Raising the bar: A story of bean-to-bar chocolate production in New Zealand

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Abstract

Chocolate is considered one of the most gratifying confections there is, and this holds as true in New Zealand as elsewhere in the world. While broader culinary traditions in New Zealand have been well documented, the food history of chocolate production has not yet been explored. Consequently, this study explores the history of chocolate production, with a specific focus on bean-to-bar chocolate production, in New Zealand.

Within the realm of a qualitative and interpretive paradigm, this work, based on a narrative history and interviews with current bean-to-bar chocolate makers in New Zealand, traces the history of bean-to-bar chocolate production in New Zealand. This process allowed for a multi-faceted reconstruction and interpretation of historical data to help understand various transformations within New Zealand's chocolate industry, an industry long dominated by multinational companies such as Cadbury and Nestlé. This domination by overseas companies has recently been challenged by the emergence of small artisanal bean-to-bar chocolate makers and the rise of local chocolate company Whittaker's.

Among the key findings is evidence of the maturing of the local chocolate industry to the point where it is clear that New Zealand-made chocolate is now widely viewed and trusted by local consumers as a high-quality product. This trust extends to both the current strong player in the market, Whittaker's, and equally to smaller artisanal bean-to-bar chocolate makers, a confidence in product comparable to the New Zealand craft beer industry and the more well-established wine industry. The research also finds that the emergence of more artisanal bean-to-bar chocolate makers and their focus on more transparency around the production of chocolate reflects similar trends overseas, highlighting the fragile structure surrounding growth and sustainability in the chocolate production industry.

The findings of the research are timely as they highlight opportunities for the industry to place current worldwide sustainability concerns in perspective with a view to the future, a future which New Zealand chocolate manufacturers cannot avoid.

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Declaration of authorship

I hereby declare that this submission is my own work and that, to the best of my

knowledge and belief, it contains no material previously published or written by another

person (except where explicitly defined in the Acknowledgments), nor material which to

a substantial extent has been submitted for the award of any other degree or diploma of

a university or other institution of higher learning.

Signed: Arno Sturny

Date: August 29, 2019

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This research was conducted under AUT University's Code of Ethics (AUTEC). Approval for this research was granted under number 18/276 on the 30th of July 2018. The application for Ethics consent is enclosed as appendix D.

Glossary of technical terms

Bar: A moulded, bar-shaped piece of chocolate; a term used

extensively in the craft chocolate industry and the

confectionery industry for filled confectionery bars.

Block: Moulded chocolate, often heavier in weight (150–200g).

Cacao: Refers to the pod and the beans before the drying stage.

Chocolate creams: Boiled sugar crystallised and creamed, set in a starch mould

and then dipped in chocolate once firmed.

Cocoa: The cocoa bean product once the beans are dried; also

traditionally describes the powdered drink.

Cocoa butter: A natural fat present in cocoa beans obtained by pressing

cocoa mass (or cocoa liquor).

Cocoa cake: The pressed cake resulting from the process of separating

cocoa butter from the cocoa mass/liquor.

Cocoa mass: Roasted and ground cocoa nibs ground to a paste; also

referred to as partially processed chocolate, or chocolate

liquor.

Cocoa nibs: Cocoa beans with shells removed.

Cocoa powder: The product obtained by grinding or pulverizing pressed

cocoa mass, available in different fat levels. It can be natural,

or manufactured by the Dutching process.

Conche: Machine (taking its name from the shell-like shape of the

containers originally used) that helped create a superior smooth and better-tasting chocolate referred to as 'fondant

chocolate' (melting chocolate) (Beckett, 1999).

Confection: Originally referring to a medicinal preparation (from the Latin

word 'conficere', meaning 'to prepare') bound either in honey or sugar syrup (Grivetti & Shapiro, 2011). Today used the

same way as confectionery.

Confectionery: Also known as confection; a shared term applied to edible

products usually produced from sugar as the common

ingredient, prepared by a confectioner.

Countline: A single unit confectionery product, such as a Mars bar.

Couverture: Translated from the French couvrir ('to coat'), a chocolate

product with high viscosity used in the manufacturing of

confectionery.

Croquettes: Small round tablets of chocolate, stacked and tube-wrapped.

Direct trade: The purchase of cocoa beans directly from the farmer.

Dutching process: The alkalisation treatment of cocoa powder allowing for better

suspension within a liquid drink.

Fairtrade: A global non-profit economic development organisation

addressing economic, ecological and social injustice.

Fair trade: The movement of promoting trade on fair terms involving the

environment and people, addressing poverty and promoting

sustainability.

Fermentation: A process by which a complex microbial interaction naturally

modifies the composition of cocoa beans so that when

roasted they yield a characteristic chocolate flavour.

Grinding: A mechanical process by which roasted cocoa bean nibs are

reduced to a smooth liquid known as cocoa liquor (or cocoa

mass).

Milk chocolate: Chocolate which contains cocoa solids, cocoa butter, milk

solids and sugar.

Melangeur: A chocolate grinding machine mixing cocoa liquor with sugar

and other flavours; often also acts as conche.

Sante bar: A one-finger bar of chocolate (Whittaker's).

Tablet: Moulded chocolate; the term is often used to describe thinner,

premium types of chocolate.

Tempering: The process of fat crystallization during chocolate

manufacture so the finished product solidifies in a stable

crystal form, today referred to as pre-crystallisation.

Viscosity: The measure of a liquid's resistance to flow.

White chocolate: Chocolate containing cocoa butter milk solids and sugar

(Technically not chocolate as it doesn't contain cocoa solids).

Winnowing: A process to separate the light husks of the cocoa beans from

the nibs by using air to blow away the husks.

Chapter 1 – Introduction

1.1 Introduction

This study explores the history of New Zealand's bean-to-bar chocolate production through considering historical behaviours in the industry alongside the place bean-to-bar chocolate makers hold within current commercial, social and cultural settings. The study focuses on the solid and moulded form of eating chocolate, generally referred to as bar, tablet or block chocolate.

The research takes the form of a narrative history based on archival data and semistructured interviews with current chocolate makers, and considers current New Zealand bean-to-bar chocolate-producing companies of varying sizes in light of the early history of chocolate making in New Zealand to better understand the transformation within the country's bean-to-bar chocolate production industry.

This chapter introduces the background to the research and outlines the aim and scope of the study. It explains the significance of the study and introduces the methodological approach. The chapter concludes with an overview of the dissertation.

1.2 Background of study

For most of its 3000-year history chocolate was a drink (Coe & Coe, 2013; Squicciarini & Swinnen, 2016). Today, people identify chocolate as a solid and sweetened formed product, elaborately processed from the pulp-surrounded cacao seeds (beans), originating from the large pod (fruit) of the tropical cacao tree (Presilla, 2001). It is this form of solid chocolate, first produced in 1847 by Fry and Sons, England (Grivetti & Shapiro, 2011), which has become one of the most cherished and important confection items in highly industrialised countries with high food consumption (Greweling, 2012; Squicciarini & Swinnen, 2016).

Chocolate has a unique and complex taste made up of "over five hundred different flavour compounds" (Alberts & Cidell, 2006, p. 218), making it one of the most complex foods available. It also has the power to elicit strong emotional responses, such as happiness and feelings of love, affection, gratitude, hospitality, even remorse (Richardson, 2003). But cacao and the production of chocolate, as with other world crops, faces many economic, ecological and social challenges, as well as questions over its sustainability (Fountain & Huetz-Adams, 2018).

While broader culinary traditions in New Zealand have been well documented (Burton, 1982; Leach, 2010; Veart, 2009), the food history of the highly processed product

chocolate is still largely unexplored. The New Zealand chocolate market (Ministry of Business, Innovation & Employment, 2018) today is relatively small compared to the European market (Fountain & Huetz-Adams, 2018). Nevertheless it is well established, as evidenced in the increase in chocolate consumption and production (Ministry of Business, Innovation & Employment, 2018), the recent establishment of artisanal banto-bar chocolate makers (NZ Chocolate Awards, n.d.-a), and the continuous media attention on the subject ("Cadbury's Dunedin Factory," 2017; "Eating Three Chocolate Bars," 2018; "Whittaker's Chocolate Blocks," 2019).

Evidence of this high interest in chocolate in New Zealand is evidenced in the voting of Whittaker's as New Zealand's single most trusted brand for eight years running (Reader's Digest New Zealand's Most Trusted Brand) (Trustedbrands, 2019), the reporting on the economic, social and cultural impacts of the closure of the Cadbury chocolate factory in Dunedin ("Cadbury's Dunedin Factory," 2017) and the opening of the first fair trade chocolate factory, Sweet Justice Chocolate Factory, in Christchurch by Trade Aid New Zealand (Trade Aid, 2019b). These examples demonstrate a clear transformation within New Zealand's commercial chocolate production, reflecting worldwide changes in multinational confectionery companies but also the emergence of artisanal production that directly addresses issues of sustainability and transparency (Fountain & Huetz-Adams, 2018; Squicciarini & Swinnen, 2016; Trade Aid, 2019b; Wilson, 2016; Whittaker's, 2013).

New Zealand has a long history of production and consumption of chocolate. A 2017 report by the New Zealand Ministry of Business, Innovation and Employment (NZ MBIE) looking to identify and profile emerging growth opportunities within the New Zealand food and beverage sector recognised potential investment opportunities in the New Zealand chocolate industry. In Chapter 2 of this report, the history of chocolate in New Zealand is broken down into three comprehensive eras of development: the 'pioneer' era (1860s–1930s), 'production' era (1930s–1990s) and 'innovation' era (2000s) (Ministry of Business, Innovation & Employment, 2018, p. 29). Historical evidence pertaining to the first two 'eras' of bean-to-bar chocolate production in New Zealand are discussed in relation to the current status of the industry in the Research Findings (Chapters 4 and 5).

1.3 Aim and scope

The central aim of this research is to:

Explore the history of bean-to-bar chocolate production in New Zealand by considering historical developments since its introduction in the late nineteenth century.

Within this central aim, the researcher is engaging in the following objectives:

- 1. To explore the extent to which the narrative of a history of bean-to-bar chocolate in New Zealand since the early 1850s draw parallels with the current localised production of chocolate.
- To examine the extent to which the current influx of artisanal bean-to-bar chocolate makers in New Zealand is influencing the course of New Zealand's chocolate industry.
- 3. To identify the place current artisanal bean-to-bar bar chocolate holds within current commercial, social and cultural settings in New Zealand.

The recent growth of independent and local bean-to-bar chocolate makers in New Zealand has brought about a questioning of New Zealand's dependence on overseas manufactured chocolate. Current production of bean-to-bar chocolate in New Zealand involves approximately twelve companies from very small to large (Ministry of Business, Innovation & Employment, 2018).

There is a lack of research literature available in New Zealand relating to chocolate from a historic, economic, social or cultural perspective. The subject of chocolate has so far only been considered in relation to health- and nutrition-related studies (No, Kelly, Devi, Swinburn, & Vandevijvere, 2014; Utter et al., 2013).

The history of chocolate production in the country has become especially interesting since the relatively recent emergence of small artisanal chocolate producers who are challenging the existing commercial landscape and consumer behaviour around chocolate production and consumption in New Zealand. The experiences, views and impact of artisan chocolate producers and their products can help give us a better understanding of the current value of mass-produced and bean-to-bar chocolate in New Zealand, including whether sustainability issues surrounding global chocolate production are being considered (Fountain & Huetz-Adams, 2018).

1.4 Methodological approach to the research

The research takes the form of a narrative history considering the past and present of the production of bean-to-bar chocolate in New Zealand. Through the examination of the history of bean-to-bar chocolate production and the influence of economic, social and cultural interactions within New Zealand, multiple emerging realities add to the historical research, providing an interpretive paradigm within a relativist ontology and constructionist epistemology.

The history of bean-to-bar chocolate production is presented within a qualitative interpretivist and historically focused methodology. A qualitative approach of methodology gives serious attention to the history of chocolate bar production in New Zealand and the businesses involved as they are shaped and limited by past events, and has the advantage of incorporating a descriptive and narrative inquiry style of method, thereby strengthening its worth.

Multiple methods of data collection were used. The collection of archival data, corporate records, books, journal articles and newspaper articles supported the historical descriptive narrative of this research (Miller & Deutsch, 2014). The use of semi-structured interviews of participants' narratives provided the researcher with oral stories and multiple perspectives (Yow, 1994) regarding the current state and future direction of chocolate production in New Zealand. In total, three bean-to-bar chocolate manufacturers of various sizes, one cocoa mass-to-bar chocolate manufacturer and one online business owner specialising in the selling of chocolate bars were interviewed. The use of thematically analysed written documents and interviews was appropriate for a history of chocolate production in New Zealand, fitting within the paradigm of a historical narrative and descriptive theoretical framework, and helps to identify themes (McCullagh, 2004; Tosh, 2015).

1.5 Significance of the research

A history of bean-to-bar chocolate production in New Zealand is crucial to the understanding of the opportunities it presents for placing current chocolate production and consumption in New Zealand in perspective with a growing advocacy for better transparency in an industry plagued by issues.

Martin and Sampeck (2015) argue that there is a lack of examination of the history of chocolate production worldwide. By contributing to New Zealand's food heritage and history of chocolate, a platform for possible new directions towards education and action can promote benefits for both chocolate producers and consumers (Martin & Sampeck, 2015). With the current focus on more transparency around the production of food worldwide, chocolate as a consumer product is in dire need of change if it wants to free itself from its colonial past (Leissle, 2017; Squicciarini & Swinnen, 2016).

This study is important as it explains how New Zealand's chocolate industry got to where it is today and presents opportunities for placing current sustainability concerns levelled at the industry in perspective with a view to the future.

1.6 Dissertation structure

This dissertation consists of six chapters, structured as follows:

Chapter 1 began with the introduction, which included the background, aim and scope, the methodological approach, significance and overview of this research.

Chapter 2 gives a brief overview of the history of chocolate worldwide and its challenges. It discusses the making of bean-to-bar chocolate and the current commercial standing of the industry. The second part of the chapter concentrates on the history of New Zealand bean-to-bar chocolate production.

Chapter 3 presents the theoretical framework based on a qualitative/interpretivist and constructionist historical perspective. It considers the foundation of the dissertation, looking at the past and present of bean-to-bar chocolate production in New Zealand. It clarifies research assumptions and justification of the theory applied.

Chapters 4 and 5 cover the findings and discussion based on the thematic analysis of all data and interviews, connected to the identity of New Zealand chocolate, its history and its role and relation to the past and future direction.

- Chapter 4 relates New Zealand's history of bean-to-bar-chocolate production to the present time.
- Chapter 5 discusses the participants' stories and experiences within the bean-tobar chocolate production industry in New Zealand.

Based on the history of chocolate in New Zealand and the stories of its participant bean-to-bar chocolate makers, Chapter 6 concludes that New Zealand is developing a sense of commercial and cultural identity when making, selling and consuming bean-to-bar chocolate. The current chocolate industry in New Zealand is strongly influenced by its local bean-to-bar chocolate makers and manufacturers, showing customer trust, market maturity, acknowledging issues of sustainability, following overseas trends and guidelines with a view to strengthening ties with New Zealand's Pacific neighbours.

Chapter 2 – Historical context

This chapter focuses on existing literature on the origin of cacao and transformation into the chocolate we know today in relation to the history of bean-to-bar chocolate production in New Zealand.

- Part 1: This section (2.1–2.3) introduces the subject of chocolate, following the trajectory of cacao to chocolate bar.
- Part 2: This section (2.4) considers the modern-day production of bean-to-bar chocolate from a multinational and worldwide perspective, from colonisation to the impact of industrialisation and mass production and its political influence.

Due to the limited scope of a dissertation, Parts 1 and 2 will be kept brief as the subject matter has been extensively researched within published literature.

 Part 3: The last section (2.5) examines the emergence and rise of innovative artisanal bean-to-bar chocolate manufacturers, the effect they have had on the existing commercial chocolate industry still dominated by large industrial chocolate manufacturers, and the underlying social, ecological and economic issues.

2.1 Introduction to chocolate

The origin of the substance we know as chocolate is rooted in a long and often difficult relationship between the old world and the new, between rich and poor, and the more recent challenges of its expanding popularity (Squicciarini & Swinnen, 2016).

Cacao beans from the tropical perennial cacao tree (*Theobroma cacao*¹) are the essential key ingredient of chocolate, a food item which has played an important part in human consumption (consumed originally in liquid form with the addition of spices), wellbeing and worship for over three thousand years, becoming a powerful commodity for many of the Mesoamerican civilisations from BC1000 (Coe & Coe, 2013; Fluck, 2014; Presilla, 2001).

2.2 Timeline: From bitter drink to chocolate

Twelfth century

Mayan and Aztec cultures used cacao beans to make a thick unsweetened drink (sugar was as yet unknown) (Coe & Coe, 2013; Presilla, 2001).

¹ The scientific name given by Swedish scientist Carl von Linné in 1753 (Coe & Coe, 2013).

Fifteenth century

By this time Spanish colonists had brought cocoa from the Aztecs back to Europe, adding to it another imported, expensive and highly taxed ingredient, sugar, along with spices to please local palates. Ground roasted cocoa bean nibs were mixed with sugar and spices into a warm cocoa mass, which was then rolled into cakes and cooled, a process that remained unchanged until the early nineteenth century (Coe & Coe, 2013).

Sixteenth century

The demand for the chocolate drink started to grow, eventually spreading across Europe to America. The increased demand for cocoa resulted in high prices, eventually forcing cacao production to other regions of the world (Coe & Coe, 2013; Squicciarini & Swinnen, 2016).

Seventeenth century

This period saw the increased growing of cacao by colonial powers such as the Spanish (in the West Indies and Caribbean), the Dutch (in Ceylon [Sri Lanka] and the East Indies [Java and Sumatra]), the French (Martinique, Brazil and the Ivory Coast), the Portuguese (Brazil and West Africa: São Tomé and Principe), the British (West Africa: Togo, Cameroon and Ghana) and the Germans (British Cameroon). The eventual increase in cocoa supply led to a fall in prices and made chocolate more accessible (Cidell & Alberts, 2006; Clarence-Smith, 2015; Richardson, 2003).

2.3 Timeline: Chocolate from bean to bar

Eighteenth and nineteenth centuries

With the coming of the Industrial Revolution (1750–1850) and the onset of innovations such as steam power and mechanisation affecting food production, the transportation, retailing and manufacturing of cocoa went through its most radical changes (Cidell & Alberts, 2006). Numerous chocolate factories were founded in America, England, France, Germany, Holland, Italy and Switzerland (Coe & Coe, 2013).

In 1828, Coenraad Van Houten invented 'dutching', a process for making chocolate powder. Van Houten's second invention involved the alkalizing of cocoa powder resulting in better mixing with liquid. These processes helped facilitate the next steps in creating a palatable eating chocolate.

The first eating chocolate

In 1847, British chocolate manufacturer Fry and Sons (Bristol, England) produced the first true eating chocolate by mixing cocoa powder, sugar and melted cocoa butter (remaining cocoa butter from the pressing of cocoa beans) into a paste able to be cast

and pressed into moulds (Grivetti & Shapiro, 2011; Squicciarini & Swinnen, 2016). Fry's chocolate bar was eventually sold to the public as a new type of French chocolate (named 'Chocolat Délicieux à Manger' [translated as 'delicious chocolate to eat']), a way of gaining increased market share from the dominating French and Swiss chocolate producers of the time (Richardson, 2003). British chocolate manufacturer Cadbury soon followed in 1849.

Other earlier attempts at making eating chocolate were made by Cailler (Switzerland, 1819), Van Houten (Holland, 1828) and Menier (France, 1836) (Grivetti & Shapiro, 2011).

The first milk chocolate

In 1875, Daniel Peter of Vevey, Switzerland invented milk chocolate (Coe & Coe, 2013). With the addition of milk powder (invented by German-born Swiss Henri Nestlé in 1867) Peter also created the first chocolate with increased shelf life, avoiding the common issue of mildew, as water could for the first time now be omitted (Coe & Coe, 2013).

In 1880, Swiss chocolate manufacturer Rodolphe Lindt invented a machine called a 'conche'. This machine helped create chocolate with a better viscosity and 'melt in your mouth feel' (Greweling, 2012; Squicciarini & Swinnen, 2016).

The intensification of commercial chocolate production in the mid- to late-nineteenth century created a division of affordability where "drinkable chocolate from cocoa was the go-to for the masses and where eatable and solid chocolate from cocoa became the chocolate for the rich" (Squicciarini & Swinnen, 2016, p. 19). But this was only short-lived as the period of 1880–1940 developed into the first true worldwide chocolate boom (Clarence-Smith, 2015), helped by the continuous drive of industrialisation and new inventions, which led to an increased quality of eating chocolate and product diversification.

Twentieth century

In 1900, Hershey (US) launched the 'Hershey's Bar', followed by Philippe Suchard's (Switzerland) 'Milka' bar in 1901, Cadbury's (England) 'Dairy Maid' in 1905 (eventually rebranded as 'Cadbury Dairy Chocolate'), Stollwerck's (Germany) 'Alpia' in 1906, Theodor Tobler's (Switzerland) Toblerone in 1908 and Rowntree (England) following suit in 1924 with its 'Plain York Chocolate' bar (Chrystal, 2011; Grivetti & Shapiro, 2011; Schulte Beerbühl, 2014). In 1930, Nestlé invented the first white chocolate (Nestlé, n.d.).

What initially started as a bitter, greasy and spicy drink had by now developed into a drink of connoisseurship consumed by the elite of society, to be transformed by the midnineteenth century into the solid chocolate confection we know today.

2.4 Contemporary commercial production of chocolate

2.4.1 Global cocoa production

Over time the history of chocolate has highlighted the dichotomy between the nations growing and extracting the raw materials (Coe & Coe, 2013; Fold, 2001), and the nations producing and indulging in the consumption of chocolate. One ironic fact is that Mexico, often referred to as the birthplace of cacao (Coe & Coe, 2013; Presilla, 2001), has only since the early 2000s managed to resurrect its industry but is still only responsible for 1.68 percent of world production (2012) (Fluck, 2014). Accurate world cocoa production statistics are difficult to obtain and tend to vary in their representation and estimates (Fountain & Huetz-Adams, 2018; Pipitone, 2018a).

According to Pipitone (2018a), previous CEO of the International Cocoa Organization (ICCO) the top ten world producing countries of cocoa in 2017 were as shown in the following table.

Table 1: The 2017 top ten world producing countries of cocoa (approximate tonnes per year)

	Country	Tonnes per year
1.	Ivory Coast	1,985,000
2.	Ghana	900,000
3.	Ecuador	290,000
4.	Indonesia	250,000
5.	Cameron	240,000
6.	Nigeria	240,000
7.	Brazil	162,000
8.	Peru	120,000
9.	Dominican Republic	60,000
10.	Colombia	55,000

The Cocoa Barometer 2018 (a biennial report on the current state of sustainability in the cocoa industry) published the 2015/2016 (based on the ICCO², 2018 report) world consumption of chocolate (processed) as follows.

Table 2: World consumption of processed chocolate (approximate tonnes per year)

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² The International Cocoa Organization (ICCO) is a global organisation composed of both cocoa producing and cocoa consuming member countries (ICCO, 2019a).

	Country		tonnes per year
1.	Europe		1,852,000
2.	US		732,000
3.	Brazil	(Americas: 333,000)	189,000
4.	Japan		176,000
5.	Africa		154,000
6.	China	(Asia: 351,000)	82,000
7.	Brazil		162,000
8.	India		46,000

An increase in consumption in developed markets and new developing markets has added pressure on the cultivation of cacao. From a consumer perspective, Africa and other new and emerging markets such as China, Russia and India show increased chocolate consumption. This growth has been particularly been high in India, where traditional sweets are gradually being replaced with chocolate (Sondhi & Chawla, 2018; Squicciarini & Swinnen, 2016). China, while still slow in comparison to the Indian market, has the potential to continue to increase considering its population of 1.3 billion (Squicciarini & Swinnen, 2016).

Global sales of chocolate reached a value of USD83.2 billion in 2010 with forecast growth of 2.7 percent. In 2016, sales reached USD98.3 billion with the Asian market holding 20 percent of the global market (Afoakwa, 2016; Leissle, 2018).

2.4.2 Production from cacao bean to chocolate

To produce chocolate, three basic commercial varieties of cocoa beans are used:

Table 3: Base varieties of cocoa beans

Criollo	Considered the best quality, but low yielding and prone to disease, Criollo makes up approximately 10 percent of the annual world harvest.
Forastero	Considered to lack flavour complexity but hardy and boasting large yields, Forastero makes up approximately 70 percent of the annual world harvest.
Trinitario	A hybrid of Criollo and Forastero, Trinitario combines advantages of each of the above, and makes up approximately 20 percent of the annual world harvest.

(Source: Fountain & Huetz-Adams, 2018)

The chocolate manufacturing industry further distinguishes two broad categories of cacao beans: 'fine' or 'flavour' beans (Criollo or Trinitario), which make up 5 percent of the world crop, and 'bulk' or 'ordinary' beans (mainly Forastero), which make up 95 percent of the world crop (Greweling, 2012; Squicciarini & Swinnen, 2016). This means most of the chocolate in the world is made of Forastero beans.

This basic system of categorising cacao has become standard in marketing, genetic classification and colloquial description, but has been questioned for its validity (Masonis, D'Alesandre, Vega, & Gore, 2017). Recent research has shown that there exists a much greater diversity than first thought (C-spot, 2019; Leissle, 2018). Leissle (2018) points out that beyond "the trinity of Criollo, Forastero, and Trinitario, cacao in fact has many varieties - called strains, varietals, types of cultivars – that have distinct characteristics" (p.165). This statement was based on the 2008 research by Juan Carlos Motamayor, who set a new standard identifying ten genetic groups of cacao beans, comprising of amelonado, contamaná, criollo, curaray, guinana, iquitos, maraňón, nacional, nanay and purúos (Giller, 2017).

2.4.3 Definition of chocolate

The definition and specific requirement for minimum cocoa content in products commercialised as eating chocolate is often governed by law and depends on a country's food legislation, where a minimum content of cocoa is prescribed to allow it to be called chocolate (Beckett, Fowler, & Ziegler, 2017; Carolissen, 2016). According to the Food and Agriculture Food Organization of the United Nations guidelines for chocolate, as noted by Carolissen (2016):

Chocolate (in some regions also named bittersweet chocolate, semi-sweet chocolate, dark chocolate or 'chocolat fondant') shall contain, on a dry matter basis, not less than 35% total cocoa solids, of which not less than 18% shall be cocoa butter and not less than 14% fat-free cocoa solids. (p.2)

In the market transformation of cacao bean to moulded chocolate, the origin of the bean goes mostly unnoticed as the chocolate's identity is more likely to be linked to the country of production (Leissle, 2017). As cited above, the standard cocoa bean used for chocolate today is the Forastero varietal, grown across the world, predominantly in West Africa. Large chocolate makers such as Cadbury, Nestlé, Hershey's or Mars select specific cocoa beans according to production and taste specifications, with cocoa beans originating from numerous locations and plantations in the world. This serves the purpose of continuous consistency, something customers generally associate with quality (Leissle, 2018).

