

Beyond the shadows of utility:
Evolutionary consumer theory and the rise of modern tourism.

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1. Introduction

1.1 The quantitative and qualitative growth of consumption

In July 1959, Richard Nixon traveled to Moscow to open an exhibition showcasing America's technological and material achievements. The highlight was a full-scale replica of an average American worker's home. It was equipped with fitted carpets, a television in the living room, central heating and a kitchen with a washing machine, a tumble-dryer and a refrigerator. The Soviet press cast doubt on whether the ordinary American lived in such luxury and mockingly baptized it the 'Taj Mahal'. Upon viewing it, Khrushchev spotted an electric lemon squeezer and remarked that no one in their right mind would want to acquire such a 'silly gadget'. Later Nixon was invited to make a broadcast on Soviet television and used the occasion to expound on the advantages of American life. He explained that Western economies had, through enterprise and industry managed to overcome poverty and famine in just a few hundred years. Modern Americans owned 56 million television sets and 143 million radios, he informed his Soviet audience, many of whom lacked access to their own bathroom or kettle. Some 31 million families had bought their own homes. The average American family could buy 9 dresses and suits and 14 pairs of shoes every year. In the USA one could get a house in a thousand different architectural styles. An infuriated Khrushchev sat at Nixon's side, clenched his fists and mouthed to the camera 'Nyet!' (Botton 2004:33).

But Nixon was not lying. Starting from the mid 18th century, Western economies had undergone the most radical transformation in living standards ever known in history. In its course, consumption patterns of ordinary workers transformed themselves beyond recognition and enveloped an immense variety of new goods and services (Saviotti 1996,

Bianchi 2002). This is in stark contrast to what earlier generations possessed: For example, a survey of the household inventory of tradesmen in the late 17th century found that only 27% of household possessed books, 11% owned knives and forks, 33% owned pictures, and 28% owned window curtains (Weatherill 1988:184). Today, despite the ongoing increases in real income that characterize Western economic development, growth in real consumption expenditure shows no signs of abating. Personal savings in Anglo-Saxon economies are now close to zero, and strong long run declines have been recorded in most OECD economies over the last century (Dean et al. 1990).

As a result, the industrial composition of modern economies has changed significantly. Entire industries exist today that were unheard of less than 50 years ago (Scranton 1994, Saviotti 1996, Witt 2001). A good example is the tourism industry, one of the fastest growing industries of the 20th century (Clancy 1998: see table 1.1 below). It has been estimated to contribute US\$ 3.3 trillion (11%) to global GDP. It employs an estimated 207 million workers worldwide (representing 8% of all jobs). As a recreational activity, it represents the major migratory movement of modern society, and involved about 700 million international travelers in 2001 (Sinclair and Stabler 1997). Given its scale, labor-intensive nature and positive impact on the balance of payments account (from incoming tourists), it is no surprise that governments strive to foster inbound tourism as a viable way of realizing economic growth and full employment. By the 1990s more than 125 nations considered tourism as a major industry and a primary generator of employment and foreign exchange (Richter 1989).

Table 1.1 World tourism arrivals and receipts.

<i>Year</i>	<i>Arrivals (thousands)</i>	<i>Variation %</i>	<i>Receipts (US\$ millions)</i>	<i>Variation %</i>
1950	25,282	–	2,100	–
1960	69,320	10.6	6,867	12.6
1965	112,863	10.3	11,604	11.1
1970	165,787	8.1	17,900	9.1
1975	222,290	6.1	40,702	18.0
1980	287,787	5.3	103,535	20.7
1985	329,616	2.8	117,374	2.4
1986	340,650	3.4	142,067	21.0
1987	366,754	7.7	174,232	22.6
1988	401,710	9.5	201,540	15.7
1989	430,993	7.3	218,369	8.4
1990	459,212	6.6	264,714	21.2
1991	465,844	1.4	271,880	2.7
1992	503,258	8.0	308,745	13.6
1993	517,607	2.9	314,249	1.8
1994	545,878	5.5	345,540	10.0
1995	561,027	2.8	380,693	10.2

(Source Clancy 1998:177)

Given its scale and influence, it is without a doubt that the long run growth and qualitative change in consumption patterns deserve to be systematically investigated. In much of the economic literature, the idea that per capita consumption expenditure grows with rising income is more or less taken for granted. In microeconomics, a starting axiom of neoclassical analysis is that consumption is 'insatiable' in that consumers will always prefer more of something to less. In macroeconomics, many models assume that any extra income generated by increases in the productive capacity is automatically converted into increases in demand (Say's Law). Thus while economic research has done well to understand the supply side forces by which this transformation has become possible (e.g. the division of labor, technological advances and the accumulation of capital), less has been done to understand the precise way in which consumption expenditure has grown (Swann 1999, Witt 2001, Metcalfe 2001).

As such, the dominant neoclassical approach to studying consumption tends to strictly focus on examining how constraints impact consumption behavior (Deaton and Muellbauer 1980). For example, in the case of tourism, these constraints take the form of destination, price, income, transport cost, time and credit constraints (Eadington and Redman 1991). Without a doubt, such an approach has brought some important insights. It has been found, for example, that travel expenditure is price-sensitive, and that this sensitivity tends to increase with proximity of the tourist destination to the origin: The further consumers travel, the more price elastic they become. Nevertheless, there are clear limits to utilizing an approach designed to explain short run changes in price and quantity demanded to examine long run evolution of consumption patterns. While strict assumptions on the nature of utility provide a convenient formalization for analyzing short term market dynamics, assumptions such as the notion that demand is insatiable tend to hinder rather than help scholars in studying the long run growth and development of consumption.

Furthermore, per capita consumption expenditure has not only grown in scale but has also changed radically in its qualitative nature. Here it is paramount to examine the rate, direction and manner in which this qualitative change occurs (Wadman 2000). For example, a widely recognized feature of tourism growth is that, as a recreational activity, it has gradually become associated with a diverse number of functions. Consumers today may travel in order to explore and experience new places, to improve their health, so undertake

particular hobbies, to spoil themselves, to visit relatives, or simply to relax and unwind and do nothing at all (Aderhold 2000). Consequently, the industry's composition has come to represent an increasingly complex bricolage of firms, ranging from local restaurants to international airline providers (Van Doren and Lollar 1985, Sinclair and Stabler 1997, Parrinello 1993, Clancy 1998). An important question concerning this growing functional complexity is how consumers learn to associate the particular activity of travel with a number of different uses (Menger 1950, Ruprecht 2002b). To tackle this issue, it is no longer sufficient to take as given the association between utility and the consumption act under analysis. Such a task requires us to take a close look at the consumer learning processes whose interaction with supplier innovations enables goods and services to functionally mutate in an economically significant fashion. Understanding the process by which consumer's discover the usefulness of things may shed light on the key characteristics of modern consumption growth.

On a broader level, a brief glance at the general trends in the distribution of consumption expenditure across different consumption areas suggests that expenditure has grown in a very uneven:

Table 1.2: Sample of US consumption expenditure shares, 1901 and 2003.

Item	1901		2003		% Change
	Expenditure	Shares	Expenditure	Shares	
Food	\$ 327	42.5%	\$ 5,357	13.1 %	- 29.4%
Alcoholic beverages	\$12	1.6%	\$ 384	0.9 %	- 0.7 %
Apparel and Services	\$108	14%	\$ 13,359	32.8 %	+ 18.8 %
Healthcare and insurance	\$40	5.2%	\$ 6,362	15.7 %	+ 10.5 %
Recreational Travel*	\$38	0.05%	\$ 287	12.23 %	+ 12.2 %
Entertainment	\$12	1.6%	\$ 2,069	5.1 %	+ 3.5 %
Reading and Education	\$8	1.1%	\$ 901	2.1 %	+ 1 %
Tobacco	\$11	1.4%	\$ 305	0.7 %	- 0.7 %
Charity Contribution	\$10	1.3%	\$1,324	3.2 %	+ 1.9 %
Average Income per family	\$ 750		\$ 50,302		+1,490.99 %
Expenditure, all items	\$769		\$ 40,748		+ 1,887.21%

* This should only be considered a rough approximation since it was calculated using data from Lebergott (Lebergott 1993:148), which provide estimates of expenditure data up to 1990, while the rest of the estimates are sourced from (US Department of Labor 2006).

This uneven nature suggests that there seem to be some types of consumption activities for which consumers have a predisposition to spend relatively more on as income increases. Naturally, the areas of consumption which are becoming increasingly important are also those in which variety growth has occurred relatively quickly (Bils and Klenow

2001). Unfortunately, because in the modern utilitarian framework all consumption is done in order to maximize the all-encompassing utility function, little consideration is given to the nature of human motivations and the precise manner in which they motivate consumption activities. Strangely enough, the modern utility-based approach, as devised by Stanley Jevons, was only ever designed to examine strictly those acts motivated by the “lowest rank of feelings”, such as basic hunger and thirst (Warke 2000:17). While the 19th century consumers he had in mind were perhaps mainly concerned simply with how to feed themselves, contemporary consumption expenditure in developed economies, for better or for worse, is of a very different nature (Scitovsky 1976, Pasinetti 1993, Frank 1999, Ainslie 2003). Hence, together with an account of how technological change can yield increases in the variety available in markets (Saviotti 1996, Saviotti 2001), a study of how the human predispositions to consume have changed in relative importance with increasing affluence is vital for a full account of the long growth of consumption (Witt 2001). All in all, the challenges that are faced in the task of accounting for the long run evolution of consumption may be summarized in what is dubbed ‘Menger’s challenge’ in chapter 2:

- To take into account the underlying motivations of consumption, and changes in their relative significance that may have occurred in the face of rising income.
- To understand how consumption acts and their related goods and services came to be associated with specific wants, and how these associations may change or remain stable over time.

This deeper level of analysis helps us construct answers to some of the most important and perennial questions that govern the growth and organization of modern economies activity: Why has per capita consumption continued to grow more than two centuries after the industrial revolution? Is there any regularity in this growth process, and what are the implications for the organization of economic activity? What causes the uneven nature of growth, and to what degree can we expect this growth to continue in the future?

1.2 A new approach

The aim of this thesis is to propound an evolutionary analysis of consumption growth, and employ it to study the growth of recreational travel demand in particular. It utilizes an analytical framework, as set out by Witt (Witt 2001), that takes up Menger's challenge by accounting for consumption growth in terms of i) the wants that motivate consumption as well as ii) how consumers learn to satisfy these wants. This dual level of analysis utilizes insights on the evolved nature of wants and how they may vary over time, as well as the evolved nature of human learning processes to provide new insights into the growth processes that drive increasing consumption expenditure. It particularly emphasizes how consumer specialization processes that result from the interaction of associative and insightful modes of learning can lead to the accumulation and refinement of both what consumers know and like (see chapter 2).

Elsewhere, this approach has already been successfully employed to analyze how a decline in consumption expenditure due to physiological satiation has had important implications in the long run development of the food industry (Ruprecht 2002b). This study complements this work by focusing on consumption activities whose expenditure shares have risen (rather than declined) in the face of increasing income. Here we seek to show how the consumer's wants and learning patterns also play a pivotal role in enabling certain activities to attract an increasing share of total consumption expenditure. Understanding why some activities have done so is vital for a full picture of how consumption patterns have evolved with rising income.

Specifically, we focus on the historical emergence of recreational travel as a popular consumption activity. It is historically one of the earliest forms of recreation that, as we have seen above, has experienced rapid growth as consumers have become more affluent. Simultaneously, the growth of tourism demand is peculiar in that, for a large part of its history, it was also a relatively expensive, risky and time-consuming activity. On the one hand, improvements in technology have no doubt played an important part in improving its convenience (Bukart and Medlik 1974, Van Doren and Lollar 1985, Brendon 1991). On the other hand, when we consider the wide range of alternative recreational activities that have also emerged, the meteoric rise of travel deserves further consideration. Modern consumers have at their disposal an increasing variety of ways to entertain themselves, seek health, engage in social interaction without having to travel considerable distances anywhere. Hence,

as Herbert Simon so aptly queried, why do people really travel? If it is to ‘gain information’ about a particular place, he contends that anything that can be learned on a trip to a foreign country (of less than one year’s duration) can be learned more quickly, cheaply and easily by visiting San Diego Public Library (Simon 1996:306, Earl 2001). Similarly, one can argue that another popular travel motive ‘to relax and unwind’ (Aderhold 2000) may be done more easily at home and thereby avoid all the risks that a typical trip entails: Uncomfortable accommodation, crowded beaches, missed travel connections, becoming sick from foreign food, bad weather, potential muggings, and so on (Scitovsky 1976:190).

