, and one menu from 2018, to be further compared and analyzed.

### 3.3 Data analysis

Although several different aspects of a menu, including food costs, contribution margin, and product mix (Taylor \& Brown, 2007), can be analyzed, this thesis will consider the numerical availability or offer of dishes belonging to a specific food group.

As a typical restaurant menu consists of starters, main dishes, and desserts, it was decided that for the purpose of this thesis, only main dishes would be considered for the following analysis. Starters, that often include salads which are and always have been mainly vegan or vegetarian, could delude the results.

Furthermore, this decision was also reasoned with the explanation that people, when eating at a restaurant, would most likely order a main dish, as the purpose for eating out is not to order a small salad, but to eat a full meal.

The next step was to separate the offer of main dishes into six categories, namely vegan, vegetarian, beef, pork, poultry, and fish. With that in mind, the analysis of dishes from different groups in the available menus began. Both, the old and the current main dishes from each of the 16 restaurants were counted and recorded in the excel sheet. Thereafter, the number of dishes of a particular group in a particular menu was set in relation to the total amount of all dishes from the same menu, calculating the percentage of one dish group. This resulted in twelve different categories, namely the percentages of all six main dish groups in both the old and the new menus.

These numbers were transferred onto the statistical program Jamovi where they were analyzed with the use of a paired samples t-test by dragging the numerical value of a dish group from both the old and the new menu of the same restaurant into the paired variables box. The next step in the process was opting for either a one-tailed or a two-tailed test, the prior indicating that a valid assumption for an increase or decrease in the dish group was available or logically comprehensible.

The one-tailed test was only carried out for the groups "Vegan" and "Beef", as the literature review indicated that there could have been a specific change in demand for these over the last years, namely a respective increase and decrease. Given the lack of reasoned expectations for the other dish types, all other tests were performed as two-tailed comparisons.

To guarantee the legitimacy of the paired samples t-test, the normality test, also referred to as the Shapiro-Wilk test was executed. As a low p-value of the normality test would suggest a violation of the assumption of normality, it had to be greater than 0.05, in order for the Student's t-test to be legitimate.

If the $p$-value of the normality test was below that limit, the Wilcoxon rank test was chosen. For both the Student's t-test, as well as the Wilcoxon rank test, a p-value under 0.05 would indicate a statistically significant result. By making use of descriptive statistics, the calculated mean of the group in question was evaluated and assisted in analyzing whether the total amount of dishes from that group increased or decreased. The downloaded results, shown in the section below, will help answer the thesis's research questions.

### 3.4 Data Discussion

After the data sampling and analysis, the qualitative part of the thesis, an interview with Severin Corti, the Austrian food critic, journalist for the Viennese daily DerStandard and former chef, was conceptualized and conducted via a recorded 30-minute phone call. The contact to Severin Corti was established prior to the writing process of the thesis, with the intended goal of interpreting the findings of the menu analysis, as well as to get a deeper insight and understanding of the Viennese Wirtshaus, its history and development, from the perspective of an industry expert.

The interview questions were based on the content of the literature review, as well as the results of the data analysis, and included Corti's personal opinion on veganism and the change in the Viennese Wirtshaus and the Viennese gastronomy landscape, as well as his professional judgment on why specific developments, including the rise of veganism and the change in menu offerings, have taken place. Furthermore, he gave a brief outlook on the future of the Wirtshaus and its potential changes in menu offerings, as well as his thoughts on the Wirtshaus in its role as a cultural institution.

At this point it must also be stated that Severin Corti gave consent to the use of his name and the information he provided in the recorded call for the purpose of this thesis.

## 4 Results and Discussion

The following section will analyze the results for the six different dish groups and evaluate if these results can be extrapolated and generalized onto a bigger population. Although it was planned to make use of stratified sampling by analyzing a representative amount of menus belonging to every price category (\$, \$\$, \$\$$\$ \$ \$ / \$ \$ \$)$, the number of menus received through data gathering was not sufficient to do so. Therefore, the table below compares the sample to the population by depicting the percentage of restaurants from the three different price categories in order to see whether the sample is representative. The percentages were calculated by dividing the number of restaurants belonging to a price category by the entire number of restaurants.

Figure 3 shows that the sample is slightly skewed towards the middle-priced (\$\$) restaurants. Therefore, the generalization of results from the menu analysis will be restricted to the category of middle-priced restaurants. As for this specific category, the sample is appropriate to project the results of it onto the entire population.

| Wirtshaus | $\$$ | $\$ \$$ | $\$ \$-\$ \$ \$ / \$ \$ \$$ | NO PRICE |
| :---: | :---: | :---: | :---: | :---: |
| Population | $30(23 \%)$ | $77(60 \%)$ | $18(14 \%)$ | $4(3 \%)$ |
| Expected <br> Sample | $3.68(23 \%)$ | $9.6(60 \%)$ | $2.24(14 \%)$ | $0.48(3 \%)$ |
| Sample | $3(18.75 \%)$ | $12(75 \%)$ | $1(6.25 \%)$ | $0(0 \%)$ |

Table 1: Percentage of restaurants belonging to a specific price group

Regarding the price categories, restaurants with a one-dollar sign (\$) indicate an inexpensive dine-out, usually \$10 and under, restaurants with a two-dollar sign (\$) are moderately expensive, ranging between $\$ 10$ and $\$ 25$, and meals at a restaurant with a two to three or three-dollar sign (\$\$-\$\$\$/\$\$\$) reach up to \$45 (CMS MAX, 2023). As Google indicated the price levels in dollar signs, the thesis adapted this form of categorization.

### 4.1 Results for Vegan Dishes

As the thesis was primarily interested in veganism and how its commercialization has influenced the Viennese Wirtshaus, the findings for the offer in vegan dishes will be presented first.

As people are becoming more aware of the personal health (Hoek et al., 2004) and public environmental benefits (Godfray et al., 2018) that veganism is attached to, more and more are opting for such a diet. With the increase of such diets, it is natural that a shift that has developed throughout the years to a greater offer of vegan and plant-based dishes has implanted itself in the global and Viennese restaurant industry. Due to this development, a shift in the offer of vegan dishes in the Wirtshaus can be expected. Therefore, the analysis, which led to the following results, opted for a one-tailed hypothesis.

The low p -value from the normality test indicated that for the paired samples t-test to be valid, the Wilcoxon rank test needed to be carried out. The p-value 0.029 from the Wilcoxon rank test in Figure 4 indicated that there has been a statistically significant change in vegan dishes on Wirtshaus menus from 2010 to 2023.

The rising demand has also effectuated that the traditionally meat-based Viennese cuisine has had to adopt vegan dishes into their menus in order to offer alternatives to people on vegan diets.