2.4.4 Production from cacao bean to moulded eating chocolate

Once the cacao beans have been fermented and dried in their place of origin they are then described as cocoa beans. To start the chocolate production process, the cocoa beans are cleaned, roasted and micronized (broken and separated from their shells), with the roasted beans (nibs) then ground into a cocoa mass (also referred to as chocolate liquor). During the mixing stage, the cocoa mass is combined with sugar, additional cocoa butter (to increase viscosity) and vanilla (and milk powder to produce milk chocolate). The next step is referred to as refining. Using steel or stone rollers, the still coarse textured cocoa mass is further crushed, mixed, refined and reduced to a particle size of 25 microns (so as to be unnoticeable to the human palate). The chocolate is still thick and crumbly and is now placed in a conche where it is agitated for up to ninety hours (the addition of lecithin at the end of conching further improves viscosity and moisture retention). According to the type of chocolate produced, the refined and fluid chocolate is then crystallised to a specific temperature, promoting proper setting. The chocolate is finally moulded and cooled and stored and is ready for consumption (or for shipping around the world), or it can be further processed into 'couverture' (Beckett, 1999; Greweling, 2012).

The main difference between moulded bean-to-bar eating chocolate and 'couverture' (the term was not coined until the early twentieth century) lies in the percentage of cocoa butter. The more cocoa butter the chocolate contains, the more fluid it appears when it is melted. This is an important advantage to subsequent development of chocolate products as it is easier to manipulate, but is less of an issue if the chocolate is moulded only once for direct consumption i.e. solid moulded eating chocolate (Beckett et al., 2017; Greweling, 2012). Couverture does not look different, but its higher viscosity allows is to be easily used to make or coat food products within the food and beverage manufacturing industry or be used by third-party small companies such as bakeries, pâtisserie and confectionery shops (Beckett et al., 2017; Greweling, 2012).

2.5 Changes within the commercial chocolate industry

2.5.1 The artisanal bean-to-bar movement

The now common term 'bean-to-bar', defined according to recent artisanal movements (Leissle, 2017) in the making of chocolate worldwide (Fine Cacao and Chocolate Institute, 2019; Giller, 2017), has been adopted by chocolate producers, industry experts and consumers alike, and the concept has, aligned with good marketing, created a niche industry which has risen steadily over 20 years.

Carla D. Martin of the non-profit organisation The Fine Cacao and Chocolate Institute (FCCI), US, estimates there are around five hundred bean-to-bar chocolate

manufacturers worldwide (with a production of 200 metric tons or less a year), with approximately two hundred in the US and fifty-five in Australasia, including approximately ten small independent bean-to-bar chocolate makers in New Zealand (no current verifiable data available) (Fine Cacao and Chocolate Institute, 2019). Bean-to-bar chocolate making, while not relying on regulated industry standards, has adopted a set of principles based on artisanal production methods, ethical considerations and sustainability, transparency, quality and market difference.

Current understanding of 'bean-to-bar chocolate' implies the making of chocolate by an individual person or small groups who value skilled production (artisan) by processing smaller quantities of specialty fermented and dried cocoa beans (often referred to as fine cacao) (Leissle, 2013), sourced independently either directly from the grower or intermediate organisations or business entities. The beans are then roasted, ground and made into chocolate and moulded, all at a single facility (Fine Cacao and Chocolate Institute, 2019; Gallo, Antolin-Lopez, & Montiel, 2018; Giller, 2017; Leissle, 2017; Recanati, Marveggio, & Dotelli, 2018; Yakah, 2017).

The term 'bean-to-bar' was coined by Robert Steinberg and John Scharffenberger, founders of San Francisco's Scharffen Berger, America's first artisan bean-to-bar chocolate making company (Giller, 2017; Leissle, 2017). In 1997, Scharffen Berger started selling bean-to-bar chocolate bars produced with single origin cocoa beans from Madagascar. This created a chocolate with big and bold flavours, challenging consumers' perceptions on what chocolate could taste like and questioning the generic taste of mass-produced chocolate by the blending of numerous cocoa beans (Giller, 2017; Scharffen Berger, 2019). To specify the bean and origin, a concept lost in mass manufactured chocolate, is a reminder of how confectioners and chocolate makers in the late nineteenth century used to differentiate their chocolate products from other companies (Leissle, 2013). Companies such as Fry and Sons in England advertised the fact that they used beans from Caracas, or Bahia used by Cadbury, England and Maravilla or Maracaibo used by the Taylor Brothers, England. This concept of terroir³ (Nesto, 2010), or place of origin, eventually lost its relevance when industrial manufacturing took over and the importance lay more in consistency (Leissle, 2018; Squicciarini & Swinnen, 2016).

Bean-to-bar chocolate makers' main goal is to achieve maximum flavour development from the chosen beans. Bean-to-bar chocolate making is often compared to the wine industry in that, like wine, the taste of chocolate is often determined by its terroir, the

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³ "The complete natural environment in which a particular [wine] is produced, including factors such as the soil, topography, and climate" ("Terroir," 2019).

environment in which the cacao trees grow, and similar processes of production such as fermentation (Giller, 2017). John Scharffenberger (of Scharffen Berger), previously a winemaker, took full advantage of his knowledge and well-developed palate when first exploring the use of Madagascan cocoa beans for chocolate making.

According to a 2015 report by ICCO, of the 4.2 million tons of cocoa produced, only 5 percent was considered to be fine flavoured cocoa. Todd Masonis of well-known Dandelion Chocolate in San Francisco (Masonis et al., 2017) suggests that US bean-to-bar chocolate makers would have probably used no more than 0.05 percent of the global production.

2.5.2 Fine flavoured cocoa beans

One of the challenges bean-to-bar chocolate makers face is convincing consumers of their higher-quality product and price tag. A driving force in the marketing of the chocolate is the advertising of the high-quality beans used, its uniqueness, origin or terroir. But Jessica Firger (2015) argues that in the US much of the available craft chocolate is actually of inferior quality, and often consumers cannot taste the difference between standard commercial bulk chocolate and premium craft chocolate (Firger, 2015). Spencer Hyman of online shop Cocoa Runners (Cocoa Runners, 2019b) admits there is a misconception of what good chocolate is, but notes that craft chocolate is not yet as developed as other food categories such as wine, coffee or beer but has the potential to become so (Hyman, 2019).

The world of chocolate draws comparison with wine where the model of the labelling of raw-material origin is accurate and well defined and often uses the term 'terroir' (Nesto, 2010). As Leissle (2017, p.23) points out, "cacao beans, like wine grapes, produce distinct flavour notes depending on strain and terroir". But Robert Steinberg (founder of Scharffen Berger) (as cited in Nesto, 2010) warns that it is very challenging to have assurance of the source or quality of any purchased cocoa from either intermediary merchants and/or individual farmers and the industry is operating very much in a "regulatory void" (p. 132). One of the major issues is the categorisation of cacao bean groups, which only recently (in 2008 by J.C. Motamayor) was organised into varieties and sub-groups (Giller, 2017; Leissle, 2018; Nesto, 2010). To bring the industry forward, the American Fine Chocolate Industry Association and industry leaders created the Heirloom Cacao Preservation initiative to help encourage farmers to grow high-quality cacao beans to help standardise and specify cacao bean varieties (Fine Chocolate Industry Association, 2019). Steinberg suggests (as cited in Nesto, 2010) that "it will take decades to accurately organize cacao plants into varieties and subgroups, since any

such categorization will require the concerted collaboration of scientists, farmers, merchants, chocolate factories, and governmental organizations" (p. 133).

Scharffen Berger (now owned by Hershey's) ("Hershey Set To Acquire," 2005) may have initiated the artisan movement of single origin bean-to-bar chocolate in the US and probably popularised the term 'bean-to-bar', but it should be remembered that Scharffen Berger's inspiration for the business stemmed from visiting traditional chocolatiers in the 1990s, such as small-scale chocolatier Bernachon (Bernachon, 2019), a French maker of bean-to-bar chocolate since the early 1980s. Other chocolatiers in France such as Bonnat (Bonnat-Chocolatier, 2019) have been exploring bean-to-bar chocolate production since the early 1950s (Chocolate Institute, 2019). This interest in terroir has been taking place in other countries too, such as Italy (Domori) and Venezuela (El Rey) (Domori, n.d.; El Rey, 2016).

The reasons for small independent and artisanal production, as previously cited, are multiple. The emergence of bean-to-bar chocolate makers in New Zealand has followed a similar path with early beginnings in the late 1990s from bean-to-bar makers 'Captain Pembleton' and 'White Rabbit' (Rootchocolate, 2014).

2.5.3 Challenges

Another important consideration for bean-to-bar chocolate makers is the concern around injustices within the cocoa industry and how to apply ethical and sustainable business practices.

A lack of development and foresight during the intense cultivation periods of cacao in the late nineteenth and twentieth centuries led to many of the issues the chocolate industry faces today. Many large cacao-growing nations such as Ghana and Ivory Coast in West Africa, the two major cocoa producers today (Fountain & Huetz-Adams, 2018; Squicciarini & Swinnen, 2016), are often characterised by small-scale family farming (2–4 hectares) and multifaceted land ownership (Cidell & Alberts, 2006; Martin & Sampeck, 2015).

In West Africa, there are an estimated two million farmers involved in labour-intensive cacao cultivation. Remuneration is often pitiful, farmers receiving only 6.6 percent return on the total cost of a chocolate bar while the rest of the profit is divided between traders, processors, manufactures and retailers (Make chocolate Fair, 2013). Challenges the farmers face include the fact cacao is prone to disease, issues around monoculture, deforestation, land use change, decreased biodiversity and soil degradation, the heavy use of fertilisers and pesticides creating environmental issues, climate change, poverty among farmers, an ageing workforce, poor investment in infrastructure, a lack of

certification due to cost, and social issues such as human rights violations around forced labour and child labour (Bunn, Castro, Lundy, & Läderach, 2018; Coe & Coe, 2013; Fountain & Huetz-Adams, 2018; Lahive, Hadley, & Daymond, 2018; Leissle, 2018).

Media coverage of these issues created a new and different relationship between consumers and producers, where consumers started to engage in acts of resistance within their power of consumption, now a widely accepted concept (Carrier & Pluetchtford, 2012). Responses to issues and problems in the cocoa industry resulted in increased research and development, new forms of legislation in many African countries, international agreements such as the "Harkin-Engel Protocol" (also known as the Cocoa Protocol) (Leissle, 2018 p.131), and the forming of social responsibility standards and voluntary sustainable standards such as cacao cultivation scheme Rainforest Alliance (merged with UTZ in 2018) (Rainforest Alliance, 2016) and fair trade scheme Fair Trade (Fairtrade, 2016), and others.

Various multinationals have also since formed their own sustainable cocoa programmes, such as Barry Callebaut (Quality Partner), Cargill (Cocoa Promise), Mars (Cocoa for Generations) Mondelēz (International's Cocoa Life Programme) and Nestlé (Cocoa Plan), working closely with the governments of cocoa-producing developing countries (ICI, 2019b; Trautrims, Gold, & Trodd, 2015). The International Cocoa Initiative (ICI)⁴ is committed to addressing child labour (Schrage & Ewing, 2005) but admitted in its 2017 executive summary that child labour was still a prevalent problem and offered a revised 2015–2020 strategy to ensure its continuing relevance and effectiveness in tackling the issue (ICI, 2019b). Leissle (2018) cautions not to point the finger only at West Africa but to look at it as a worldwide issue. According to a 2013 report by the International Programme on the Elimination of Child Labour (IPEC), Asia Pacific is now considered the region with the largest number of child labourers worldwide (Leissle, 2018).

According to a 2016 statement by the International Cocoa Organization's (ICCO) 2016, stakeholders in the complex cocoa supply chain realise that new initiatives need to be created to tackle the challenges the industry faces (ICCO, 2016). A further study completed in 2016 by the International Institute of Environment and Development (IIED) recommended "that a supply chain approach is adopted as a path that will not only ensure all the steps of the chain are 'greened', but also build synergies and lead to better results" (Camargo & Nhantumbo, 2016, p.11). Stakeholders involved in the push for sustainability include governments (providing the right incentives and support, and

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⁴ ICI is a Swiss-based foundation that unites the forces of the cocoa and chocolate industry, civil society, farming communities and national governments in cocoa-producing countries to ensure a better future for children and to advance the elimination of child labour (ICI, 2019a).

appropriate resource management), cocoa and chocolate manufacturers (running their own programmes and initiatives), and global food companies, organisations and foundations for the betterment of the industry (WCO – World Cocoa Foundation, ICCO – The International Cocoa Organisation, RSCE – The Roundtable for a Sustainable Cocoa Economy, IDH – The Sustainable Trade Initiative).

While the chocolate industry has made progress in sustainability many of the certification schemes or producer initiatives have yet to convince smallholder farmers, as livelihoods have not yet improved (Pipitone, 2018b). Many, such as Sylla (2014), believe that the sustainability certification boom with schemes such as Fairtrade make consumers feel better but have not significantly improved poverty, especially when considering that ten years ago certified cocoa sold worldwide was at 2 percent compared to 31 percent in 2018 (Pipitone, 2018b; Sylla, 2014).

Stakeholders are multiple and with this comes many more and often politically charged issues. As Leissle (2018) points out, the issues are known:

Any individual company or organization will frame sustainability in a particular way, based on their position in the industry and their reference points regarding the most important elements of the supply chain. As with quality there is no single industry definition of cocoa sustainability. (p. 177)

Award-winning British academic and journalist Raj Patel, in a 2015 interview with Fairfood International (2015), made the point that important change won't come about through guilt-driven consumerism and self-congratulation, but rather through transformation, organisation and protest at a systemic level. Cocoa is moving from a basic, cheap commodity to a unique and precious commodity with an important history and connection to share, no longer only achieved through the artistry of the chocolate maker transforming a base product into elaborate confections and visual displays of art.

2.6 Summary

This chapter considered the history of cocoa and the production of chocolate and its global supply chain in view of cocoa's importance as a major global commodity, stressing the discrepancy between the undeveloped nations growing cacao and wealthier nations producing chocolate. Recent changes within the chocolate industry as a result of the worldwide expanding artisan food movement were also examined, as well as how the arrival of small craft bean-to-bar chocolate makers has increasingly dismantled the traditional model of mass-produced chocolate and highlighted a lack of transparency in an industry plagued by social injustice, environmental issues and economic dominance.

Chapter 3 – Methodology

3.1 Introduction

Food (the world's largest industry) is an important subject of study and "methodological tool" (Miller & Deutsch, 2014, p. 6). The study of food offers insights into humanity, social and cultural behaviour (Beardsworth & Keil, 1997), but the subject has only relatively recently been researched by academia after a long time being understated (Belasco, 2002).

This chapter provides an overview of the methodology and methods best suited to the research of the history of bean-to-bar chocolate production in New Zealand. To understand constructs of knowledge and how the participants view the world, it is necessary to explore themes of paradigm, ontology and epistemology, before realising those themes within methodology and its practice and methods. Just as methodological theory facilitates what is done within method, the action of operationalisation helps form the conceptual framework for this study (Neuman, 2006).

3.2 Research aims and objectives

The aim of this research is to explore the history of New Zealand's bean-to-bar chocolate production by considering historical developments since its introduction in the late nineteenth century.

This research investigates the path of bean-to-bar chocolate production in New Zealand, identifying the following objectives:

- To explore the extent to which the narrative of a history of bean-to-bar chocolate in New Zealand since the early 1850s draw parallels with the current localised production of chocolate.
- To examine the extent to which the current influx of artisanal bean-to-bar chocolate makers in New Zealand is influencing the course of New Zealand's chocolate industry.
- 3. To identify the place current artisanal bean-to-bar bar chocolate holds within current commercial, social and cultural settings in New Zealand.

3.3 Theoretical framework

A theoretical framework represents a clear set of concepts and relationships that frame research and facilitate its findings. Creswell (2009) suggests that a theoretical framework

provides guidance and support for research undertaken and, in this way, provides the scaffolding on which the building up of research occurs.

The historical perspective on the story of commercially produced bean-to-bar chocolate in New Zealand serves as a vehicle to determine patterns and bring together a summary of realities that occurred over time, helping to understand the current influx of small artisanal bean-to-bar chocolate makers and their place in New Zealand. These observations of an "empirical world" take the direction of an inductive theory, recognising the unfolding and expanding of the world but also encompassing uncertainty and incompleteness (Neuman, 2006, p. 73).

For this research, an inductive rather than deductive theory has been deemed appropriate as, according to Neuman (2006), a deductive theory begins with an abstract or theoretical concept working towards concrete empirical evidence.

Given the perception that being human is a subjective experience, the conceptualisations of reality are founded within the social construction of reality (Berger & Luckmann, 1966) and the interactivity inherent to Mead's (1934) symbolic interactionism. Those theoretical positions enable and empower the researcher's world view.

3.3.1 Paradigm

While a theoretical framework and a paradigm are "intellectually and philosophically related", the theoretical framework is "the intellectual structure" which guides the research study and explains the researcher's understanding and facts (Troudi, 2010, p. 3).

A research paradigm refers to a way of thinking about the world, a structure that is based on ontological and epistemological belief systems and philosophical assumptions (Denscombe, 2009; Guba & Lincoln, 1994). A paradigm helps researchers create the foundation on which individual theories can be built (Gray, 2013). Within different paradigms, multiple values and assumptions arise from different ontologies, epistemologies and methodologies (Grant & Giddings, 2002). Perspectives can vary among researchers, who experience the world via different cultural, social, philosophical or professional sets of belief. The four fundamental theoretical positions on how to acquire knowledge are 'positivism', 'post positivism', 'interpretivism' and 'critical theory' (Denscombe, 2009; Gray, 2013). Positivism and interpretivism have been among the most influential theoretical perspectives (Gray, 2013). Positivism is based on a scientific method of enquiry searching for the truth, or facts about reality, fitting within a realist ontology and objectivist epistemology (Denscombe, 2009; Gray, 2013). Interpretivism, often associated with the social sciences, incorporates a range of approaches and

highlights that research is rarely simply one or the other. Interpretivism sits within a relativist ontology, indicating that social reality is subjective, and that the reality of our social world is constructed where knowledge is not easily determined (Denscombe, 2009).

The aforementioned paradigms guide the researcher and the research activity and depend much on the selected ontology and epistemology and how that knowledge might be gained and are logical and congruent (Grant & Giddings, 2002; Guba & Lincoln, 1994).

3.3.2 Ontology

Ontology is defined as the study of being and the nature of existence or reality (Gray, 2013). As Gray (2013) proposed, philosophical questions such as 'What is true?', 'What exists?' or 'What is real?' are often used to determine ontological perspectives. Bryman (2008), Davidson and Tolich (2003) and Denscombe (2009) realised ontology within research by suggesting that ontology proposes the understanding and view that researchers hold on the nature of reality, reality's variance within cultures and groups. Two of the dominant ontologies with contrasting perceptions of reality are realism and relativism (Denscombe, 2009; Denzin & Lincoln, 1994).

Realists understand the real or natural world as the truth: objective and existing, static and measurable, independent of any theory and beliefs or human behaviour, even if unknown, a world devoid of social constructions (Denscombe, 2009; Denzin & Lincoln, 1994; Kilduff, Mehra, & Dunn, 2011). Contrasting that, relativists understand meaning in social action, where truths are subjective and contextual, entrenched within multiple and changing realities (Gray, 2013). This positioning embraces interpretivism and a pluralistic worldview. Thus an interpretivist approach indicates that our lived experiences are too complex to be explored with a methodical tool that presumes certain facts about it (Davidson & Tolich, 2003). In this way, relativists are influenced by experiences and social interactions. This aligns relativists with co-construction and the social construction of reality (Berger & Luckmann, 1966; Gray, 2013).

Once the researcher has considered an ontological perspective, an epistemological construct can then be considered.

3.3.3 Epistemology

While ontology refers to the study of being and the nature of reality (Gray, 2013), epistemology refers to the ways in which we come to know things (Davidson & Tolich, 2003). Laverty (2003) proposed that epistemology incorporates the theory of knowledge and how it relates to truth, belief and justification.

Related to research, Denscombe (2009) suggested that epistemology is concerned with the logic behind a researcher's ability to gain knowledge of reality. Accordingly, epistemological considerations help researchers to be clearer in their choice of methodological tools that are best suited to gain valid and meaningful evidence. Such a relationship and consideration highlight the importance of the researcher's relationship with knowledge, justified belief and opinion by lessening the distance between the researcher and their research context (Gray, 2013; Yilmaz, 2013).

Two contrasting epistemological positions are objectivism and constructivism (Gray, 2013). While objectivism implies that reality occurs independent of human consciousness and separated from social interaction, constructivism suggests that knowledge is not found but constructed and rejects the existence of an objective reality. Humans 'construct' meaning by basing reality on the interaction with their social environment where knowledge is continuously created and constantly revised, closely linking it to an interpretive paradigm (Crotty, 1998; Gray, 2013).

The questions 'What is real?' (ontology) and 'How do we know 'what we know'?' (epistemology) are interdependent. Their symbiosis is reflected by two simple questions: 'How can we know about the existence of things without considering knowledge?', and 'How can we consider knowledge without existence?' These questions emphasise that ontology and epistemology are not independent but interdependent constructs, configuring how we know what we know and what constitutes knowledge.

3.3.4 Paradigm choice

The aim of this study is to construct a narrative of the history of bean-to bar chocolate production in New Zealand and consider the recent influx of small artisanal bean-to-bar chocolate makers to identify the place bean-to-bar chocolate holds within the current commercial, social and cultural environment.

Drawing on ontological and epistemological stances, an interpretivist paradigm is selected. This allows for broad philosophical positions as it relies on individuals to make sense of the world given that social reality is subjective when history is constructed and interpreted by people (Denscombe, 2009; Miller & Deutsch, 2014).

The appropriate epistemological construct for the subject of this research is constructionism within a historical perspective. According to Munslow (2006), "constructionism" (p. 48) (an expansion of constructivism within a postmodern stance) (Held, 1990) refers to the social theory within historical explanation, covering the study of the past and historical knowledge corresponding to the reality explored and taking into account the researcher's human perception and social experiences within the context of

a study. A common view suggests that history can only ever offer the reader their own personal view or construct as "objective knowledge of the past is impossible" (Hobart, 1989, p.43). A constructionist epistemology applied to the history of bean-to-bar chocolate production in New Zealand, with the ongoing critical approach and the interaction of the researcher, will lead to multiple social constructions (Gray, 2013; Hobart, 1989).

The aim of this highly interpretivist and descriptive method of writing on the history of chocolate production in New Zealand is to facilitate multi-faceted reconstruction and interpretation of historical data. It will enable the culturally informed and meaningful construction of knowledge within the social reality of New Zealand. It also casts the role of the researcher as a participant or facilitator of the inquiry process, this being another aspect of the interpretivist paradigm (Guba & Lincoln, 1994; Miller & Deutsch, 2014). Consequently, the history of chocolate production in New Zealand is not only a construction designed to help make sense and order of the world, but that history is founded within the multiple interactions that have occurred over time. This suggestion, particularly its emphasis on interaction (symbolic interactionism, Mead, 1934), raises an interesting question: How many histories of bean-to-bar chocolate production, in New Zealand or elsewhere, are there, and how do they relate to the current state of production, consumption and cultural value? This philosophical position sits outside the scope of this study. Yet in raising it the researcher proposes a simple response: there are multiple histories that reflect pluralistic worldviews and experiences. Within this suggestion there is an implicit hierarchy: that some histories are more 'important' than others. The researcher hopes that this history will be perceived as a significant contribution to New Zealand's socio-culinary history.

3.3.5 Methodology

Grant and Giddings (2002) proposed that any methodology is underpinned by constructs of ontology and epistemology. Extending this, Jonker and Pennink (2010) suggested that methodology is a domain that expresses a system of methods and principles of doing (specific and practice-based) whereby the researcher can make numerous choices in conducting research. In this way, methodology forms the theoretical and ideological foundation of methods within specific paradigms and theoretical positions (Grant & Giddings, 2002). Drawing on the ontological and epistemological realisations, a qualitative/ interpretivist methodology based on an inductive approach seemed best suited to this research, as the undertaking of a history is intrinsically interpretive and qualitative (Munslow, 2006). Interpretivism sits within a relativist ontology, reflecting the subjectivity of social reality and the socially constructed nature of that reality (Denscombe, 2009). A qualitative approach was chosen because of its flexibility, use of

multiple research methods and "the searching for an understanding of the whole over time" (Yilmaz, 2013, p. 317).

In recognition of Suddaby and Greenwood's (2009), suggestion that using a historical methodology "helps to focus on past events, using archival documents and retrospective interpretations of actors in an effort to understand the processes by which institutions emerge" (p.183), the methodology is then refined into method. Accordingly, within a qualitative/interpretivist historically focused methodology, the history of bean-to-bar chocolate production in New Zealand is presented.

3.4 Research methods

Research methods differ from methodology. Research methodology incorporates metatheories. Meta-theories, "a critical exploration of theoretical frameworks", help us understand and negotiate complex problems and research situations (Paterson, Thorne, Canam, & Jillings, 2019, p. 91). Within this negotiation change and refinement may occur. It is these changes and refinements to the meta-theories of methodology that constitute method. Historical research relies on multiple sources and, accordingly, methods for this research need to be congruent with the qualitative/interpretivist and historically focused methodology selected. The methods chosen are archival data and interviews (Neuman, 2006; Tosh, 2015). Tosh (2015) and others believe that the use of methods such as archival data and interviews are sufficient and common within the realm of a narrative and exploratory historical research methodology.

The following sections explore the method: the form in which meta-theory facilitates this research; that is, secondary data sources, primary data sources consisting of semi-structured interviews, samples, data collection and data analysis.

3.4.1 Data sources

This study used two data sources "providing a framework for approaching a topic" (Galgano, Arndt, & Hyser, 2008, p. 33): primary and secondary data sources.