To this end, in relation to i) above, we examine how the act of travel has become associated with particular wants, and further study the dynamic nature of these associations, i.e. how they have changed or remained stable over time. First, in chapter 3 the evolution of the British Grand tour of Europe is examined to understand the relationship between travel and the want for arousal, and how this connection remained stable despite the emergence of more convenient means by which consumers could satisfy their want for arousal. We come to understand how the relatively low-skill means of satisfying the want for arousal (means of entertainment) tend to complement, rather than compete with, the more high-skill alternatives by stimulating consumer specialization processes. Chapter 4 scrutinizes the emergence of resort travel, its original association to the consumer’s want for health, and the process by which it later became associated with the want for status as well as the want for arousal. Through understanding the precise manner in which consumers learn to satisfy different wants and how these learning processes influence supply of goods and services, one can attain a better understanding of how ‘combination goods’ emerge that jointly serve a number of different consumers wants (Witt 2001). Together, these case studies are designed to provide insights not only into the manner in which the associations between travel and the underlying wants of consumers can change in economically significant ways, but also on the tendency for these associations to remain stable over time, despite the emergence of other, more advanced, alternative consumption activities that potentially threaten these associations.

Furthermore, in relation to ii) above, a major theme of this work is how different modes of consumer learning processes can have a fundamental impact on the manner in which markets develop and mediate the association between a consumption act and the consumer’s wants. As outlined in detail in chapter 2, the consumer’s specialization level

tends to influence the type of qualitative change goods and services undergo, how suppliers advertise to consumers, how consumers coordinate with suppliers and other consumers, the level of scale returns which producers may achieve, and the role that consumers play in co-developing innovations. In chapter 3, specialization is found to have important implications for the rate at which consumers become less responsive to arousing stimuli (the habituation process). In chapter 4 we consider how a related interaction between associative and insightful modes of learning can determine how consumers satisfy the want for health in situations where consumers know relatively little about the consumption act, what we dub 'consumer generalization'. This interaction is shown to have had important economic consequences on the developmental trajectory of resorts and on the treatments they offered.

Along the way, the work also examines in greater detail the nature of two particularly important basic wants that have played significant part in driving the historical rise of consumption expenditure, namely the want for arousal and the want for health. In the case of the want for arousal, we examine in chapter 3 the process of habituation where consumers become less responsive to particular arousing stimuli. In the case of the want for health, we consider in chapter 4 how the range and variety of aversive stimuli that have motivated health consumption have changed in the course of economic development, and particularly in light of urbanization which fundamentally impacted the consumer's habitat. Uncovering the particularities of such behavioral predispositions contribute to building a more complete account of changing consumption patterns and the opportunities as well as the limits that suppliers face in producing goods and services that are linked to these particular behavioral tendencies.

Finally in chapter 5, we move away from studying particular associations between travel and consumer wants, and empirically investigate the effect that consumer specialization processes have on hierarchical systems of tourism intermediary markets, given there is some common tendency for specializing consumers to use certain goods and services at particular stages of specialization. We examine regularities in specialization processes in the form of dynamic substitution effects that are shown to have an important impact on the evolution and organization of markets, particularly when the overall number of new consumers entering a particular system of markets reaches saturation point. This is done by analyzing the factors that influenced the degree to which consumers used tourism intermediary services to organize their trips. Here it is hypothesized that relatively specialized

consumers tend to engage in relatively less organized forms of travel, a tendency which becomes crucial to suppliers as the markets reach saturation point. Hence, we investigate what empirical evidence there for this process, and how suppliers may have adapted to its consequences by undertaking strategies to entice specialized consumers to continue to use fully-organized forms of travel.

In sum, this work demonstrates how the evolutionary approach can shed light on the nature and growth of modern consumption, and on the consumption of tourism in particular. As discussed in chapter 6, by examining the nature of wants that drive consumption, how consumers learn to satisfy these wants, and how markets interact with these learning processes, this work offers a number of insights that shed light on both the short run and long run determinants of consumption growth. In the short run, the level of subjective consumption knowledge that consumers accumulate has important implications for the manner and rate at which markets in particular consumption areas grow. In terms of the long run determinants of consumption growth, the particular aspects of the want for health and the want for arousal are discussed to understand how economic development influenced their intensity and manifestation in consumption patterns. These provide a better understanding of why these wants have made such a large contribution to the growth of consumption expenditure.

In conclusion, Khrushchev may have been right in pointing out the silliness of American consumers wanting to buy electronic lemon squeezers, but as a sample of the immense growth and diversity in the goods and services that are consumed in Western developed economies, it is nevertheless important to understand the interaction between capitalist market forces and consumer learning processes by which goods like electronic lemon squeezers emerge and affect consumption patterns. Ultimately, fulfilling this task means that we must go beyond analyzing consumer demand by simply examining how consumers react to changes in the pecuniary constraints they face. Such a traditional focus is more appropriate for analyzing the consumption patterns of Jevons' time or of those found under Khrushchev's regime where scarcity prevailed and, indeed, costs may be assumed to have been the key factor influencing consumption behavior. To progress, a new approach that uses precise and scientific evidence on the nature of consumer's wants and their learning patterns can make a real start to answering important and perennial questions that govern the growth and organization of modern economies activity.

2. Learning consumers and market evolution

“The task of our age is to establish the interconnections between all fields of science and to unify their most important principles... I believe that scholars in the various fields of science can never lose sight of this common goal of their endeavors without damage to their research.”

- Carl Menger, Introduction, Principles of Economics, 1848.*

2.1 Introduction

This chapter introduces an evolutionary approach to the study of consumption. In order to better account for the historical increases in per capita consumption expenditure, it takes on Menger’s challenge of explicitly analyzing the underlying wants that motivate consumption and thereby examines how changes occur in the way in which these wants are satisfied. As outlined in Witt (2001), this interdisciplinary approach synthesizes insights from psychology on associative and insightful modes of learning in order to account for the full range of ways in which humans, as evolved organisms, learn and adapt to changing environs. Similarly, knowledge of the nature of the human genetic endowment is used to shed light on the nature of wants and how the relative significance of certain wants may change in the long run as income increases. Thus by analyzing how changes in consumption are related to the consumers’ wants and how consumers learn to satisfy these wants, a comprehensive methodological approach is developed to explain its long run growth.

Furthermore, we focus on how two particular types of learning phenomena, namely consumer specialization and generalization, can significantly influence the organization and evolution of markets. These describe, respectively, the situation in which consumers have accumulated relatively large or small amounts of detailed subjective knowledge about the consumption act. Given that markets are essentially tools which consumers use to satisfy

* “Die Aufgabe unserer Zeit (ist) den Zusammenhang aller Wissenschaften und die Einheit ihrer höchsten Principien festzustellen...Nie werden, so glauben wir, die Forscher auf den verschiedenen Gebieten der Wissenschaft dies gemeinsame Endziel ihrer Bestrebungen ohne Nachtheil aus dem Auge verlieren...”

their wants, we expect level of knowledge that consumers possess to influence how these tools are utilized. While specialization and generalization do not hinder the potential for expenditure on a consumption activity to increase as income grows, a variety of studies (reviewed below) suggest that they do tend to influence the manner in which these increases can occur. Differences are observable in the type of functional change that goods and services undergo, how firms advertise, the tendency for consumers to coordinate with suppliers as well as fellow consumers, and the role consumers play in the innovation process. These insights into particular modes of market evolution provide a better idea of the economic processes through which per capita consumption has grown in the face of rising real income.

This chapter is structured as follows. Section 2.2 reviews Menger's work and contrasts it to the standard microeconomic analysis of consumer behavior: He challenges scholars to take into account the wants that motivate consumption and to explain how characteristics of consumer learning patterns have an impact on not only price and quantity demanded, but on the underlying set of goods and services that are perceived as useful by consumers. In order to gain a better understanding of how consumers learn, section 2.3 reviews psychological approaches to analyzing consumer behavior of which there are two major approaches: insightful and associative modes of learning. Section 2.4 then reviews Witt's framework set out in *Learning to Consume (LTC)* in which these two modes of learning are synthesized into one coherent approach from the evolutionary perspective. Such an approach offers a comprehensive picture of market evolution, as discussed in section 2.5. Finally, section 2.6 concludes with an outlook on how the following chapters utilize and build on this framework.

2.2 Menger's challenge

Economic analysis inherently involves the analysis of human behavior. However, a newcomer to economics who peruses its work may be a little confused. For in contrast to the natural sciences, economists seem to prefer minimalist and abstract models of behavior, and show little interest in the voluminous amounts of work done on its nature, development and influences available in other disciplines such as psychology, sociology, anthropology and biology. The reason for this is simple. What really interests economists is not so much human behavior *per se*, but how it *changes*, and how this change may be both triggered by and

simultaneously affect economic activity. Hence, the most basic type of economic analysis of consumer behavior involves the analysis of changing behavior, such as the way quantity demanded changes in response to changing prices in generic partial equilibrium analysis.

In particular, orthodox neoclassical economics tends to restrict its focus on how price and income constraints change behavior. As a result, other influences tend to be bundled into an all-purpose utility function. To proceed with analysis, this function is assumed to have certain properties: reflexivity, completeness, transitivity, continuity, convexity and insatiability (Deaton and Muellbauer 1980:26). The final assumption states that utility increases with quantity consumed, i.e. consumers always prefer more of something to less. Furthermore, it is always *a priori* assumed that there exists some specified set of goods and services related to the consumer utility function in a fixed fashion, and that consumers know of this relationship (Etzioni 1985, Ruprecht 2002b: Chapter 4). Given these conditions, consumption behavior is then described as the cheapest way of achieving a target of utility at given prices, such that $C(u, p_x) = \min \{p_x | v(x) \geq u\}$ (Deaton and Muellbauer 1980:38). This is mathematically equivalent to how producers are modeled to find the cheapest way of achieving a given scale of production at given factor costs. Swann notes that while much has been done in the economics of technical change to understand how innovation has altered the technology of production, much less has been done to understand how innovation has changed consumption technologies, both of which relate to the nature of the $C(\cdot)$ function (Swann 1999:285).

No doubt, the neoclassical approach has led to fruitful insights, particularly from a short run perspective, where it does well to reduce the complex determinants of human behavior to enable economists to predict how a change in price impacts quantity demanded. Nevertheless, when we consider longer run trends in consumption patterns that have accompanied rising income as described in the last chapter, it seems less appropriate to utilize a theory in which it is assumed consumer always prefer more to less. Furthermore, given the immense changes in the variety of goods and services consumers utilized (as described in chapter 1), it seems less sufficient to begin an analysis with an *a priori* specification of the goods and services related to utility. Thus, whilst acknowledging the usefulness of neoclassical economics in examining the consumer's short run responses to changing pecuniary constraints, a different approach is needed to account for the long run evolution of consumption.

The foundations of a more appropriate approach can be found in the work of Carl Menger. Rather than starting with a given set of goods and services which are already known to consumers, he challenges economists to go one step further and understand the learning processes by which “things” come to be associated with the underlying wants of consumers (Menger 1950:51).¹ A fundamental prerequisite to understanding purchasing behavior is to first comprehend how consumers learn to associate these things to the satisfaction of wants, and how the strength of such associations change over time. He argues that consumers work out the usefulness of things in the actual consumption process itself rather than knowing this *a priori* (Ruprecht 2002b:34). Thus he sees the consumption as being more akin to a trial and error process rather than a static optimization problem: What is and what is not a good is not constant or set over time: things can lose their ‘goods characteristics’ according to what consumers know, learn and do (Menger 1950:56). Consequently, the learning process through which consumers work out whether things are useful in satisfying their wants is equally, if not more, important than the situation in which consumers choose from goods which they already know to be useful.