While none of the analyzed menus from 2010 to 2018 had vegan dishes on their menus, an average of $3 \%$ of the dishes on menus in 2023 were vegan alternatives to, primarily, meat dishes.
Results
Paired Samples T-Test for Vegan Dishes

|  |  |  | Statistic | df | p |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POVD OLD | POVD NEW | Student's t | -2.41 | 15.0 | 0.015 |
|  |  | Wilcoxon W | $0.00{ }^{\text {a }}$ |  | 0.029 |

Note. $\mathrm{H}_{\mathrm{a}} \mu_{\text {Measure } 1 \text { - Measure } 2<0}$
a 11 pair(s) of values were tied
Normality Test (Shapiro-Wilk)

|  |  | w | p |
| :---: | :---: | :---: | :---: |
| POVD OLD | - | POVD NEW | 0.665 |

Note. A low p-value suggests a violation of the assumption of normality

| Descriptives |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean | Median | SD | SE |
| POVD OLD | 16 | 0.0000 | 0.00 | 0.0000 | 0.0000 |
| POVD NEW | 16 | 0.0279 | 0.00 | 0.0463 | 0.0116 |

Figure 3: Paired Samples T-Test for Vegan Dishes

According to Annette Brandt, an Austrian nutritionist at the University of Vienna, the trends of vegetarianism and veganism have arrived in Austria and will continue to gain further popularity in the near future. Another up-and-coming trend is the comeback of Hausmannskost, Austrian dishes that are traditionally served in a Wirtshaus, but as a modernized and plant-based version where meat is substituted by lentils and potatoes (Reichmann, 2022). A recent article in DerStandard supports Reichmann's statement as it states that Figlmüller, a Viennese institution in the first district, is already offering a plant-based Schnitzel. According to the owner, the vegan option already amounts for four percent of all Schnitzels sold (Beirer \& Pramer, 2023).

When asked whether an increase or decrease in vegan dishes on Wirtshaus menus has been detected in the menu analysis, Corti said he "would think that there was not a big impact on Viennese Wirtshaus menus through veganism". Furthermore, Corti expressed that he "could actually imagine that they decreased in that amount of time", justifying his opinion by explaining that chefs do not have the incentive to cook elaborate and time-consuming vegan dishes.

Additionally, Corti voiced his opinion on the difficult combination between veganism and traditional dishes served in the Wirtshaus, thereby reassuring himself and his assumptions of a decrease in vegan dishes between the old and new menus. He, in comparison to Reichmann, does not believe in plant-based or vegan alternatives in regard to traditional Wirtshaus dishes, but in "good veggies and good vegetarian dishes" that do not substitute a Schnitzel or Tafelspitz, but add to the variety of offered dishes. Although this statement could be interpreted as an increase in vegan dishes, Corti generalizes this thought and projects it onto the general approach of eating good food, while relinquishing meat.

Therefore, Corti's prediction stands in conflict with the findings of the menu analysis that, as discussed prior, show a statistically significant increase in vegan dishes on Wirtshaus menus. His assumption is comprehensible in the sense that chefs that are used to the routine of "throwing a Schnitzel into a deep fryer" and therefore do not have the stimuli to change that. However, this assumption is not supported by the empirical evidence that has been gathered throughout the writing process.

Regarding the discrepancy between Corti's statement and the quantitative findings, it is also necessary to state that the gathered data, old and new menus, is only a sample from the entire Viennese Wirtshaus population, implying that it is theoretically possible that every other Wirtshaus menu would show a decrease in vegan dishes, resulting in a positive correlation with Corti's opinion. To resolve such a divergence, more research, including a much larger sample size of old Wirtshaus menus, would need to be conducted.

Nevertheless, Corti points out that the advent of a new generation of consumers, who acknowledge and practice veganism as a way of life, has influenced the supply and demand structure of the Austrian and Viennese gastronomy landscape.

### 4.2 Results for Vegetarian Dishes

Different to vegan dishes, the literature review did not suggest a major decrease or increase in vegetarian dishes on Wirtshaus menus. This led to the decision to use a two-tailed hypothesis for the menu analysis.

Indicated by the p-value of 0.298 from the Wilcoxon rank test seen in Figure 5, there was no statistically significant change in vegetarian dishes when comparing the old to the current menus. However, this does not necessarily come as a surprise: When looking at the descriptive statistics, the means show a high percentage of vegetarian dishes in relation to the entire menu.

The old menus record that, on average, $24.8 \%$ of all main dishes gathered from the menus were vegetarian; a slight increase to an average of $25 \%$ vegetarian dishes in 2023 is also reported.

The Viennese cuisine has been offering a variety of vegetarian dishes, including dumplings with scrambled eggs and different kinds of fried vegetables served with sauce tartar.

Results
Paired Samples T-Test for Vegetarian Dishes
Paired Samples T-Test

|  |  |  | Statistic | df | p |
| :--- | :--- | :--- | ---: | :---: | :---: |
| POVED OLD | POVED NEW | Student's t | -0.0724 | 15.0 | 0.943 |
|  |  | Wilcoxon W | 47.0 |  | 0.298 |

Note. $\mathrm{H}_{\mathrm{a}} \mu_{\text {Measure } 1 \text { - Measure } 2 \neq 0}$

Normality Test (Shapiro-Wilk)

|  |  | w | p |
| :---: | :---: | :---: | :---: |
| POVED OLD | - | POVED NEW | 0.781 |
| 0.002 |  |  |  |

Note. A low p-value suggests a violation of the assumption of normality

Descriptives

|  | N | Mean | Median | SD | SE |
| :--- | :---: | :---: | :---: | :---: | :---: |
| POVED OLD | 16 | 0.248 | 0.195 | 0.178 | 0.0446 |
| POVED NEW | 16 | 0.250 | 0.223 | 0.117 | 0.0291 |

Figure 4: Paired Samples T-Test for Vegetarian Dishes
Therefore, it can be said that the p-value indicates no significant change over the time period, but the comparatively high mean values show the affiliation and constancy of vegetarian dishes in the Viennese Wirtshaus and its cuisine.

### 4.3 Results for Beef Dishes

The literature review already suggested that the negative impact of cattle breeding on the environment could play an important role in the decrease of beef dishes offered in the Wirtshaus and beef consumption in general.

According to a statistic by Poore and Nemecek, cattle breeding exceeds all other food categories by far, creating 60 kilos of CO2-equivalent emissions per kilo of beef produced, compared to pork with 7 kilos of CO2 emissions per kilo and poultry with 6 kilos of CO2 emissions per kilo (2018). Furthermore, dietary shifts that were also discussed in the literature review could be potential factors of a reduced offer in bovine meat dishes on Wirtshaus menus.

As these indicators favor a shift towards a specific direction, namely a decrease in the offer, it was decided to use a one-tailed test for the statistical analysis of beef dishes in the Wirtshaus.

As the $p$-value of the normality test is greater than 0.05 , the Student's t-test can be accepted for the following section. The Student's t-test with a p-value of 0.031 implies that there has been a statistically significant change in the offer of beef dishes in the Viennese Wirtshaus and the mean confirms that this offer has decreased from an average of almost $25 \%$ beef dishes on menus to $18 \%$.

Although it could be argued that this decrease is linked to a dietary shift to more plant-based foods, there is no solid proof for that, as the other red-meat category in question, namely pork, which will be analyzed in the next section, did not show the same outcomes.