3.4.2 Secondary data

To get an appropriate sense of the broader historical aspect of the history of bean-to-bar chocolate production in the world and in New Zealand, secondary sources were chosen, reviewed and evaluated. This review formed a basic vocabulary of the topic and helped provide a framework (Galgano et al, 2008).

Secondary sources, considered a step removed from the actual "activity or phenomenon in question", are an important tool in the context of a historical rendition, in this case, bean-to-bar chocolate production in New Zealand (Miller & Deutsch, 2014, p. 82).

Archival works from newspapers, books and journals support the historical descriptive narrative of this research as being reliable and trustworthy. After considering a range of printed evidence, the subsequent history was arranged chronologically and presented as an accurate history.

As regards secondary data, the use of analysed written documents was appropriate for a history of bean-to-bar chocolate production in New Zealand, fitting within the interpretive paradigm of a historical narrative and descriptive theoretical framework (McCullagh, 2004; Tosh, 2015). As Munslow (2006) suggests, the past is not just constructed but "created and represented as a text and which in turn is consumed by the reader" (p. 190). The concept of a narrative historical story of chocolate production in New Zealand is more than just telling a trackable story as it helps signal a way for the researcher to contemplate the form of history portrayed, and allows the employment of moral strategies or descriptions, giving a meaning of a certain kind (Munslow, 2006).

While the particular secondary data classification listed can at times be subjective and by some researchers categorised differently, the sources were carefully studied and considered appropriate as secondary data.

 Table 4: Secondary data sources

Location/Source	Content
National Library of New Zealand	National Newspaper Collection
National Library in New Zealand	Parliamentary Debates, 14 April 1970
University of Otago Library	Hocken Collection
Book	Sweet Success: The story of Cadbury and Hudson in New Zealand
Book	Whittaker's: Passion for Chocolate since 1896
Book	Family Matters: 120 Years of Nestlé in New Zealand
Books, journals, magazines, websites, blogs	See references

3.4.3 Primary data

Primary sources can be defined as "first-hand sources of information which are contemporaneous to the event of phenomenon being studied" (Miller & Deutsch, 2014, p. 81). In this research, primary sources are the semi-structured interviews.

Semi-structured interviews

Semi-structured interviews are characterised by an interactive dialogue on a specific topic between a researcher and their participant. Researcher questions probe for relevant data from the participants' own experiences and understandings (Mason, 2004).

A semi-structured interview format was best suited to this research as it runs congruent to the choice of a constructionist historical methodology. The data from the interviews helped support understanding of the interpretive and narrative history of bean-to-bar chocolate production in New Zealand, decreasing the researcher's role and emphasising the individual experiences of the participants (Bryman, 2008). In this way, the semi-structured interviews captured the attitudes and beliefs of the bean-to-bar chocolate makers within an industry that has until recently been dominated by large multinational chocolate producers, affirming that the semi-structured interview technique approach and the uniqueness of the participants combine in a conducive manner to generate a unique insight into New Zealand's chocolate industry.

3.4.4 Samples

New Zealand has approximately twelve bean-to-bar chocolate manufacturers, ranging from very large to very small (micro). It is the relatively small size of the New Zealand chocolate market (Ministry of Business, Innovation & Employment, 2018) when compared to the European market (Fountain & Huetz-Adams, 2018) which allows for purposeful selection and small but credible sampling (Gray, 2013).

The participants selected for this study were employed using a "purposive sampling technique" (Davidson & Tolich, 2003, p. 118; Etikan, Musa, & Alkassim, 2016, p. 2), according to the following criterion: that participants make chocolate from bean (or cocoa mass) to bar in New Zealand.

This 'expert' sampling technique is useful for exploring new areas of food studies research in New Zealand, such as chocolate, and vital in aligning it with the historical data gathered. Unlike the commonly used random 'snowball technique' (Davidson & Tolich, 2003, p. 35), purposive sampling targets participants with particular characteristics and therefore contributes to specific research more precisely.

Samples were initially chosen according to size of operation, with the aim of including participants from a cross-section of chocolate producers. They ranged from the very large, such as Cadbury (2015), to large, Whittaker's (2018a) and Trade Aid (2018a), to small artisanal operations like the Wellington Chocolate Factory (n.d.-b) and Hogarth (2019a), and very small businesses like Devonport Chocolates (2018). Included in this interview group was chocolate expert Luke Owen Smith, owner and operator of online

chocolate shop, The Chocolate Bar (Owen Smith, 2019a), which sells international and New Zealand-made bean-to-bar chocolate.

Due to the closure of Cadbury's chocolate factory in Dunedin in 2018, secondary data such as historical books, corporate records and journal articles was deemed sufficient for constructing a representative historical account of Cadbury's role in the New Zealand history of chocolate production. Large chocolate manufacturer Whittaker's withdrew their initial offer for an interview indicating commercial sensitivity issues and staff shortages as reasons, but as a compromise answered individual questions of generic historical value via email (C. Attenburrow, Brand Manager, Whittaker's, personal communication, August 30, 2018 and C. Butcher, Marketing intern, personal communication, April 30, 2019).

Interviews were eventually undertaken with participants Ewan Cameron (Trade Aid), Rochelle Alagar (Wellington Chocolate Factory), Karl Hogarth (Hogarth), Stephanie Everitt (Devonport Chocolates), and Luke Owen Smith (The Chocolate Bar). Five expert participants on the subject of making chocolate in New Zealand were considered sufficient within a qualitative method seeking "in-depth and detailed understanding" (DeJonckheere & Vaughn, 2019, p. 3).

The researcher made contact through a formal email and invited participants using a 'Participant information Sheet' (Appendix A), followed by a courtesy telephone call introducing the researcher and subject further. The formal email invitation provided an overview of the research. Participants confirmed their involvement by signing a 'Consent Form' (Appendix B). Participants had the opportunity at any time to ask questions. An interview (date, time and place) was arranged via telephone.

Table 5: List of interview participants

Participants

Ewan Cameron, Trade Aid, Christchurch,

'The Sweet Justice Chocolate Factory' was established in 2014.

Trade Aid NZ is considered to be a pioneer in importing fair-traded chocolate into New Zealand. Ewan Cameron is the company's product manager. In 2014, Trade Aid decided to import chocolate into New Zealand by purchasing a large chocolate manufacturing plant from Germany. Then they began to make chocolate by using imported cocoa mass from multiple cacao plantations. Later, they began chocolate bar production.

Rochelle Alagar, Wellington Chocolate Factory, Wellington

Rochelle Alagar is the founding member of the 'Wellington Chocolate Factory' in Wellington, first established in 2013. The Factory makes artisanal quality organic Fairtrade bean-to-bar chocolate, The Factory was the first Fairtrade organic bean-to-bar chocolate factory in New Zealand (The Wellington Chocolate Factory, n.d.-b).

Karl Hogarth, Hogarth, Nelson

Karl and Marina Hogarth formed their small artisanal bean-to-bar chocolate production company in Nelson in 2015 and they have steadily increased their market presence and profile. In 2017 and 2018, the couple's artisanal chocolates won numerous national and international awards.

Stephanie Everitt, Devonport Chocolates, Auckland

Stephanie and husband Terry Everitt have been operating Devonport Chocolates for more than 25 years. Traditionally a maker of luxury chocolate gift products such as handmade chocolate truffles and moulded chocolates, Devonport Chocolates have recently partnered with a Samoan cacao farmer. This relationship and the importing of cocoa beans meant that Devonport Chocolates began making their first bean-to-bar chocolate in 2015.

Luke Owen Smith, The Chocolate Bar, Wellington

Luke Owen Smith has been operating an online bean-to-bar chocolate retail outlet since 2015. Luke sells international and New Zealand-made bean-to-bar chocolate. Luke runs chocolate appreciation classes and is a regular judge at the annual 'New Zealand Chocolate Awards'.

3.4.5 Data collection

Interview questions were written to elicit data on the making of chocolate in New Zealand and generate an in-depth understanding of the participants' businesses reflecting aspects of bean-to-bar chocolate production and the future direction of chocolate production in New Zealand. Taking into consideration the theoretical framework of a qualitative/interpretive and constructionist historical perspective, methodology and thematic literature such as archival newspapers, books and journal articles regarding the practical and theoretical usage of chocolate were central in establishing effective interview questions.

The success of an interview depends on a template of easy-to-understand questions of short to medium length, which are easy to answer (Greener & Martelli, 2008). Interview

questions were kept clear and concise and not ambiguous (Appendix C). They included familiar and technical language that the interviewees were accustomed to. The questions were separated into three parts, with each part based on guiding questions, accompanied by follow-up and systematic questions (DeJonckheere & Vaughn, 2019).

The interview questions addressed major themes regarding the New Zealand chocolate market, the manufacturing of chocolate, the concept of bean-to-bar chocolate, sustainability concerns and the future of chocolate.

While all interviews contained the same essential questions, some questions had to be adapted due to the difference in operational size of some of the businesses included in the research. In the case of Luke Owen Smith (The Chocolate Bar), all questions relating to the business of making bean-to-bar chocolate had to be omitted and replaced with alternative questions relating to the emergence and expansion of the bean-to-bar chocolate market worldwide, locally and its future direction.

The interviews were digitally recorded, using quality audio recording equipment to ensure accurate transcription. Initial data collection concentrated on bean-to-bar chocolate-producing companies in New Zealand to illustrate their origins, development and current presence in New Zealand. The collected data helped with the selection of interviewees, and the gathering and representation of rich data generated robust and deep levels of understanding (Gray, 2013).

The interview questions were not pilot-tested due to the small sample size. A factor minimising the risk of unreliability of interviews was the technical knowledge and professional background of the interviewer, deemed sufficient to warrant successful interviewing.

In accordance with the wishes of two of the participants, face-to-face interviews were held at the School of Hospitality and Tourism, Auckland University of Technology, Auckland (Karl Hogarth and Luke Owen Smith). A further interview was conducted at the participant's (Stephanie Everitt) place of business in Devonport, Auckland. The last two interviews (Rochelle Alagar and Karl Hogarth) were held face to face via video and telephone call.

Face-to-face interviews were chosen as interviewees were more likely to give their full attention while the interviewer could consider each response. To facilitate this research, the researcher created a warm, welcoming and user-friendly participant 'space'. This was important as the research is founded within the relationship created between the researcher and participants (DeJonckheere & Vaughn, 2019). A positive exchange is

important because the research explores the opinions and lived experiences of participants' 'exposure' to bean-to-bar chocolate production in New Zealand.

The timeframe for interviews was set at one hour per participant, acknowledged and agreed to by both parties. Interview questions (Appendix C) were discussed and were made available prior.

Participants were encouraged to freely interact with the researcher. This partnership was positively enacted cognisant of the need to understand differences between cultures. In consultation with participants, this research held the mutual aim of expanding the body of knowledge on the topic of bean-to-bar chocolate production in New Zealand.

While the interviewer could not create the same comfortable environment when conducting a telephone interview with Ewan Cameron, the responses received were believed to be as spontaneous and direct as those obtained from a face-to-face interview format.

All interviews were conducted in good faith and research participants did not experience discomfort or embarrassment and were limited to the experiences they selected to share. Some handwritten notes were taken during the interviews and further notes after the interviews, reflecting on specific ideas and thoughts.

Participant cognition and emotions were fully respected within an iterative and positive manner. Research participants had ongoing opportunities not only to contribute to the research and ask questions, but also be provided access to their transcribed interviews to check or amend in any way.

Participants were identifiable adding to the validity of the research because of their expertise and stories. However, the researcher was sensitive to the fact that identification may be problematic. Consequently, this research does not contain any commercially sensitive information.

3.4.6 Data analysis

From the recorded interviews transcripts of the participant narratives were completed. From the transcriptions, using Strauss and Corbin's (1990) "open coding system" (p. 54) data was extracted and themed, identifying emergent participant themes.

3.4.7 Thematic analysis

Manual thematic analysis was used to identify themes within the archival data and interview transcripts. The reason for manual thematic analysis is based on the fact that

historical data is built on the quality of data and how it relates to the historical narrative rather than quantitative data (Munslow, 2006; Tosh, 2015).

Open coding then ascertained a thematic analysis (Braun & Clarke, 2006), providing the researcher with an understanding of "collective or shared meanings and experiences" (p.57). Thematic analysis detects patterns of meanings which are thematic, rich and expressed as temporary but important truth. Thematic analysis also frequently allows for wider and more varied interpretation of the research topic (Braun & Clarke, 2006).

By considering an inductive (from specific to wide-ranging), bottom-up approach to data coding and analysis, thematic analysis was determined by the available content of data (Strauss & Corbin, 1990). Inductive, bottom-up theorising begins often with the researcher's state of "wonderment and raw data", starting off with the unknown allowing for sincerity and validity to the concept (Shephard & Sutcliffe, 2011, p. 361). By initially defining the research topic more closely, the researcher is also less likely to experience a lack of scope, or end up with too many variables, providing a better case for the theory (Eisenhardt & Graebner, 2007).

By using source-orientated thematic analysis of the history of bean-to-bar chocolate production in New Zealand, interpretations of the past by means of multiple sources were constructed, a challenge with implications for authenticity, appropriate understanding and reliability. While the reliability of written sources can never be guaranteed (Tosh, 2015), the selection of archival newspapers, books and journals used for the construction of the history of bean-to-bar chocolate in New Zealand was carefully verified and critiqued so as to avoid assumptions. As Tosh argues, "the historian is anything but a passive observer" (Tosh, 2015, p. 118). Regarding the use of secondary written documentation, the analysis was thematic with themes drawn from the context of the research topic and its justified methodologies.

Final research data was then used within a Findings and Discussion section of the dissertation (Chapter 4 and 5). Regarding the history of New Zealand bean-to-bar chocolate, the archival data gathered was reasoned to go beyond the original observations in the interviews to determine themes and relationships, with variables identified in an analysis of the data itself and mediated by the available literature.

Chapter 4 - Research findings 1

4.1 Introduction

Chapters 4 and 5 discuss the research findings in the context of a theoretical framework that considers the narratives of archival data in forming a history of bean-to-bar chocolate production in New Zealand, and the multiple perspectives given by interviewees regarding the history, current state and future direction of chocolate production in New Zealand.

4.1.1 Main Themes

After familiarisation with the historical context and the transcription of interviews, the focus went on considering response patterns and detecting codes, allowing for preliminary analysis (Table 6: Process). Certain themes emerged (Table 6: Emerging Themes) and were further reviewed (Table 6: Stage 2) and defined by final analysis (Table 6: Specific Themes) (Braun & Clarke, 2006; Strauss & Corbin, 1990).

The findings are based on a qualitative/interpretivist and historically focused methodology.

Table 6: Themes

Process	Emerging Themes	Specific Themes
Stage 1: a) Read history narrative b) Transcribe interviews c) Study transcripts and history narrative d) Look for codes e) Generate codes f) Construct themes g) Establish a	a) History of chocolate b) Bars, tablets and blocks c) Culture and society d) Identity e) Globalisation f) Monopoly g) Multinationals h) Premium i) Artisanal production	a) A history of beanto-bar chocolate production in New Zealand b) The monopoly of making chocolate c) The crossover of artisan and commercial bulk chocolate d) The costs of chocolate
framework of themes	j) Business development and growth k) Price and cost l) Quality m) Cocoa in the Pacific n) Challenges	e) The sourcing of cocoa beans f) The ethical and sustainable side of chocolate production g) The required business growth
	o) Ethics and sustainability	zasinoso growan

	n) Cocial injustice
	p) Social injustice
	q) Future of chocolate
Stage 2:	
a) Re-study narrative and transcripts b) Redefine and	a) History
	b) Globalisation
	c) Monopoly and
amend themes	multinational companies
c) Fuse similar	d) Price of chocolate
themes	e) Artisanal production
d) Finalise themes	f) Business
	development, growth
	and challenges
	g) Multinationals versus artisanal production
	h) Challenges
	,
	i) Ethics and sustainability
	j) Future

4.2 A history of bean-to-bar chocolate production in New Zealand: Theme discussion

4.2.1 Introduction

This chapter focuses on a history of bean-to-bar chocolate production in New Zealand, forming a narrative of the early beginnings of chocolate production in the mid-eighteenth century to the current state of chocolate production in New Zealand.

Concluding the synthesising of topics, specific themes are now discussed within the following sections:

4.2.2 Pioneer era (1850s)

The history of chocolate production in New Zealand has been influenced and shaped by colonisation, New Zealand's people, the evolution of food manufacturing industries as part of the Industrial Revolution, imports of major brands of cocoa and chocolate, and the eventual establishment of a local cocoa and chocolate industry.

In the early days of colonisation, imported food was vital for the survival and wellbeing of settlers, predominantly British of working- and lower middle-class origin (Hunter, 2007). Through mercantile trade, small trading ships stopped at different ports around the country with precious cargos of flour, beef, sugar, tea, salt, butter, vinegar, fabrics and cotton (Brewis, 1982), forming the essence of the colony. The manufacturing of food

and general goods enjoyed in the respective home countries, such as clothing, tableware, wines, beer, biscuits, bread, confectionary, newspapers, boots and other leather goods, established itself from the 1840s onwards (Hunter, 2007). During the period of 1840–1870, imports were generally twice the value of exports. By 1850 grocery shops were still scarce because of the difficulty of transporting products with a lack of infrastructure (Brewis, 1982). According to Hunter (2007), New Zealand's settler numbers in 1855 were at 37,192 (the Māori population was estimated at between 60,000 and 100,000) and by the year 1860 at 79,711, "regularly growing at a rate of 20 percent or more a year" (p.31) and further increased by the South Island gold rushes of the early 1860s.

Increased colonisation in New Zealand during the 1860s and the 'New Zealand Wars' (Taranaki Wars, 1863) (Pinny, 2010; Wright, 2013) created New Zealand's first major economic crisis and a time of depression, as food imports and production could not keep up. The government needed a way to finance the wars, resulting in higher import duties and taxation. Food imports like cocoa experienced such import duties. Sugar, considered a staple and important food for both settlers and indigenous Māori in New Zealand, was especially heavily taxed (Goldsmith, 2016; Mintz, 1985).

But contradictory to the Depression in the 1860s and onwards and a growing population, manufacturing was not hindered, eventually continuing to rise substantially, especially during the 1880s (Hunter, 2007).

The development of a biscuit and confectionery industry in New Zealand was initially slow, a reflection of the home-based making of baked goods and confections initiated by English and Scottish immigrants (Veart, 2009). By the eighteenth century, the confectioner, especially in Britain, was the most highly regarded of all tradesmen in the preparation of food. The Scottish especially, crucial to the development of the British confectionery industry, were considered the masters of sweetmeats, having developed sophisticated boiled sweets and comfits sold to shops and apothecaries by travelling candy men (Richardson, 2003; Veart, 2009). With the continuous influx of English and Scottish immigrants to New Zealand, and the British government's continued and vested interest in keeping consumption of sugar high (Mintz, 1985), the creation of baking and confectionery industries was imperative (Veart, 2009). With the growth of bakeries and biscuit and confectionery shops in the mid-1850s, the continuous craving for sugar was eventually recognised by the government and incentives were offered for the establishing of a sugar refinery (Veart, 2009). While most of the sugar used was initially imported via Australia, local refining in New Zealand was encouraged with the opening of the Chelsea

sugar refinery in Auckland in 1885 (Auckland Sugar), still operating on its original site and one of the few Victorian industries still operational today (Luke, 1984; Veart, 2009).

New Zealand's developing dairy industry and the rise in availability of butter, milk and eggs also helped form an important relationship with sugar, adding to the developing cultural worth of New Zealand's baking tradition (Steel, 2005). The strong progression of the baking (biscuit), confectionery and dairy industries would ultimately help to establish the manufacturing of chocolate in New Zealand.

Cocoa and chocolate in New Zealand

In the mid-nineteenth century, the city of Dunedin was at the forefront of founding manufacturing businesses. This was partly due to the importance of its port, the largest of its kind in New Zealand. Spurred on by New Zealand's increase in manufacturing and the forecasting of better economic times ahead, numerous food manufacturing businesses were established by English and Scottish immigrants. Confectionery manufacturers businesses such as Murray's (1870s, origins in 1858 in sugar-boiling) and biscuit maker Richard Hudson & Co (1868) found early success in Dunedin (Bauchop, 2017; Clarence-Smith, 2015; Farquahar, 2006). By the beginning of the twentieth century the city of Dunedin counted at least six manufacturing confectioners (Bauchop, 2017). An article in the *Otago Daily Times* (23 April 1900, p.1) looking at Otago's importance as a producing and manufacturing provincial district placed the city of Dunedin, while not the largest, as the "commercial capital of New Zealand with branch houses all over the colony".

During the 1840s the use of drinking chocolate in Europe and United States was by now well established (Coe & Coe, 2013). As early as 1840, newspapers like the *Wellington Spectator* (Volume 1, Issue 6, 16 May 1840) published the arrival of ships by advertising their cargo, including bags of cocoa.

By mid-1850, well-known British cocoa and chocolate manufacturers Fry & Sons and Taylor Brothers' homeopathic cocoa and soluble chocolate advertised more frequently in the local newspapers (Auckland's *Daily Southern Cross*, Volume XII, Issue 811, 6 April 1855). Van Houten's defatted soluble cocoa was for the first time advertised on 20 December 1869 in the *Southland Times* (Issue 1185), on sale at McPherson's & Co in Invercargill.

Other early advertisements for cocoa and chocolate in New Zealand included imported Menier's French chocolate (*Daily Southern Cross*, Volume XXXI, Issue 5512, 23 April 1875). 'Chocolat Menier', founded in France in 1816 as a pharmaceutical company, considered chocolate as a nutritious health product (Turpin, 2003). By 1843, Menier's

production of cocoa and chocolate was so high that the pharmaceutical arm of the company was sold off. By the end of the eighteenth century, Menier was considered France's biggest chocolate manufacturer in the world (Smithsonian Libraries, n.d.; Turpin, 2003). Menier particularly emphasised the benefits of cocoa and chocolate as a health-strengthening food, easy to digest and excellent for indigestion (Grivetti & Shapiro, 2011). This was typical of the times as chocolate belonged to the family of 'confections' (sold at apothecaries), a term originally referring to medicinal preparations (Grivetti & Shapiro, 2011). English chocolate manufacturer Taylor Brothers advertised its chocolate products by highlighting their purity and sanative, nutritive and sustaining power, a beverage perfect for breakfast, luncheon and as a refreshment after a late evening, supplying readers a medical reference (British Medical Journal) to cross-check validity (West Coast Times, Issue 2477, 8 March 1877).

The lines between medical purpose and enjoyment became more and more blurred with the diversification of a confectioner's product range (sweets without medical purpose), the inclusion of eating chocolate, and its eventual production. With respect to the importing of cocoa and eventually eating chocolate, it was not until the mid- to late-1860s that they were considered part of the confectioner's range of products and not listed only as part of merchants' imported goods lists.

New Zealand's first chocolate manufacturer: Hudson and Co

Given the demands of the growing New Zealand population (Hunter, 2007), biscuit and confectionery businesses ultimately directed their efforts to replacing imports of cocoa and chocolate products from Britain and France with local products. An ever-increasing population required the development of local industries. Immigrant entrepreneurs such as biscuit maker Richard Hudson eventually set up their own factories in New Zealand (Barringer, 2000).

Richard Hudson arrived in Christchurch in 1865, attracted first by the gold rush, and eventually finding employment as a baker's apprentice with John Griffin⁵, a future competitor. By 1868 Hudson had moved to Dunedin, setting up his own business manufacturing biscuits. The business grew and by 1871 Hudson expanded to include a confectionery department. Hudson's vision of creating a business involving numerous food product lines led him to further research and import the latest in manufacturing equipment, and he created a purpose-built factory of high efficiency (Bradley, 2008). By

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⁵ John Griffin later moved to Wellington, setting up biscuit business Griffin & Sons Ltd, and eventually setting up a chocolate manufacturing plant, indirectly becoming Hudson & Co's competitor.

1884 (and with the involvement of his six sons) the business had grown to such a considerable size that a trip to Europe was essential (Clarence-Smith, 2015).

Hudson became the first to import into New Zealand the complete machinery required to produce and make cocoa and chocolate after he discovered it at the 1885 Antwerp World's Fair (Exposition Internationale d'Anvers, 1885) in Belgium, purchasing the required components in Dresden and Paris.

The arrival of Hudson's equipment was documented in the *Otago Daily Times* on 9 October 1885 in an article headed 'A New Industry':

About 11 weeks ago the machinery was purchased in Paris and Dresden. It was mostly shipped by the Tongariro, but some portions missing that steamer came forward by the Arawa, and was delivered here on the 2nd inst. Everything was so far ready that work was commenced, and on the afternoon of the same day the first chocolate manufactured in this Colony was turned out.

Figure 1: Otago Daily Times, Issue 7379, paragraph 4, 9 October 1885

While the article highlights the potential of this new industry, the author, either reflecting Hudson and Co's views or the author's, shows concern for the new industry due to the import duty put on raw cocoa beans.

As much of the work as possible in connection with the fitting up of this machinery was reserved for local firms, Mr Hudson only purchasing abroad what was absolutely necessary. With the skilled labour brought from England every description of chocolate and cocoa can be turned out, and the industry is likely to become a very important one if properly encouraged. We find it is starting at a disadvantage, owing to the duty on the raw material, cocoa beans. This duty is nominally 1d per lb, but after cleaning, roasting, and waste, it is really equal to nearly double that amount on the material used. This duty has hitherto yielded a most insignificant sum to the revenue, and we hope the Government will see fit to remit it without delay, as we consider the enterprise of Messrs Hudson and Co. is worthy of all praise, and should be loyally supported as a practical effort to relieve the prevailing depression.

Figure 2: Otago Daily Times, Issue 7379, paragraph 5, 9 October 1885

Import duties and taxation on cocoa beans were to continue to burden and challenge the newly developing chocolate industry in New Zealand, and the first attempts of abolishing

import duties only occurred in 1911 (Chocolate and Cocoa Duties, *Ashburton Guardian*, Issue 8302, 24 February 1911) and without success.

By July 1886, Hudson and Co was producing chocolate confectionery such as chocolate drops, almonds, creams, nougatines and pralines, including two different kinds of cocoa (Advertising, *Evening Star*, Issue 6989, 24 August 1886), which started to have an impact on the local market and competed with imported products.

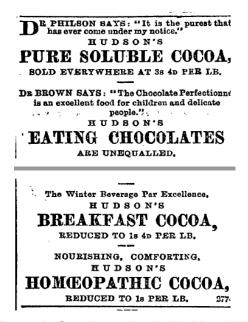


Figure 3: Star, Issue 6550, 20 May 1889

It is unclear whether the advertised eating chocolate (Figure 3) was produced only in drops or moulded in tablet form, but further advertising in September 1889 eventually describes it as chocolate tablets (Figure 4).