Moreover, Menger notes that learning about causal connections in consumption can be difficult. This especially so in the case of ‘indirect goods’ that do not serve a human want directly, but are inputs into a transformation process which results in the production of final goods (Menger 1950:55). For example, an oven is an indirect good in that it does not directly satisfy the consumer’s want for food but is used to make other goods (e.g. delicious cake) which are then consumed. Their use can be problematic because whether or not such an indirect good is used successfully depends not only on their objective characteristics, but also on the consumer’s ability to use and transform it as well as on other higher order goods that are simultaneously used in the transformation. Consumers may know how to operate a mobile telephone which may be in perfect working order, but if they do not have the adequate knowledge to engage in a mobile phone contract, the phone will remain a ‘thing’ rather than a ‘good’. Additionally, problems may also arise in that the passing of time may make it harder for the consumer to learn the causal associations between goods and their effects (Menger 1950:68). Here Menger recognizes that the duration it takes to consume is not just a costly input, but may also complicate the act of discerning what the effects of

¹ For an extensive discussion of the conditions under which things become goods see (Ruprecht 2002b)

goods are. This opens up the possibility of consumers making errors in their actions (Menger 1950:69).²

In the neoclassical framework some steps have been taken towards capturing the transformative nature of consumption (Lancaster 1966, Becker 1976, Becker 1981, Becker 1996). In these models utility is not a direct function of market goods consumed, but rather a function of final goods which are produced from market goods. Here the appearance of new goods (or attributes of goods) has the same effect that the appearance of a new means of production has on a firm: It changes the household's production technology (Bianchi 2002:3). However to what degree these are 'transformative' in the Mengerian sense remains an open question since the models start with *a priori* specifications of the goods that can be changed with full certainty into final goods (Ruprecht 2002b:51). In Lancaster's model, where consumers choose goods on the basis of the characteristics they possess, these are defined on the basis of the 'objective' characteristics of goods, which are known to all consumers (Lancaster 1966:6). Furthermore, consumption technologies are assumed to be linear such that doubling expenditure on a commodity doubles the output of each characteristic (Earl 1986:35).³

Furthermore, in Becker's work (Stigler and Becker 1977, Becker 1996), whilst also making the same problematic assumptions, the author does introduce some form of learning where consumers may accumulate 'personal capital' which can influence the marginal productivity of future consumption activities. Unfortunately, how consumers accumulate personal capital is precisely analogous to how firms invest in physical capital. Each investment i) is the result of a freely chosen action, ii) lowers utility below what it would otherwise have been, but is nevertheless undertaken because it promises to generate more utility in the future, and iii) is reversible in that it decays unless maintained (Elster 1997:750). Needless to say, not only is this analogy flawed in several situations (Elster 1997, Loasby 1998:98), but 'investment' is undertaken with perfect foresight of its expected consequences. Time is also treated as a cost and is not something taken up in the consumption act itself, let alone an element that can interfere with how consumers learn about goods and services (Steedman 2001). Also none of these models take into account how an increase in the number of higher order goods used may pose problems for the consumer in that their

² This is similar to the concept of contiguity in psychology (Anderson 2000:12).

³ For a full evaluation of Lancaster's model see (Earl 1986:33).

effective use requires additional knowledge. Consequently, whether the consumer uses one or one thousand different higher order goods in the consumption act makes no real impact on the consumer's ability to achieve their goals.

In sum, Menger's approach presents two outstanding challenges to those interested in analyzing consumer behavior and its impact on the organization and long run evolution of economic activity. First, consumption must be considered as a phenomenon that is not just related to price and income effects, but as something that is fundamentally driven by the consumer's wants. Therefore, a greater understanding of the nature of these motivations will shed more light on how consumption expenditure has grown and changed with rising affluence. Secondly, rather than assuming that a given set of goods and services is related to utility, one needs to investigate the learning process through which these come to be associated with the satisfaction of the consumer's wants in the first place. In this way, the concept of wants introduces a deeper level of analysis which enables us to study the changing nature of the consumption set, i.e. what is and what is not a good. Such an approach is more realistic and delivers a better understanding of the growing and changing nature of consumption and its impact on markets.

2.3 Psychological approaches to learning

In this section we first briefly review two broad approaches that have used insights from psychology to study consumer behavior, which will be used in the next section to construct an evolutionary approach to consumption. Recently, an increasing number of economists have become interested in analyzing learning dynamics (Brenner 2006). Learning, as defined in the natural sciences, is the general process by which a species adapts to change, where behavior is modified in response to environmental stimuli (McFarland 1987:2). In psychology, which is specifically concerned with human behavior, it is defined as a relatively permanent change in behavior that results from experience and cannot be attributed to temporary body states (Hergenhahn and Olson 1997:7). To this end, many scholars have recently re-introduced insights from psychology to obtain an enhanced understanding of, and/or an improved ability to predict, behavior in areas that have normally been viewed as the preserve of economics (Earl 2005:911). These follow a long tradition of introducing psychological insights into economics. Indeed, it has been noted how the very framework of utilitarianism that drove the neoclassical revolution was strongly based on 19th century

psychology (Warke 2000, Witt 2004). It is specifically the area of consumer microeconomics that has witnessed an increasing movement to build a more realistic depiction of agent learning, since there is a strong interest for consumer research in modern psychology.

However, such interdisciplinary work that shares the common aim to build more realistic models of behavior has not yet yielded a coherent theoretical framework. While Earl does outline some elements of a common research programme for psychological economics (Earl 2005:912), the pluralistic nature of modern psychology, especially in learning (See Hergenhahn and Olson 1997), has led to many different ‘realistic’ depictions of consumer behavior to emerge under the banner of psychological economics. Below we outline the differences between two prominent approaches of a) associative learning and b) insightful learning.

a) Associative learning

This approach analyses learning by focusing on how forces external to the agent may stimulate behavioral change, as found in the operant and classical conditioning literature. These generally describe a type of learning mechanism that is thought to be not unique to humans, and whose workings can be experimentally tested (Skinner 1953). Such work has been argued to be more realistic in situations where consumers appear to be ‘uninvolved’ and ‘uncommitted’ whilst consuming (Foxall 1990:14). In such circumstances, it is unlikely that consumers undertake thoughtful, comparative evaluations of choices. Foxall cites studies of how nutrition information is used where it has been found that “the vast majority of consumers neither use nor comprehend nutrition information in arriving at food purchase examples,” (*ibid*). Furthermore, consumers have been observed to consider only a subset of choices, not engage in information about the product available to them, and only use restricted price information.

In order to explain these observations, associative learning theories focus on how consumers attain reinforcement, which is simply defined as a consequence of behavior that has the effect of increasing the rate at which the behavior occurs (Skinner 1953:53). It then examines how certain behaviors may come to be related to the attainment of reinforcement, and how an organism may learn, through trial and error, to discriminate in precisely which circumstances a behavior is reinforced. An important finding is that consumer behavior is not only altered in specific ways by the attainment of pleasure and the negation of pain, but

that the set of things which deliver reinforcement can themselves also change with experience. Specifically, secondary reinforcers are formerly neutral stimuli whose repeated pairing with primary reinforcers results in them exerting a reinforcing effect in their own right (Anderson 2000:39). An important example is money whose attainment can deliver reinforcement to agents since it is generally exchangeable for a wide range of primary reinforcers. Consequently, it is possible to construct a taxonomy of goods according to the type of reinforcement that they deliver (Alhadeff 1982:16):

- Primary commodities are positive primary reinforcers, such as basic food products, whose capacity to reinforce stems from the consumer's biological inheritance.
- Secondary commodities are positively conditioned reinforcers which receive their power to strengthen behavior as a result of having been paired with primary commodities. They vary from consumer to consumer according to their reinforcement history.
- Escape/avoidance commodities are negatively conditioned reinforcers, the use of which results in escape from, or avoidance of, aversive consequences.

b) Insightful learning

The studies of insightful learning focus more on how individual and cognitive factors can change behavior. Consumer choice is understood as a problem-solving sequence of activities, the outcome of which is principally determined by the agent's intellectual functioning and the way they process information (Howard 1983). Thus what one may call 'insightful learning' is not done by a trial and error process, but depends on the creative capacity of agents to analyze situations in order to find appropriate courses of actions. Relative to associative learning, insightful learning is usually regarded as having four characteristics (Hergenhahn and Olson 1997:263):

- 1) Transition from pre-solution to solution is sudden and complete.
- 2) Performance gained by insight is usually smooth and free of errors.
- 3) Performance based on a solution by insight is retained for a considerable length of time.
- 4) The principles gained by insight are easily applied to other problems.

As an example, inspired by personal construct psychology, Earl uses such an approach to examine how consumers cope with choices in a turbulent environment and the uncertainty which they create (Earl 1986). Since consumers may not have complete information about the choices they face nor of the consequences which these choices entail, he argues that it is important to understand the strategies used in making decisions, which collectively makeup a consumer's lifestyle. These are "viscous collections of procedures for dealing with fluid situations in which ambiguity is the order of the day," (Earl 1986:4). Earl maintains consumption involves more than simply working out alternative choices and picking an option, but also navigating a web of ever-changing complementarities between decisions. Here choices are a function of many complex forces, such as social identity in an evolving and turbulent world filled with ever-present uncertainty and the real possibility of costly mistakes. Such strategic behavior helps the consumer to incorporate surprise and anticipate the unexpected, as well as to cope with the inevitable interdependencies that exist among choices.

Juxtaposing these two approaches to the analysis of learning, both make valid points about realistic aspects of consumer behavior. They do not contradict each other, but rather highlight the fact that there are ultimately many modes of consumer learning which require different approaches to analyzing the factors involved in their specific situations. However little has been done to consider how these different insights relate to each other. For example, how does associative learning influence the consumer's more cognitively-grounded strategies? Vice versa, can mental deliberation lead to consumers engaging in acts that may be associated with reinforcement? If we recognize the fact that associative learning represents a basic mode of learning which humans share with other species, then it is important to understand how the modes that have evolved at different stages of human phylogeny may work in synchronous manner. In the next section we highlight one attempt to build an analytical framework that incorporates and synthesizes insights from both of these general approaches.

2.4 The evolutionary synthesis

This section outlines an evolutionary approach to consumption that seeks to answer Menger's challenge by formulating a methodological framework in which the motivations of consumption are explicitly taken into account. The fundamental cornerstone of evolutionary analysis is the insight that humans are evolved organisms.⁴ Knowledge of the human genetic endowment provides important insights into the nature of consumer learning, and what consumers learn about.

In terms of learning, human evolution suggests that humans have no one 'set' and predominant learning pattern. As Sartorius notes, in the course of genetic evolution the emergence of the general capability to learn gradually increased the flexibility of organisms behavior, thereby contributing to their reproductive success (Sartorius 2003:30). The key evolutionary benefit of learning is that behavior can be reconfigured when it is no longer relevant and adapt to new environments. Over time those organisms that could adapt faster to changing environs through a better capability to learn had a higher chance of surviving and reproducing. However the overall process by which this occurred was gradual and occurred in a piecemeal fashion, such that the enlargement of human brain capacity did not occur in such a way in which there was a smooth *substitution* of more advanced learning mechanisms for more primitive ones (Flinn 1997:33, Sartorius 2003). Rather, development was sticky: more advanced mechanisms emerged to *complement* older mechanisms. Thus it is important to highlight the different coexisting modes by which consumers learn and how these may interact.

Secondly, beyond endowing us with the ability to adapt, genetic evolution has also influenced *what* humans learn about. In the existing literature, the goals that motivate consumption are called 'wants' (Lloyd 1833, Marshall 1890, Maslow 1954, Schmookler

⁴ The evolved nature of humans has become increasingly popular in explaining behavior, such as evolutionary psychology's use of 'evolved cognitive modules' to explain certain aspect of behavior (e.g. Orians and Heerwagen 1992). However utilizing an evolutionary narrative provides both opportunities and inherent risks to scholars. On the one hand, because such knowledge is inherently new, its use can provide a multitude of novel perspectives into how human behave. On the other hand novel scientific insights is also be prone to becoming obsolescent or severely proven wrong in relatively short time period. With Occam's razor in hand, a scholar must choose wisely which established and verified insights to use that can be used to reach general insights into behavior.