Nevertheless, the decrease of bovine meats on Wirtshaus menus could directly be linked to the increase in price the market is witnessing. According to a CoBank report, red meat production, specifically beef, will experience substantial contraction in 2023 as a result of decreasing cattle supply.

Results
Paired Samples T-Test for Beef Dishes

| Paired Samples T-Test |  |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Ptatistic | df | p |  |  |  |  |
| POBD OLD | POBD NEW | Student's $t$ | 2.02 | 15.0 | 0.031 |  |

Note. $\mathrm{H}_{\mathrm{a}} \mu_{\text {Measure } 1 \text { - Measure } 2>0}$

Normality Test (Shapiro-Wilk)

|  |  | W | p |  |
| :---: | :---: | :---: | :---: | :---: |
| POBD OLD | - | POBD NEW | 0.873 | 0.030 |

Note. A low p-value suggests a violation of the assumption of normality

| Descriptives |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean | Median | SD | SE |
| POBD OLD | 16 | 0.247 | 0.261 | 0.178 | 0.0446 |
| POBD NEW | 16 | 0.180 | 0.152 | 0.127 | 0.0318 |

Figure 5: Paired Samples T-Test for Beef Dishes
This will eventually lead to an approximate $5 \%$ annual reduction in total bovine inventory, resulting in even higher prices (Myers, 2022). Both the FAO Agricultural Outlook 2021-2030 and the US National Chicken Council support CoBank's report.

The latter lists the retail price of US beef and US pork in cents per pound and shows that beef was sold at 439.5 cents and pork at 311.4 cents in 2010 . While the price only rose to approximately 490 cents per pound for pork, the price for beef made a steep incline to almost 760 cents per pound (National Chicken Council, 2021). Furthermore, the FAO Agricultural Outlook 2021-2030 visualizes that beef and veal dominate the global meat trade by value, but not in terms of quantity (FAO, 2021).

This high price of beef in comparison to pork validates the assumption that beef dishes in Wirtshaus menus have declined because of increasing prices, and not because of dietary shifts.

Corti supports the assumption of this decline by stating that "Austrian and Viennese customers are very price sensitive and that could definitely be a reason". However, he does not believe that "in vitro meat might be an alternative to real beef in any near future, especially if we speak of traditional cuisine".

There is no proof that the decreased offer of beef dishes in the Wirtshaus is linked to a dietary shift. Nevertheless, as statistics and sources in the literature review have shown, one of the main reasons to opt for a plant-based diet is to prevent harm on the environment.

Therefore, it can be assumed that people have established a consensus that the reduction of beef in one's diet can be beneficial for personal health and the environment, leading to an actual decline in consumption.

### 4.4 Results for Pork Dishes

## Results <br> Paired Samples T-Test for Pork Dishes

Paired Samples T-Test

|  |  |  | statistic | df | $\mathbf{p}$ |
| :--- | :--- | :--- | :---: | :---: | :---: |
| POPD OLD | POPD NEW | Student's $t$ | -0.969 | 15.0 | 0.348 |

Note. $\mathrm{H}_{\mathrm{a}} \mu_{\text {Measure }} 1$ - Measure $2 \neq 0$

Normality Test (Shapiro-Wilk)

|  |  | w | p |
| :---: | :---: | :---: | :---: |
| POPD OLD | - | POPD NEW | 0.937 |

Note. A low p-value suggests a violation of the assumption of normality

| Descriptives |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean | Median | SD | SE |
| POPD OLD | 16 | 0.326 | 0.310 | 0.173 | 0.0433 |
| POPD NEW | 16 | 0.361 | 0.369 | 0.162 | 0.0406 |

Figure 6: Paired Samples T-Test for Pork Dishes
Although pork dishes claimed the highest percentage of all main courses when compared to the other five categories, there were no indications on whether to expect more, or less, pork dishes on new Wirtshaus menus, influencing the decision to opt for a two-tailed hypothesis.

Comparable to the approach for beef dishes, the p-value 0.319 of the normality test indicates that the Student's t-test can be accepted. The p-value 0.348 of the Student's t-test states that there is no statistically significant between the old and the current menus. However, when comparing the mean, the statistics do show that there has been a slight increase in the offering of pork dishes in the Wirtshaus.

On average, both the mean from the old and the new pork dishes hold the highest percentage of all main courses when compared to the other five categories.

As discussed in the previous subchapter, the steady offer of dishes with pork as the main actor might correlate with its prices. While the Austrian kilo price when buying beef as an enterprise, a restaurant, directly from the slaughterhouse traded at 3.91 euros at the end of 2022, a kilo of pork meat could be bought for 2.04 euros (AgrarMarkt Austria, 2023).

Due to rising inflations the Austrian consumer price index in February 2023, taking 2010 as the base year, was 141.6 (Oesterreichische Nationalbank, 2023), basically stating that for a basket of goods that cost 100 in 2010, a person buying the same basket of goods today, would have to pay 141.6.

Taking this steep increase into account and keeping the price levels of different meat types in mind, it can be assumed that the 4.5 million people with an average Austrian income of around 31,000 euros (Statistik Austria, 2023) will tend to order pork instead of beef or veal when eating out, resulting in the constantly high offer of pork dishes in the Wirtshaus.

### 4.5 Results for Poultry Dishes

Results
Paired Samples T-Test for Poultry Dishes
Paired Samples T-Test

|  |  |  | statistic | df | p |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POPOD OLD | POPOD NEW | Student's $t$ | 0.789 | 15.0 | 0.443 |

Note. $\mathrm{H}_{\mathrm{a}} \mu_{\text {Measure } 1 \text { - Measure } 2 \neq 0}$

Normality Test (Shapiro-Wilk)

|  |  | w | p |  |
| :---: | :---: | :---: | :---: | :---: |
| POPOD OLD | - | POPOD NEW | 0.899 | 0.078 |

Note. A low p-value suggests a violation of the assumption of normality

| Descriptives |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean | Median | SD | SE |
| POPOD OLD | 16 | 0.127 | 0.119 | 0.0714 | 0.0178 |
| POPOD NEW | 16 | 0.111 | 0.108 | 0.0756 | 0.0189 |

Figure 7: Paired Samples T-Test for Poultry

As for some sections above, it was decided to make use of a two-tailed hypothesis, as no suggestion indicated a high increase or decease in overall poultry dishes on Wirtshaus menus. The p -value 0.078 of the normality test approves the use of the Student's t-test that indicates a p-value of 0.443 in the category of poultry dishes. Due to the high p-value, the result in this category is not statistically significant. Displayed by the mean of old and new poultry dishes on Wirtshaus menus, a minor decrease is noticed.

As established in the two previous subchapters, beef, and especially pork, have and still dominate the meat types in the Wirtshaus. Therefore, the low offer of poultry dishes was not unexpected. Nevertheless, the decrease in the offer does come as a surprise, as a shift to a healthier diet would imply replacing poultry for red meat. However, the number of traditional dishes in the Wirtshaus containing poultry is limited. Consequently, the assumption of choosing the vegetarian over the poultry offer, when opting for a healthier dish while eating in a Wirtshaus, can be made.