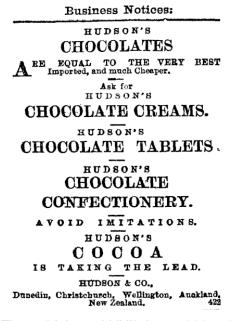


Figure 4: Lyttelton Times, Volume LXXII, Issue 8897, 13 September 1889

To produce chocolate, Hudson and Co imported cocoa beans from places as far as Trinidad, Grenada, Ceylon (Sri Lanka) and Africa, and used sugar from the Auckland Sugar Works (Chelsea Sugar) (R. Hudson and Co's Works, *Otago Witness*, Issue 2097, 3 May 1894).

The equipment used to produce cocoa and chocolate consisted of a 'roaster', heated by coke fire to help develop the beans' flavour profile. The winnower then removed the shells from the beans, releasing the nibs. The graded cocoa nibs then passed through a grinding mill, which turned the cocoa beans into a warm and thick treacle-like liquid. When producing cocoa the thick treacle-like liquid was then placed into canvas bags, subjected to extreme hydraulic pressure, releasing the cocoa butter. The latter was left to dry and then passed through granite rollers, dried and finally sieved to a fine cocoa powder.

For the production of chocolate, the treacle-like liquid from the grinding mill was then placed into a 'melangeur' where, depending on the end product, flavours, sugar and additional cocoa butter were added and refined to a paste. Described as a delicate machine, the melangeur reduced the paste to the smoothest condition possible. Overall the process of making chocolate took six weeks (R. Hudson and Co's Works, *Otago Witness*, Issue 2097, 3 May 1894).

Competition was stiff as imported chocolate from England continued to dominate the New Zealand market. Fry and Sons' French chocolate in sticks (*New Zealand Spectator and Cook's Strait Guardian*, Volume XX, Issue 2037, 8 February 1865) was available from 1865 while Taylor Brothers advertised chocolate tablets from 1877 (*West Coast Times*, Issue 2477, 8 March 1877).

In 1895, and by then employing over a hundred workers, Richard Hudson highlighted his grievances regarding the import duty of cocoa beans in front of the government's tariff commission (The Tariff Commission, *Otago Daily Times*, Issue 10441, 17 August 1895). He asked for an increase in import duties for cocoa and chocolate products and chocolate confectionery. He pointed out that his cocoa and chocolate products were sold at the same price and were as good and even superior to the imported article. Hudson's struggle to further increase product sales in the local market was put down due to prejudice and habit, and as late as 1924 one confectioner observed that while the imported article was the same price as the local, "the public has a national antipathy to anything locally manufactured, when an imported article is on the market" ('Chocolate War', *Patea Mail*, Volume XLVII, 27 June 1924, p.2).

In 1899, Van Houten entered the New Zealand market with numerous variations of eating chocolate in forms of croquettes, drops, square tablets and small bars. Caley's (Norwich, England) chocolate tablets were available from 1906 and the company was especially proud of its milk chocolate using milk from local cows (Chrystal, 2011).

Cadbury and Bros, England's largest cocoa and chocolate manufacturer at the time, was keen to expand its market share in New Zealand. In 1890, the company sent James Henry Whittaker (the eventual founder of Whittaker's) to Wellington (Farrell-Green, 2012; Laugesen, 2013).

At the start of the twentieth century further competition arrived with Swiss manufacturers Cailler (Advertisement, *Evening Star*, Issue 12061, 5 December 1903) and Peter (Advertisement, *New Zealand Times*, Volume LXXV, Issue 5068, 12 September 1903). Swiss manufacturers of the time differentiated themselves with their milk chocolate sold in various tablet and croquette sizes. Swiss chocolate by manufacturers Nestlé, Kohler's and Peter's was available by 1907 (Business Notices, *Evening Post*, Volume LXXIV, Issue 130, 28 November 1907). The sudden increased presence of Swiss chocolate on the New Zealand market was due to a combined effort by Swiss companies to increase sales through export. In 1901, Swiss chocolate manufacturers formed a trust called 'Union libre des fabricants suisses de chocolat' (translated as 'Free Union of Swiss Chocolate Manufacturers') to help counterbalance the intense competition in their own local and European markets with a view of increasing their share of the global market.

While there was now more competition than ever, more local chocolate manufacturers looked to follow Hudson and Sons' steps as the demand for chocolate increased.

Aulsebrook and Co

Christchurch company Aulsebrook and Co, one of the first biscuit and confectionery manufacturers in New Zealand, was started in the early 1860s (Zam, 2016) and became recognised for high-quality biscuits. In 1889, the same year that Hudson and Co advertised its own brand of chocolate tablets, Aulsebrook and Co (Zam, 2016) entered the market with chocolate tablets and chocolate creams. It can be assumed that this chocolate was imported then remelted, moulded and branded, as the company did not yet have the facilities to produce bean-to-bar chocolate tablets (Advertisement, *Press*, Volume XLVI, Issue 7329, 6 June 1889).

It was only in 1896 that the company [henceforth referred to as Aulsebrooks] added to their extensive factory a cocoa and chocolate manufacturing plant, partly in response to Hudson and Co's increasing success, (Local Industry, *Lyttelton Times*, Volume XCV, Issue 10935, 18 April 1896). By importing the latest equipment from England, hiring

chocolate specialist J. Bradshaw, and using imported cocoa beans from Ceylon (Sri Lanka), Guayaquil (Ecuador), and Trinidad and Suriname (South America), the production of soluble cocoa, eating chocolate and chocolate confectionery occurred only months after initial setup.

Griffin and Sons Ltd

As previously stated, John Griffin of biscuit business Griffin and Sons Ltd in Nelson (established mid-1860s) started to manufacture chocolate in 1897. Before purchasing chocolate manufacturing equipment, the company [hereafter referred to as Griffin's] imported ready-to-eat chocolate products from English manufacturer Terry and Sons. By 1899, Griffin's was producing soluble cocoa and over thirty different styles of chocolate confectionery. The company produced numerous slabs, sticks and forms of drop chocolate and was particularly proud of its chocolate sticks made for cyclists and athletes (Figure 5) "especially wholesome for its stimulating effect" (Messrs Griffin & Sons, Limited, *Colonist*, Volume XLI, Issue 9241, 4 August 1898; The Making of Cocoa, *Evening Post*, Volume LVII, Issue 47, 25 February 1899).

SPECIAL NOTICE to cyclists and athletes. USE GRIFFIN'S CYCLISTS' CHOCOLATE.

STRENGTH AND REPRESEMENT IN

Figure 5: Nelson Evening Mail, Volume XXXII, Issue 249, 27 October 1898

Cocoa beans were imported from Ceylon (Sri Lanka), America, South America and the West Indies and were used for different products (Griffin and Sons Ltd, *Nelson Evening Mail*, Volume XXXV, Issue 205, 7 September 1901, Supplement). By 1901, Griffin's employed a hundred workers and was considered Nelson's biggest single employer.

Promoting of chocolate products

Advertising in New Zealand newspapers kept local chocolate products on a par with overseas products. But as Richard Hudson pointed out in 1895, overseas companies often had an advantage over local firms as they got better terms from local newspapers (The Tariff Commission, *Otago Daily Times*, Issue 10441, 17 August 1895). While Hudson and Co kept its advertising to a minimum, Aulsebrooks was renowned for changing its advertisements weekly and pushing their marketing (Figure 6).

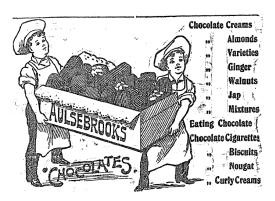


Figure 6: Lyttleton Times, Volume CIV, Issue 12307, 25 September 1900

In 1904, Hudson and Co began to experiment with milk chocolate by condensing milk with sugar and adding it to the basic cocoa mass (Barringer, 2000). Aulsebrooks had already sold milk chocolate from 1901 under the name 'Swiss Milk Chocolate', advertised as being made with pure Swiss milk. It is not clear whether the milk was imported or whether Aulsebrooks imported a milk-based chocolate crumb, which would only require remelting and moulding (Advertisement, *Press*, Volume LVIII, Issue 11161, 31 December 1901). Or perhaps the company used a Swiss preserved milk product (condensed milk), which had been available in New Zealand since the late 1870s (*Auckland Star*, Volume IX, Issue 2438, 15 January 1878).

In 1885, Nestlé registered its trademark in Wellington, producing milk products through the Underwood Milk Condensing factory in Invercargill. By the beginning of the 1890s Nestlé was advertising its condensed milk heavily through many newspapers across New Zealand (*The New Zealand Herald*, Volume XXVIII, Issue 8562, 9 May 1891) with the condensed milk rebranded as Highlander Milk in 1901 (Nestle, n.d.). By February 1905 Aulsebrooks dropped the word 'Swiss' and assured the public that a newly introduced process and the use of locally produced milk formed the nutritious confection (Advertisement, *Lyttelton Times*, Volume CXII, Issue 13662, 1 February 1905).

Considering Hudson and Co had been at the forefront of manufacturing chocolate, it is interesting to note that Aulsebrooks appeared to find the solution to producing quality milk chocolate, although marketing of the time may give a false impression. According to Barringer (2000), Hudson and Co's purchase of a condensing plant and moulding machines in 1919 helped them produce the type of high-quality milk chocolate similar to the highly regarded Swiss products. The company also addressed the tedious hand-moulding of chocolate tablets and for the first time started to mould chocolate tablets with centres. Hudson and Co rarely advertised, believing that inferior products would eventually stop selling and that advertising alone could not help either locally or imported products convince a customer (Barringer, 2000).

Tariff protections eventually put in place in 1928 helped local manufacturers to compete against the overseas market. The New Zealand government decided to increase "the duty on chocolate from 3d in the pound in weight to 25 percent *ad valorem*⁶" (Jones, 2006, p.70). By 1920 overseas competition increased further with numerous new players on the market, such as Rockwood and Co, selling couverture for the first time ever on the New Zealand market (spelt 'couvatures') and other types of popular chocolate tablets (Figure 7). Caley's chocolate continued to be popular as well.



Figure 7: Evening Post, Volume XCIX, Issue 134, 7 June 1920).

Others

By the 1920s other manufacturers like Stewarts Confectionery in Dunedin (Stewart Confectionery Limited, *Otago Daily Times*, Issue 20746, 18 June 1929) and Southern Cross Biscuit and Co in Wanganui (eventually taken over by Griffin's in 1959) (Southern Biscuit and Co, *Wanganui Herald*, Volume LIII, Issue 160837, 20 December 1920) set up chocolate manufacturing plants as part of their businesses, making milk and dark chocolate but not attempting to market their chocolate as eating tablets or in any other forms.

Many smaller confectionery companies were seeing opportunities in the making of chocolate but they were often short-lived. Confectionery company 'Segin Ideal Pure Sweet Shop' in Auckland (Shop 8-14, Wellesley Street West) first made chocolate in November 1918 (*Auckland Star*, Volume L, Issue 90, 15 April 1919) and by 1925, with the purchase of another chocolate plant, were intending to produce moulded chocolate tablets (Advertisement, *Auckland Star*, Volume LVI, Issue 301, 21 December 1925). But

⁶ Ad valorem meaning a tax calculated in proportion to the estimated value of the goods taxed (Collins Dictionary, 2019).

by 29 April 1929, Segedin and Co was for sale as a going concern (*The New Zealand Herald*, Volume LXIV, Issue 19623, 29 April 1927).

Cadbury and Fry

The influence of English chocolate manufacturers in the New Zealand market continued to increase especially when companies Cadbury and Fry joined forces in 1918. This combined effort helped restore exports to New Zealand post-World War One, but was not helped by increased import duties with the original 8 percent now at 28 percent (Bradley, 2008; Jones, 2006).

With dropping export sales, Cadbury and Fry considered the building of a factory in New Zealand. Initial scouting of an appropriate site by G. Sara, the manager of Cadbury and Fry's distribution office in Wellington, initially targeted the area around Levin. Sara described Levin as an ideal location with even climatic conditions (important for producing chocolate), the best farming land, cheap electricity and easy access to rail and road (*Horowhenua Chronicle*, 6 May 1929). In September 1929, Sara also considered Palmerston North, but outlined the potential difficulties of producing chocolate in an area with high humidity. He explained how the manufacturing of chocolate requires a dry and even temperature, therefore placing Palmerston North at a disadvantage (*Horowhenua Chronicle*, 24 September 1929).

The recent tariff protection of 1928 increased Hudson and Co's sales and encouraged the company to look for a new site in the North Island, an area of population growth (Bradley, 2008).

4.2.3 Production era (1930 - 2000)

Cadbury Fry Hudson Ltd

Through the help of a third party, Cadbury and Fry was eventually put in contact with Hudson and Co. Cadbury and Fry was impressed with Hudson and Co's factory and product lines and by March 1930 they came to an agreement to purchase a controlling share of Hudson and Co's assets (Barringer, 2000). The company was rebranded as Cadbury Fry Hudson Ltd, allowing each of the parties to continue with its own product lines in the New Zealand market, especially important to Hudson as its Milk Chocolate bar was very popular during the 1920s and continued to be so during the 1930s (Barringer, 2000).

By 1931 Cadbury Fry Hudson had employed over four hundred staff and expanded the factory further (*Evening Star*, Issue 20791, 13 May 1931). Hudson's milk chocolate continued to be popular but advertising of its bars and blocks seemed to slow down, with very little evident from 1932 on (*Auckland Star*, Volume LXII, Issue 153, 30 June 1932),

except for an increase in biscuit advertising. In 1933, the recipe for Hudson's milk chocolate was made to the Cadbury recipe and processed up to the stage at which a different flavour was added, guaranteeing good working relationships between the different entities involved (Jones, 2006). Cadbury's own Dairy Milk chocolate eventually came to dominate the local New Zealand market (Barringer, 2000).

One of the main factors of increased profitability in New Zealand in the 1930s for companies like Cadbury Fry Hudson was a trend towards cartelisation, giving way to "market-sharing agreements and reciprocal manufacturing agreements", especially important with the onset of another world Depression (Jones, 2006, p.74). Other examples include the joining of Phoenix (1880s, Dunedin, biscuit and confectionery manufacturer, previously known as Murrays) with Caley's (England, 1883, manufacturer of confections, cocoa and chocolate) and Mackintosh (England, 1890, manufacturer of confections; acquired Caley's in 1932). The company was known as MCP and continued to produce Caley's chocolate in New Zealand.

While New Zealand's population was still relatively small at 1.5 million, Cadbury Fry Hudson was profitable from the beginning. With a more aggressive style of marketing, something previously avoided by Hudson and Co, Cadbury products like the Dairy Milk chocolate block were prime examples of success for the company.

Nestlé

In 1904, Swiss milk manufacturer Nestlé added milk chocolate to its product line, manufactured under licence by Peter and Kohler Swiss General Chocolate Company. Nestlé continued to establish itself in New Zealand not only with its licensed milk products but eventually with imports of milk chocolate first sold in 1920 through Heards Confection, Auckland (eventually purchased by Nestlé in 1986). Nestlé formed further relationships with Cailler and Peter (Nestlé Cailler and Peter's chocolate), increasing the presence of Swiss chocolate tablets in the New Zealand market (*Manawatu Standard*, Volume XLIII, Issue 1944, 16 October 1920). Aggressive marketing (Figure 8) helped to develop a unique relationship with the growing New Zealand market and the public.



Figure 8: Lyttelton Times, Volume CXVIII, Issue 18517, 20 September 1920

By 1928, Nestlé acquired its close allies, chocolate makers Peter, Cailler and Kohler (*Evening Post*, Volume CV, Issue 60, 12 March 1928). Using its large milk food production, Nestlé expanded its chocolate market rapidly, eventually becoming Cadbury and Bros' main competitor in the world market for chocolate (Jones, 2006), and eventually in New Zealand (Barringer, 2000).

Milk chocolate tablets started to dominate the New Zealand market. Nestlé eventually, through its subsidiary New Zealand Milk Products (owned 55% by Nestlé), decided to build a factory in Parnell, Auckland. The factory was lauded for its technological advances with the construction of a temperature-controlled factory ensuring a cool and dry atmosphere similar to that of Switzerland (Swiss Atmosphere in New Zealand Factory, *Northern Advocate*, 31 October 1931). By October 1929, the Nestlé factory was making 41.5 tons of chocolate a month with imported cocoa beans from South America and West Africa (Gold & Hollingum, 2006).

The increase in chocolate production was finally breaking down chocolate's stigma of luxury. Nestlé especially was continuing to highlight chocolate's health-promoting properties of invigoration, renewed energy and refreshed mental strength to both old and young. With the introduction of new lines of eating chocolate, Nestlé added to the variety of chocolate tablets on the New Zealand market helped by strong advertising campaigns with slogans such as "Eat a Nestlé's Tablet Every Day – Take a Nestlé's Tablet Home To-night" (*Otago Daily Times*, Issue 21456, 3 October 1931).

James Henry Whittaker

As noted earlier, in 1890, Cadbury Bros sent James Henry Whittaker to Wellington to set up an office. By 1892, J. H. Whittaker was ready to move on and left Cadbury Bros, going into partnership trading in cocoa and confectionery from England, as the agent for EPPS Cocoa and Rowntree's cocoa and confectionery (Zam, 2012).

In 1896 J. H. Whittaker moved to Christchurch, setting up a confectionery company and trading as J. H. Whittaker and Sons (going into business with sons Ronald and James). By 1911 J. H. Whittaker and Sons was facing difficulties so the company moved back to Wellington in Vivian Street, once more opening a confectionery business and finally succeeding due to the popularity of their toffee and caramel production (Farrell-Green, 2012). Nevertheless they continued to trade and import cocoa as they could see its potential (New Zealand Times, Volume XLIV, Issue 10341, 26 July 1919). By 1931 J.H. Whittaker and Sons [henceforth referred to as Whittaker's] became Woolworth's preferred main supplier of confectionery. Many of the confectionery items were covered and dipped in chocolate. It is unclear whether the chocolate used was imported or locally purchased, as Whittaker's did not yet have the facilities to make its own chocolate. According to Farrell-Green (2012), only in 1936 did the company purchase a chocolate manufacturing plant from a struggling business in Petone (business unknown), a major turning point in the company's future. While there are no specific records available (Whittaker's declined to be interviewed as part of this dissertation, indicating commercial sensitivity and lack of staff as the reason) (personal communication, August 30, 2018), the chocolate produced may initially only have been used for the coating of confections. As for moulded eating chocolate, a large Woolworths advertisement in the Christchurch Press (Figure 9) pictured a monster chocolate bar referred to as the 'Miracle Bar' (available since the early 1930's, Press, Volume LXVIII, Issue 20700, 10 November 1932). The bar showed no branding but would most likely have been made by Whittaker's. When discussing the history of Whittaker's Zam (2012) does not refer to specific chocolate products as vintage articles like packaging and advertising are very rare.



Figure 9: Press, Volume LXXII, Issue 21737, 20 March 1936

The first documented evidence is the still-popular 'Peanut Slab' bar developed in the early 1950s (Farrell-Green, 2012). The original Peanut Slab was initially made into one large slab, with chunks displayed in stores and chopped off for sale (Farrell-Green, 2012). The Peanut Slab as we know it today has only been foil-wrapped since 1984 and marked the first step towards Whittaker's' eventual domination of the chocolate tablet market in New Zealand.

Adams Bruce and Queen Anne

In the 1920s, bakers Ernest Adams and Hugh Bruce of Christchurch formed Adams Bruce Ltd and by 1929 operated bakeries in Auckland, Wellington, Christchurch and Dunedin, and even had their own brand of chocolate shops called 'Queen Anne' (Figure 10). The chocolate studio (as it was referred to in their advertising) was set up in 1925 by two Canadian confectioners. Queen Anne shops, with their black and white tiles and light windows featuring row upon row of chocolate products, were considered the quintessential New Zealand chocolate shop specialising in seasonal boxed chocolates. But there is no actual evidence as to whether Adams Bruce Ltd was making chocolate directly from cocoa beans. It seems more likely that the company imported the raw chocolate (e.g. cocoa mass). In an article in the *Evening Post* on 13 June 1933 (Volume CXV, Issue 137), Adams Bruce is complaining to the Tariff Commission regarding the price of duties placed on raw chocolate. This raw chocolate would have been further processed by the addition of sugar and flavourings, as indicated in an advertisement placed in the *Auckland Star* on 28 August 1931.



Figure 10: Auckland Star, Volume LXII, Issue 203, 28 August 1931

While Queen Anne specialised in boxed chocolates, the company also moulded chocolate bars (Figure 11), having realised the potential of chocolate as a confection in its own right (*Otago Daily Times*, Issue 22361, 7 September 1934). Bars were offered in three sizes as Jersey Milk, Mildura (raisins in natural chocolate), Jordan Almond Nut, Raisin and Almond and the Natural bar (Finest Plain Chocolate).



Figure 2: Evening Star, Issue 21752, 21 June 1934

The Queen Anne brand managed business well through the tough times of the Depression and World War Two by further expanding its shops and tearooms, but the arrival and expansion of supermarkets in the 1950s led to its demise and it closed shop in 1974. In 2011, Queen Anne was relaunched by Sarah Adams, granddaughter of Ernest Adams, by opening a new factory in Christchurch and reviving old recipes (personal communication, S. Adams, January 31, 2019).

The Great Depression and World War Two

While tough economic times continued to dominate during the Great Depression of the 1930s, chocolate consumption kept on rising, noticeable in the overall increase in advertising. Aulsebrooks continued advertising its range of chocolate tablets and croquettes (*Northern Advocate*, 4 July 1931), and Hudson's nut milk chocolate bars and brazil nut chocolate blocks advertising continued to slow down due to World War Two.

Despite the difficult times, Cadbury Fry Hudson considered an aggressive campaign of dropping the price and increasing the weight of its Cadbury Dairy Milk chocolate blocks (Figure 12) to counter Nestlé's coupon-style sales tactics, as it was still in the position of a reasonable profit on its milk chocolate (Barringer, 2000; Fitzgerald, 2006).

CADBURYS announce PRICE REDUCTION and INCREASED WEIGHTS

How is it done? Record sales have reduced manufacturing costs and it is Cadbury's policy to pass such benefits on to the public.

The milk so generously used in making Cadburys Milk Chocolate is full cream milk. The cocon beans—a 100 per cent. British product—are of the highest quality.

x-lb. weight of fresh, full cream milk gots into every t-lb. block of Cadburys Milk Chocolate. The milk is concentrated and all the food value is retained.

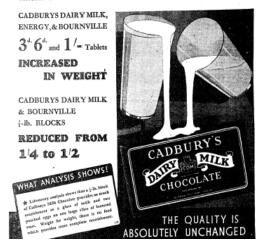


Figure 3: Press, Volume LXXI, Issue 21494, 8 June 1935

Nestlé followed suit by quickly by increasing the weight of many of its products (Figure 13).



Figure 4: Otago Daily Times, Issue 22610, 29 June 1935

At the height of the Depression and with the impending World War Two, reduced sugar imports (Barringer, 2000) forced the slimming of product lines for many manufacturers and importers. Chocolate manufacturers were careful and prioritised their now well-established chocolate blocks and bars. Nestlé continued to advertise its chocolate bars and blocks, while Cadbury Fry Hudson was less visible. In 1936, Nestlé introduced for the first time its 'Milky Bar' (Figure 14) into the New Zealand market.



Figure 5: Otago Daily Times, Issue 22971, 28 August 1936

Local manufacturer Adams Bruce continued to advertise its brand of Queen Anne assorted chocolates. Numerous manufacturers were feeling the pinch and at different stages both before and after World War Two biscuit manufacturer Griffin's tried to sell its business to Cadbury Fry Hudson, with Adams Bruce trying similarly towards the end of 1940.

Eating chocolate reached a peak and by 1940 Cadbury Fry Hudson was the largest chocolate and biscuit manufacturer in New Zealand (Barringer, 2000). Since the outbreak of war England had increased its chocolate consumption by 50 percent and increased the purchase of cocoa beans by buying the Gold Coast's (Ghana) complete cocoa crop, considered at the time to be half the world's cocoa supplies (*Bay of Plenty Times*, Volume LXVIII, Issue 12969, 17 February 1940).

World War Two forced Nestlé to prioritise production for the New Zealand Armed Forces (*Press*, Volume LXXX, Issue 24238, 21 April 1944). Similarly, Cadbury Fry Hudson ran its factory in Dunedin to full capacity, providing emergency ration chocolate bars not only for the New Zealand Forces but also for those of other countries (Barringer, 2000). In 1944, more than 36 tons of chocolate was sent to troops overseas (*Northern Advocate*, 8 April 1944). In 1942, Cadbury Fry Hudson produced "service biscuits, biscuits for the US forces, chocolate for NAAFI, chocolate for canteens and Red Cross Army packs, jungle chocolate, emergency ration chocolate and cocoa for the US forces" (Barringer, 2000 p. 52).

By the end of the war, the price of cocoa increased fifteen-fold compared to pre-war prices. This was due not only to high demand but to a virus affecting the West African

crop of cacao trees. At the same time, government subsidies for sugar for manufacturing were lifted, increasing the price by over 60 percent and other ingredients such as dried fruit and nuts were difficult to obtain (Barringer, 2000). This resulted in a continuous increase in the price of chocolate (*Bay of Plenty*, Volume LXXVI, Issue 14701, 19 June 1948).

As the chocolate market became increasingly competitive, Cadbury emerged stronger than ever, especially due to its now dominant Dairy Milk bar and other new moulded chocolate blocks. But the deterioration of shipping services to the North Island meant product in local branches was often out of stock, with retailers naturally turning to North Island manufacturers Nestlé and Griffin's. The same was happening in the South Island with Cadbury Fry Hudson dominating the local South Island market but with the disadvantage of an ever-increasing population in the North Island (Barringer, 2000). Cadbury Fry Hudson's problems continued to worsen especially in the chocolate tablet and block market with the Nestlé factory strategically based in Auckland. Cadbury Fry and Hudson tried numerous new products, such as Dairy Milk croquettes, but could not compete against Nestlé's now well-established products. Cadbury Fry Hudson decided on a different advertising tactic by increasing the weight of the blocks by 20 percent (Figure 15) and accepting a lower profit margin, which worked well (Barringer, 2000).