1966:180, Georgescu-Roegen 1954, Lebergott 1993). While many different schemas of wants have been proposed, it should be noted that the vast majority of proposals recognize that the most basic wants are related to our biological heritage, such as the human need to drink, eat and have shelter (Ruprecht 2002b:19). Practically, utilizing knowledge of the evolved nature of humans allows one to avoid making *a priori* assumptions about which goods are connected to utility functions. Such an analysis generally shifts concern away from the discussing the exchange value of good and services, which is typically the realm of price theory, towards to their use value (Buenstorf 2004:176). Understanding how they manifest in consumption and how this manifestation changes with increasing income provides a good basis for understanding long run economic trends, such as the changing industrial composition of economies as discussed first by Clark (Clark 1951) and later by Pasinetti (Pasinetti 1993, Gualerzi 2001, Saviotti 2002).

Learning to Consume (LTC)

A new step towards building a evolutionary theory of consumption that builds on these foundations is Witt's *Learning to Consume* (Witt 2001). Witt's motivation differs slightly from merely explaining consumption behavior *per se*. Rather, it is borne out of the attempt to better understand the forces that have driven the historic rise in per capita consumption (Witt 2001:29). Not satisfied with simply assuming that demand is insatiable, Witt takes a closer look at consumption growth via two analytical levels that simultaneously also represent drivers of change in consumption. These are, firstly, the consumer wants and, secondly, the consumption knowledge which is used in the satisfaction of these wants.

In relation to the former, Witt defines wants as behavioral dispositions which arise from a state of deprivation of an organism (Witt 2001:32). An important type of these wants are 'basic' as they are part of the human genetic endowment and are universally shared by all consumers. These include the need for air to breath, for aqueous solutions to drink, for food to eat, for medicines to cure an ill. As such they are related to the homeostatic physiological mechanisms that govern human life. Witt argues that a significant feature of these fixed consumption motivations is that they are subject to satiation: In the process of satisfying these wants, a point is reached where deprivation disappears and consumers are aversive to

further consumption. However, in the absence of further consumption, a state of deprivation will re-emerge, and the motivation to consume will return.⁵

In addition to these, Witt describes another class of wants that are not universally shared, and may be acquired or lost through experience. Through the laws of associative learning, formerly neutral stimuli that have repeatedly become associated with primary reinforcers may become reinforcing in their own right. An example is the act of perceiving aesthetic tableware which occurs whilst an agent consumes food and enjoys the company of others (Witt 2001:35). With enough experience, the consumer may find perceiving such tableware as pleasing in its own right, even if it is not in the company of food or friends. Importantly, such acquired wants may be extinguished if they are not periodically re-associated with primary reinforcers. Furthermore, the degree to which consumers are deprived with respect to acquired wants depends on how deprived they are of the underlying want. Nevertheless, because neutral stimuli may become associated with a number of different sources of reinforcement (e.g. tableware is associated with food *and* the company of others), the intensity of the acquired want may still be relatively high even if a consumer is satiated in relation to one of these basic wants. All in all this represents a new approach for thinking about how the changing ‘tastes’ of consumers may be subject to certain regularities in that associative learning essentially changes what the consumer likes and dislikes.⁶

Given this set of wants, the second level of analysis and source of change in consumption is the manner in which consumers satisfy their wants, where their subjective consumption knowledge figures prominently. Here insightful learning can be used by consumers to work out how to satisfy their wants (Witt 2001:34). In much the same way as Menger distinguishes between goods and higher order goods, Witt argues that consumers

⁵ Scitovsky has a similar conception of how evolved predispositions dynamically govern behavior: “Men and animals have many needs, but, because they cannot attend to all of them once, they fill most needs intermittently one at a time. As a particular need, such as hunger, builds up in intensity with the passage of time, a moment comes when that need begins to dominate all others. Then its satisfaction becomes highest priority. While it attends to this hunger gradually diminishes, and , with other needs in the background building up in intensity, some other need soon becomes the strongest and so becomes the organism’s dominant preoccupation,” (Scitovsky 1976:64).

⁶It should be noted that Witt uses these acquired wants synonymously with “tastes”, e.g. “people with emerging tastes..” (Witt 2001:35). In order to avoid confusion with other work done on “Accounting for tastes” (Becker 1996), in the following we use refer to the acquired wants as the “likes” and “dislikes” that people have. Also, Witt’s concept of acquired wants shares some similarities with Scitovsky’s concept of acquired wants: “Many of our wants are not innate and biologically determined, but are acquired by learning. Once they are acquired... they also become habituated and create drives to maintain or repeat newly learned satisfactions,” (Scitovsky 1976:67).

reflect and learn how to satisfy their wants through ‘direct inputs’ on the one hand and ‘tools’, which are used because of the services they yield (Witt 2001:33). The oven, mentioned in the last section, would be an example of a tool in this instance, whilst the food that is cooked in the oven is a direct input. Witt emphasizes that while satiation impacts how many direct inputs are consumed, it does not impact how many tools the consumer uses in the consumption act. Rather, their use is dependent on “other cognitively conditioned factors which rest in the individual perception of the instrumental relationship between tools and wants,” (Witt 2001:33).

In essence, Witt ingeniously synthesizes insights from both associative and insightful learning into a coherent and comprehensive method for understanding change in consumption patterns. Associative learning influences the set of wants consumers have, whilst how consumers satisfy their wants is the consequence of insightful learning. In doing so, he successfully answers Menger’s challenge to bring the wants that drive consumption into the analysis. As for economic implications, this approach allows us to consider how goods and services have functionally changed as they may appeal to a number of different wants, e.g. combination goods (Witt 2001:39). This may occur because certain wants have become satiated (Ruprecht 2002b), or because of similarities in how consumers learn to satisfy different types of wants (see chapter 4). Furthermore, by considering two coexisting types of learning mechanisms, Witt is also in the unique position to consider how these may dynamically interact in a way that may significantly impact the organization and growth of markets. He does so via the phenomena of consumer specialization through which the wants and consumption knowledge that consumers possess become selectively more detailed (Witt 2001:35).

In general, many economists recognize that the intensive accumulation of knowledge and experience by consumers have important implications for consumption (Stigler and Becker 1977, Langlois and Cosgel 1998). However, there are very few attempts to explain how and when it happens. It is typically assumed that it occurs in areas of consumption that are frequently done or in acts of consumption which are important to consumers. This is only half correct: For things that are done frequently, many recognize that non-cognitive routines may be developed which are not readjusted until necessary (see routine-based learning in (Brenner 1999)). Thus frequency itself does not suffice to explain the phenomenon. As for things that are ‘important’ to consumers, these are increasingly done

with the help of consulting peers and experts (Earl and Potts 2004), as is the case in the consumption of durables (fridges, cars, etc).

In LTC, an explanation is provided using insights on the nature of attention processes that form the foundations of insightful learning. Witt argues that what consumers like influences what they insightfully learn about since consumers tend to collect information and develop highly differentiated knowledge about the technological and aesthetic details of things they like (Witt 2001:35). One may dub this the ‘refinement’ effect. At the same time, by changing the details of an act according to what they know, the consumption experience is changed in such a way that may enable new associations to be made between reinforcement and neutral stimuli. Hence, via the consumers’ tendency to modify the consumption act according to the knowledge they have, the insightful knowledge that consumers gain may in turn influence what consumers like (Witt 2001:36). Together the two effects may be mutually reinforcing and lead to the refinement of what the consumers know and what they like. Furthermore, Witt also argues that attention is also influenced by social interactions, in that things which are frequently talked about also tend to be ‘on the agenda’ (*ibid*). Hence via this ‘shift’ effect, groups of intensively communicating individuals can develop similar (dis)likes as well as accumulate knowledge about the same type of consumption activities.

All in all, the LTC approach is a comprehensive framework to understand the historic process by which rising income has been converted into increases in per capita consumption. However, let us be clear: relative to simplistic utility maximizing approaches which assume that it may be rather too complex for some to accept. Compared to the traditional approaches, the tractability of this approach may indeed be questioned. How plausible is it to distinguish between the influences of insightful and associative learning? How can one be sure that any one particular consumption act is driven by one particular act and not others or combination of other wants? Clearly the ability to make such distinctions, which is central to the analysis, rests on current scientific knowledge about the nature of motivations, and the consumer’s learning patterns. As far as this scientific knowledge is itself fallible and subject to change, so too are the theories based upon these insights. Nevertheless, these costs must always be considered together with the benefits it brings. And here we argue that these benefits are substantial:

First, both associative and insightful modes of learning are formed on hard scientific evidence. From this perspective learning is not some rationalization of what scholars would like learning to be (e.g. analogous to capital accumulation), instead it is defined as what it has been scientifically observed to be. While at some level equally guilty of making *a priori* assumption about which goods are connected with the satisfaction of wants, these are educated guesses which are constructed upon what is known about the evolved nature of humans and the wants they possess, as well as on how goods and services may serve these wants. Via this approach, the economics of consumer behavior is unified with one of most important principles that has emerged in the natural sciences, namely the principle of evolution. Furthermore, an analysis of consumption based on the evolved nature of consumer's wants shifts focus onto the very important question of how the consumer learns to perceive goods and services found in the environment as being useful in the first place, an issue that has been so far ignored in the literature.

Additionally, in terms of considering both associative and insightful modes of learning, another clear benefit of this approach is that it can properly distinguish the power and limits of any one particular mode of learning. Many studies that selectively focus on one particular mode of learning have the potential to over-emphasize how much of consumption change it can explain. Finally it also provides a framework in which the interaction between learning mode can be clearly delineated. Approaches that base their explanation on one single mode of learning are by definition unable to provide any insights on this issue. This interaction is especially pertinent in explaining how specialization in consumption happens. In the following section we show how this interaction also matters in the case where consumers know relatively little about the consumption act, e.g. consumer generalization. Together specialization and generalization have important implications for the manner in which markets evolve.

2.5 The implications for market evolution

In this section we extend the LTC approach to show how its insights on the interaction between associative and insightful learning processes also matter in situations where consumers learn relatively little about the consumption act (consumer generalization). We then consider how consumer specialization and generalization influence the growth and evolution of markets, where 'market' *a la* Menger is a tool consumers use to satisfy their

wants. In regards to generalization, consumers may accumulate relatively little knowledge about consumption acts for various reasons: increasing income may lead to stronger time constraints (Lindner 1970, Schor 1991). In other cases they may be ‘slack’ (Witt 2001:39, Cordes 2002).⁷ Furthermore, in certain consumption activities the causal connection relating the good to the want may be relatively hard to learn about (Earl and Potts 2004). This case is especially prominent in advanced economies where the accumulated knowledge grows relatively quickly and becomes qualitatively more abstract (Hayek 1937, Shackle 1972, Mokyr 2002). Hence cases where consumers have relatively little knowledge of the consumption act also warrant some theoretical attention.

In order to provide insight into these important situations, we modify the explanatory framework described in the last section in one small way to make it even more useful for the analysis of change in consumption patterns. In LTC, associative learning influences consumption solely in changing what the consumer likes and dislikes, but no mention is made about whether it can affect how consumers satisfy their wants. Yet here there is much evidence to suggest that what consumers like and dislike can depend on what they have perceived as useful in achieving particular tasks. If, for example, a consumer learns to use a ladder to attain and consume apples, the consumer may develop a liking for ladders, since it is a neutral stimuli that is perceived in the presence of reinforcement (Sartorius 2003:38). Anderson notes that this type of ‘instrumental’ conditioning is fundamentally no different from ‘classical’ conditioning since in both cases the organism is learning to form an association between an antecedent configuration of elements and a consequence that can be predicted from these antecedents (Anderson 2000:79). Hence through the building up of such a chain of associations via associative learning, the consumer’s acquired wants can in some circumstances guide the satisfaction of basic wants. As we shall see in chapter 4, the instrumental nature of the consumer’s likings is especially pertinent in situations where insightful learning is hindered by the complex nature of the consumption environment. Cabanac notes that one evolutionary advantage behavior being guided in this manner is that it does not require a high level of cognition to produce a behavior adapted to biological goals (Cabanac 1992).