### 4.6 Results for Fish Dishes

## Results

Paired Samples T-Test for Fish Dishes
Paired Samples T-Test

|  |  |  | statistic | df | p |
| :--- | :--- | :--- | :---: | :---: | :---: |
| POFD OLD | POFD NEW | Student's $t$ | -0.985 | 15.0 | 0.340 |

Note. $\mathrm{H}_{\mathrm{a}} \mu_{\text {Measure } 1 \text { - Measure } 2} \neq 0$

Normality Test (Shapiro-Wilk)

|  |  | W | p |  |
| :---: | :---: | :---: | :---: | :---: |
| POFD OLD | - | POFD NEW | 0.935 | 0.289 |

Note. A low p-value suggests a violation of the assumption of normality

| Descriptives |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean | Median | SD | SE |
| POFD OLD | 16 | 0.0520 | 0.0572 | 0.0540 | 0.0135 |
| POFD NEW | 16 | 0.0706 | 0.0742 | 0.0643 | 0.0161 |

Figure 8: Paired Samples T-Test for Fish Dishes

The last section shows the results for fish dishes in the Viennese Wirtshaus. For this section, it was decided to use a two-tailed hypothesis, as there were no indications on whether to expect a big decrease or increase in offered dishes.

The $p$-value 0.289 from the normality tests indicates that the Student's t-test can be further analyzed. The $p$-value of 0.340 states a statistically non-significant change in the offer of fish dishes.

The slight increase that is indicated by the mean confirms that there is no external factor that influences the change in quantity, but much rather a range in which the offer changes year to year. It is apparent that the group of fish dishes is the second smallest, only ranking before vegan dishes.

Other than vegan dishes though, it can be supposed that the range of the mean, the offer of fish dishes in the Wirtshaus, will not change drastically in the future. This assumption is based on the fact that the main reason for fish dishes in the Wirtshaus, other than being an alternative to meat dishes, is of religious descent, as it is a tradition to eat fish on Fridays, especially on Good Friday, as a devout member of the Catholic Church (Die Presse, 2022).

## 5 Conclusion

The primary goal of this thesis was to find out how the Wirtshaus culture has changed over time, specifically in regards to the rising trend of veganism. The intention of the thesis was to reach that goal through the combination of the restated literature, the findings of the menu analysis and the support of the expert interview. Although the literature review, as well as the findings of the menu analysis, namely a statistically significant increase in vegan dishes and a statistically significant decrease in beef dishes on Wirtshaus menus between 2017 and 2023, imply that the commercialization of veganism has had an effect on the Wirtshaus, the interview with Severin Corti unlocked a different point of view that did not correlate with the previous assumptions. Corti's answers, as insightful and interesting as they were, were not supportive to the findings of the menu analysis.

According to him, the Viennese Wirtshaus "has dramatically changed", although he does not "...believe that this has anything to do with veganism at all". When asked about the future of the Viennese Wirtshaus, Corti answered, "I think it's in its last stages, it is lying in its death bed. There still are places to be found where you get an impression of what a Viennese Wirtshaus used to be. There is still some time left for those to be found and those to survive". He supports his assumption by describing the Viennese cuisine as "labor-intensive" and "very affordable", implying that not many chefs are willing to put up with the work without a proper monetary award. Time-consuming dishes like a "proper Beuschel", the Viennese pendant to a ragout served with homemade dumplings, or a "proper Krautfleisch" are rarely found anymore. Corti's statement does not necessarily imply that there has been a reduction in beef dishes, as found in the menu analysis, but that traditional meals that were once a standard of Viennese Wirtshaus menu are slowly vanishing.

Corti sees the dramatic change of the Viennese Wirtshaus culture from a different perspective, as he focuses more on the missing heritage and traditions in the Wirtshaus today, rather than the rise of vegan dishes on Wirtshaus menus.

This thesis, however, focuses on veganism, its development through commercialization, and its influence on the Wirtshaus and therefore takes the findings of the menu analysis into substantial consideration in regards the conclusion of this thesis.

Therefore, it can be stated that there has been a significant change in the Viennese Wirtshaus culture through the commercialization of veganism that can be seen through the statistically significant increase of vegan dishes in Viennese Wirtshaus menus, as well as the statistically significant decrease in beef dishes.

Furthermore, the Wirtshaus and its culture, have also changed due to other social, cultural, and economic factors, resulting in "...the real Wirtshaus is dead. There are still some impersonators, there are still some ghosts going on, but the institution as it should be, a popular place where you don't have to think a long time, wherever you are you can find one, that has been gone for a long time" (Corti, 2023).

Regarding future research on the subject, a different approach of data collection should be taken into consideration. Had there been more old menus supplied by the contacted restaurants, a more representative sample would have made the actual situation of offered dishes in Viennese Wirtshäuser even clearer. However, this was an impossible task, as many restaurants that were contacted had changed their owners, had lost their files, or had never saved them in the first place.

Similar to Ghaffari et al., a consumer-based research approach could be adapted, in order to find out what it is that the consumers are looking for in the Viennese Wirtshaus landscape (2021). Based on the received information, implications on whether the offer of specific dishes is sufficient or is in need of improvement could be made. This approach would not only be beneficial for looking at the development of the Wirtshaus over time, but also for analyzing the dietary differences between specific genders and age groups.

Nevertheless, the thesis, with the support of peer-reviewed journal articles, data sets, and statistics, does show that the Viennese Wirtshaus, as well as the Viennese gastronomy is witnessing radical change in its landscape.

Recently, the Vienna Chamber of Commerce announced that the city will offer an entirely vegan training for future chefs, implying that the demand for fully vegan restaurants will keep rising (DerStandard, 2023) and preparing the food industry, in order for it to adapt quicker and more efficiently.

## Bibliography

Abidin, C., Thompson, E.C. (2012). Buymylife.com: Cyber-femininities and commercial intimacy in blogshops. Women's Studies International Forum 35, no. 6: 467-77.

Ahlgrim, A. (2018). A Vegan Exploration of Social Movement Theory. In POLS 419 Social Movements and Political Protests (pp. 36-44). essay, California Polytechnic State University

Alissa, E. M., \& Ferns, G. A. (2015). Dietary fruits and vegetables and cardiovascular diseases risk. Critical Reviews in Food Science and Nutrition, 57 (9).

Amato, G., Muntean, C. I., Bolettieri, P., Perego, R., MOnteiro de Lira, V., \& Renso, C. (2017). 40th International ACM SIGIR Conference. In Social Media Image Recognition for Food Trend Analysis(pp. 1333-1336). Tokyo. Retrieved March 11, 2023, from https://www.researchgate.net/publication/318763976_Social_Media_Image_R ecognition_for_Food_Trend_Analysis.

Amos, C., Holmes, G., Strutton, D. (2008). Exploring the Relationship between Celebrity Endorser Effects and Advertising Effectiveness: A Quantitative Synthesis of Effect Size. International Journal of Advertising.