Figure 6: Otago Daily Times, Issue 27510, 3 October 1950

The cost of cocoa beans continued to increase, resulting in a 20 percent product price increase by 1954. World War Two, the increase in chocolate manufacturing and the price of cocoa beans forced New Zealand manufacturers like Aulsebrooks and Griffin's to

reconsider their involvement in the chocolate market. In 1954, Aulsebrooks became the agents for well-known biscuit manufacturer Huntly and Palmers and Griffin's, and once more renewed its pre-war offer to sell the business to Cadbury Fry Hudson, but this was once again declined (Barringer, 2000).

In 1955, Cadbury Fry Hudson continued its strong campaign for moulded chocolate blocks with the introduction of Caramello (caramel centre) and Honeycomb (aerated milk chocolate) with promising sales especially in Auckland (Barringer, 2000).

The 1950s also saw increased diversification in the chocolate market with the increased consumption of chocolate confectionery (often referred to as countlines⁷), especially with the arrival of confectionery bars such as the Mars bar (England, 1930, Mars bar was a version of the American Milky Way bar), by now imported into New Zealand. Cadbury Fry Hudson considered introducing Fry's Crunchie bar, but instead decided to develop a new basic bar called the Buzz Bar (white marshmallow base with toffee layer, covered in chocolate), sold under the Hudson logo. Confectionery bars, also referred to as candy bars or novelty bars, continued to increase in market value, eventually dominating the chocolate confectionery market altogether (Beckett et al., 2017). During the 1960s Cadbury Fry Hudson developed the 'Crunchie', 'Picnic' (updated version of Hudson's Buzz Bar) and 'Flake' bars (Barringer, 2000; Bradley, 2008).

Other manufacturers MCP (Mackintosh and Sons, Caley and Phoenix) and Bycroft added their versions of chocolate blocks (the term 'block' was now more commonly used, probably due to the increased weights of the chocolate and its increased popularity). By 1961, Aulsebrooks acquired the South Island factory of MCP, then its North Island factory a few years later. In 1966, the company joined forces with Bycroft (Auckland, 1883, biscuit manufacturer), eventually becoming a subsidiary of A. B. Consolidated Ltd (Blanchard, 1970) and by 1978 reverting back to Aulsebrooks, liquidating the Bycroft brand (Zam, 2016). Griffin's soon followed by selling out to the National Biscuit Company of New York (Nabisco).

During a parliamentary debate in the New Zealand Parliament House of Representatives on 14 April 1970, Patrick Blanchfield, Westland, emphasised the issues many New Zealand companies were facing regarding the increase of foreign ownership and formation of monopolies. Taking biscuit manufacturing as an example, Blanchfield listed Hudson and Co as the first casualty of many to be acquired by foreign investors such as Cadbury and Fry. Blanchfield noted that in 1890 there were twenty-two biscuit factories

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⁷ With respect to chocolate, this refers to impulse purchasing and on-the-go consumption of smaller plain chocolate bars or chocolate-coated confections with multiple layers (Bradley, 2008).

in New Zealand compared to eight in 1970, three of them controlling 30 percent of the market, suggesting that the New Zealand market was almost entirely controlled by foreign ownership (Blanchard, 1970).

The development of global multinationals was a reflection on the significant investment made by large companies focusing on large-scale production seeking low-cost ingredients and efficiency in production (Ministry of Business, Innovation & Employment, 2018). One of the issues local food manufacturers faced was high product diversification leading to intense competition.

The advertising of chocolate started to diversify from the 1950s onwards with the arrival of magazines (*Listener* and *Woman's Weekly*) and advertising on television in 1962 (Fay, 2003). Cadbury Fry Hudson, as the market leader in every sector it competed in, was one of the first companies to make use of this (Barringer, 2000). Nestlé followed with similar advertising strategies, its main emphasis the quality and freshness of their chocolate blocks. Nestlé was particularly popular with their 'Milky Bar kid' concept in the 1980s with the first TV advertisement produced in 1961 (Nestle, 2017), promoting children's need for energy-promoting health benefits and the nutritional value of milk (Turner & Jones, 2018). Increased urbanisation in the 1950s and the growth of disposable income and free-market economic policies shaped the way of advertising (Fay, 2003). Chocolate advertising reflected New Zealand's population, at the time estimated at 2.5 million, using group values such as family, child rearing, nurturing and youthfulness, health and nutritional values and quality (Fay, 2003).

During the 1960s many of the original New Zealand chocolate tablets, blocks and bars from household names Aulsebrook's, Hudson and Griffin's continued to be produced and sold, but once more the biscuit side of these businesses seemed to prevail. It is unclear when the production of chocolate tablets, blocks and bars and eventually ceased to exist.

Dunedin confectionery company Romison (1886), sold to a group of Dunedin investors in 1946 then shifted to Oamaru and renamed as Regina Confections, also manufactured chocolate products such as Easter eggs and chocolate tablets (Full Cream Milk Chocolate with Nuts and Fruit, 1960s). However, it is not clear whether Regina Confections imported the chocolate (couverture) then reprocessed it or made its own. The company was eventually purchased by Nestlé in 1995 before closing in 2001, shifting all manufacturing to Australia. In 2001, Innovex Holdings purchased the building, establishing the still existing Rainbow Confectionery (Rainbow Confectionery, 2018).

Within this contested chocolate (tablets, blocks, bars) market, it became less clear who manufactured what and where and who was owned by whom. This was particularly the

case with Aulsebrooks (Zam, 2016). Another issue facing smaller chocolate manufacturers in New Zealand was the continuing fluctuations in cocoa prices.

In 1970, chocolate manufacturers in New Zealand (agreed on by all) decided on a price increase for chocolate and chocolate biscuits, even so world commodity prices of cocoa collapsed from 470 to 400 sterling a ton (*Christchurch Press*, 6 January 1970) (Kirk, 1970). Manufacturers, arguing with the government at the time, pointed out that the increase in price was necessary as they had not changed the price of their 25-cent blocks (approximately 135–150g in weight) since 1954. The government maintained that in 1965 the cocoa bean market had totally collapsed, and that the price of cocoa beans was 79 percent below the price level in 1954, but with no reduction in the price of chocolate. Manufacturers replied that one of the main issues was the increase in labour costs (Kirk, 1970).

In 1969, Cadbury Bros (England) merged with Schweppes (soft drinks), recommending Cadbury Fry Hudson change its name to Cadbury Schweppes Hudson Ltd. By 1970, Cadbury Schweppes Hudson commanded nearly 80 percent of the New Zealand chocolate market (Bradley, 2008). While successful in market share and competition, it was difficult for any large company to fully sustain an independent business and continue to grow further in a market of only three million people. In 1975, Cadbury Schweppes Hudson formed closer ties with its sister company Cadbury Fry Pascall in Australia, allowing for a further increase in chocolate production in Dunedin.

With another drop on the world market in 1975, Cadbury Schweppes Hudson looked at either increasing its prices, changing the formula or changing the size or physical shape of its chocolate bars and blocks. Once more prices were increased, proving to be the right strategy, and the company continued to dominate the New Zealand market especially with its Dairy Milk chocolate block. Chocolate brands Aulsebrooks and Griffin's eventually fell to the side, leaving Cadbury Schweppes Hudson and Nestlé to dominate the New Zealand tablet, block and bar market. In 1984, Cadbury Schweppes Hudson invested a further four million dollars into upgrading its chocolate factory (considered at the time the most modern in the world) to help meet demand (Barringer, 2000; Munro, 2017).

In 1986, Nestlé purchased Heards Ltd and by 1988 Nestlé's Parnell factory, open since 1929, was permanently closed. According to Nestlé's Consumer Engagement Services (Nestlé, n.d.; personal communication, Charlene, Consumer Engagement Services March 13, 2019), manufacturing of its chocolate products for New Zealand shifted to the Campbellfield factory in Australia, for strategic business reasons. 1988 was a year of important business decisions for Nestlé, especially with the takeover of giant British

confectionery and chocolate manufacturer Rowntree Mackintosh ("UK: Nestlé Rowntree - Bittersweet Tale," 2016), further validating the potential rearrangement of production worldwide and Nestlé's expansion in food manufacturing in general (Nestle, n.d.).

The end of Hudson

1990 marked an important year for Cadbury Schweppes Hudson, with the 60-year celebration of the Dairy Milk chocolate block in New Zealand. But at the same time the company decided to discontinue all Hudson's biscuits (produced in Dunedin since 1868), selling the biscuit manufacturing part of the company to Griffin Sugar Confectionery Ltd. (Nabisco). With this transfer, Cadbury Schweppes Hudson changed its name to Cadbury Confectionery Ltd [henceforth referred to as Cadbury] thereby ending Hudson's manufacturing in New Zealand (Barringer, 2000). Cadbury was now New Zealand's prime chocolate (and confectionery) manufacturer, but with "transfer of ownership and control of the New Zealand company" to Cadbury Australia (Barringer, 2000, p. 171).

Whittaker's change of direction

Whittaker's was by now one of the last standing New Zealand confectionery companies still making chocolate from bean to bar. The company's reputation was founded on its well-known toffees and caramel confections in the 1930s, further validated in the 1950s with the now classic products Toffee Milk and K-Bars (Zam, 2012). While Whittaker's continued the manufacturing of chocolate, it is unclear of its use other than in the covering of confections, or as an added ingredient (Zam, 2012). As discussed earlier, Whittaker's only made their classic Peanut Slab in the 1950s. The company's Sante bars (individual thin fingers of chocolate) were also offered over the counter, eventually becoming a brand name on its own merits (Zam, 2016). It was sometime during this period that Whittaker's must have shifted priority, decreasing production of confectionery products (pressure of overseas confectionery products and Cadbury's dominance) and increasing chocolate production, quietly building a unique and quintessential New Zealand chocolate brand of major importance to come.

As previously discussed, the importance of particular varieties of cocoa beans used by overseas manufacturers was an important marketing tool. Britain's influence in West Africa eventually resulted in an increase and eventual domination of these cocoa beans. While Whittaker's primarily used West African beans, they sometimes purchased cocoa beans from a closer source like Samoa (as did Cadbury Fry and Hudson). These cocoa beans originated from plantations around Vaisala on the island of Savaii (producing at its peak in 1962 fine flavour cocoa beans in excess of 5,300 metric tons), a relationship formed during the 1960s and lasting until the 1980s (Budd, 2018).

Samoan cacao and New Zealand

Cacao was first introduced into Samoa by Germans in 1883 with presumed Criollo varieties from Ceylon (now Sri Lanka) and Java (C-spot, 2018), but by 1914 introduced Forastero cacao beans started to dominate with Criollo taking a back seat, and from there further hybrids developed (C-spot, 2018).

Samoa has had a tumultuous history regarding the cultivation of cacao (Budd, 2018). New Zealand's colonial influence since its mandate of governance in 1920 highlights its rather non-committal stance towards economic and agricultural partnership between the two nations over the years (*Evening Star*, Issue 19318, 3 August 1926). Examples can be seen as early as 1915 when New Zealand imposed hefty levies on cocoa coming from Samoa (Germans instead exempted duties to help stimulate exports) (Clarence-Smith, 2015) (*The New Zealand Herald*, Volume LIII, Issue 16210, 22 April 1916). A lack of direct trade in the 1920s (most crops went straight to Britain, e.g. Cadbury), considered a term of the dominion's mandate (*Otago Daily Times*, Issue 19682, 8 January 1926), highlighted the fact that New Zealand manufacturers preferred the cheap West African variety of cocoa beans (Ghana). Export duties, high shipping charges and increased labour costs resulted in costs nearly as much to ship a ton of cocoa beans to Dunedin as to London (*The New Zealand Herald*, Volume LXIII, Issue 19320, 6 May 1926).

In the 1940s Samoa struggled from a lack of labour, having to leave a large part of the crop to rot with no help or suggestions (*Gisborne Herald*, Volume 1, LXX, Issue 21053, 26 March 1943). In 1943, B. A. McPherson, director of the Christchurch Botanic Gardens, urged New Zealand to help Samoa by introducing a parasite to control the rhinoceros beetle which was affecting their cacao plantations, but to no avail (*Press*, Volume LXXX, Issue 24215, 24 March 1944).

Samoa's cocoa industry continued, reaching its peak in 1962, but its production fell from 2700 to 3,6 metric tons in 2003. Issues ranged from mismanagement, lack of government support, multiple ecological and agricultural issues and a decrease in cocoa prices worldwide (Budd, 2018). One of the big issues was the planting of poor plant material, suggesting the introduction early on of the lower-value Amelonado cacao varieties (Forastero) and the adaptation of poor fermentation, drying and storage practices. Today, Trinitario and Amelonado varieties prevail as the main crops of Western Samoa (C-spot, 2018).

Over the years many attempts by government agencies failed at revitalising the industry. Now initiatives such as the use of direct commercial agreements (direct trade), the arrival of small bean-to-bar makers searching for alternative beans, and large chocolate makers

such as Whittaker's introducing "The Whittaker's Cocoa Improvement Programme" are helping to resurrect a once thriving cocoa industry.

Whittaker's purpose-built factory

In 1969, after outgrowing its premises, Whittaker's shifted to a purpose-built factory in Porirua, from where the company continues to operate today (Farrell-Green, 2012). According to Laugesen (2013), reclusive third-generation brothers Andrew and Brian Whittaker took over the helm of the company in the 1970s from father Maurice, making it their mission to transform it by investing in new equipment, quality ingredients, product development and export opportunities. Whittaker's sensed an opportunity where others had failed, eventually creating a niche New Zealand chocolate brand in a market dominated by Cadbury. It was the arrival of its 250g chocolate blocks in the 1990s which marked a change in direction (Laugesen, 2013; Whittaker's, 2019a).

Whittaker's' foresight of changing world markets and the emergence of artisanal beanto-bar producers overseas and in New Zealand eventually put Whittaker's at the forefront of the moulded chocolate block market in New Zealand (Philp, 2018).

4.2.4 Innovation era (2000s)

As previously stated, the artisan food production movement continued to gain traction during the late 1990s (Owen Smith, 2018) but it was not until the mid-2000s that early proponents of the bean-to-bar concept started to appear in New Zealand. These were often individuals with ties to the food industry like pastry chef Rochelle Alagar in Wellington (previously known as Rochelle Harrison) of 'RQute' and Alison Holland of 'White Rabbit Cacao' (previous manager of Mt Difficulty winery, Bannockburn, Central Otago). Both Alagar and Holland started to experiment with the concept of bean-to bar chocolate, but they were not the only ones.

Rochelle Alagar's interest in making chocolate started in the early 2000s. By 2009 Alagar had experimented with her first bean-to-bar concept, producing around 10kg of chocolate a week under the brand The Cocoa Press, using fair traded cocoa beans and sugar (Figure 16).

Alagar describes her passion for perfection in chocolate making as reflecting her work ethic as a pastry chef and the continuous drive to use the best ingredients. But one of her main motivations was the unavailability of fair-traded chocolate (e.g. fair-traded couverture for use in production) in New Zealand for use in her professional role as pastry chef. She was very much concerned about ethically and sustainably sourced cocoa beans, also the driving force for others.



Figure 7: Commonsenseorganics.co.nz, (date is unclear, interview dated March 2014) (Commonsense, 2014).

Holland described (McCarthy, 2012) how part of her passion for making chocolate stemmed from her desire to create unique and complex flavours from the use of different cocoa beans (in her case, from the Dominican Republic). Her experience in the wine industry helped her produce chocolate of individual complexity and nuances not found in standard chocolate blocks and tablets. Another appealing aspect of bean-to-bar chocolate to Holland was the trend towards darker and less sweet chocolate, imparting messages of health benefits like increased amounts of antioxidants.

White Rabbit Cacao chocolate tablets (Figure 17) appeared slightly earlier than Alagar's brand The Cocoa Press. With a distinct and stylish wrapping, the chocolate tablets were available to consumers at farmers markets and from the company's online website. (whiterabbitcacao.co.nz, no longer available) (McCarthy, 2012).



Figure 8: White Rabbit Cacao (Localist, 2019).

Following Alagar and Holland was industrial designer Jamie Andrews from Kerikeri. With his professional background and the help of his father, he designed and built part of his chocolate making equipment himself, unable to afford professional equipment. In 2013, he released his brand Capt Pembleton (Figure 18), chocolate made with beans from Papua New Guinea of single origin from two plantations, Saidor and Kulili (McCoy, 2014).



Figure 9: Capt Pembleton ("The Dish: Our Favourite Food News," 2014).

As previously stated, bean-to-bar chocolate makers pride themselves on using fine flavoured cocoa beans, often ethically sourced. The use of high-quality cocoa beans versus bulk beans dictates price, requiring marketing strategies convincing customers of the product's worth. The added challenge of small quantities, lack of professional equipment and market access are challenges many face in a newly developing craft industry. While the early attempts by Alagar, Holland and Andrews highlighted a new direction in chocolate making in New Zealand, large manufacturers were continuing to wrestle for market domination and for the first time had to face up to issues plaguing the industry due to a slow but growing consumer backlash.

Whittaker's road to dominance

For any emerging artisanal industry such as bean-to-bar chocolate makers in the early 2000s it was going to be challenging to compete against market leaders Cadbury, Nestlé, emerging Swiss company Lindt, and Whittaker's.

Swiss manufacturer of premium chocolate Lindt (Lindt & Sprüngli) entered the New Zealand market in 1998 with chocolate tablets initially only available in department stores and specialty stores. According to Maryann Romeo (personal communication, March 19, 2019) from Lindt's Australian Consumer Service office, in 2005 the company's premium tablets (70% Cocoa and Milk) were eventually available in supermarkets. Sales increased steadily and by 2007 Lindt managed to double sales from 2006 and has been going steadily ever since. Lindt as a brand reflects premium quality and elegance with slim packaging and a higher price tag, setting them apart from other manufacturers.

Whittaker's was quick to understand the changing market and continued to increase its chocolate selection and production while decreasing its range of confections such as caramels and toffees. Careful planning continued within the family company with the involvement of fourth-generation Whittaker family members Holly Whittaker (Marketing

Manager) and Matt Whittaker (Export Manager). In 2009, Whittaker's eventually placed third in the '*Reader's Digest* Most Trusted Brands' in New Zealand and by 2012 topped the list ahead of Wattie's and Cadbury. Cadbury had previously won seven times in a row (Gilchrist, 2009).

The reason for Cadbury's sudden drop in consumer trust was based on an unprecedented incident. In June 2009 the company decided to replace part of the cocoa butter in its Dairy Milk chocolate with palm oil, a contentious ingredient (the palm oil industry is known to be widely responsible for massive deforestation and subsequent habitat loss of animal species) (Ferdous Alam, Er, & Begum, 2015) and, simultaneously, to reduce the weight of a block of Dairy Milk from 250g to 200g. Reasons given for the changes were high commodity prices, a volatile cocoa bean market, and an apparent consumer demand for a softer eating chocolate. (During the challenging 1950s Cadbury Fry and Hudson had employed a different tactic to tackle lacklustre sales by accepting a lower profit margin and increasing the weight of the chocolate bars alongside aggressive marketing, a tactic which worked very well.) Cadbury's 2009 campaign was a complete public relations disaster (Cadbury stopped using palm oil two months after its introduction due to public pressure). Having already lost the public's trust, Cadbury then in 2008 announced the decision to cut staff at its Dunedin chocolate factory by 145 over a period of two years due to the introduction of new technology (Gilchrist, 2009).

Following these two deeply unpopular moves, Whittaker's business increased by 35 percent and its market share went from 22 to 32 percent (Laugesen, 2013; Philp, 2018). Having taken notice of the many issues facing the chocolate industry and the inability of a massive corporation like Cadbury, by now part of global food giant Kraft (eventually becoming Mondelēz International), to move and adapt, Whittaker's finally increased its supermarket shelf space by increasing its flavours to twenty-four (Laugesen, 2013).

Meanwhile new smaller bean-to-bar chocolate manufacturers began to emerge on the scene.

4.2.5 New Zealand artisan bean-to-bar chocolate producers

Though bean-to-bar chocolate makers like Capt Pembleton and White Rabbit Cacao did not operate past 2015, others such as Rochelle Alagar's The Cocoa Press continued working towards the goal of manufacturing chocolate on a larger scale.

The period of 2013–2019 saw a gradual increase in bean-to-bar chocolate makers. The most recent is Shirl & Moss of Wellington, selling its first bar in the first week of July 2019 (Shirl & Moss, 2019).

The next section introduces current smaller bean-to-bar chocolate makers, including some operating within the spectrum of craft chocolate.

The Wellington Chocolate Factory

In 2013, Rochelle Alagar and Gabriel Davidson (with a background in coffee) co-founded the 'Wellington Chocolate Factory', New Zealand's first Fairtrade organic bean-to-bar chocolate factory. The Wellington Chocolate Factory specialises in bean-to-bar chocolate hand-wrapped in packaging designed by local artists and sold at a premium price. The company's objective is to produce the best possible chocolate by sourcing 'fine bean' varieties such as Criollo and Trinitario (ICCO, 2018).

In 2014, the Wellington Chocolate Factory looked at sourcing beans from the South Pacific by setting up a direct relationship with a cacao farmer in Papua New Guinea. A Kickstarter campaign was aimed at helping Bougainville farmer James Rutana update his equipment and plantation (Wellington Chocolate Factory, 2014), with the company promising to buy one ton of beans from him at a fair price. The Wellington Chocolate Factory attracted 449 contributions, raising over \$37,272 (Kickstarter, 2019). The purpose of the project was not simply to highlight the injustices many smallholders face, but also to attract attention to the difficulties of reinstating a functioning agriculture in Bougainville following the disastrous effects of international copper mining and a 10-year civil war for independence (Lummani, 2005).

In July 2015, the beans were transported aboard a traditional sailing boat (*vaka*) to New Zealand, taking over three months to reach Wellington. The Wellington Chocolate Factory wanted to not only make a statement about using Fairtrade products and sustainable sourcing, highlighting the qualities of Bougainville cocoa, but also highlight other issues like sustainable transportation, that is, traditional Pacific voyaging (Wellington Chocolate Factory, 2015). By teaming up with the Uto ni Yalo Trust (formerly the Fiji Islands Voyaging Society), a trust dedicated to reviving sustainable sea transportation by rejuvenating and sustaining traditional Fijian canoe building, sailing and navigation skills, the company hoped to create further awareness of Pacific issues and promote a low-carbon, lower-cost option for shipping (Wellington Chocolate Factory, 2015).

This concept of low carbon was further highlighted when the beans arrived in Wellington by unloading and transporting them on bicycle carts to further avoid fossil fuel use, which was clever marketing (Tuckey, 2015). Alagar explained it was about more than just promoting sustainability but about ways to make the business eventually financially viable. For the Wellington Chocolate Factory, it was important to achieve higher level of

transparency, allowing customers to know where their food comes from ("Uto Prepares For 'Chocolate Voyage'," 2015).

Hogarth

Karl and Marina Hogarth of 'Hogarth Chocolates', Nelson, started making bean-to-bar chocolate around 2012, selling their first chocolate at the local farmers market in 2015. Hogarth specialises in small batches of bean-to-bar chocolate using fine flavoured beans that are ethically sourced. Besides offering single varieties of bean-to-bar chocolate, Hogarth has been particularly successful in the creation of flavoured bars (Hogarth Chocolate, 2019a), winning the Supreme Award at the 2018 New Zealand Chocolate Awards for its Buttered Toast & Sea Salt Sweet & Savoury Milk Chocolate bar (NZ Chocolate Awards, n.d-a).

OCHO (Otago Chocolate Company)

OCHO was started by Liz Rowe in 2013 in Dunedin. Rowe first sold her bean-to-bar chocolate at Dunedin's farmers market (Baker, 2015; OCHO, n.d.). The cocoa beans were originally sourced from the Pacific, a common theme among New Zealand bean-to-bar makers. The beans came from farmer-owned co-operatives such as the Mamo Cocoa Export Ltd in Papua New Guinea, or the Solomon Islands, Samoa, and Fiji (Ocho, n.d.).

In November 2017, after the closure of the Cadbury factory, OCHO launched an equity crowdfunding campaign giving people the opportunity to invest in the expansion of OCHO and maintain chocolate making in the city of Dunedin. Over a period of two days, OCHO met its target of \$2 million with the support of more than 3,549 new OCHO owners. It was at the time considered the fastest and most successful Pledge Me crowdfunding campaign in New Zealand (PledgeMe, 2017; Rowe, 2018). The new factory opened its door in March 2019, nearly a year after Cadbury closed. Rowe now acts as general manager of OCHO rather than owner. Rowe intends to continue her local, ethical and sustainable business philosophy.

Solomon's Gold

Clive Corp, founder of C-Corp which promotes Solomon Cocoa together with Glenn Yeatman (who previously worked with coffee), started to produce bean-to-bar chocolate in Mt Maunganui in 2013 (Solomons Gold, 2018). The company pledges to produce a range of cocoa products (including chocolate tablets) to provide long-term benefits for the Solomon Island communities, with an added health benefit (the product is free of all known food-causing allergens) (Meyers, 2018).

Ola Pacifica

Nia and Phil Belcher started Ola Pacifica in 2011. Nia Belcher, originally from Samoa, decided to set up direct trade with local Samoan cacao farmers and make chocolate in Havelock North, Hawkes Bay (Ola Pacifica, 2019). (Ola Pacifica's online store is currently offline due to changes within the company, posted 29 June 2018 on website) (Belcher, 2018).

Maloko Chocolate Company

According to Maloko Chocolate Co's website, owners Annette and Rik (full name not listed) first produced bean-to-bar chocolate in 2006, in Grey Lynn, Auckland (Maloko, 2014). With another strong link to the Pacific, Maloko Chocolate Co sources their Trinitario cocoa beans from a Samoan plantation. The website has been inactive for some time and the owners could not be contacted. According to Owen Smith from The Chocolate Bar (personal communication, August 19, 2019) Maloko have never actually sold any bean-to-bar chocolate.

Raglan Chocolate

Raglan couple Simone and Mike Renfrey (previously a chef and current food technologist with Profile Food, Hamilton) first made bean-to-bar chocolate in July 2017, using organic and fair-traded sugar and cocoa butter, organic cocoa beans (Norandino) and organic milk powder (Raglan Chocolate, n.d.; Raglan Community Radio, 2017).

Flint Chocolate

Tania Lincoln, owner and chocolate producer of Flint Chocolate, Auckland, makes chocolate bars using organic beans (Norandino organic beans purchased from Trade Aid New Zealand directly through Meridian Cacao⁸) and organic coconut sugar, with the addition of flavours (Flint Chocolate, 2019). In 2017, Lincoln sold her first chocolate at the NZ Chocolate & Coffee Show, in Auckland.