We now turn to investigate what implications consumer specialization and generalization processes have for how markets evolve. Let us begin by noting that although markets play a

⁷ Cordes cites the ‘wants for physical ease’ as an important driver of technological evolution (Cordes 2002:157).

central role in economic analysis, Coase argues that what orthodox microeconomics offers us are models of ‘exchange without markets’: What is called a market is simply a label for an intersection of supply and demand correspondences, from which equilibrium allocations may be deduced (Coase 1988:3). Indeed Loasby maintains that it is a categorical mistake to confuse markets with exchange since the latter represents an event within a sequential process, whilst a market is a setting within which this process may take place (Loasby 1999:107). He cites Marshall in describing this setting as “a group or groups of people, some of whom desire to obtain certain things, and some of whom are in a position to supply what others want,” (Marshall 1919:182). By this definition, it is easy to see how consumer learning processes directly impact markets by affecting both the consumer’s wants and the acts by which they are serviced. Suppliers, generally interested in sustaining an ongoing relationship with consumers, need to take heed of changes caused by learning and even, if possible, interact with learning processes in order to ensure that the set of goods and services they offer remain in the favor of consumers.⁸

Simultaneously, markets also fundamentally *enable* consumer learning to occur. They do this by coordinating and informing consumers where information and tools are available to satisfy their particular wants. From the Mengerian perspective, given their useful nature, one can conceive of markets as a higher order tool that is causally connected to the satisfaction of wants (Menger 1950:57). Whether or not consumers use markets depends on the consumer’s knowledge of these tools, their past experience in using them, and how their use fits with the other sequences of the consumption act. Such higher order goods emerged in the process of economic development as societies developed increasingly more sophisticated ways of satisfying their wants (*ibid*). They represent the chief way in which the production of knowledge is coordinated (Hayek 1937) and are an endogenous product of economic development. In short, markets are both influenced by consumer learning processes and also play a role in shaping how such learning occurs.

We now examine how specialization and generalization dynamics lead to distinct ways in which consumers and suppliers interact with each other over time. Differences emerge in a number of dimensions including:

1. The functional change that occurs in goods and services and the type and variety of wants these are associated with.

⁸ For a good overview of how the term ‘market’ has changed, see (Swedberg 1994)

2. How firms compete for customers and the type of advertising used for this purpose.
3. How producers coordinate with existing consumers, which may influence the modularity of market structure.
4. How they impact scale returns in production, which has implications for the costs of consumer specialization.
5. The role consumers play in the introduction of novelty and the creation of new markets.

In terms of 1) functional change, we expect specialization to *sharpen* the consumer's focus onto those aspects of the consumption act associated with their specific wants. As consumers possess relatively more knowledge they have a greater tendency to modify the consumption act to better suit their refined likings. Hence functional change is 'performance-orientated' as it works towards producing ever more highly refined goods and services. Scitovsky gives the example of sports cars that have acquired more gears, more gauges, more lights, differential locks, and other attributes that are designed to give the driver more control over the vehicle, but at the same time may require more skill that may prove aversive to non-specialized consumers (Scitovsky 1976:273). Another example is in using cameras to take pictures (Windrum 2005). Windrum observes how the expert consumer "values the quality of image reproduction and seeks to control the picture taking process and... has grasped the technicalities of composition and the different creative opportunities afforded by different shutter speeds, lens focal lengths and flash photography," (Windrum 2005:1050). On the other hand more casual 'snapshotters' use the camera relatively infrequently to record important occasions such as birthdays and weddings, and look for cheap, relatively easy to operate and reliable cameras. Not surprisingly, von Hippel also finds that specialized users who demand customized products also tend to have a higher willingness to pay for these modifications (von Hippel 2005:40). From a historical perspective, Scranton argues that while modern consumer markets tend to be equated to

'mass markets' characterized by homogenous goods and large scale production, a large array of specialized markets also emerged relatively early in the industrial era which grew in parallel to mass markets although here production was very far from being standardized. Instead, in markets such as fashion textiles, apparel, jewelry, furniture, carpets, lamps, and printing, batch and custom manufacturing techniques grew and remained prevalent into the 20th century (Scranton 1994:476).

In the case of generalization, functional change may be of a very different nature. Many have also noted that novel goods and services tend to be periodically redesigned to help the unspecialized consumers learn about its performance and functionality (Bianchi 2002, Saviotti 2002:122). Furthermore, the effort to make goods and services more convenient and easier to use may involve addressing more aspects of the consumption act and other wants whose satisfaction were previously not addressed. An example is pre-cooked frozen meals available in supermarkets. Whilst these have previously already saved the consumer's time and effort in not having to cook, a new generation of such meals emerged in the 1990s which are designed to be more "healthy" in that they have reduced the amount of calories and fat contained in such meals. Hence not only is the consumer's hunger satisfied, but their concern for being healthy is also addressed. Witt notes how such product innovations which appeal to several wants at the same time is a good way in which suppliers can avoid satiation (Witt 2001:32). Thus relative to performance-orientated functional change in the case of specialization, here functional change is more geared toward improving the convenience of goods and how they may efficaciously fit into the consumer's general lifestyle (total set of wants).

The difference between convenience- and performance- orientated functional change is depicted in figure 2.1 below. The consumer's set of basic and acquired wants are represented in the 'locus of wants' which is composed of one single basic want (e.g. hunger), and the acquired wants that have emerged in association this basic want (e.g. sampling particular exotic spice combinations). Whilst in both types of functional change there is an interaction between the consumer's wants and the goods they use, in the case of convenience-orientated functional change, goods and services come to be associated with multiple loci of wants (e.g. food and health in the frozen meals example). In contrast, performance-orientated functional change is a process which associates one locus of wants

with a multiple set of goods, as the accumulation of subjective consumption knowledge may motivate consumers to use both a variety of goods and services.

Figure 2.1 Functional change in the case of specialization and generalization.

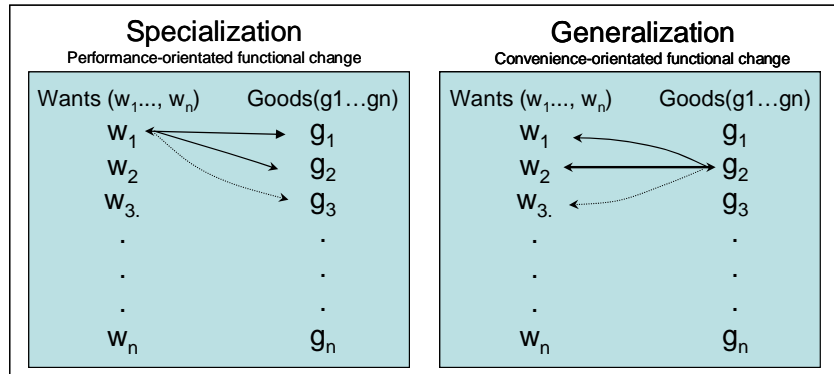


Figure 2.1. Note that ‘wants’ (w_n) in this figure refers to a locus of basic and related acquired wants. The act of consuming a good (g_n) can impact acquired wants existing in this locus, hence a didactic (two-way) relationship is displayed between goods and the locus of wants. However under no circumstances can consumption the change nature of the basic want in this locus.

Secondly, specialization and generalization dynamics can also influence how firms compete and advertise for new consumers. Marketing research shows that consumers with relatively little knowledge tend to choose products according to the service attributes they possess, whilst expert consumers judge a new product according to how it relates to their entrenched knowledge (Moreau et al. 2001). Consequently, producers appealing to specialized consumers offer more specific information about the performance capabilities of goods and services, information which would be relatively less effective on generalized consumers (Muller 1991). Subsequently, the advertisement media firms use to reach specialized consumers would also be more specific. Rather than purchasing relatively expensive and short advertising space in the mass media, firms would tend to use channels that may be unique to specialist communities and whose relatively lower popularity would enable longer or larger advertisements that carry more information appealing to specialists (Foxall 1990:135). Examples include specialized magazines and radio shows.

In contrast, firms appealing to generalized consumers tend to use advertisements that focus on highlighting causal connection of goods, e.g. relating the good or service to wants in an easily understood manner. This may come down to a demonstration of the effectiveness of goods or by simply associating it with positively reinforcing stimuli (e.g

smiling beautiful people) (Foxall 1990:133). Such short, appealing commercials can be communicated to a relatively large audience via the mass media (DeFleur and Ball-Rokeach 1989). Furthermore, when consumers possess relatively little knowledge, there is a tendency to follow the guidance of experts (Earl and Potts 2004) or fellow consumers (Bikhchandani et al. 1992). Hence the diffusion of new products in such cases can be highly dependent on the nature of the social network (Rogers 1962, Granovetter and Soong 1986, Cowan et al. 1997, Janssen and Jager 2001).⁹

Thirdly, in terms of coordinating with existing consumers, Langlois notes how the distribution of knowledge across consumers and producers can influence the specific institutions by which consumers and suppliers interact (Langlois and Cosgel 1998, Langlois 2001). In the case of specialized consumers, who have a greater willingness to self-produce and demand more differentiated goods, coordination mechanisms tend to be more modular, which allow consumers a greater degree of customization. Cosgel and Langlois give the example of the Land's End catalogue which, by offering a varied assortment of mix-and-match clothing elements within a coordinated design paradigm, allows consumers to better fine tune a wardrobe to their personal tastes (Langlois and Cosgel 1998:116). Non-specialized consumers, on the other hand, may coordinate with suppliers through standardized goods and products, such as the European common standard for measuring shoe size via numbers 1-15. Standards can relate to the technical, durable and performance characteristics of a good (Farrell and Saloner 1985). Whilst inflexible, such standards provide a universal and convenient institution which helps consumers to find out which goods and services properly satisfy their wants.

Fourthly, the level of knowledge possessed by consumer can impact scale returns in production. Specialized goods tend to only allow small scales of production, since specialization leads to the differentiation of consumer's tastes. The greater the differences in the underlying likes and dislikes of consumers, the greater the likelihood they tend to incur 'mismatch costs' from using standardized goods (Bresnahan and Gambardella 1998). Consequently, producers catering to specialized consumers have a relatively smaller production run, which increases the relative price of specialized goods and services. This effect, together with rising real wages, implies that specialization has played a role in

⁹ It is unfortunate that all too often imitation is equated to status-driven behavior, although there are important differences (Campbell 1993).

stimulating the emergence of small scale and highly specialized industries (Witt 2001:35). Suppliers catering for generalized consumers would have relatively higher returns to scale, since there are generally more consumers who are not specialized and/or value slack.

Finally, specialization and generalization may also influence the role that consumers can potentially play in the innovation process. Recently, much literature has examined the role that expert consumers play in co-developing novel products and services (Schmookler 1966, Lundvall 1988, Bünstorf 2003, Jeppsen and Molin 2003, von Hippel 2005, van den Ende and Dolfsma 2005). This ‘consumers as producers’ perspective makes the valid point that much of the time inventors and entrepreneurs responsible for introducing novelty are also users, and their interest in developing innovation may be personal as well as pecuniary. Non-specialized consumers, however, are less likely to take a lead role in the introduction of innovation, although their learning processes are equally important in determining the success of a novelty. In this sense, markets in which there are a higher number of specialized consumers have a higher probability of witnessing the introduction of novelties which have been co-developed with consumers. Of course, whether or not co-development takes place also depends on whether consumers and producers have the proper means to cooperate with each other, whether the goods and services in question can be developed on a small scale, or whether the economic system is generally open to such entrepreneurial activity (van den Ende and Dolfsma 2005). We can summarize these stylized facts in the following Table 5.1:

Table 5.1: Impact of specialization and generalization on markets.

Interaction type	Functional change	Advertising/ Diffusion	Coordination	Scale returns	Innovative Consumers?
Specialization	Performance – orientated	High information, specific targeting	Modular	Low	More likely
Generalization	Convenience, Multi-purposed	Sensoric, low information, mass targeting	Standard	High	Less likely
References	(Scranton 1994, Bianchi 1997, Bianchi 2002)	(Rogers 1962, Granovetter and Soong 1986, Foxall 1990, Cowan et al. 1997, Janssen and Jager 2001)	(Langlois and Cosgel 1998, Farrell and Saloner 1985)	(Scranton 1994, Langlois 2001)	(Schmookler 1966, Lundvall 1988, von Hippel 2005, Jeppsen and Molin 2003, van den Ende and Dolfsma 2005)

Taken together, these stylized facts provide evidence that important differences exist in how markets grow that depend on the level of knowledge accumulated by consumers. Because markets are essentially higher order tools which consumer use to satisfy their wants, it makes sense that they are themselves strongly impacted by what consumers know and act upon.