Appleby, P. N., Thorogood, M., Mann, J. I., Key, T. J. (1998). Low body mass index in non-meat eaters: The possible roles of animal fat, dietary fiber and alcohol. International Journal of Obesity 22:454-460.

Atkins, A. (2021). How SWFL foodies used social media to help local restaurants during the COVID pandemic. Naples Daily News, 20 May. Available at: https://eu.naplesnews.com/story/life/food/2021/05/20/swfl-foodies-use-social-media-followings-help-during-covid/5036507001

Beardsworth, A., \& Keil, T. (1992). The vegetarian option: Varieties, conversions, motives, and careers. Sociological Review, 40, 251-293.

Beardsworth, A., \& Keil, T. (1993). Contemporary vegetarianism in the UK: Challenge and incorporation. Appetite 20:229-234.

Beirer, J., \& Pramer, P. (2023, April 1). Das Schnitzel der Zukunft ist Laborfleisch, paniert mit veganem Ei und Hirse. DerStandard.

Bina, W. (2000). Das Dorfgasthaus - Die Wirtin als alltägliche psychosoziale Helferin. (Dissertation). Klagenfurt, Kärnten.

Business Intelligence. (2019). Influencer Marketing: State of the social media influencer market in 2020. Online Report.
https://www.businessinsider.com/influencer-marketing-report?r=US\&IR=T
Cameron, B., \& O'Neill, S. (2019). State of the Industry Report - Plant-based Meat, Eggs, and Dairy. The Good Food Institute.

Campbell, G. L. (2014). The Oxford Handbook of Animals in Classical Thought and Lifen. Oxford University Press.

Caruana, E. J., Roman, M., Hernandez-Sanchez , J., \& Solli, P. (2015). Longitudinal studies. Journal of Thoracic Disease , 7(11).

Clark, M.A., M. Springmann, J. Hill, and D. Tilman. (2019). Multiple health and environmental impacts of foods. Proceedings of the National Academy of Sciences 116 (46).

Craig, J. W. (2009). Health Effects of Vegan Diets. Faculty Publications. 1752.

Creswell, J. W. (2014). Research design: qualitative, quantitative, and mixed methods approache). Thousand Oaks, CA: SAGE Publications.

Commercialization. (2019). Cambridge Dictionary. Retrieved March 10, 2023, from
https://dictionary.cambridge.org/dictionary/english/commercialization.

Cornelsen Verlag. (2020). Haus. Duden. Retrieved February 2, 2023, from https://www.duden.de.

Cornelsen Verlag. (2020). Wirt. Duden. Retrieved February 2, 2023, from https://www.duden.de.

Christopher, A. et al. (2018) Portraits of veganism: A comparative discourse analysis of a second-order subculture. Societies. 8 (3), 55-76.

DerStandard . (2023, April 11). In Wien ist eine Ausbildung für vegane Köche geplant. DerStandard.

De Veirman, M., Cauberghe, V., Hudders, L. (2017). Marketing through instagram influencers: The impact of number of followers and product divergence on Brand attitude. International Journal of Advertising 36, no. 5: 798-828.

Dewell, A., Weidner, G., Sumner, MD., Chi C.S., Ornish, D.A. (2008). A very-low fat vegan diet increases intake of protective dietary factors and decreases intake of pathogenic dietary factors. J Am Diet Association. 108:56-347.

Duffy, A., Kang, H.Y.P. (2020). Follow me, I'm famous: Travel bloggers' self-mediated perform- ances of everyday exoticism. Media, Culture and Society 42, no. 2: 172-90.

Eisenmenger , N., Plank, B., Milota, E., \& Gierlinger, S. (2020).
(rep.). Resource Use in Austria 2020 (Vol. 3, pp. 54-93). Vienna: BMK.
Erben, T. (1987). Bürgersinn und Aufbegehren: Biedermeier und Vormärz in Wien: 1815-1848. Eigenverlag der Museen der Stadt.

Fortune Business Insights. (2022). Vegan Food Market Size, Share \& COVID19 Impact Analysis, Product Type (Vegan Meat, Vegan Milk, and Others), Distribution Channel (Supermarkets/Hypermarkets, Convenience Stores, Online Retails, and Others), and Regional Forecast, 2021-2028. Market Research Report.

Fox, R. (2014). Food and Eating: An Anthropological Perspective. Social Issues Research Centre.

Fraser, G. E. (2003). Diet, life expectancy and chronic disease. Oxford: Oxford University Press.

Frei Rampe Schlachthofpreise in österreich - monatsdurchschnittspreise AgrarMarkt Austria. (2023, March 21). Retrieved March 28, 2023, from https://www.ama.at/getattachment/7cddd2c7-2499-479e-85d579c0eba95901/100_SHPreis13_23.pdf

Freshela Exporters. (2023, January 17). The Complete Guide to importing avocado in Austria 2023. Freshela Exporters. Retrieved March 19, 2023, from https://www.freshelaexporters.com/avocado/imports/austria

Gaenssle, S., Budzinski, O. (2020). Stars in social media: New light through old windows?. Journal of Media Business Studies.

Ghaffari, M., Rodrigo , R., Ekinci, Y., \& Pino, G. (2021). Consumers’ motivations for adopting a vegan diet: A mixed-methods approach. International Journal of Consumer Studies, 46(4).

Giddens, A. (1991) Modernity and self-identity self and society in the late modern age. Cambridge: Polity Press.

Godfray, C., Aveyard, P., Garnett, T., \& Hall, J. (2018). Meat consumption, health, and the environment. Science.

Gordon, D. (2021). Fleischatlas 2021 - global 2000. FLEISCHATLAS Daten und Fakten über Tiere als Nahrungsmittel. Retrieved March 3, 2023, from https://www.global2000.at/sites/global/files/Fleischatlas-2021.pdf

Greenebaum, J. B. (2016). Questioning the Concept of Vegan Privilege: A Commentary. Humanity \& Society, 41(3).

Haslinger, I. (2018). Die Wiener Küche: Eine Kulturgeschichte. Mandelbaum Verlag.

Hoek, A. C., Luning, P.A., Stafleu, A., de Graaf, C. (2004). Food-related lifestyle and health attitudes of Dutch vegetarians, non-vegetarian consumers of meat substitutes, and meat consumers. Appetite 42:265-272.

Holmes, A. S., Serrano, E. L., Machin, J. E., Deutsch, T., \& Davis, G. C. (2013). Effect of different children's menu labeling designs on family purchases. Appetite, 62(1), 198-202.

Horn, L., Budulan, M.-A., \& Loghin, M. (2022). (rep.). Motives for Veganism and the Influence of Social Media. Bucharest: University Politehnica of Bucharest.

Hudders, L., De Jans, S., \& De Viermal, M. (2021). The commercialization of social media stars: a literature review and conceptual framework on the strategic use of social media influencers. International Journal of Advertising.

Hunt, R. (2023, March 6). Food trends that are about to take over 2023. Mashed. Retrieved March 12, 2023, from https://www.mashed.com/1095968/food-trends-that-are-about-to-take-over2023/?utm_campaign=clip

Hundscheid, L., Wurzinger , M., Gühnemann, A., \& Welcher, A. (2022). Rethinking meat consumption - How institutional shifts affect the sustainable protein transition. Sustainable Production and Consumption, 31.