Foundry Fine Craft Chocolate

David and Janelle Herrick from Mahurangi, Auckland, are a recent addition to the bean-to-bar chocolate movement. Sourcing cocoa from Bolivia, Colombia, Ecuador, Papua New Guinea, Peru and Tanzania, the Herricks started selling their chocolate tablets in mid-2018. They pride themselves on producing micro batches with just two ingredients: sugar and cocoa beans (Dunc, 2018).

⁸ Meridian Cacao is a boutique cocoa bean importer in Portland, US (Meridian Cacao Company, n.d.)

Shirl & Moss

The latest bean-to-bar chocolate manufacturer (July 2019) consists of siblings Aimee and Simon from Wellington, selling their handcrafted bars, made with ethically sourced cocoa beans from Fazenda Camboa, Brazil through online chocolate shop, 'The Chocolate Bar' (Shirl & Moss, 2019).

Devonport Chocolates

Stephanie and Terry Everitt of Devonport Chocolates started making their first bean-to-bar chocolate in 2016, sourcing the cocoa beans directly from a single cacao farmer in Samoa (Devonport Chocolates, 2019). Devonport Chocolates uses a commercial brand of couverture for its production of confection and handmade and moulded chocolates. At this stage, the bean-to-bar concept forms only a small part of their overall product range.

Miann

As recently as 2019 well-known Auckland owner pastry chef Brian Campbell of Miann decided not only to make his own bean-to-bar chocolate tablets but to replace the commercial brand of couverture he used in the making of his pâtisserie and chocolate products with his own bean-to-bar couverture chocolate, a first in New Zealand (Miann, 2019). He currently produces 8 tonnes of chocolate a year and is the first pastry chef and chocolatier in New Zealand to take on both sides of the process, that is, making his own chocolate and using it in production (Owen Smith, 2019b).

Trade Aid New Zealand

Trade Aid New Zealand was first established in 1973 as part of a social justice movement using a fair-trade model to provide a means to earn a living for people in disadvantaged and developing countries, mainly dealing in handcrafts (Low & Davenport, 2005). In the late 1990s, Trade Aid diversified by trading coffee and other products such as Fairtrade organic sugar and drinking chocolate (White, 2015). Experiencing success in trading drinking chocolate, Trade Aid started importing eating chocolate from Oxfam, Belgium. Oxfam Belgium sourced the fair-traded chocolate from Callebaut, Belgium, which got the cocoa beans from a well-known Fairtrade cocoa co-operative in Ghana called Kuapa Koko. This chocolate (couverture) was then moulded into bars by another Belgium company and re-branded as Oxfam, Belgium. Eventually in 2007, Trade Aid imported chocolate from Switzerland through 'Claro Fair Trade AG' (Stella Bernrain, n.d.).

In 2013, Trade Aid decided to manufacture chocolate instead of importing fair trade chocolate. By August 2014 Trade Aid New Zealand was the first Fair-Trade organisation in the world to open a chocolate factory (Sweet Justice Chocolate Factory) (Trade Aid, 2019a). Certain chocolate manufacturing equipment (German) was purchased and

imported in early 2014 from Australia and installed in Christchurch. By September 2014 production began and sales immediately rose by 300 percent. Trade Aid's Sweet Justice Chocolate Factory is not a true bean-to-bar chocolate manufacturer, using cocoa mass as the starting point to make chocolate.

Trade Aid's role in chocolate manufacturing in New Zealand has increased and the company has become an important intermediary for local bean-to-bar chocolate makers such as the Wellington Chocolate Factory, Hogarth, Ocho, Raglan Chocolate and Flint Chocolate. Trade Aid imports large quantities of beans form different locations and cooperatives and due to the smaller quantities required by bean-to-bar makers, the company can purchase them at a more compatible price and has the capacity to stock them too.

Wildness

In 2016, French chocolatier Marie-Loic Monmont of Wellington, while not a bean-to-bar chocolate maker, developed in conjunction with Callebaut Brazil a unique chocolate with the addition of cupuaçu⁹. By using a combination of Forastero, Criollo, and Trinitario cacao beans from regions in Brazil and other countries such as Indonesia, Marie-Loic Monmont had the idea of blending cacao beans with cupuaçu. This chocolate is currently used to create her distinctively flavoured chocolate tablets and other miscellaneous chocolate products. She uses her business acumen to combine her passion for the environment and social conscience to help others by involving inmates at the Rimutaka Prison in Upper Hutt, Wellington, in the packaging of her products (Knight, 2017).

From analysis of current chocolate production in New Zealand, it is clear that the emergence of numerous smaller bean-to-bar chocolate manufacturers at a time when large-scale producer Cadbury is facing challenges and Whittaker's is experiencing unceasing success, all against the backdrop of unprecedented environmental change, is helping contribute to the disruption of the commercial landscape of chocolate production in New Zealand.

4.2.6 Industrial fair-traded chocolate

Fairtrade

In 2010, Matt Whittaker of Whittaker's set up a Fairtrade supply chain in Ghana. There were multiple reasons for this, such as his interest in commodity sourcing, consumer reaction towards trends, the company's understanding of labelling and source of

⁹ Cupuaçu is a fruiting tree that grows in the rainforests of Brazil and is farmed in very few places in the Amazon river basin and Bahia. The cupuaçu (*Theobroma grandiflorum*) is a sister plant to cacao, and the flavour of the pod's pulp is often compared to chocolate (Organic Wildness Chocolate, n.d.)

ingredients and competitor pressure from Cadbury's introduction in 2009 of its 'Fairtrade Dairy Milk'.

Soon after, Whittaker's certified its 'Creamy Milk' by February 2010 (Fuseworks Media, 2010). Whittaker's saw itself now not only as a large industrial manufacturer of chocolate but also as a bean-to-bar producer with a conscience, this eventually becoming a key sales concept (Philp, 2018). The 2010 BBC documentary "Chocolate - the bitter truth", exposing child labour in West Africa ("Tracing the Bitter Truth," 2019), was soon to highlight many of the issues the chocolate industry was facing. When questioned by TVNZ ONE News about the origin of its cocoa supply, Whittaker's' response was timely as the company could argue that most of its cocoa was purchased through Ghana's governmental Cocoa Board (via the certified Kuapa Kokoo co-operative) and a small part from Madagascar used for the chocolate block 'Milk Madagascar' ("Chocolate Companies Respond," 2010). The company's long-term goal was to increase its Fairtrade range of chocolate but it needed to make sure that all logistics regarding the continuous access and reliability of Fairtrade ingredients could be guaranteed before continuing with its quest for further accreditation. By May 2010 Whittaker's 'Fairtrade Creamy Milk' 250g block became its bestselling product. In 2012, Whittaker's became the Reader's Digest Most Trusted Brand (Scott, 2015).

In 2011, Whittaker's invested \$10 million in a new Swiss five-roll refiner (capable of producing twenty 250g blocks per minute, increasing the quality of its chocolate substantially and allowing for further product development previously not possible). Continuing Matt Whittaker's quest to produce ethical and sustainable chocolate, the company refined its already successful Creamy Milk into the '5 Roll Refined Creamy Milk' block. By December 2012 the block was voted New Zealand's favourite Fairtrade product at the inaugural Fairtrade Product Awards (Whittaker's, 2013). In May 2013, the company released its 72% Dark Ghana block by now tripling its purchase of Fairtrade certified cocoa (Whittaker's, 2013).

Cadbury's 'Fairtrade Dairy Milk' bar was introduced in 2009 and became an instant worldwide success but has since been increasingly questioned due to dubious chocolate labelling (Ramsay, 2013). The problem is that Cadbury has been unable to quote the exact percentage of fair-traded ingredients in its chocolate products. When further questioned in 2013, the response was that not all ingredients had to be fair traded and that the Dairy Milk bar contains at least 70 percent fair-traded ingredients (Ramsay, 2013). This touches on what the industry calls a 'mass balance' system (St-Pierre, 2019) where manufacturers must only purchase the equivalent mass of cocoa used in their certified products, which implies that not all beans have to be fair-traded. Cocoa beans

are often mixed up before reaching manufacturers (for specific traits and flavour profile requirements), increasing the probability that the opposite could happen, that a non-certified bar of Cadbury chocolate could end up using Fairtrade chocolate (Ramsay, 2013).

Whittaker's, aware of this unfolding drama, made sure there was a clear distinction between its Fairtrade and other chocolate products, fully aware of the difficulty of securing a continuous and reliable supply of high-quality Fairtrade certified ingredients. Understanding the volatile and unpredictable nature of growing cacao (Leissle, 2018) and its current size of operation made the company more flexible and adaptable.

4.2.7 Whittaker's heading towards domination

Whittaker's has so far been modest in its product advertising compared to the giants of confections, Nestlé and Cadbury. Advertising of Whittaker's products has over the years used phrases such as "A passion for chocolate since 1896" and "Good honest chocolate" (Whittaker's, 2019a). This changed drastically with the 2013 television advertisement of their '5 Roll Refined Creamy Milk' bar involving English celebrity chef Nigella Lawson cheekily advertising Andrew and Brian's new chocolate by taking on the Swiss at their own game (Laugesen, 2013). According to Scott (2013), companies like Whittaker's have shown that by building a brand they are able to create expectations among consumers through targeted marketing, then deliver the experience through their product. Well-defined marketing has become their forte, especially focusing on quality, investing in new manufacturing equipment and upskilling employees (Scott, 2015; The Stoppress Team, 2017).

With an uncompromising communication strategy, increased advertising and a strong presence online and on social media, Whittaker's has continued to be proactive in increasing its profile by building a story of superiority, reflecting values of quality and innovation, loyalty and a sense of national identity (The Stoppress Team, 2017). By the end of 2013 Whittaker's had a 38 percent share of the New Zealand chocolate tablet market with sales of 14.7 million blocks of chocolate a year (Scott, 2015).

In 2015, Whittaker's introduced a range of chocolate tablets emulating the emerging market of artisan bean-to-bar chocolate manufacturers. Taking full advantage of the current consumer trend towards artisan products, Whittaker's introduced an artisan range of six types of 100g chocolate tablets in collaboration with New Zealand and Pacific artisanal food producers (Marlborough Sea Salt, Kaitaia Fire Chili Pepper Spice, Waikato Grown Aromatic Oolong Tea, and others) (Whittaker's, 2019a).

Included in this artisan range was a single origin Samoan cocoa chocolate. Reconnecting the company's relationship with the Va'ai family in Vaisala on Savaii, Samoa, Whittaker's is using the plantation's Trinitario cacao beans as a reference to its use in the milk chocolate the company produced during the 1960s to 1980s (Whittaker's Cocoa Improvement Programme) (SweeneyVesty, 2015).

By 2015 Philip (2018) described Whittaker's as a strong leader in the chocolate market in New Zealand. According to data from Nielsen (as cited in Ryan, 2018), chocolate sales in New Zealand totalled \$365 million in 2016, with chocolate block sales worth \$139m of the total, according to Cadbury New Zealand chief executive officer James Kane, with Whittaker's now owning 41 percent of the market share.

In 2017, the Toffee Milk bar was launched with the inclusion of the famous milk toffees produced during the 1930s. This tactic in product development clearly reaffirmed the use of nostalgia as a marketing tool and traded on the concept of "Kiwiana" (Neill, 2018), reflecting on past life in New Zealand and creating a modern narrative incorporating notions of "cultural collectivity" (Day, 2014, p.2). Whittaker's continues to use principles of nostalgia and Kiwiana in its advertising campaigns.

Not to be outdone, rival Cadbury retorted with Jaffa and Apple Crumble chocolate blocks, but with less success, somehow reflecting the public's lost trust in the brand (Harris, 2017). Whittaker's latest creation followed a string of chocolate products teamed up with Kiwi favourites, including L&P soft drink flavour (Whittaker's, 2019c) Jelly Tip ice cream flavour (Whittaker's, 2019b) and Whittaker's own famous K-bars (Harris, 2017).

The Whittaker's brand, by now considered a true New Zealand chocolate brand aligned with values such as authenticity and integrity, also took a new approach via social media. Tom Reidy (2012) from Social Media New Zealand points to how since 2011 Whittaker's has successfully used its social media platforms to launch its products and increase its Twitter and Facebook fans and followers, with the ongoing goal to convert its brand audience into supporters. In 2011, Whittaker's had 12,000 Facebook followers, increasing sharply to 129,000 by the end of 2012, resulting in being selected by Facebook as a 'best practice case study' (Reidy, 2012). In 2015, the company had 484,000 followers and is currently sitting at over 785,000 (Whittaker's Chocolate Lovers, 2019). Whittaker's has continued to release clever marketing campaigns introducing new products. Nevertheless even Whittaker's is not immune to backlash with the most recent campaign involving pink and blue chocolate bars, a take on 'baby gender reveal',

¹⁰ Kiwiana includes artefacts within "articulate narratives of accumulated symbols reflecting national identity imbued with identity" (Neill, 2018, p. 172).

receiving criticism for "erasing people in the rainbow community and promoting 'antiquated' gender stereotypes" (Meier, 2019, para 1).

4.2.8 Cadbury's fall from grace

Whittaker's success was clearly advanced by Cadbury's marketing blunders in 2009. Cadbury had traditionally been an expert at creating expectations through advertising and delivering the goods, but had been struggling to keep up with Whittaker's relentless product diversification and use of social media platforms for clever marketing (Scott, 2015). Emerging rumours of potential job losses and factory closure didn't help maintain the public's trust in the brand.

Cadbury's Dunedin factory was to become its downfall. The factory was efficient and 70 percent of its production was exported to Australia. In February 2017, Cadbury owner Mondelēz International announced it had decided to shift all production to Australia, therefore ending Dunedin's longest-running chocolate factory started by Richard Hudson in 1885. At the end of March 2018 Cadbury closed its doors. This was not the first for Mondelēz International as it has been closing factories in many developed countries such as the US, Canada and Europe, often shifting production to developing countries to widen overall profit margins (Ryan, 2017).

While the closure of Cadbury was a major economic and cultural loss to New Zealand, chocolate production continues with Whittaker's, Trade Aid (The Sweet Chocolate Factory) and the many artisan bean-to-bar chocolate manufacturers all committed to New Zealand and its Pacific neighbours.

4.2.9 Whittaker's monopoly

By 2015 Whittaker's had established itself as an archetypical New Zealand food brand, trusted and accepted as a true exponent of New Zealand culture. Whittaker's had shaped the New Zealand chocolate industry, an industry comparable in its development to other food industries of coffee, beer, wine and cheese.

The notion of a national food brand was further emphasised when in August 2019 Whittaker's opened its first permanent shopfront at Auckland International Airport (Shaw, 2018). Selling and advertising its chocolate products as the essential New Zealand gift, the company began competing directly with the quintessential airport chocolate gift, the famous Swiss 'Toblerone' chocolate bar (Toblerone is owned by Mondelēz International) (Smith, 2018). Having forged a trusted New Zealand brand, it was clear to Whittaker's that the presence of their product at duty free airport shops was vital to strengthen its market position further, as airport shops are currently considered the ninth biggest

chocolate market in the world (confectionery sales in duty free airport shops account for \$5 billion in a \$70 billion market) (Smith, 2018).

The question arises as to whether Whittaker's current monopoly in the New Zealand chocolate market has been helped by the recent arrival of small artisan bean-to-bar chocolate manufacturers and their ideologies, reflecting consumer preferences and the impact artisanal production in food manufacturing is having. Or have small artisan chocolate manufacturers benefited from the fact that Whittaker's has, together with the earlier presence of Cadbury in Dunedin, created a New Zealand chocolate industry known for its quality in New Zealand and overseas? (In 2018, Whittaker's exported 30 percent of its chocolate production to twenty different countries) (Philp, 2018).

4.3 Summary

This chapter explored New Zealand's history of bean-to-bar chocolate manufacturing from the perspectives of the pioneer (1850s), production (1930–2000) and innovation (2000 onwards) eras. Emerging narratives include the importing of chocolate and cocoa products into New Zealand, the forming of a New Zealand's chocolate industry with local manufacturing, the influence and eventual dominance of global chocolate manufacturing entities such as Cadbury and Nestlé, the rise of local manufacturing company Whittaker's, the emergence of small local independent artisanal bean-to-bar chocolate makers, shifts in consumer behaviour and the challenges chocolate manufacturing faces worldwide.

The objective of this narrative was to identify key themes such as the difficulties faced by producers, the lack of infrastructure, the challenge of distance regarding purchase of raw materials and equipment, the cost of chocolate production, the acceptance of local versus overseas chocolate products, business growth within the constraints of a small market and the market stranglehold by global manufacturers. Other themes include the rediscovering of an independent local chocolate industry with the emergence of small independent bean-to-bar chocolate makers and developing consumer trust in New Zealand-made chocolate. This suggests a repeat of the past where the dominance of global manufacturers within a local market like New Zealand has been challenged.

Chapter 5 - Research findings 2

5.1 Introduction

This chapter focuses on the recent emergence of small independent bean-to-bar chocolate makers in New Zealand in light of data obtained in expert participant interviews on identified specific themes (Refer Chapter 4.1.1: Main themes).

Concluding the synthesising of topics, specific themes are now discussed within the following sections:

5.2 New Zealand bean-to-bar chocolate makers: Theme discussion

5.2.1 The monopoly of chocolate production

In 2016, chocolate sales in New Zealand totalled \$365 million. Cadbury New Zealand CEO James Kane estimated its chocolate block/bar sales at around \$139m of total chocolate sales, with Whittaker's owning 41 percent of the market share (Ryan, 2017). Whittaker's has maintained its market dominance in a local market competing with the likes of Cadbury, Nestlé and Lindt.

All interview participants agreed on the vibrancy of the current local chocolate market and the potential for growth, but said they understand they are working in a market dependant on mass-produced chocolate sold through channels that are often difficult to access.

Ewan Cameron from Trade Aid thinks that within the current New Zealand chocolate market there are three tiers. He describes the first as:

"... the mainstream chocolate market ... which is Cadbury and Whittaker's ... it's driven through the supermarkets ... or at the service station..."

The second tier is:

"... Lindt and Nestlé and other big multinationals..."

The third tier consists of the local small bean-to-bar chocolate companies:

"... who are producing some increasingly good chocolate, and who are actually starting to find some market for that chocolate. I think it's still pretty early days for that, but I can see it developing further."

Like many small businesses, bean-to-bar chocolate makers find it very difficult to gain higher market share through commonly used confectionery channels such as supermarkets, convenience stores and service stations. Rochelle Alagar from the Wellington Chocolate Factory says it can be achieved especially if you have a good quality product at hand, perseverance and good business acumen. Having worked hard over the years, Alagar has only recently experienced a major move into supermarkets and specialty food stores:

"We have moved into over twenty or thirty New Worlds this year. It is slowly growing. I think with New Worlds it's the price point that's still getting people a bit. But the more higher-end stores like Moore Wilson's and Farro ... they're doing pretty well..."

Trade Aid, selling cocoa mass-to-bar chocolate since 2004, has also recently made its product available in New World and Pak'nSave supermarket outlets, no longer depending on its Trade Aid shops and stockists alone, something more easily achieved due to the chocolate's lower price structure, to be further discussed (See *The cost of chocolate*).

Karl Hogarth of Hogarth, selling bean-to-bar chocolate since 2015, now has product available at selected New World supermarket outlets and summarises the experience of dealing with supermarkets as follows:

"So the supermarket strategy is a lot different. We sort of went back to the drawing board and we've redesigned all our packaging to make it more supermarket-friendly, and we're going to be able to bring the price down and get it under that ten-dollar price point for supermarkets and things like that."

Whittaker's influence

All interviewees acknowledged the importance and place that Whittaker's holds within the New Zealand bean-to-bar chocolate industry. Cameron recognises the company's dominance and thinks it can spur others to achieve the same or do better.

"They are making a product that their market really likes ... I think that's something which is quite distinctive about the New Zealand chocolate marketplace, is that there's not many other places in the world where there's a local not international chocolate company which dominates the market in the same way. They're an exceptionally good marketing company."

"I think definitely what Whittaker's is doing has been an encouragement to people in New Zealand to sort of see New Zealand-made chocolate as world-class. Absolutely, I think there's an equal motivation from people like Rochelle¹¹ to say We can do better than that. We can do better than Whittaker's. We can make something which is more interesting and distinctive."

Alagar believes that as a bean-to-bar chocolate company they have benefited from Whittaker's popularity and even from its artisan range of chocolate tablets.

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¹¹ Rochelle Alagar from The Wellington Chocolate Factory.

"... them bringing out their little artisan range. I guess people have got a slightly fancier chocolate and maybe they might try some more fancier chocolate. So I think it's definitely probably helped."

But she also has confidence in the public understanding the difference between the chocolate bars produced by Whittaker's and the Wellington Chocolate Factory and others.

Some participants had mixed feelings around Whittaker's dominance of the New Zealand market and customers' blind belief in its products. Luke Owen Smith from the online chocolate shop 'The Chocolate Bar' sees benefits:

"Potentially, they've done some benefit in terms of making people think more about New Zealand-made. Because they just have such a huge audience, anything they do is going to be introducing some people to things for the first time – artisan range. So there's certainly benefits from that ..."

But he also identifies some negativity:

"... There's a real blind faith in Whittaker's being 'This is as good as it gets', and I find people really don't want to hear anything else. Often when I'm doing talks, they'll be like, 'So where does Whittaker's fit in in all this?' and I have to explain that 'Well, they're not craft; they're kind of industrial, better than a lot of the other industrial.' People are like, 'I love their Ghana ..."

5.2.2 The crossover of artisan and commercial bulk chocolate

Another challenge bean-to-bar chocolate makers face is the fact that multinationals have taken notice of the commercial potential of bean-to-bar products, and are either acquiring successful smaller businesses or emulating their marketing strategies. In 2005, the famous Green & Black brand (Burn-Callander, 2015; Milmo, 2011) was acquired by Cadbury International Ltd (now owned by Mondēlez International) and in 2015, early American bean-to-bar chocolate maker Scharffen Berger was purchased by Hershey (Shanker, 2017). While Sean Maurer, leader of Hershey's artisan group, admits that in the case of Scharffen Berger changing the production and sale of this premium chocolate within a mass market initially led to disappointing sales, but sales seem to be on the rise again (Shanker, 2017). Association with big brands is often linked to mistrust by the general public and chocolate makers alike. For Cadbury International Ltd, the purchase of Green & Black signified a foothold in the sustainable food market, at the same time appealing to its Quaker origins (Khamis, 2011).

The phrase 'bean to bar' (not previously used by large chocolate manufacturers) was clearly expressed in Whittaker's marketing strategy for the 2015 release of its range of artisan chocolate tablets, and by the increased presence of premium tablets of multinationals such as 'Lindt' and 'Green & Black'.

Whittaker's recent (June 2019) television advertisement promoting its Fairtrade 'Creamy Milk' chocolate bar puts particular emphasis on the phrase 'bean to bar' by clearly citing the term at the start and the end of the clip, highlighting it further with the words appearing in the last frame (Only the Best – From – Bean To Bar).

Owen Smith and others have noticed Whittaker's sales strategies:

"They were a classic example of a big company who suddenly started always going on about the bean to bar."

"It's changed over the past few years a bit. When I first started doing this, the kind of chocolate that I sell, i.e. small batch bean-to-bar makers, everyone was using bean to bar; that was just the term that was used, and no-one was really after chocolate. But then it kind of shifted, I think for two reasons: firstly, that some of the big companies started using bean to bar because most of the big companies are bean to bar and they just never said it because it was never a selling point, but then suddenly these high-quality companies were using it and it became a selling point."

"But then, as well as that, it's a little bit confusing to consumers because they go, 'Oh, bean to bar – that means high quality,' or if it's bean to bar, it must be good, but that's just like so far from the truth. The fact is that the majority of bean-to-bar chocolate is commercial, industrial and multinational chocolate."

Hogarth sees Whittaker's influence increase by muscling its way into the craft chocolate market:

"I'm starting to see them trying to come into the craft chocolate space, like a lot of breweries do ... buy up a small brewery and that's how they get into their space ... or like Whittaker's is trying to sell themselves as a bit of craft."

Alagar noticed that some customers react a little sceptically towards Whittaker's' artisan range, questioning the use of the company's standard Ghanaian chocolate:

"I think the people who really know, and I have seen a comment on this, go 'It's just their normal Ghana chocolate made half the size.' And that's what it is."

Alagar herself reflects on the Samoan tablet:

"Have you ever had the Samoan one? I'm sure they pay a bit more for their beans for that bar. But it just tastes like their other chocolate because they put vanilla in it."

Owen Smith suggests that it is perhaps time to change the terminology:

"I think craft is a slightly better word because people associate with craft beer and it just has a bit more of an association of small-scale, high-quality artisan. But who knows if that will change?"

Alagar and Hogarth both use the term 'craft chocolate' to describe the industry during the interviews but describe themselves as making chocolate 'from bean to bar'. Most recent American literature on bean-to-bar chocolate making seems to use the term 'craft chocolate' too (Dandelion Chocolate, 2019a; Giller, 2017; Leissle, 2017).

5.2.3 The cost of chocolate

On 1 April 2019, Whittaker's increased the price of its chocolate blocks due to "rising costs" (Webb-Liddall, 2019, para. 1). This followed Cadbury's announcement (February 2019) of a reduction in the size of its chocolate blocks as an alternative to raising prices, a move that saw an online backlash from consumers (Ensor, 2019).

Online comments reacting to Whittaker's increase in prices received a wholly different reaction, with many followers congratulating the company for being upfront and honest, indicating they were more than happy to pay a little more for their favourite chocolate ("Whittaker's Chocolate Price," 2019). Neither company specified exactly what the increased costs were, a fact the general public did not seem to care much about.

The cost of cocoa beans is often cited as the reason for price hikes in chocolate products, but while cocoa prices spiked during the months of February 2019 due to lower yields, the forecast for upcoming months was actually positive due to top cocoa supplier Ivory Coast expecting record levels of cocoa production (ICCO, 2019b).

The last noted price increase of chocolate blocks in New Zealand occurred in 2016, a reaction of chocolate manufacturers to the increase in consumption of premium chocolate (McConnell & Clayton, 2016).

Taking into consideration Cameron's three tiers of commercial importance of chocolate, bean-to-bar chocolate makers prefer to follow a system of quality. Karl Hogarth describes it as follows:

"We are super premium, definitely super premium ... You've got Whittaker's, which is bulk and run of the mill – I don't know what the word is, Lindt is premium, we're super premium apparently."