Therefore, scholars interested in studying the precise ways in which consumption has grown should take heed of the important differences which characterize those markets serving generalized consumers from those that serve specialized consumers. In the following two chapters we examine long run changes in the goods and services in two submarkets of tourism to see whether they correspond with these stylized facts. However, it should be noted that due to the limitations of historical research it is not possible to gather data for all of these categories. We do however find that, whilst by no means infallible, these stylized facts provide a good rough guide for better understanding market evolution. In chapter 5 we further consider the possible dynamic interrelations between generalized and specialized markets in the market for tourism intermediary services.

2.6 Conclusion

In this chapter we have reviewed various approaches used to understand both how consumer behavior changes and how this change impacts economic systems. Standard neoclassical microeconomics strictly examines behavioral change in terms of the consumer's reaction to prices, and how it impacts economic activity through changes in quantity demanded. Alternatively, Carl Menger challenges economists to go one step further and understand the learning processes by which 'things' come to be associated with the underlying wants of consumers. Introducing the concept of wants sheds more light on both i) how consumption patterns adapt to increasing income in the long run and ii) how consumer learning processes may impact the organization of markets and the qualitative change in goods and services in the short run.

Synthesizing this challenge with an understanding of human evolution, a new research agenda emerges in which it is possible to build a richer account of how per capita consumption expenditure has grown and changed in the long run as income has risen. From this perspective, the LTC approach highlights how changes in the wants that consumers have as well as changes in how consumers have learnt to satisfy these wants both contribute to this process. In both cases, regularities exist which govern these changes and have important implications for the organization of economic activity. By also taking into account the interaction of insightful and associative modes of learning, a greater understanding is attained for the conditions under which consumers intensively accumulate knowledge about consumption acts. As such we seek to return to economic theory's fundamental aim:

“Economic theory is concerned, not with practical rules for economic activity, but with the conditions under which men engage in provident activity directed to the satisfaction of wants,”(Menger 1950:47).¹⁰

¹⁰ „Die theoretische Volkswirtschaftslehre beschäftigt sich nicht mit praktischen Vorschlägen für das wirtschaftliche Handeln, sondern mit den Bedingungen, unter welchen die Menschen die auf die Befriedigung ihrer Bedürfnisse gerichtete vorsorgliche Tätigkeit entfalten.“

3. Consumer specialization and the Romantic transformation of the British Grand Tour of Europe

“Anything that can be learned by a normal American adult on a trip to a foreign country (of less than one year’s duration) can be learned more quickly, cheaply and easily by visiting San Diego Public Library” (Simon 1996:306).

“What is the good of moving when a person can so wonderfully travel sitting in a chair?” Duc des Esseintes, *A Rebours*, J. K. Husmans 1884.

3.1 Introduction

This chapter aims to understand how the act of travel came to be associated with the want for arousal, and how consumer specialization impacted on this relationship in the Romantic era of the British Grand Tour of Europe.¹¹ It has been argued that with growing income the consumer’s want for arousal plays an increasingly important role in consumption (Scitovsky 1976, Zuckerman 1994). Some degree of change is inherent in these consumption activities because consumers, after prolonged exposure, become less responsive to stimuli (habituation effect). Throughout history many forms of entertainment have emerged which may satisfy this want (e.g. watching television, reading books, listening to radio). As we show in the early history of the Grand Tour, a relatively early type of such means that emerged in Britain after the enlightenment was travelling and visiting stimulating destinations in continental Europe.

At the same time, given its relatively complicated, expensive, time-consuming and potentially hazardous nature, one would expect that this type of travel would decrease in popularity with the emergence of a multitude of relatively more convenient means of entertainment. This would fit Scitovsky’s contention that consumers tend to utilize more convenient (low-skill) means of entertainment, which in turn leads to a decline in their detailed knowledge about less convenient means of attaining arousal. Yet during the Romantic transformation of the Grand Tour in the late 18th century, this type of travel

¹¹ A tour of the principal cities and places of interest in Europe (Towner 1985:297).

increased in popularity precisely at a time when a more convenient source of stimulation emerged in the form of inexpensive reading literature. This occurred well before modern transport technologies, such as the steam-train, made travel relatively faster and more convenient. Furthermore, destinations that became popular in this era were often described as ‘desolate’ and generally lacked the accommodation and entertainment infrastructure that other established cities, such as Paris and Rome, already possessed.

To explain this change, we take into account how consumer specialization can influence the manner in which consumers satisfy their want for arousal. Through satisfying their want for arousal via reading the recently-emerged Romantic literature, consumers were exposed to particular arousing stimuli in the form of certain scenic landscapes. Furthermore, this literature not only provided exposure to but also information about such stimuli that enabled consumers to insightfully learn about the nature of these stimuli and the act of travel. Consequently, we argue that specialization was fostered by the emergence of the print industry and this encouraged a new generation of consumers to visit regions which seemingly had a relatively poor ability in terms of its infrastructure and entertainment facilities to satisfy their want for arousal. Thus, by understanding its impact on consumer specialization, we can track how the emergence of a convenient mode of entertainment, namely the reading of romantic novels, dynamically *complemented* rather than competed with the more high-skill act of travel as a means by which consumers exposed themselves to arousing stimuli. This underlines how the study of consumer specialization may yield insight into the economic relations between goods and services that serve the same want.

Furthermore, we argue that consumer specialization has a twofold impact on the degree to which habituation necessitates change in how consumers satisfy their want for arousal. Because they accumulate detailed subjective consumption knowledge, specialized consumers tend utilize it by varying aspect of the consumption act, e.g. how they expose themselves to arousing stimuli. Scientific evidence suggests that such variation can significantly delay, or even entirely inhibit, the rate at which consumers habituate to a particular stimuli. Secondly, specialization can localize the impact of habituation on the consumption act in that specialized consumers tend to classify arousing stimuli in greater detail and may via modification discover other arousing stimuli that also become associated with the act. Some preliminary evidence for this is reflected in the arguments made by Romantics in opposition to modern forms of travel. They contended that such modes as

travel by steam-train essentially deny tourists the ability to control the rate and manner in which they are exposed to scenic landscapes. All in all, these insights suggest that while change is an inherent feature of consumption activities related to the want for arousal, thanks to the impact of new forms of entertainment which may foster specialization, an increasing amount of this change is the result of consumer specialization processes rather than habituation dynamics.

This chapter is structured as follows. Section 3.2 examines the want for arousal, and Scitovsky's argument about how it has impacted on modern consumption patterns. Section 3.3 applies this analytical narrative to the evolution of the British Grand Tour, one of the earliest examples of tourism in modern Europe. Whilst useful in accounting for some early changes, in order to explain the emerging popularity of certain destinations, section 3.4 considers the role that consumer specialization can play in these consumption activities and how modern forms of entertainment act to foster such learning processes. Section 3.5 then examines what evidence there is for the argument that such learning processes gave rise to the Romantic transformation of the Grand Tour. Section 3.6 examines how the tendency of specialized consumers to modify aspects of the consumption act can interfere with habituation and its impact on how consumers satisfy their want for arousal, while section 3.7 summarizes and draws some conclusions.

3.2 The want for arousal and the evolution of entertainment

In this section we discuss the want for arousal and how it is hypothesized to impact consumption patterns as income growth and technological advancement. The general human disposition to be curious has received much attention and throughout history scholars including Aristotle, Cicero, Bentham, Burke and Kant have extensively discussed the passion for learning and the 'appetite' for knowledge (Loewenstein 1994). From an evolutionary perspective much evidence suggests that certain animals also engage in exploratory behavior. Whereas most organisms tend to rest when not driven to act by their basic wants, the more advanced species, such as mammals, tend to engage in a range of ludic activities (MacDonald 1993). This tendency is correlated with brain size and is thought to play an important role in the development of learning mechanisms and the brain (Fagan 1981). Studies reveal that the content and structure of ludic activity also appears to vary little across affected species: categories of play include exploring the environment and interacting with objects found in

the environment (e.g. horses tend to sniff, paw, pull, nibble, pick up, carry objects); interacting with other conspecifics (circling around, chasing, teasing, touching, play-fighting); or simply loco-motor play involving certain exercises, such as jumping and frolicking (Fagan 1981). It has also been found that the absence of hunger and thirst tends to positively influence the probability that animals engage in ludic behavior (Bell 1991).

Exploratory behavior is an important sub-category of ludic behavior. It is defined as the tendency of organisms to interact with the environment when there is no obvious reward (Loewenstein 1994:81). A number of studies show that it has motivational value independently from other basic wants such as hunger or thirst (*ibid*). For example, Rats have been found to be willing to endure electrical shock in order to explore novel stimuli with no apparent connection to reinforcement (Dashiel 1925, Nissen 1930, Montgomery 1953). It has also been shown that monkeys attempt to solve a puzzle with no external incentive for doing so (Harlow 1950), and that the opportunity to explore acts as a source of reinforcement that triggers monkeys to discriminate neutral stimuli which are associated to this opportunity (Butler 1953).

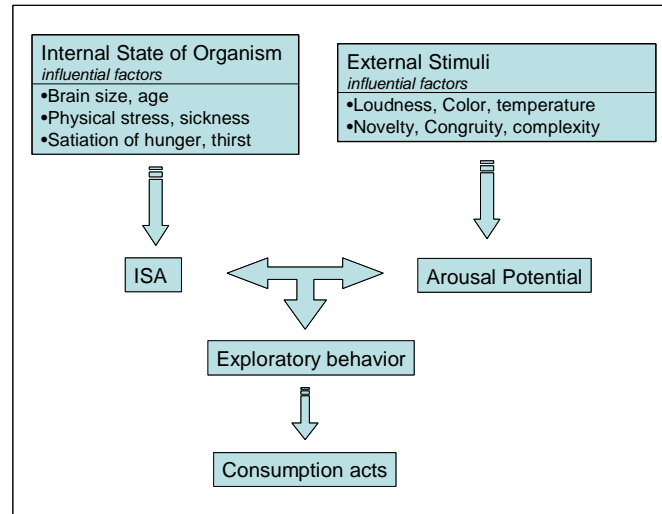
Theoretically, a general approach to studying this tendency to explore is to examine both i) the internal state of the organism and ii) the nature of the stimuli which it is exposed to (see figure 3.1 below). This approach was pioneered by Berlyne (Berlyne 1960, Berlyne 1971) and was later applied to consumer theory by Scitovsky in his book *The Joyless Economy* (Scitovsky 1976). Regarding i) arousal is defined as the level of alertness or activation of an individual, ranging from extreme drowsiness to extreme wakefulness (Berlyne 1960).¹² Many factors have been identified as influencing the organism's level of arousal. For example, the deprivation of basic wants is a stimulator of arousal, while satiation of hunger tends to reduce arousal (Scitovsky 1976:29). In general, it has been posited that consumers tend to seek an Intermediate State of Arousal (ISA) that is, as Scitovsky puts it, being 'between strain and boredom' (Scitovsky 1976:15, See also Zuckerman 1994:13, Steenkamp and Burgess 2002).¹³ When the consumer's arousal level is above the ISA, they typically look for ways of reducing arousal towards the ISA (e.g. relaxing after a stressful day, cooling down when too hot). When it is too low, they look for ways of increasing arousal (e.g. watching television

¹² Despite its age, the concept of arousal is still widely used (Zuckerman 1994, Steenkamp et al. 1996, Parker and Tavassoli 2000) although some criticisms of the concept have been made (Winton 1987, Rozin 1999).

¹³ It is originally called the 'optimal state of arousal' but we do not use this term in order to avoid confusion with the economic term 'optimum'.

when bored, exercising). We identify the negative/positive difference between the ISA and the consumer's actual arousal level and the corresponding motivation to act with the want for arousal.¹⁴

Figure 3.1: Factors influencing the want for arousal.