Ignaszewski, E. (2022). 2021 US Retail Market Insights - Plant-based Foods. Good Food Institute.

Influencer Marketing Hub. (2019). The State of Influencer Marketing 2019:
Benchmark Report. https://influencermarketinghub.com/influencer-marketing-2019-benchmark-report/

Jährliche Personeneinkommen. STATISTIK AUSTRIA. (2023). Retrieved March 28, 2023, from https://www.statistik.at/statistiken/bevoelkerung-und-soziales/einkommen-und-soziale-lage/jaehrliche-personeneinkommen

Klocke, B., \& Maurer, D. (2003). Vegetarianism: Movement or moment? Contemporary Sociology, 32(3). https://doi.org/10.2307/3089185

Kortetmäki, T. (2021). Is there a convincing case for climate veganism? Agriculture and Human Values.

Kos, W., \& Spring, U. (2007). Im Wirtshaus. Eine Geschichte der Wiener Geselligkeit. Czernin.

Kostyo, M. (2023). 2023 food trends. Free Report by Datassential. Retrieved March 11, 2023, from https://offers.datassential.com/2023-foodtrends?referrer=googlesearch\&utm_term=food+trends\&utm_campaign=Googl e\%2B\%7C\%2BSearch\%2B\%7C\%2BTest\%2B\%7C\%2BMenu\%2BTrends\%2 B\%7C\%2B20211115\&utm_source=adwords\&utm_medium=ppc\&hsa_acc=8 $453683417 \&$ hsa_cam $=15276063791 \& h s a \_$grp $=136590673864 \& h s a \_$ad $=5700$ $53357227 \& h s a \quad$ src $=$ g\&hsa_tgt=kwd301175861909 \&hsa_kw=food+trends\&hsa_mt=p\&hsa_net=adwords\&hsa_ver $=3 \& g c l i d=C j 0 K C Q i A 6 r C g B h D V A R I s A K 1 k G P K w f R 3 T x Z Z f a Q y 5 h u F f H f w ~$ MeVeFiqKUStOMkWJ0-xVQ77O8jHzizGsaAqfoEALw_wcB

Lancaster, G. and Massingham, L. (1999). Essentials of Marketing. McGrawHill. London.

Langer, B. (1996). Zum Weltenspiegel. Das Wirtshaus als dramatischer Schauplatz. Fulda.

Lindeman, M., \& Sirelius, M. (2001). Food choice ideologies: The modern manifestations of normative and humanist views of the world. Appetite, 37, 175-184.

Long, L. M. (2015). The Food and Folklore Reader. Bloomsbury Publishing.
Lupton, D., \& Feldman, Z. (2020). Digital Food Cultures. Routledge.
Matsumoto, D. (2002). Culture, psychology, and Education. Online Readings in Psychology and Culture, 2(1). https://doi.org/10.9707/2307-0919.1010

Min, H., \& Min, H. (2011). Benchmarking the service quality of fast-food restaurant franchises in the USA: A longitudinal study. Benchmarking: An International Journal.

McCall, M., \& Lynn, A. (2008). The Effects of Restaurant Menu Item Descriptions on Perceptions of Quality, Price, and Purchase Intention. Journal of Foodservice Business Research, 11(4).

Miceli, D. (2018) Veganuary 2018: the results are in! [online]. Retrieved March 1 2023, from: https://veganuary.com/blog/veganuary-2018-the-results-are-in/

Myers, V. G. (2022, December 26). Shrinking supplies, consumer demand should help beef prices hold up in 2023. DTN Progressive Farmer. Retrieved March 28, 2023, from
https://www.dtnpf.com/agriculture/web/ag/livestock/article/2022/12/26/shrinki ng-supplies-consumer-
demand\#: $\sim:$ text $=$ After $\% 20$ eight $\% 20$ years $\% 20$ of $\% 20$ growth,result $\% 20 \mathrm{of} \% 20 \mathrm{~s}$ hrinking\%20cattle\%20supplies.

Norwood. R., Cruwys, T., Chachay, V.S., Sheffield, J. (2019). The psychological characteristics of people consuming vegetarian, vegan, paleo, gluten free and weight loss dietary patterns. Obesity Science \& Practice, 5, 148-158.

OECD-FAO Agricultural Outlook 2021-2030 - Food and Agriculture Organization. Food and Agriculture Organization of the United Nations . (2021). Retrieved March 28, 2023, from https://www.fao.org/3/cb5332en/Meat.pdf

Ortile, M. (2023, January 16). How Vienna's restaurants are helping it become one of Europe's greenest cities. Condé Nast Traveler. Retrieved March 12, 2023, from https://www.cntraveler.com/story/how-viennas-restaurants-are-helping-it-become-one-of-europes-greenest-cities

Ozdemir, B., \& Caliskan, O. (2014). A review of literature on restaurant menus: Specifying the managerial issues . International Journal of Gastronomy and Food Science 2.

Packwood Freeman, C. (2015). Framing Animal Rights in the "Go Veg" Campaigns of U.S. Animal Rights Organizations. Society \& Animal.

Parker, J. (2018). The Year of the Vegan. The World in 2019. The Economist.
PBFA. (2018). Retail Sales Data 2018. Plant Based Food Association. Retrieved February 26, 2023, from https://www.plantbasedfoods.org/marketplace/retail-sales-data-2018/.

Petter, O. (2018). Veganism is 'single biggest way' to reduce our environmental impact on planet, study finds. Independent. June 1, 2018.

Pfoser, A., \& Weigl, A. (2013). Im Epizentrum des Zusammenbruchs: Wien im Ersten Weltkrieg. Metroverlag.

Phua, J., Jin, S. V., \& Kim, J. (2020). The roles of celebrity endorsers' and consumers' vegan identity in marketing communication about veganism. Journal of Marketing Communications, 26(8), 813-835.

Plachutta, E., \& Plachutta, M. (2008). Plachutta - Meine Wiener Küche. Brandstätter.

Pohanka, R. (2005). Um die Wurst. Vom Essen und Trinken im Mittelalter. Katalog Zur 323. Sonderausstellung Des Wien Museums.

Poore, J., \& T. Nemecek. (2018). Reducing food's environmental impacts through producers and consumers. Science 360: 987-992.

Ranteallo, I. C., \& Andilolo, I. R. (2017). (rep.). Food representation and media: experiencing culinary tourism through foodgasm and foodporn. Denpasar.

Reichmann, B. (2022, December 27). Comeback Der Hausmannskost, Aber Vegan. science.ORF.at. Retrieved March 27, 2023, from https://science.orf.at/stories/3216693/

Rützler, H., \& Reiter, W. (2023, February 20). Food trends 2023: The Future of Food and eating. Forschung \& Zukunftsprognosen. Retrieved March 12, 2023, from https://www.zukunftsinstitut.de/artikel/food/food-trends-hanni-ruetzler-en/

Saiz-Rubio. V, Rovira-Más, F. (2020). From smart farming towards agriculture 5.0: A review on crop data management. Agronomy. 10(2): 207. Crossref.