Alagar believes that the price of chocolate needs to increase due to the many issues the chocolate industry faces. In 2014, the Wellington Chocolate Factory, having operated for a year only, recorded a turnover of over \$700,000. But Alagar attributed the company's success not to the public's understanding of the issues within the chocolate industry but to visualisation of the chocolate making process, their open-plan factory and shop concept, a massive step forward:

"It was the first open-plan bean-to-bar chocolate factory in New Zealand. I think having it open plan really gave us the X-factor. As soon as we opened, we had 'Dish'¹² magazine doing a full-page spread. We had the Wellington City Council and Positively Wellington."

The open-plan bean-to-bar factory concept and its ability to make numerous organic single origin Fairtrade chocolate bars certainly helped make the public aware of a quality product with conscience. This view is shared by many, such as American bean-to-bar chocolate maker Dandelion Chocolate, a company that suggests transparency of the production process and its educational aspects help visitors better understand the product, illustrating the difference and justifying the cost of the product (Shanker, 2017). But chocolate makers could possibly face a backlash over what Lash and Urry (1994) refer to as the "touristic quality" (p. 272) of consumption, a materialistic food culture where (chocolate) knowledge is a way to reflect a customer's understanding of the world and morality.

Alagar still faces resistance to a higher price tag and smaller size, an issue facing all bean-to-bar chocolate manufacturers interviewed.

"It was expensive, and people were like, 'Wow, thirteen dollars for a chocolate bar? How could you?' But then we had the whole story behind it. We had the factory actually explaining this is how we do it. We did so many tours through that factory; had groups of tours coming through all the time."

For many new entrants in the bean-to-bar chocolate market, a certain naivety yet enthusiasm for the making of a quality product often numbs the harsh reality of running a business. Hogarth's initial drive of starting a business was based on his passion for chocolate and he felt that the ethos of craft chocolate regarding sustainability and fair trade go hand in hand. His initial focus was on running a business following principles of ethical consideration and sustainability. His first chocolate bar was sold at the farmers market in Nelson in March 2015 for \$10 a bar (packaging had not yet been resolved):

"I think there's a reason why the large industrials are the ones that are making it and can make a profit out of it because the capital expenditure, the fact that you have to run a factory, you have to have food safety standards, packaging, difficulty getting ingredients, and all these things make it really difficult to sell a bar less than ten dollars, which you need if you want to sell them. You can't sell enough bars above ten dollars to make a decent living. You have to keep the price down."

Hogarth had to eventually increase the price of a bar to \$14 due to added costs of packaging required in the retail sector.

"Our first thing would be resistance to price. Our first bars were fourteen dollars retail, which was too high. I thought that people would understand that the

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¹² Award-winning New Zealand food magazine

quality would be reflected in the price, or the price reflected in the quality, but we just couldn't sell enough; stockists wouldn't take them on."

This increase in price reflected commercial reality but also inexperience and wanting to follow the Wellington Chocolate Factory's lead:

"I didn't know what a mark-up was or anything like that. I just said, 'They're doing a 70g bar and selling it for thirteen bucks; if that's what works, that's what I'll do.' Now they're selling their bars at ten bucks. We're going to be selling our bars at ten bucks too. We've both learned that offerings over ten dollars are very difficult to sell."

The Wellington Chocolate Factory would like to drop its prices further but admits the costs for packaging machines are expensive for a small business, especially when you want to continue using the more traditional hand-wrapping machines instead of the modern foil wrap machines (used by Trade Aid). Alagar has been considering buying an old-fashioned hand wrapping packing machine at a cost of \$100,000.

"... sitting around the ten to twelve dollar mark now. I don't see it dropping much more than that. I would love to see it in about the eight-dollar mark, but we wouldn't be able to hand-wrap our bars for that."

Packaging is a major cost, as the wrapping of small bean-to-bar chocolate bars tends to be stylish and unique, involving artists and designers, with the added pressure of creating packaging which is compostable for the purposes of sustainability.

Owen Smith, from online bean-to-bar chocolate shop The Chocolate Bar worked in the craft beer industry previously so fully understands the similarities, crossovers and issues among the emerging artisan bean-to-bar chocolate makers in New Zealand. He describes the issue customers have with the increased price as a matter of education, a view Alagar and Hogarth agree with:

"Mostly just the educational thing with the consumers. In Wellington, it wasn't a completely alien thing. People have never seen blocks of chocolate over four dollars and it's just like ... still is, but it's definitely getting easier."

Owen Smith describes the current chocolate market as exciting with potential for growth and sees his role as educating customers in the types of chocolate generally not available at a standard supermarket. He runs tasting classes and a monthly subscription service with the latest international or local brands offered. He currently sells up to a hundred different types of chocolate, including New Zealand-made chocolate. While he expected the market to take off quicker, he is nevertheless happy with the way things are now:

"I guess I consider myself a bit of a voice for quite a unique position, I think, with what I do. Any other chocolate business is a producer whereas I like to think I've helped create that vibe of there being a scene and just in general increasing demand for craft chocolate."

He also points out that all bean-to-bar producers are happy to be showcased and sold through his online retail shop.

OCHO's owner Liz Rowe shares a similar opinion in that New Zealand bean-to-bar chocolate manufacturers don't compete against each other, as their main emphasis is to educate people, but she agrees that everyone is competing against imports. She also agrees that the "price point is often a barrier to Kiwis being ethical. Basically, if you are paying less than ten dollars for a block of chocolate, someone is getting duped whether it is the grower, the maker or the consumer" (Rowe, 2018, para. 4).

All parties interviewed agreed that the price point of chocolate is a major issue for most small bean-to-bar chocolate makers as the bulk of chocolate bars are sold through supermarkets, service stations, convenience stores and local dairies and the product is considered as a snack food of low-price value.

While bean-to-bar manufacturers like Alagar and Rowe operate chocolate manufacturing facilities which include a retail outlet, most bean-to-bar chocolate makers start off manufacturing on their own, selling through their local farmer markets and businesses, and on their websites. Other businesses involved in the production of bean-to-bar chocolate such as Brian Campbell from pâtisserie and chocolate outlet Miann and Stephanie Everitt from Devonport Chocolates manufacture their single origin chocolate bars in their kitchen facilities, with the advantage of a pre-existing large clientele and their own retail outlets.

5.2.4 The sourcing of cocoa beans

The motivation for all bean-to-bar chocolate makers is the making of high-quality chocolate and offering its customers transparency of the overall process. Understanding the issues with the cocoa bean supply chain, they wish to educate consumers. But continuous access to good cocoa beans is often difficult to maintain, and many have to rely on multiple sources when adopting sustainable and fair-trading principles. Once sourced, the challenge is to continue to access the same cocoa beans over and over again, guaranteeing product quality and availability year-round.

Some work closely with cacao bean-growing communities and go beyond the traditional business model hoping to shift more profit towards growers. Bean-to-bar chocolate makers form relationships with farmers and direct trade through profit sharing. Direct trade (first used for coffee) is a system where the grower and producer have a relationship around price and quality and are interested in eliminating exploitation in the

supply chain (Geffner, 2015). But one of the drawbacks is that relationships are often built around undeveloped and "fragile business structures" (Martin & Sampeck, 2015, p. 55).

Where the bean-to-bar chocolate makers are unable to work directly with the growers, they work with reputable sources like brokers, other manufacturers, or importers and boutique cocoa distributors such as Chocolate Alchemy (Nancy, 2016), Uncommon Cacao (Uncommon Cacao, n.d.) and Meridian Cacao (Meridian Cacao Company, n.d.), expecting high-quality products either accredited through Fairtrade and/or of organic origin.

When Hogarth decided to make chocolate he first experimented by acquiring knowledge through a well-known American online bean-to-bar forum called Chocolate Alchemy, run by John Nancy. Alagar also used Nancy's blog and online tutorials to further educate herself, then purchased beans from Chocolate Alchemy (before being approached by Trade Aid). Alagar indicated that practically everyone learned from Nancy, as he was known as America's foremost bean-to-bar authority (Nancy, 2016).

Hogarth's first cocoa beans (from Peru) were bought in an organic shop and then further beans (Dominican Republic) through internet auction website Trade Me, but he was still unaware of the varietal he actually bought. The cocoa beans were sold under the category of health food, as cocoa beans at the time were often only found and sold in health food stores (Trade Me, 2019). Hogarth eventually realised that cocoa beans could easily be bought through Trade Aid New Zealand (Trade Aid, 2019a).

Many bean-to-bar chocolate makers in the early 2000s struggled to source cocoa beans. This meant that bean-to-bar chocolate manufacturers were probably less concerned with terroir or the origin of cocoa beans, as there were was plenty of scope for creating chocolate with nuanced flavours with whatever beans were able to be sourced.

Alagar's first-ever cocoa beans came via direct trade from Fiji, but only for a short time:

"Actually, the very first chocolate bar ever, ever made was from beans from Fiji. Then they had a coup and I couldn't get any. So that stopped that supply."

Some of Hogarth's beans came from Madagascar, also via direct trading:

"When I first started the business back in 2013 or whatever, I thought, 'I'm going to need some more cocoa beans.' And remember I told you I got a bar from Australia, well, he had a Madagascar and that's the one I tried; it was beautiful – really fruity. 'I want some of this Madagascan,' and I managed to get hold of

Bertil Akesson¹³, the guy that makes it. He said, 'Yeah, I'll sell you some beans,' and I bought a tonne, not knowing what I was doing."

"I also got half a tonne from another supplier in Italy. I ended up paying a horrendous amount of money and I had a tonne and a half of beans, and I didn't even have a chocolate factory or anything. I thought, 'These will do me for a while.' I only finished with the Akesson that I bought back then at the beginning of last year; it had been in frozen storage."

The smaller amounts required by bean-to-bar manufacturers like Hogarth creates a continuous headache in respect of availability and freight costs.

"It's usually availability; availability and cost of freight. They're pretty much the first considerations, then you'll start sampling and decide what you want from that particular seller. But it can be so difficult to get beans. I would prefer to buy it directly from source — Peru, Venezuela or whatever — but you just can't get them; not in the quantities that I want, and I have to buy a container. So I need to find a seller that's got a variety. There's a few of them around and then cherrypick what I want from that. Usually I can't get everything I want."

Hogarth suggests that for his small operation anything below half a ton of cocoa beans is not cost-effective. Even a continuous flow of the same cocoa beans can be challenging as flavour profiles can change:

"...the Peru has always been our best-selling single origin... Unfortunately, what I don't like about the Peru is I don't have the cocoa in stock, and I have to keep buying it all the time. It's changing so much from shipment to shipment and I keep getting on the phone to them saying, 'Hey, this one doesn't taste like last time.' It goes from tasting like honey and it's now tasting like raisins, which they're both nice chocolates..."

Devonport Chocolates relies on direct trade with a single supplier of cocoa beans in Samoa. Graham Leith, previously employed by Cadbury and strong advocate for Samoan cocoa, supplied Stephanie and Terry Everitt with the initial contacts. Eventually, Devonport Chocolates formed a relationship with Samoan cocoa farmer Nusi, who through his expertise as a soil scientist (previously working as a representative of the United Nations Small Islands Forum) set up Moa Estate. While Devonport Chocolates produces only a small quantity of bean-to-bar chocolate the company deals with similar issues of availability, consistency and freight costs.

"We decided to stick with Nusi, even if we had at times had to say that this Samoan chocolate is no longer available until the next season because it is not all our business, you know, it is only a very tiny part of our business, whilst the others probably can't do that."

"One of the challenges is because the beans are from one crop of trees, there is no blending, a bit like the apples in your backyard, it varies from season to

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¹³ "A pioneer of the bean-to-bar movement, Bertil was one of the first people to start selling high-quality Madagascan cocoa beans to small makers around the world. Åkesson's Madagascan cocoa is a favourite amongst other chocolate makers in the know." (Cocoa Runners, 2019a, para. 3)

season, so we have to re-manage it each time, which is good, it makes it really individual."

"Then when it gets here, it has to go through MPI¹⁴, every day that it is here we have to pay a storage fee before we get it. Oh, it is just endless, endless, so ah ... the last time the ship, the cost of the shipment and all the other fees, we had to pay when it arrived, equalled the costs of the beans."

As previously mentioned, Trade Aid is not considered a true bean-to-bar chocolate maker.

Trade Aid's Sweet Justice Chocolate Factory first imported cocoa mass from cocoa cooperatives such as Conacado in Santo Domingo, Norandino in Peru and eventually from
Unocace in Ecuador. But Trade Aid has gone as far as buying cocoa beans through a
company in Switzerland called Pronatec, specialising in sustainable raw materials,
ironically importing them from places such as the Dominican Republic, Peru, Ecuador,
Panama and Madagascar. According to Cameron, Trade Aid's goal was to marry ethical
production and efficient business practices but the company does not consider itself a
bean-to-bar chocolate maker. Trade Aid argues that by importing cocoa mass and cocoa
butter it gives cacao farmers a 30 percent export growth value.

According to Cameron, the use of a single variety of cocoa beans is not as important to Trade Aid and the company is more concerned about whether the cocoa beans and cocoa mass are fair traded and organic rather than whether they are creating a unique blend of chocolate.

Trade Aid is following an industry standard of blending but uses high-quality cocoa mass to achieve this uniformity.

"There is some mention of Trinitario in some of the marketing, I think; it does get used sometimes because of when we talk about Dominican Republic that's basically what they grow there mostly."

"We know that UNOCACE¹⁵ is a big producer of nacional¹⁶. We don't actually use that terminology."

"I think it has to be about a good basic product. What we're doing is we're making blends. We're not doing the inventive bean-to-bar thing of like pulling out the kind of distinctive flavours of each cocoa region, or whatever."

¹⁵Union of Peasant Organizations Cacaoteras in Ecuador (Unocace, 2017b).

¹⁴ New Zealand Ministry for Primary Industries (MPI, n.d.)

¹⁶Cocoa bean variety grown specifically in Ecuador and sold through Unocace. (Unocace, 2017a)

The Wellington Chocolate Factory is more specific in the use of its beans as the Peru chocolate bar, for example, shows (Wellington Chocolate Factory, n.d.-c), listing the use of Criollo beans from the Norandino Cooperative in Peru (Coop Norandino, n.d.).

Hogarth describes its Ecuador 85% (Hogarth Chocolate, 2019b) bar as using Nacional beans from a single estate (500 hectares, large when compared to industry standard) called Hacienda Victoria in Ecuador. Stephanie Everitt from Devonport Chocolates refers to single origin but has reservations regarding the variety of beans:

"Most definitely, it is about as single origin as you can get, yeah. Hmm, it is a mixture of ... so much is, has been ... when Samoa started off, the Germans planted Criollo only. Someone else introduced them to Forastero at some stage, the most of it now is Trinitario ... hmmm, the cacao trees grew wild over Samoa for years, so they are all blended. So we call ours a Trinitario blend because we can't hand on heart call it Criollo."

As discussed previously (Chapter 2.5.2), the challenge in specifying varietals or origin and truly representing its status is a problem for all bean-to-bar chocolate makers. The case of Samoa (discussed in Chapter 4.2.3) and its history highlights issues experienced in all cacao-growing countries worldwide.

5.2.5 The ethical and sustainable side of chocolate

Ethical and sustainable sourcing is an essential part of bean-to-bar manufacturing and is considered an effective marketing tool. Bearing in mind the cost of imported cocoa beans and proximity to the Pacific, it makes sense for New Zealand bean-to-bar chocolate makers to support their Pacific neighbours while weighing up quality versus accessibility.

Everitt's direct trade relationship with Samoan cacao farmer Nusi is an essential part of her involvement in making ethically sourced chocolate. In 2016, Devonport Chocolates won a gold star at the prestigious UK Great Taste Awards for its '80% Single Origin Trinitario Moa Estate Samoan Islands' tablet (Great Taste Awards, 2019). While there is no reference on the packaging to cocoa certification or sustainably sourced ingredients (cocoa, sugar and vanilla), Everitt has stated that as a company they are paying Nusi above industry-standard prices for their cocoa and use sustainably grown sugar from Australia (no data regarding vanilla). The challenges for growers and makers regarding accreditation are multiple and challenging:

"What happens in the Pacific, no one can get Fairtrade or organic certification because it costs a small fortune ... and you have to have people flown in from Fiji, so the only way to get the certification is probably to have everyone lined up with all the stuff they are supposed to have documented, which would be a nightmare."

Another example of how direct trade can stimulate a failing industry was highlighted by the Wellington Chocolate Factory. In 2015, the company purchased cocoa beans from Papua New Guinea, listing its varietal as Trinitario¹⁷ and creating its now classic Bougainville bar ("Bougainville Chocolate Festival," 2016). The Wellington Chocolate Factory hoped that the production of this bar would help encourage good cacao-growing practices and increase the island's production. But even well-meaning campaigns such as 'The Wellington Voyage' (see Chapter 4.2.5) forced the Wellington Chocolate Factory to re-evaluate how to best trade with its Pacific neighbours:

"We also did some direct sourcing (Papua New Guinea). We would love to do that again, but it's just at this stage it's not viable. When we actually did that trip, we raised about \$30,000 in the end, but it cost us \$100,000."

Hogarth's bean-to-bar chocolate tablets indicate that some ingredients, including cocoa beans, are Fairtrade or otherwise ethically sourced directly, or from Trade Aid. While currently not offering any chocolate made with cocoa beans from the Pacific, he is an adamant supporter but sees challenges for farmers in the Pacific, one of them being the smaller size of many bean-to-bar makers:

"... because we're only buying a pallet. Most producers, they send out containers. Having been up to the islands and seeing how it all works, small producers are some of the poorest people in the world. They don't have the ability to ship anything. It gets sold to traders in town and then the traders knock it off and it goes through the supply channel and ends up in either the States or in Europe."

Many of the New Zealand bean-to-bar chocolate makers rely on organic and Fairtrade cocoa beans from Trade Aid. Trade Aid, itself a maker of chocolate but not a true bean-to-bar maker, works closely together with bean-to-bar chocolate manufacturers in New Zealand, supplying high-quality beans and cocoa mass and couverture:

"I don't think we're bean to bar. We do support the bean-to-bar chocolate makers; we sell stuff to them. We import stuff for them. We have made it possible for someone like the Wellington Chocolate Factory because it's a lot cheaper to buy cocoa through us than it is for them to import. They don't have to put down a whole lot of money. We can hold the stock for them."

"So we can manufacture drops, like little chocolate drops, like callets, on their mobile line. Now we sell bulk chocolate to other manufactures and chocolatiers. That's proving to be a good market really. So being able to sell effectively couverture or New Zealand fair trade organic chocolate is a good thing."

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¹⁷ Papua New Guinea showed similar cultivation traits such as Criollo from Venezuela via Java then Samoa, through hybrids mixed in from Ceylon together with Amelonado beans and modified Trinitario beans (C-spot, 2019).

Alagar states:

"Our main bulk of cocoa beans from Trade Aid are fantastic. We must go through a good twelve tonnes a year with them at this stage. We get beans from Peru and the Dominican Republic from them."

There seems to be a symbiotic relationship between Trade Aid and bean-to-bar chocolate manufacturers in New Zealand, as the different experiences and expertise of manufacturers help everyone in the long run:

"When we land the shipments from Norandino or from Conacado, I make chocolate with the landed chocolate just to be sure of the flavour. I make that for a trial basically, and I'm talking to people like Hogarth or Wellington Chocolate Factory about that; so about those flavours."

Fairtrade is the best-known certification process in New Zealand and has for many years been identified with Trade Aid (Trade Aid, 2019a), the largest fair-trade organisation in New Zealand (White, 2015). While Trade Aid has been selling fair-traded chocolate under its own name for years, the company decided to move from importing chocolate to manufacturing chocolate locally as even their own imported chocolate had often dubious and vague supply chain origins:

"I think the first time we bought an eating chocolate was 2002. That was coming from again via another fair-trade organisation, from Oxfam Belgium. So they were sourcing their chocolate from Callebaut, so just fair trade – not organic chocolate from Callebaut in Belgium. Basically, they were buying chocolate ... it was quite a move really. They were buying fair trade certified chocolate, which was coming from Kuapa Kokoo¹⁸ in Ghana made by Callebaut and then moulded by another company in Belgium, and then branded Oxfam Belgium."

"The chain of supply that we had through Oxfam Belgium was pretty shaky for our purposes, which is to have as direct a link to the producers as possible and to be returning as much value to the producers as possible. There were obviously a lot of people in that chain. The actual manufacturer of the chocolate was a particularly murky link in the chain, I guess."

Not convinced by the circumstances of purchase, eventually a more successful collaboration started with Swiss company Claro Fair Trade AG, the collaborator and distributor of the world's first Fairtrade chocolate in 1991 made by Bernrain Chocolat in Switzerland (Stella Bernrain, n.d.):

"In 2007, Trade Aid imported chocolate via another Trade Aid company, another fair-trade company in Switzerland called Claro. They were getting the chocolate made by a company called Chocolat Bernrain. They're a Swiss company and they were making 100g organic bars, so it was a range of flavours."

¹⁸ Kuapa Kokoo is Ghana's foremost producer of sustainable cocoa beans (Kuapa Kokoo, 2017)

In September 2014, Trade Aid produced its first bar of Fairtrade organic chocolate, a world first for a fair-trade organisation. While fair trade organisations push for processing and packaging at source, Trade Aid argues that chocolate requires temperature control and reliable low-cost power, often not feasible in producer countries, and marrying ethical production and concise business practices with effective communication and the ethical treatment of customers results in a successful business model. Trade Aid argues that by importing semi-prepared cocoa mass and cocoa butter, farmers can expect a 30 percent growth in the value of their exports (White, 2015).

But Gallo et al. (2018) maintain that ultimately firms with associative sustainable business models that are capable of producing chocolate locally contribute more to the business of sustainability than firms that produce from a distance. A good example is well-known Colombian chocolate manufacturer Casa Luker. Casa Luker purchases almost 40 percent of all cacao grown in Colombia, working closely together with over fifty cacao-growing co-operations focusing on single origin and fine flavoured cocoa. The company is famous for its drinking chocolate and internationally recognised for the production of its high-quality couverture (meeting ICCO's standard for 'fine flavour') and chocolate bars. For its large size Casa Luker has managed to incorporate transparency, quality and sustainability as part of its core business values (Askew, 2019).

This raises the question as to whether small bean-to-bar chocolate makers can truly make a large-scale impact on issues of sustainability. Large and small manufacturers of chocolate play different roles in a sustainable entrepreneurship model (Hockerts & Wüstenhagen, 2010). They require collaboration as the importance does not only lie in the production of a quality product, but how it is produced and distributed.

The Wellington Chocolate Factory's mission statement is based on the principle of creating a better-tasting world where the top priority is to create the best-possible chocolate, employing ethical practices across all its supply chain:

"We do like our local deliveries; we get a guy on a bike to deliver them. So just little things like that all counts. They are little things. Sharing containers with Trade Aid really helps in cutting down our carbon footprint as well. Just all the little things."

But Alagar also admits they are a long way from being perfect and the packaging can be a real issue not fully resolved yet:

"... so our packaging, for example. Our wrappers are compostable, our labels are compostable. We pay more for it. The paper we actually use is not paper;

it's made out of rock paper ¹⁹. There's only so much you can do. There's still a lot of developing, especially with the foil paper. If we go to the flow wrap, it could be a little bit different, but then most of those kinds of wraps are plastic so it makes it quite hard."

Hogarth also tries to be considered but sees major issues with compostable packaging:

"We're doing our best to make everything recyclable, but there's a real trade-off there between shelf life and cost, so the cost of sustainable like compostable plastics is through the roof in New Zealand. They have the challenge that they start biodegrading pretty much as soon as they're manufactured, so you don't get the shelf life that you're supposed to get. Some people are using them. I don't know how they're getting away with it because the New Zealand supplier of them told me that it wasn't suitable for chocolate because of that factor."

Everitt from Devonport Chocolates laments the influence Whittaker's has had on the availability of packaging material in New Zealand:

"I'll give you a classic example of New Zealand and supply. This company which since 2004 we have been getting this paper backed foil from, they also supply Whittaker's. Now Whittaker's have changed to another foil, we all have to take the same foil ... Whittaker's don't do things by hand; it's going through a machine. Our girls foil by hand and they find this new foil very hard to handle."

Fairtrade and other certification schemes have clearly become brands unto themselves and are used as general classification for businesses to instil trust in the end customer. Masonis et al. (2017) lament that while a certification scheme like Fairtrade specifies safe working conditions, appropriate income for farmers and the appropriate use of the environment, bean-to-bar chocolate makers need high-quality cocoa beans first and foremost to be able to make their business sustainable. Producing high-quality cocoa beans requires an understanding of farming practices. Farmers need help with using appropriate cultivars of cacao which are manageable to farm and allow them to deliver quality beans resulting in commercially higher value. One of the stigmas attached to cocoa beans from the Pacific is that of poor fermentation techniques (due to the wet climate fires are often used to help with the drying of cacao beans tainting the product with smoke), resulting in an inferior product. This was especially noticed in cocoa beans originating from Papua New Guinea and the Solomon Islands (Leissle, 2018).

In 2016, Dandelion paid an average of USD6,599 per ton for fine flavour cocoa beans (purchased through many cocoa co-operations in the world) compared to the average world market price of USD2,892 per ton of bulk cocoa beans (if accredited, farmers would be offered a further USD200 by Fairtrade). According to Masonis et al. (2017), Dandelion pays over USD3,707 more per ton and argues that while many of the sources used have

¹⁹ Rockstock is the registered trade-name of a ground-breaking high-quality coated paper with outstanding environmental values that prints extremely well using standard inks (Rockstock, 2019).

no accreditation, the company pays on average more than fifteen times' the amount of what Fairtrade offers (Dandelion Chocolate, 2019b).

Due to the small market in New Zealand there is still hesitancy around sharing commercially sensitive information on the price paid for cocoa beans. Trade Aid, which trades in multiple cocoa products, shared their current price list (1 May 2019, price per kilo) indicating a price range from NZD8.80–10.00 per kilo of cocoa beans. The price for a kilo of cocoa mass is set at NZD16 per kilo.

Hogarth, currently offering a very exclusive limited edition of single origin chocolate (Hogarth Chocolate, 2019c) laments being a small business wanting to pay a fair price for high-quality beans (Porcelana):

"... the Porcelana that we have, I have been talking with this guy for a long time, and finally he said, 'Do you want to buy some? I'll make it happen.' He managed to airfreight them, or get them from Venezuela to Miami, and I bought them from Miami. I got them airfreighted from Miami and it cost me an arm and a leg; it ended up being about \$27 a kilo, but it's a very special cocoa ..."