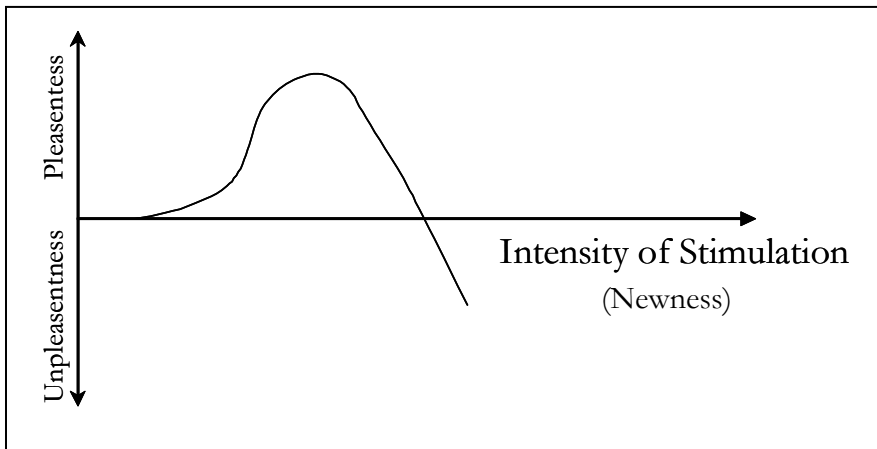
Regarding ii), arousal potential is the extent to which a stimulus is capable of raising arousal, and to generally excite the nervous system. Certain properties of stimuli contribute to their arousal potential. For example, the psychophysical properties related to the physical and chemical characteristics of the stimuli, e.g. their loudness, color and temperature, are found to positively contribute to their arousal potential. Furthermore, their collative properties (novelty, congruity and complexity) can also positively influence arousal potential (Berlyne 1971). These depend on the comparison, or collation of various stimulus elements with each other or with previous experiences of the consumer (Steenkamp et al. 1996:321).¹⁵ Here Scitovsky emphasizes that a very potent source of arousal is novelty (Scitovsky 1976:31). He notes that when an organism has “eaten, drunk, made love, and is fully satiated and comfortable in all other respects...,” one of the few motivations that can stimulate

¹⁴ Recently, further insights into the functioning of the brain's reward centers has revealed that the ISA's biochemical basis is related to three main neurotransmitters: Dopamine, norepinephrine, and serotonin (Parker and Tavassoli 2000:36). Dopamine is involved in the anticipation of reward and in the sensory arousal associated with novel and intense stimuli. Serotonin is found to be involved in inhibiting the behavioral reactions to stimulation, while norepinephrine provides psychomotor arousal associated with stimulation itself. Depressed levels of these three transmitters have been associated with low arousal levels (Zuckerman 1994:304). The want for arousal has also been labeled elsewhere as the 'need for stimulation' (Steenkamp et al. 1996).

¹⁵ Whilst arousal potential is still a popular concept, the notion that the stimulus' complexity can be measured has been criticized (Kubovy 1999:140).

action is a new or unexpected change of the environment (Scitovsky 1976:33). According to the Wundt curve (depicted below), stimuli of an intermediate degree of novelty are pleasantly arousing. If they are too novel, they are perceived as unpleasant (Scitovsky 1976:35).

Figure 3.2: The Wundt curve.



(Source: Scitovsky 1976:35)

How does this want for arousal impact long run consumption patterns? Scitovsky argues that with technical progress, consumers are *less* deprived of other basic wants (e.g. food & suchlike), and hence are *more* deprived of important sources of arousal, “What I am arguing therefore is that at an earlier stage of development, the ordinary routine of a more difficult existence imposed as much excitement as most people could take, but that progress since then, by reducing the intensity of those unwanted excitements and tensions, has created, for the first time in many people’s lives a positive need for excitement, which they seek to fill for enjoyment’s sake.” (Scitovsky 1981:5). Therefore, in order to avoid painful boredom, consumers search for ways to increase their arousal level, either through physical or mental stimulation (Scitovsky 1976:31).

In the literature, the idea that historically low arousal levels (i.e. greater amounts of boredom) drive modern consumers to expose themselves to arousing stimuli has been strongly criticized. First off, Scitovsky equates boredom with a state of low arousal (Scitovsky 1976:31) even though Berlyne, upon whose work Scitovsky builds his argument, sees boredom as related to high arousal (Berlyne 1960:189). Berlyne notes that a low level of arousal is not perceived as unpleasant or distressing, and generally causes subjects in sensory-

deprived environments to sleep. It is only when they can no longer sleep that sensory-deprivation is perceived as painful by subjects. While boredom in Berlyne's sense would still be a state which motivates consumption acts, it is a very extreme state that would occur rarely, if ever, in day-to-day life (Steenkamp et al. 1996:321). Earl doubts that modern consumption patterns are driven by boredom since the increasingly complex and diverse nature of goods and services available in affluent societies tends to complicate rather than simplify consumption activities in a way that is increasingly stressful for consumers (Earl 1998:138).

Nevertheless, one point in which there is consensus is that the ability to satisfy the want for arousal has strongly benefited from technological progress in information, storage and communication technologies (ISCT). This progress has fundamentally magnified the unique ability of humans to store and communicate knowledge and information in extra-somatic ways, which forms the basis of cultural evolution (Flinn 1997:36).¹⁶ The average household in developed economies today contains books, magazines, radios, television, DVD players, computers, and stereo systems (Vogel 1998). Considering that in the early 18th century only around 22% of English households owned books (Weatherill 1988:26), this change represents a large addition of entertainment means to the consumer's local habitat in a relatively short period of time.¹⁷ For most of history, the only means of communicating was through speech and painting (DeFleur and Ball-Rokeach 1989:11). In approximately 4000 B.C. the first pictographic writing appeared, while in the 15th century the printing press was reinvented in Europe and led to the emergence of various types of newspapers, books and magazines. In the 19th century motion picture and the cinema emerged, as did the phonograph. Finally, the 20th century witnessed the emergence of radio, television, and the internet (DeFleur and Ball-Rokeach 1989:26). In terms of delivering potentially arousing stimuli, these advances in ISCT served not only to provide quantitatively more arousing stimuli but they simultaneously improved the quality and the arousal potential of available stimuli (Winston 1998).

Beyond affecting the quantity and quality of arousing stimuli which consumer could gain exposure to, Scitovsky also notes that modern forms of entertainment are more

¹⁶ Economic historians have noted the importance of 'external storage systems' as the taproot of modern technological culture (Donald 1991:308).

¹⁷ We equate 'entertainment' with consumption act that aim to satisfy the want for arousal. It refers to "the act of diverting, amusing, or causing someone's time to pass agreeably." (Vogel 1998:xvii).

convenient as they require relatively fewer ‘skills’ on the part of consumers (Scitovsky 1976:226). For example, to read a book requires consumers to be literate, whilst watching television only requires consumers to direct attention towards the source of the stimuli. While this still requires some skill, the basic level of knowledge the consumers must have to gain some pleasant arousal from the act is relatively lower. In the following we call these low-skill forms of entertainment ‘convenient’ means of entertainment.

Scitovsky argues that by providing access to more arousing stimuli in an increasingly convenient fashion, these convenient forms of entertainment tend to replace other, less convenient, forms of entertainment as income increases. This is because, firstly, in relation to high-skill forms of entertainment there is a ‘rational bias’ against acquiring consumption skills. For when deciding to invest in the attainment of skills, the consumer “cannot attach a dollar value to the skill of enjoying a concert or a ballet... With so many unknowns so utterly impossible to estimate, it seems rational... to discount the benefits heavily and to opt instead for adding to our production skill and their easily quantifiable benefits,” (Scitovsky 1976:231).¹⁸ Furthermore, the nature of modern work increasingly requires a growing number of professional and vocational skills which tend to ‘crowd out’ consumption skills and knowledge (Scitovsky 1976:229). Thirdly, because consumers form habits, they may still continue to use convenient forms of entertainment even when they are no longer arousing (Scitovsky 1976:124). He argues that consumers derive ‘comfort’ from the mere act of keeping such old habits. Finally, American culture in particular has a Puritan ‘ghost’ which is biased against the acquirement of skill purely related to the attainment of pleasure (Scitovsky 1976:228).¹⁹

Leaving aside for now a critical evaluation of these arguments, let us note other scholars have come to a similar theory from the perspective that an increasing level of income raises the opportunity cost of time (Lindner 1970, Becker 1996). If one is willing to accept this observation, then it is not difficult to argue that this tendency can also impact the

¹⁸ By ‘production skill’ Scitovsky was referring to skills relevant for employment.

¹⁹ In relation to the rational bias, this argument relies heavily on a conception of consumer behavior where agents are purely ‘forward-looking’ in that they imagine a number of hypothetical scenarios of the future and choose those actions which have the best expected outcome. In relation to habit-formation argument, this is problematic given that evidence shows that ‘habits’ become extinct when they are no longer associated with reinforcement. Scitovsky does acknowledge this process of extinction, but argues that the rate at which this occurs is generally very slow (Scitovsky 1976:124).

time-intensive accumulation of consumption knowledge.²⁰ For example, Cosgel and Langlois reason that as income rises the increasing opportunity cost of time can lead consumers to ‘outsource’ knowledge-intensive activities to consultants (Langlois and Cosgel 1998:118). Hence in terms of understanding what impact emergence more convenient means of entertainment has on consumption knowledge, from Scitovsky’s perspective we can formulate the following hypothesis:

Hypotheses 1: As technological progress yields new means by which consumers can gain exposure to arousing stimuli, consumers tend to substitute away from less-convenient means of attaining arousal towards those which are relatively more convenient.

Scitovsky argues that this tendency is problematic for consumers as such convenient forms of entertainment are relatively poor sources of novelty (Scitovsky 1976:233). Consequently, as novelty gets used up in the act of enjoyment through the process of habituation, consumers naturally tend to become less responsive to a stimulus after prolonged exposure (Scitovsky 1976:58, Wathieu 2004). As Scitovsky puts it “What arousal they attain from such ‘unskilled’ acts as watching television, going shopping and driving is fully adequate when the time devoted to their enjoyment is suitably limited, spaced and selected but quickly becomes redundant, unsurprising, and monotonous as we devote more and more time to them in the vain hope that intake of novelty will keep step with the increased time we spend on them,” (Scitovsky 1976:233).²¹

An important question in respect to the magnitude of this problem is to what extent habituation effects induce changes in consumption activities. For example, if a consumer becomes habituated to watching a certain television show, do they become habituated specifically to that particular show, or generally to the act of watching television? While the

²⁰ For a critical rebuttal of the ‘time squeeze’ argument see (Lebergott 1993:138).

²¹ Another critique Scitovsky has of modern consumption relates to the frequency of consumption. Because of their frequency, many consumption acts today do not deliver pleasure (Scitovsky 1976:71). According to the ‘law of hedonic contrast’ pleasure derives from changes in arousal level. Hence, consumers derive pleasure from satisfying their want for arousal only if there is a critical difference between their current state of arousal and the ISA. However, because consumers prefer ‘comfort’ since modern consumption techniques are able to maintain the consumer close to the ISA, most changes are not significant enough to yield pleasure. This essentially leads to a ‘joyless’ nature of consumption. Whilst this is an important critique, due to spatial limitations, we refrain from discussing it in more detail due to spatial limitations, this critique.

answer depends on what alternative activities the consumer engages in, it also depends on whether consumers have the knowledge and ability to vary the details of their consumption activity. For instance, if they have the ability to change the program habituation to one particular show may simply cause the consumer to switch the channel. On the other hand, if they cannot change the channel, or if they think that all television programs are generally similar, this habituation process may lead the consumer to cease watching television altogether. The answer, therefore, depends on what consumers know about the activity, the goods and services involved in the activity, as well as their ability to modify the arousing stimuli they are exposed to. Section 3.4 will further discuss this issue.

3.3 The evolution of the Grand Tour

Having described the want for arousal, we now evaluate how analytically useful it is for understanding the historic evolution of the British Grand Tour of Europe, and evaluate what evidence it yields to support Hypothesis 1. Many scholars argue that a significant proportion of recreational travel is related to the human's natural tendency to actively explore their environment, a longing to learn and experience the unknown (e.g. Stagl 1995:4, Scitovsky 1976:194).²² Historical evidence suggests that it was common to travel in order to gain exposure to many different types of arousing stimuli. In pre-industrial Britain, this took the form of visiting regional fairs and festivals that were a common occurrence throughout England. These festivals offered a wide range of entertainment, including alcohol consumption, gambling, theatre troupes, street entertainers, and street sports, such as football (Vorspan 2000:912). Elsewhere, art galleries, famous theatrical performances, sporting events, ballroom dances, museums, and big crowds, are all types of traditional stimuli that have significant arousal potential and have long motivated travel (Adler 1989, Feiffer 1986, Towner 1996).