Scourboutakos, M. J., \& L'Abbé, M. R. (2014). Changes in sodium levels in chain restaurant foods in Canada (2010-2013): a longitudinal study. Cmaj Open.

Sexton, A. E., Garnett, T., \& Lorimer, J. (2022). Vegan food geographies and the rise of big veganism. Progress in Human Geography, 46(2), 605-628.

Shani, A., \& DiPietro , R. B. (2007). Vegetarians: A Typology for Foodservice Menu Development. Hospitality Review, 25(2).

Society. (2019). Cambridge Dictionary. Retrieved February 13, 2023, from https://dictionary.cambridge.org/dictionary/english/society.

Statista. (2022). Themenseite: Gastronomie in Österreich. Statista. Retrieved March 12, 2023, from https://de.statista.com/themen/4415/gastronomie-inoesterreich/

Taher, A. (2019). Instagram: Key Global Statistics 2019 [web log]. Retrieved March 11, 2023, from https://blog.digimind.com/en/trends/instagram-key-global-figures-2019.

Tan, D. (2016, August 29). Culinary Tourism, a growing trend. Home. Retrieved March 12, 2023, from https://www.cordonbleu.edu/news/culinarytourism/en

Taylor, J. J., \& Brown, D. M. (2007). Menu Analysis: A review of Techniques and Approaches . Hospitality Review, 25(2).

Team, V. (2021, September 13). Why people go vegan? - survey with 8,500 respondents. Veggly. Retrieved March 3, 2023, from
https://www.veggly.net/why-go-vegan/

The NPD Group. (2023, March 7). Retrieved March 19, 2023, from https://www.npd.com/

The Vegan Society. (2023). Retrieved February 26, 2023, from https://www.vegansociety.com/

The VRG Blog RSS. (2022). Retrieved February 26, 2023, from https://www.vrg.org/blog/2022/11/10/the-number-of-vegetarians-and-vegans-in-the-usa-1994-2022/

Tian Wien - vegetarisches gourmet restaurant. TIAN Restaurant Wien. (2023). Retrieved March 22, 2023, from https://www.tianrestaurant.com/wien/

Vegan in Wien. Vegane Gesellschaft Österreich. (2023, March 8). Retrieved March 22, 2023, from https://www.vegan.at/inhalt/vegan-wien

Vegetarismus und veganismus in österreich. Statista. (2022, November 28). Retrieved March 8, 2023, from https://de.statista.com/themen/3804/vegetarismus-und-veganismus-inoesterreich/\#topicMain

Vocelka, K., Traninger, A., Csendes, P., \& Opll, F. (2003). Wien. Geschichte einer Stadt: Die frühneuzeitliche Residenz (16. Bis 18. Jahrhundert). Böhlau.

Was Österreich zu Ostern isst. (2022, April 11). Die Presse.
Webber, J. (2020, December 15). $86 \%$ of people buying vegan products are meat-eaters, says New Data. LIVEKINDLY. Retrieved March 19, 2023, from https://www.livekindly.com/86-of-people-buying-plant-based-products-are-meat-eaters-says-new-data/

What do the price ranges $\$, \$ \$, \$ \$ \$$ mean ?CMS Max. (2023). Retrieved March 26, 2023, from https://www.cmsmax.com/faqs/misc/price-ranges

What is globalization? PIIE. (2022, October 24). Retrieved March 19, 2023, from https://www.piie.com/microsites/globalization/what-is-globalization

WHO. (2020). Depression. Retrieved March 8, 2023, from: https://www.who.int/news-room/fact-sheets/detail/depression

Wholesale and retail prices for chicken, beef, and pork. National Chicken Council. (2021, March 22). Retrieved March 28, 2023, from https://www.nationalchickencouncil.org/about-the-industry/statistics/wholesale-and-retail-prices-for-chicken-beef-and-pork/

Whorton, J. (1994). Historical development of vegetarianism. American Journal of Clinical Nutrition, 59, 1103-1109.

White, R.J. (2018). Looking backward/moving forward. Articulating a "Yes, BUT!'" response to lifestyle veganism, and outlining post-capitalist futures in critical veganic agriculture. EuropeNow 20: 1-13.

Willett, W., J. Rockström, B. Loken, M. Springmann, T. Lang, S. Vermeulen, and L. MajeleSibanda. (2019). Food in the Anthropocene:
the EAT-lancet commission on healthy diets from sustainablefood systems. The Lancet 393 (10170): 447-492.

PRIVATE UNIVERSITY VIENNA

## Appendices

## Appendix Interview

1. Before we start with the interview, I would like to ask how you want to be identified in my thesis? Also, could you briefly give an introduction to your persona and your professional experience, in order for the reader to understand why you are a good fit to answer the following questions related to the Viennese Wirtshaus and the Austrian food industry.

I am absolutely fine by being identified by my full name, which is Severin Corti. I am a journalist. I am a food writer for the last 20 years. I work as a restaurant critic for the Viennese daily DerStandard. I also have a recipe magazine, which I edit together with my colleague Tobias Müller for Falstaff, and I write in various German publications about food and restaurants. I also worked as a chef for some years. That was in Vienna, but that's more than twenty years ago. A restaurant called Castillo - Bar \& Grill - we managed to get a Haube by Gault Millau which back at this time still was something which was a respected accolade.
2. What is your personal take on veganism, and do you believe that the future of the food industry will be paved by plant-based and vegan dishes and diets?

My personal take is that veganism is a reaction to what the food industry in general looks like in the Western world today, that is a quite perverted state. I think that the food industry is in a very serious state, bias state one could also say, because the industrialization has taken over in a way which has perverted the pact which has been in place for thousands of years between farm animals on one side and farmers i.e., humans on the other side. For the longest time this pact was working well for both sides, animals being protected and fed over their lifespan, and on the other side, humans being fed by animals through milk or eggs and meat at the end. And this worked out fine for both sides in a way. But this has changed with the advent of industrial farming and nowadays we are in a situation where animals live in conditions which can hardly be categorized as "Iiving" - they don't see daylight at any point except for the moment when they are being brought up to the lorry which then conducts them to the slaughterhouse. And they never get the chance to see what a field or a meadow is like, although that would be their natural habitat. I think veganism is a natural outcome of this perversion. It's a long story because it comes from the experience of hunger and malnutrition during the wars, so the industrialization of agriculture was a beacon also for many generations, but at the point that we are at today, where a lot of people, especially in our country, eat meat three times a day - starting with breakfast - this has nothing to do with a sustainable or ethical way of doing agriculture or feeding oneself.

## 3. How has the food industry changed in regard to veganism? What are the biggest changes that you have witnessed so far? What are the biggest changes in Vienna's food scene in regard to veganism?

Veganism is a quite recent development, not as far as its history, but as far as its impact on the food and the restaurant industry, especially in Austria. So I think that the relevance of the trend has come about in the last five to seven years I would say. Before that, veganism was not something that was worth mentioning as far as trends and the restaurant industry in general is concerned. But I think with the advent of a new generation of consumers this has all of a sudden become a more widely acknowledged and practice way of life.