According to Fernando Morales-de la Cruz, founder of Cocoa for Change (Café for change, 2015) in a letter addressed to the United Nations secretary general Ban Ki Moon on 20 July 2016, current Fairtrade premiums are insignificant and should be 30 times' higher, tripling the current market price. He suggested introducing a different system (WeShare, a transparent shared value system), where premiums are not paid directly by cacao farmers, farmer associations and co-operations. Retailers would increase consumer prices on chocolate products (e.g. US\$0.10), with the surcharge distributed to the cooperatives and farmer associations. He argued that consumers would be more than willing to pay an additional cost. But would they?

Camargo and Nhantumbo (2016) suggest that the benefits of current cocoa certification standards are limited, proposing certification look more at the landscape, rather than just the cacao farm, thereby complementing initiatives to promote increased biodiversity, conservation and restoration.

5.2.6 The required business growth

The development of a valued and recognised brand takes time and requires a business to grow to a reasonable size to have an impact, as with Whittaker's which today has over 160 employees. While Trade Aid's Sweet Justice Chocolate Factory only employs six staff members, the factory is capable of producing larger quantities of chocolate bars compared to other small independent bean-to-bar chocolate makers. This is due to the semi-industrial size of its manufacturing equipment and the fact of only having to process and refine cocoa mass, immediately speeding up and increasing production.

According to Rowe from OCHO, "Staying small is actually quite hard because your costs are high and there's a limit to what people will pay for a chocolate bar. On the other hand, growth requires investment and involves employing staff, which has its own set of issues" (Rowe, 2018, para. 13).

According to the Ministry of Business, Innovation and Employment (2014), the business²⁰ sector in New Zealand can be classified according to the number of employees: zero business (no employees), micro business (1–5 employees), small business (6–19), small to medium business (20–49), medium business (50–99) and large business (100 employees) (Ministry of Business, Innovation and Employment, 2014). The New Zealand business landscape is made up of 97 percent small enterprises with particular growth noticed in the mid-2000s in the zero employee category (Ministry of Business, Innovation and Employment, 2014). Surviving the volatile zero business structure and moving forward into the next operating level is challenging for many of the bean-to-bar chocolate makers as reflected in the failure of White Rabbit and Capt Pembleton.

OCHO (ten employees) and the Wellington Chocolate Factory (twenty employees) have consciously moved from an independent single-person operating business entity to a business model governed by capital investment, a board of directors and increased staff. Alagar suggests that the production of high-quality, ethically and sustainably produced chocolate and ethical projects such as 'The Chocolate Voyage', involving the wider public (see Chapter 4.2.5 'The Wellington Chocolate Factory'), have helped the company create a strong brand now widely recognised. Promotion and marketing includes close relationships with local business such as Havana Coffee Works, creating special-edition bars (La Cubana Bar) ("Wellington Chocolate Factory," 2017) and Garage Project (The Craft Beer Chocolate Bar) (Wellington Chocolate Factory, n.d.-a).

Similarly, Rowe (2018) says that with the help of clever marketing and the recent fundraising campaign 'The maintaining of chocolate making in Dunedin' (see Chapter 4.2.5 'OCHO'), the company has taken advantage of Dunedin's chocolate history and current public grief due to Cadbury's 2018 departure by promoting the beginning of a new chapter of chocolate production in the city.

Alagar has further future plans of expansion, without losing track of ethical sourcing of ingredients, trading and manufacturing:

²⁰ Describing the different levels of businesses in employee size according to the Ministry of Business, Innovation and Employment (2014).

"Our next biggest goal at the moment is to expand our factory. ... So it's bringing up our quality as well."

Increasing quality draws on a fact often argued by larger manufacturers that quality can only be achieved through the use of the right equipment and technology. This is a view shared by Franz Ziegler²¹ (personal communication, November 10, 2018), a Swiss chocolate consultant recently involved in chocolate making with manufacturer Max Felchlin Inc (C-spot, 2019) after the discovery of rare and genetically pure 'Nacional' cacao beans (a member of the Forastero variety) in Peru in 2011 (Fabricant, 2011). Ziegler argues that small chocolate makers just don't have the right tools to truly get the best out of the cacao beans and make chocolate efficiently, cost-effectively and well.

Hogarth too wants to grow his business and eventually have his own outlet:

"Goals: We want to get to a point where we're actually creating a profit – that would be nice. I want Hogarth to be one of the chocolate families of New Zealand like Whittaker's is, and like I thought Cadbury was. Yeah, I want Hogarth to be sitting right beside Whittaker's. As kids that are growing up now get to twenty or thirty years old, Hogarth will be synonymous with chocolate."

Trade Aid sees further expansion possible especially in the sale of its organic and Fairtrade bulk chocolate used by miscellaneous food manufacturers:

"Yeah, I think we would like to make more bulk chocolate particularly; I can see that's a really important market to make more chocolate that we would be able to sell to the wholesale market for the manufacture of other products. Then to build stronger links with people who are making chocolate products here in New Zealand, and to help encourage them to understand more about where the chocolate is coming from. Obviously, we would like to be selling more in the mainstream market as well; and, more people looking for our chocolate, as opposed to stumbling across our chocolate."

Expanding the production of high-quality Fairtrade and organic chocolate allows local food manufacturers to increase the quality of their chocolate-related products, increasing the market presence of certified chocolate and allowing for better transparency.

Enhanced customer experience at visitor-friendly factories revealing production methods (Wellington Chocolate Factory) or allowing factory visits (OCHO), alongside visually pleasing and educational shop premises, help to tell important stories and add another dimension of transparency to a developing New Zealand chocolate industry.

For a business such as Devonport Chocolates, the production of bean-to-bar chocolate, as described by Everitt as a labour of love, has yet to be explored to its fullest.

²¹ Franz Ziegler, of Ziegler Consulting Switzerland, currently an international panel member of the Heirloom Cacao Preservation initiative, evaluating quality in heirloom cacao; refer Chapter 2.5.2)

All interviewees continue to believe in their own success and the success of a New Zealand chocolate industry. Rowe (2018) believes that New Zealand chocolate could eventually stand alongside other New Zealand food success stories, such as wine and dairy.

5.3 Summary

This chapter discussed the manufacturing of bean-to-bar chocolate bars from an artisanal perspective according to four bean-to-bar chocolate businesses and one online retailer of international and local New Zealand bean-to-bar chocolate bars. The aim was to explore their place within an emerging history of bean-to-bar chocolate production in New Zealand.

The objective was to identify their experiences of making and selling chocolate within the commercial landscape largely dominated by Whittaker's and multinationals such as Cadbury, Nestlé and Lindt, and look to the future direction for chocolate production in New Zealand. This was achieved through the exploration of themes such as monopolies within manufacturing, selling and promoting of sustainably made chocolate and the industry's future. Thematic analysis of interviews and historical data helped identify specific themes within the production of chocolate and the establishing of a localised chocolate industry noticing similar patterns reflected within the history of chocolate in New Zealand and current trends overseas. It highlighted that while artisanal bean-to-bar chocolate production is still small-scale, it is nevertheless starting to influence the course of New Zealand's chocolate industry. It highlights an emerging understanding among consumers of New Zealand-made chocolate and a sense of national identity. It highlights connections between the past, present and future of chocolate production in New Zealand which is being played out against a backdrop of rapid change to landscape, climate, business, sustainability, consumer demand and quality.

Chapter 6 – Conclusion

This final chapter summarises the research findings around the history of bean-to-bar chocolate production in New Zealand by considering historical behaviours in the industry alongside the place bean-to-bar chocolate production holds within current commercial, social and cultural settings. It then continues to highlight the contribution chocolate production has added to New Zealand food history, addresses the limitations of the study and gives suggestions for further research.

6.1 Overview

The aim of this dissertation was to document the history of bean-to-bar chocolate production in New Zealand by considering comprehensive historical eras of development against the current place of the industry and future direction by analysing the recent flourishing of small artisanal bean-to-bar chocolate makers in the market.

This research investigated the path of bean-to-bar chocolate production in New Zealand by setting the following objectives:

- 1. To explore the extent to which the narrative of a history of bean-to-bar chocolate in New Zealand since the early 1850s draw parallels with the current localised production of chocolate.
- To examine the extent to which the current influx of artisanal bean-to-bar chocolate makers in New Zealand is influencing the course of New Zealand's chocolate industry.
- 3. To identify the place current artisanal bean-to-bar bar chocolate production holds within current commercial, social and cultural settings in New Zealand.

The proliferation of bean-to-bar chocolate producers in New Zealand today draws parallels with the country's pioneer era (1880s–1930s) with its development of a localised chocolate industry made up of businesses of different commercial and operational size. While current artisanal production of chocolate reflects overseas trends, the emergence of a craft chocolate industry has been helped by the consumer trust placed in New Zealand-made chocolate manufactured by Whittaker's strongly established brand.

Further parallels between today's growing local chocolate industry and the pioneering era can be found in similar beliefs among chocolate makers, and a shared sense of conviction in their ability to produce chocolate as good as any of the imported chocolate and not be discouraged by distance in order to access either the knowledge, equipment or ingredients required to make chocolate.

One fact that has remained the same is that most manufacturers of chocolate in the world still have to import ingredients of cocoa beans and sugar, and this creates similar sourcing problems for all. Sources of cocoa beans used in the past (before the dominance of West Africa and its bulk variety of cocoa beans) included Caracas (Venezuela), Ceylon (Sri Lanka), Grenada, Guayaquil (Ecuador), Trinidad and Suriname (South America) with the beans available on the London market. This variety led to points of difference which were emphasised in the marketing of different-tasting chocolate products. The sourcing of high-quality beans for the making of chocolate is still vital for bean-to-bar chocolate makers today and emphasis is still placed on the beans' origin, cultivar and difference this can make in producing a quality product.

The dominance of the large manufacturers of the past is still felt today, through price control and competition between local manufacturers. This can be observed across all levels of bean-to-bar chocolate production – bulk, premium and super premium (artisanal).

The current increase in number of local manufacturers is influencing the future course of New Zealand's bean-to-bar chocolate history while large chocolate manufacturer Whittaker's continues to form an essential link with the past history of chocolate making in New Zealand.

New Zealand's artisan chocolate makers, including large manufacturer Whittaker's, are changing consumer habits. This is especially noticeable in the increased production of chocolate made with cocoa beans sourced from the Pacific. By harbouring closer relationships and commercial ties with Pacific neighbours Samoa, Papua New Guinea, Solomon Islands, Fiji and Vanuatu (in the past often ignored), the perception of the Pacific Islands producing only 'inferior beans' has changed. This was particularly influenced by New Zealand's artisanal bean-to-bar chocolate makers, interested in supporting local economies by purchasing cocoa beans, and advocating for the involvement of governments to help local farmers improve their production methods. This included chocolate makers' own roles in establishing new or continuing current relationships with New Zealand's cocoa-producing Pacific Island neighbours such as Samoa (Samoa Cocoa Industry Development Initiative), Papua New Guinea (Cocoa Board of Papua New Guinea), Vanuatu (Vanuatu organic Cocoa Growers Association), Fiji (Fiji Cocoa Farmers Association) and the Solomon Islands (Cocoa Islands Cocoa Livelihoods Improvement Project).

In 2016 Alagar attended a two-week seminar with farmers in the Solomon Islands to learn more about cacao growing and chocolate making (as did Rowe of OCHO). The seminar was attended by both first-time and well established bean-to-bar chocolate

makers from Hawaii and America (Dandelion Chocolate). The seminar in the Solomon Islands was part of the first-ever Solomon Islands Chocolate Festival, with over a hundred farmers entering their raw beans for judging (Australian High Commission Honiara, n.d.; McNeilly, 2016).

Also, Alagar has recently produced two more Pacific chocolate bars, promoting cacao beans from Fiji and the Solomon Islands (mid-July 2019), while Owen Smith is currently (22 July 2019) promoting and selling New Zealand-made bean-to-bar chocolate with Pacific cocoa beans (Exclusive Pacific chocolate box) following up with chocolate tastings during the month of August 2019 (Owen Smith, 2019c).

This major driving force behind changing the course of history entails bean-to-bar chocolate manufacturers' drive for socio-economic sustainability, a concern long discarded by large manufacturers but since used effectively as an additional marketing tool. In New Zealand, this is clearly noted in the increasing pressure from New Zealand's small artisanal bean-to-bar chocolate makers on premium chocolate makers like Lindt (promising to have its cocoa supply to be traceable and verifiable by 2020), and the renewed market pressure by British ethical chocolate maker Green & Black in New Zealand (through the influence of owner Mondelēz), as well as Whittaker's continuous push.

While for a large manufacturer like Whittaker's the inclusion of an accredited (Fairtrade) chocolate block was perhaps just reflecting global trends such as consumer pressure, for small bean-to-bar chocolate manufacturers in New Zealand this is an important part of their business philosophy. But small operational size, especially during the initial growth period, and lack of business and product experience are often challenging factors in achieving and maintaining sustainable entrepreneurship. While bean-to-bar chocolate makers realise that from the point of sustainability they have not created the most effective business yet, they have nevertheless started to untangle the traditional model used over the past 150 years of industrialisation and are an import part of the reshaping of an industry in need of change.

As the production of locally produced chocolate continues to evolve, different levels of quality and sophistication can be noted within locally-produced bean-to-bar chocolate. Until the appearance of bean-to-bar chocolate makers in the early 2000s, New Zealand had only two large chocolate manufacturing businesses: Cadbury (final closure in March 2018, employing over 350 staff), and Whittaker's (160 staff). They produced chocolate from bean to bar through the use of bulk commodity beans. The emergence of numerous artisanal bean-to-bar chocolate manufacturing start-ups in the early 2000s slowly

changed the commercial landscape of chocolate manufacturing in New Zealand, with the formation of enterprises of different and continuously evolving operational sizes.

As regards reputation, Whittaker's has led the way by embracing New Zealand's culture and values. Over time Whittaker's persuaded the New Zealand consumer to trust and believe in New Zealand-made chocolate, in a similar way to Richard Hudson's mission in 1924 to get the New Zealand public to accept that his products were as good as any imported chocolate. While Whittaker's operates within a traditional business model, emulating major confectionery and chocolate manufacturers, the company understands the importance of the local market. It is clear that emerging bean-to-bar chocolate makers have benefited from Whittaker's success as New Zealand consumers' faith in New Zealand-made chocolate increased, a fact acknowledged by all interviewed. This has created a positive platform to help sell artisanal crafted bean-to-bar chocolate in New Zealand.

Some bean-to-bar chocolate makers consider Whittaker's chocolate of average quality because of the company's use of bulk beans. While bean-to-bar chocolate makers supposedly use superior beans, they themselves face issues of quality, often experienced in the early experimental phases of production. Chocolate industry experts and large manufacturers often question artisanal bean-to-bar chocolate production by raising the fact that good-quality chocolate can only be processed with superior and more advanced equipment, appropriate research facilities and the proper technological knowledge accumulated by a business over years.

While the contentious issue of what is or makes quality remains, bean-to-bar chocolate makers are helped through production methods such as the connection between place and product throughout the commodity chain and the virtues of marketing and packaging promoting localness (Cidell & Alberts, 2006). The findings also suggest that while the initial drive for the making of bean-to-bar chocolate was based on the principle of offering chocolate of increased quality, customers are continuously demanding innovative new products. Product diversification can result in the making of flavoured bars, a concept often disregarded as a way of masking the flavour of inferior beans. Bean-to-bar chocolate manufacturers like any other small start-up business are interested in expanding and growing their market share. But they also realise the need to grow the industry collectively. This led to the recent creation of the New Zealand Craft Chocolate Collective currently listing Flint, Hogarth, OCHO, Ola Pacifica and the Wellington Chocolate Factory as members. The creation of the yearly NZ Chocolate Awards (NZ Chocolate Awards, n.d.-b) also created a form of quality measurement helping to

promote the artisanal production of chocolate, further emulating the success of the New Zealand wine industry.

Lastly, the emerging of numerous small bean-to-bar chocolate manufacturers has increased the potential for more transparency around the production of chocolate, a factor which has plagued the industry since its early beginnings. But transparency around chocolate needs further addressing or else small bean-to-bar chocolate makers could run the risk of evolving into just another chocolate manufacturer 'carrying on with business as usual'.

6.2 Contribution

For the first time, a history of bean-to-bar chocolate production in New Zealand has been completed, contributing an important chapter to New Zealand food history. It is especially relevant as in part it corresponds to the global history of chocolate manufacturing while telling a distinctly New Zealand history. Exploration of defined eras of New Zealand chocolate-making history has uncovered common experiences echoed by the country's new generation of bean-to-bar chocolate producers as they encounter similar or familiar challenges to those of historical figures and companies of the past, all the while seeking the same outcome: to develop and maintain high-quality chocolate production in New Zealand.

The findings point to the need for additional research around the history of food in New Zealand, an area of study often undervalued in academia (Belasco, 2002). The historical archival data captured together with the contemporary voices of New Zealand's new generation of chocolate makers combine to tell the story of creativity and competition.

6.3 Limitations and suggestions for further research

A limitation of this research was the requirement to limit the scope of the study due to the confines of a master's dissertation. Further research is required to accurately reflect the history of bean-to-bar chocolate production in New Zealand so that multiple lines of enquiry raised in this research can be followed up.

The limited written evidence documenting the history of bean-to-bar chocolate production in New Zealand was initially concerning. Evidence was collated through the study of historic New Zealand newspapers, some archival data and corporate publications. This initial lack of evidence was partly due to the influence and dominance of international bean-to-bar chocolate manufacturers challenging the development of a specific chocolate industry in New Zealand, an industry also perhaps not taken as seriously as other industries. Nevertheless during data collection numerous areas of

research presented themselves, many of which warrant more in-depth investigation such as around the marketing and advertising of chocolate production where the analysis of patterns could help further in evaluating the development of chocolate production in New Zealand and its position from a cultural and social standpoint.

From a business perspective, the inclusion of input from smaller chocolate manufacturers with shorter life spans and confectionery manufacturers that stopped producing chocolate due to unknown commercial reasons would have helped in better understanding the challenges companies faced, allowing the researcher to draw parallels with today's manufacturers' experiences (not researched within this dissertation are the companies Phoenix Co, Dunedin, Stewarts Confectionery, Dunedin, M. or Segedin and Co, Auckland).

Another disappointing limitation was the researcher's inability to convince Whittaker's, today the dominant manufacturer of chocolate bars in New Zealand, to participate fully in this research. Their non-participation meant the initial goal of interviewing business entities of numerous operational sizes could not happen. As the small artisanal bean-to-bar chocolate makers are closely linked, the parameters of the chocolate-making industry have been shaped accordingly and constraints put on a more comprehensive view of chocolate as a nationally treasured food product.

New Zealand is continuing to shape its history of chocolate production with its own very distinctive products, with Cadbury's Dairy Milk block, once considered by New Zealanders as the archetype New Zealand product, trusted and loved for decades, now falling out of favour to make way for a new preference for Whittaker's Creamy Dairy Milk block as a new cultural icon. But New Zealand cannot forget its historical beginnings and the past helps point towards a more sustainable future production of chocolate. Cocoa is moving from a basic, cheap product to a unique and precious commodity with an important history and connection to share, no longer only achieved through the artistry of the chocolate-maker transforming a base product into elaborate confections or visual displays of art. New Zealand chocolate companies need to face the same future environmental and sustainability challenges the chocolate industry faces worldwide as the country is now more deeply involved than ever.

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Appendices

Appendix A Participant information sheet



Participant Information Sheet

Date Information Sheet Produced:

September 2018

Project Title

Raising the bar: a story of bean-to-bar chocolate production in New Zealand.

An Invitation

Hello. My name is Arno Sturny inviting you to be a part of my research exploring and documenting the history of bean-to-bar chocolate in New Zealand. I have identified you as an expert in the topic of chocolate in New Zealand and believe that you will make a significant contribution to the research in this area, hence my invitation to you. Your participation in this research is voluntary, and you can, without any penalty, withdraw from it at any time. I welcome the opportunity to discuss my research and fully answer any questions that you may have. The purpose of my research is to enhance the body of knowledge on bean-to-bar chocolate in New Zealand by completing my Master in Gastronomy dissertation.

What is the purpose of this research?

The result of my research and your participation will encompass the publication of a Master in Gastronomy dissertation. This research will help to understand and reflect on how your views have shaped and contributed to the present understanding of the 'place' of chocolate in New Zealand's contemporary socio-culture.

How was I identified and why am I being invited to participate in this research?

You were selected to be invited to participate because of your recognised expertise and knowledge of chocolate and its making.

How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

After you have been given time to consider your participation, I will contact you and ask if you would like to participate. If you agree, I will arrange an interview with you. Before the interview begins, you will be asked to sign a Consent Form, verifying your participation. You will also have ample opportunities to ask any questions you may have regarding the research. These will be fully answered. Your interview will be digitally recorded. A transcription will be made of your interview and sent to you. You may alter/amend/delete or add to this document. When it is returned to me, I will begin writing up the dissertation.

What are the discomforts and risks?

I anticipate no discomfort of risk to you in this research.

How will these discomforts and risks be alleviated?

N/A

AUT Health Counselling and Wellbeing is able to offer three free sessions of confidential counselling support for adult participants in an AUT research project. These sessions are only available for issues that have arisen directly as a result of participation in the research and are not for other general counselling needs. To access these services, you will need to:

 drop into our centres at WB219 or AS104 or phone 921 9992 City Campus or 921 9998 North Shore campus to make an appointment. Appointments for South Campus can be made by calling 921 9992

17 August 2019

let the receptionist know that you are a research participant, and provide the title of my research and my
name and contact details as given in this Information Sheet

You can find out more information about AUT counsellors and counselling on http://www.aut.ac.nz/being-astudent/current-postgraduates/your-health-and-wellbeing/counselling.

What are the benefits?

The potential benefits and outcome of this research will be of practical use to New Zealand's hospitality and food manufacturing industry because it could influence confectionery and chocolate teaching, inspire culinary and baking lecturers, to raise the profile and understanding of bean-to-bar chocolate history and production in New Zealand. This research also reflects the wider community interest for bean-to-bar chocolate and its production. This research is important, as it will explain how we got where we are now and present opportunities for placing current sustainability concerns in perspective with a view to the future.

What compensation is available for injury or negligence?

in the unlikely event of a physical injury as a result of your participation in this study, rehabilitation and compensation for injury by accident may be available from the Accident Compensation Corporation, providing the incident details satisfy the requirements of the law and the Corporation's regulations.

How will my privacy be protected?

Because your expertise would be easily recognised by readers should non-des-plumes be used, you will be clearly identifiable by name in our research. However, to protect any sensitive areas that you may divulge in our research, the researchers will not publish any material, from the interview with you that you identify and request to be excluded.

What are the costs of participating in this research?

There are no costs to you other than the time taken for interview. We anticipate a 2hour interview and may recontact you after your interview to request a second interview. We anticipate your participation, in total, will not be longer than 2x2hr interviews.

What opportunity do I have to consider this invitation?

Two weeks

Will I receive feedback on the results of this research?

Yes, you will receive a copy of your own transcribed interview for your consideration.

You can also receive a copy of any published material by letting any researcher know that you would like to receive it and the most convenient way to distribute it to you.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor:

David Williamson: david.williamson@aut.ac.nz work.phone: 09/921 9999 ext. 8448

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz , 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Arno Sturny: arno.sturny@aut.ac.nz work phone: 09/921 9999 ext. 8631

Project Supervisor Contact Details:

David Williamson: david.williamson@aut.ac.nz work phone: 09/921 9999 ext. 8448

Approved by the Auckland University of Technology Ethics Committee on the 30th July 2018, AUTEC Reference number: 18/276.

Appendix B Consent form



Consent Form

Project title:		Raising the bar: the story of bean-to-bar chocolate production in New
		Zealand
Projec	t Supervisor:	David Williamson
Researcher:		Arno Sturny
0	I have read and of dated the 16th July	understood the information provided about this research project in the information Sheet y 2018.
0	I have had an opp	ortunity to ask questions and to have them answered.
0	I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.	
0	I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.	
0	I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.	
0	I agree to take part in this research.	
0	I wish to receive a	summary of the research findings (please tick one): YesO NoO
Participant's signature:		
Participant's name:		
Participant's Contact Details (if appropriate):		
Date:		
Approved by the Auckland University of Technology Ethics Committee on the 30th July 2018, AUTEC Reference number: 18/276		
Note: The Participant should retain a copy of this form.		
April 201		page 1 of 2. This version was last edited in April 2018

Appendix C Sample indicative interview questions

Raising the bar: A story of bean-to-bar chocolate production in New Zealand

Research aim: To explore the history of bean-to-bar chocolate production in New Zealand by considering historical behaviours alongside the place bean-to-bar chocolate holds within current commercial, social and cultural settings.

Research question: What is the history of bean-to-bar chocolate production in New Zealand since its introduction in the late nineteenth century?

GENERAL STARTING QUESTIONS

- When was your company founded?
- What types of chocolate products did the company first produce?
- Is there a difference between the terms 'bar', 'block' or 'tablet'?
- When did you first make your own bean-to-bar chocolate?
- What were some of the problems you encountered when producing and selling New Zealand-made chocolate bars?
- How would you describe the chocolate market in New Zealand from a company point of view? What about from a customer's point of view?

SPECIFIC QUESTIONS

- Where do you source your cocoa beans?
- Who and/or what influenced you in choosing these particular cocoa beans?
- What types of chocolate bars (tablets) does your company produce?
- What is the most popular chocolate bar (tablet) in the company's product range?
- Has recent consumer awareness of sustainable chocolate production and consumption been a factor in the product decision-making of the company?
- What differentiates your products from competitors' products?
- What are the company's future goals regarding chocolate production?

FUTURE FOCUS QUESTIONS

• How do you see the future of chocolate, considering current issues?

REFERAL

• Can you think of others who could contribute to this research?

Appendix D Ethics approval from AUTEC



Auchland University of Technology D-BB, Private Bag 52006, Auchland 1142, NZ T: +64 5 523 9339 act. 8316 E: ethics (Furtus: ac www.autus: as freuenchelbics

30 July 2018
David Williamson
Faculty of Culture and Society

Dear David

Re Ethics Application: 18/276 Raising the bar: The story of bean-to bar chocolate production in New Zealand

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 30 July 2021.

Standard Conditions of Approval

- A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through https://www.aut.ac.nz/research/researchethics.
- A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/research/researchethics.
- Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can
 be requested using the EA2 form: http://www.aut.ac.ng/research/researchethics.
- be requested using the EA2 form: http://www.aut.ac.nz/research/researchethics.

 4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
- Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsibile for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact ethics@aut.ac.nz

Il O aunour

Yours sincerely,

Kate O'Connor Executive Manager

Auckland University of Technology Ethics Committee

Cc: armo.nturny@aut.ac.ne