## 4. Has the landscape of the Viennese cuisine \& the Viennese Wirtshaus changed in your opinion? And if so, how?

It has dramatically changed, but I don't believe that this has anything to do with veganism at all. I think that the Viennese cuisine is a very labor intensive cuisine, if you want to do it properly. It's no work at all to throw a Schnitzel into a deep frier, but to do a proper Besuchel, to do a proper Krautfleisch or Dillfisolen for your Tafelspitz, that is proper work and that is something which fewer and fewer chefs are willing to do in their daily work. Because to put up with a real Viennese Wirtshaus menu means getting up early and doing a lot of prepping and proper work, and that is not something that most chefs are up to chase anymore, especially since Viennese and Wirtshaus cuisine is still considered to be something that has to be very affordable. So I think the Wirtshaus is something that is becoming less and less, but has nothing to do with the advent of veganism. The loss of Wirtshäuser in the Viennese restaurant landscape has been going on for as long as I can think of. The last great Wiener Speisehaus Koranda closed its doors when I had my graduation from school, so that was maybe 1989 or something. Koranda was where Plachutta is today. This was an absolute temple of Viennese gastronomy which was open from 11 am until 11 pm every day and had a freshly written menu every day and a menu that never changed with "Fertigspeisen". But the freshly made dishes were handwritten and cooked freshly every day. It was a place where real Viennese cuisine was celebrated, as if it was the most normal thing in the world. But then they went into retirement and that was that. Suddenly everybody. Realized. "Oh shit, we had something really good" and now we don't have any of it left anymore.
5. My findings from a sample of 16 Wirtshäuser show...
...an increase in the proportion of dishes that are vegan.
Do you think this trend can be extrapolated to Viennese Wirtshaus in general?
How would you explain this change?
Do you think the trend will continue?
That's a good question. 2010 to 2018 I would think that there was not a big impact on Viennese Wirtshaus menus through veganism, through active veganism. It always depends how you define a Viennese Wirtshaus. I could actually imagine that they decreased in that amount of time due to less active cooking by the chefs in those Wirtshäuser - which then leads to easier or more convenient food - which means less vegan food. I think vegan and Wirtshaus is a difficult combination anyhow. I mean, give me one vegan Wirtshaus dish, even Krautfleckerl would not apply, and Eiernockerl wouldn't, and Gebackene Champignons wouldn't.
6. My findings from a sample of 16 Wirtshäuser show... ... a decrease in the proportion of dishes that use beef.

Do you think this trend can be extrapolated to Viennese Wirtshaus in general?
How would you explain this change?
Do you think the trend will continue?
I could imagine that there was a slight increase since the popularity of grilled dishes has increased in that time, more steak-like dishes might have turned up in Wirtshaus environments as well - which traditionally are not a part of Viennese cuisine. (...) It's a very optimistic outlook, I would say, that beef dishes have decreased because of people trying to be more sustainable. I don't think that the majority of people take a lot of concern over sustainability when they sit in front of a restaurant menu, but maybe they do. (...) I think so, Austrian and Viennese customers are very price sensitive and that could definitely be a reason
7. What does the future Viennese Wirtshaus look like to you? Will the shift towards a more plant-based diet, that we are witnessing right now, influence the menu offer in the Wirtshaus? And if so, will traditional meat dishes from the Wirtshaus be substituted by plant-based alternatives?

I must admit I might be too old to give a proper assessment on that, I cannot imagine that in vitro meat might be an alternative to real beef in any near future, especially if we speak of traditional cuisine. If we say "We have a Tafelspitz of in vitro Tafelspitz" that is not something I could imagine. I would think that the idea of artificial meat or meat substitutes is not something that is a witness of an active food culture. If you want to have good food and you want to eat less meat, you are not looking for meat substitutes, you are

PRIVATE UNIVERSITY VIENNA

looking for good vegetarian food. That's what my impetus would be. I try to eat as little meat as possible, only if it's really good, but that does not mean that I am looking for meat substitutes at any time. I am looking for good veggies and good vegetarian dishes that I can enjoy. And maybe using meat or animal related protein or fat, for that matter, as a spicing agent for my food - as the Chinese have been doing for thousands of years. Where meat has been scarce, but where you have found ways to use dried meat or fermented meat or fish for ways to spice up your veggies. And I think that would be something where I would believe of good food in a sustainable way would rely. But to think of meat substitutes which are produced by an even more industrialized agriculture, which ruins just as much soil as the meat industry does, I don't think that that is the way forward. I would like to see a little more Linsengulasch with Speck instead of fake Tafelspitz.
8. Do you believe that there is a tendency in the difference of vegan menu items between higher and lower priced Wirtshäuser? What is the reason for the difference in the offer?

I could imagine that since tourists are a big motor of the Viennese restaurant industry and tourists tend to go to higher-priced places that maybe those places would have a higher acceptance rate of vegan dishes.
9. The Wirtshaus is not only famous for its food, but what it stands for from a cultural and historical perspective. If there will be a shift in the offer of dishes in the Wirtshaus towards more plantbased and vegan alternatives/ dishes, do you believe that this will influence the cultural institution that the Viennese Wirtshaus is? In your opinion, does the Viennese Wirtshaus, in its romanticized form with a witty owner and a bad-tempered waiter, still even exist?

I think it's in its last stages, it is lying in its death bed. There still are places to be found where you get an impression of what a Viennese Wirtshaus used to be. There is still some time left for those to be found and those to survive. (...) The beer did not get any better, that's for sure. The wine didn't get any cheaper, that's also for sure. I think cheap wine was a fixture of a Viennese Wirtshaus and that is less and less to be found. I think cheap wine is a hallmark of a wine growing city like Vienna. In a city where wine is being grown in such large scale and wherever you go around the city there is wine being harvested, it would be the most normal thing, like in Italy and like in France, that wine costs almost nothing. All of a sudden wine costs a hell of a lot of money in almost every place and that is a bit strange. But I think that the main point is that Viennese cuisine is a cuisine that basically is a laborintensive cuisine which makes a lot out of nothing, which is the hallmark of many grand cuisines, like the Italian for instance. But less and less people are willing to put that labor in and who am I to blame them since I am not doing it myself, how could I tell anyone else to do it? It's difficult. (...) I think that the real Wirtshaus is dead. There are still impersonators, there are still some ghosts going on, but the institution as it should be, a popular place where you

PRIVATE UNIVERSITY VIENNA
don't have to think a long time wherever you are you can find one that has been gone for a long time already. Now you need to know and you need to look out for and you need to have lived and think a long time before you find places somewhere in the city which still resemble to a Viennese Wirtshaus. But that is not what a Viennese Wirtshaus should be. A Viennese Wirtshaus should be more or less on every other corner of the street because it is something that is deeply rooted in our culture and that's not the case anymore. What is deeply rooted in our culture now is Döner and Schnitzel places - that's a totally worthy development, which like many others in modern times - but the Viennese Wirtshaus's days have been counted a long time ago.