Nevertheless, historically travel represents a relatively difficult means of attaining exposure to arousing stimuli as it involves a multitude of costs and discomforts. Compared to other forms of entertainment, it takes a relatively long time and there is a high degree of uncertainty pertaining to the hedonic value of the act since it is an 'experience good' (Ruprecht 2002b:53). As Scitovsky notes in relation to modern travel, while it is an activity rich in arousing stimuli, there are also many potential inconveniences to endure, for

²² Commonly described as *Wanderlust* in the tourism literature (Gilbert and Abdullah 2004).

“traveling involves the austerity of summer housing, the discomfort of unfamiliar beds and baths, hazards of restaurant food, crowding, exposure to weather, danger of reservation not being honored (Scitovsky 1976:194). With respect to pre-industrial Europe, Braudel summarizes the history of transport as “bad roads, ridiculously low speeds,” (Braudel 1992:42). Noting that Napoleon traveled no faster than Julius Caesar, he estimates that using the most advanced means of transport available in the 18th century 100 kilometers was the maximum distance covered in one day (*ibid*). Apart from improvements in canals and some road networks, transport conditions in continental Europe did not significantly improve until the emergence of the railway networks that only emerged in the 1840s (Walter 1995:51). Even with bearable road conditions, the pre-modern traveler faced a number of other problems, such as expensive toll inspections, changes of routes due to seasonal conditions, and the possibility of attacks by thieves and brigands (Braudel 1992:52). Furthermore, travel may have necessitated the acquirement of skills such as being able to converse in foreign languages and calculating wildly varying exchange rates between different local currencies.

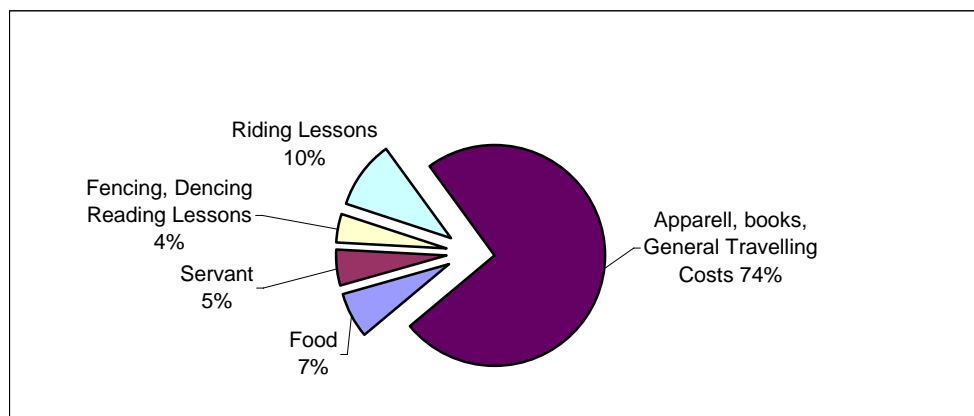
Consequently, especially in the era before modern transport that made this act more convenient, one would predict that the emergence new forms of entertainment would severely diminish the consumers’ incentive to travel as stated in hypothesis 1. Hence, we look to find what evidence supports this hypothesis in the periodic changes in the European destinations that British tourists visited on the ‘Grand Tour’ of Europe. It is typically described as “A tour of the principal cities and places of interest in Europe,” (Towner 1985:297). In the tourism literature, the Grand Tour is frequently discussed since it was the first openly secular form of travel in the 16th century and led to the creation of an identifiable tourist infrastructure in destination countries (Towner 1985). Over time the Grand Tour underwent two significant changes in terms of destinations visited, the motivations for travel, and associated consumption activities undertaken (Adler 1989). In the following we examine each of these changes separately and discuss what evidence they yield in relation to hypothesis 1.

The first gradual change occurred circa 1500 - 1750, during which the Grand Tour slowly transformed from being primarily an educational activity to being a recreation-orientated activity. Originally, during the 16th and 17th century, the Grand Tour emerged as a means of educating young aristocrats. Often partially funded by either governments or universities in the interest of producing young diplomats, travelers sought to develop

international contacts, judicious political judgment, and adeptness at foreign languages (Feiffer 1986:64). From the sixteenth century onward the education of the British elite was also influenced by the Renaissance's quest to cover as much knowledge as possible, including classic European literature, art and architecture (Towner 1996:100). Travelers also sought to engage the services of Europe's dancing, music, fencing or riding masters with whom they would be forced to speak in foreign tongue. Consequently, their primary destinations were the universities of Paris, Bologna or Padua.

Early treatises on the art of travel emphasized the importance of scholastic discourse and impartial observation. An important part of travel was to speak with eminent scholars (Adler 1989:1383). For this reason the general practice was to keep a book with blank pages, an *Album Amicorum*, in which travelers would collect inscriptions of reputed scholars. Also, according to Francis Bacon's instructions, the tourist should systematically investigate each and every court, church, monument, fortification, harbor, antiquity, library, college, disputation, army, navy, arsenal, magazine, bourse, warehouse, fencing school, riding academy, theatre, treasury, cabinet and museum (Feiffer 1986:69). In the process, the tourist should measure all accessible structures and record all available statistics into his travel notebook. Thus study constituted a substantial financial item in the traveler's budget. These costs included not only university lessons but also lessons in manner and style, such as riding, fencing, and dancing, as well as the cost of language schools in Blois, Saumur and Siena (Maczak 1995:77).

Figure 3.3: Expenditure of a tourist in France, late 16th century.



(Source: Maczak 1995:78)

Over time interest was gradually directed away from places of learning towards more entertaining locations. This is reflected in a decline in the number of visitors who attended university (Towner 1985:310). While such data is rare and hence low in terms of the number of observations, Towner examined the records of 108 different tourists between 1547 and 1840 and found that 85% of the sample who went on the Grand Tour attended university in the period between 1604 and 1639. This fell to around 20% in 1814 and to virtually nothing by 1840. Furthermore he found that the average length of the tour had also dramatically declined. For while in the period from 1604 to 1638 the average length of the Grand Tour was around 30 months it had dropped to around 4 months in the 1830s (Towner 1985:315). This supports the notion that the Tour decreasingly related to education, since study required considerable lengths of time being spent in European universities.²³ In this period, educational centers in Europe also featured less significantly in travel itineraries, including Padua and Siena in Italy as well as Saumur, Tours and Blois in the Loire valley (Feiffer 1986:111).

As the length of the tour declined, major centers such as Paris and Rome came to dominate the Grand Tour from the 1660s on (Towner 1985:321). Visits to these locations took a large proportion of the tour, with tourists making only a few short stays at other locations. Hence, this decline in duration seems to have been accompanied by a decline in the diversity of places visited. From the perspective of the traveler who is motivated by the want for arousal, it seems logical that consumers would have focused on the major cities because they were better connected in terms of travel infrastructure and offered a multitude of attractions. Rome especially was well equipped with stimulating attractions because of its history as the capital city of the Roman Empire. Many cultural events were also frequently staged in cities, including operas, concerts and theatre performances. Minor cities that were visited less frequently included Venice, Florence and Naples as well as Cologne and Frankfurt (Towner 1996:108).

Furthermore, the focus of traveler's attention changed significantly as entertainment moved to center stage. Not only was more time dedicated to activities, such as tea parties and sports (Feiffer 1986:96) but foreign forms of entertainment were also embraced, for

²³ In the consideration of this general trend one should not forget the impact of improved transport technology and income on the duration of travel, as an increasing number of relatively less wealthy consumers started to travel (who could only afford relatively shorter trips) and transport time declined.

example carnivals in Italy. As Feiffer summarizes, “the tourist’s day was an uninterrupted round of pleasure: morning in the coffeehouse, afternoons marveling at the sights and dancing in the streets, evenings at the opera or at a private ball, of which there were several every night” (Feiffer 1986:112). Thus for some, the new Grand Tour became a symbol of hedonistic debauchery that was staged under the banner of ‘renaissance’. As a result it was ‘more often than not’ judged to corrupt the mind of young travelers (Porter 1991:25). This pursuit of pleasure inevitably led to prostitution becoming more pronounced and institutionalized in major travel destinations such as Paris and Rome (Littlewood 2002). The changing tone of travel was also reflected in guidebooks, which gave practical hints to the tourist for his pleasure trips (Feiffer 1986:100).

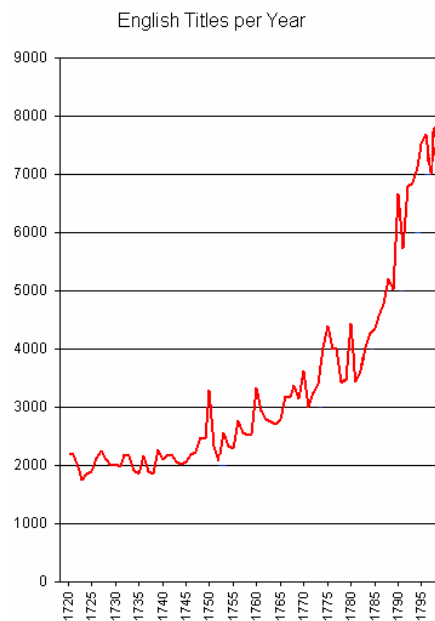
All in all, hypothesis 1 can be comfortably used to explain this initial change in the Grand Tour. With tightening time constraints, consumers limited their trips to visiting those places, such as Paris and Rome, which offered a multitude of potential sources of arousal. Furthermore, the type of activities undertaken whilst traveling also support the notion that such travel was orientated towards satisfying the want for arousal. However, in the second change that occurred in the Romantic era of the Grand Tour (1780 to the 1870s), which will now turn to review, two significant paradoxes become salient which challenge the explanatory power of this approach:

1. Despite the emergence of more convenient forms of entertainment, this type of travel became more popular, not less popular as predicted by hypothesis 1.
2. There was an increasing demand to visit and spend time in places that were relatively stimulus-poor compared to established destinations such as Paris and Rome, despite the fact that the average time spent on the Grand Tour continued to decline even further (Towner 1985).

In relation to the emergence of new means of entertainment, the late 18th century was a period in Britain in which reading material became widely available (McKendrick et al. 1985:266, Altick 1998, St Clair 2004). Previously in the 17th century, most books were relatively expensive and were mainly theological or classical in nature and mainly owned by lawyers, clergymen, gentry or prosperous merchants (McKendrick et al. 1985:267, Weatherill

1988:180-1). The change was the result of the original information revolution, namely the invention of the modern printing press, which led to the production of a many different forms of literature (McKendrick et al. 1985, Raven 1992). While in the early 1690s printing was a restricted medium confined to a few enterprises in London, Cambridge, Oxford and York, by 1800 a printing press was located in almost every small town in the country, with hundreds located in London alone (Raven 1992:1). This change was itself heavily aided by technological developments related to the improvement of paper quality and engraving techniques (*ibid*). Thus even before the introduction of steam-driven mechanized printing in 1814, English booksellers and publishers produced an immense diversity of books, pamphlets, newspapers, magazines and periodicals, as seen in the following figure 3.4. It shows the total number of titles published every year (including magazines and periodicals):

Figure 3.4: British print literature in the 18th century.



(English Short Title Catalogue 2006)

Secondly, in relation to changing travel patterns, in the period from 1780 to the 1870s the average time spent on the Grand Tour dropped even further to well below 10 months by the start of the 19th century (Towner 1985:315). Simultaneously, the destinations that tourists visited and the routes by which they traveled altered considerably. Tourists increasingly spent time visiting scenic destinations that were located away from the previously popular urban

destinations. One of the greatest benefactors of this change was Switzerland (Bernard 1978, Buzard 1993, Towner 1996:109, Chard 2002). Previously and up to the middle of the 17th century, the Alps had possessed a mainly negative image: they were seen as a barren, cold and dangerous place to be avoided by travelers (Bernard 1978:8). Now perceptions changed and consequently Switzerland emerged from a transit route for tourists traveling to Italy to becoming a major touring location in its own right. Lake Geneva in particular became a focal point for trips to smaller towns, such as Chamonix and Lauterbrunnen. Between 1789-1792 the former had recorded on average around 800-1200 annual visitors (Bernard 1978:33). In 1777 the first guidebook to the region was published and it is estimated that in 1785 ‘a large proportion’ of the 40,000 English tourists visited Lausanne between June and October (Buzard 1993:97). Note that the railway made its first appearance in Switzerland in 1844, around 50 years after the first recorded rise in popularity (Buzard 1993:41).

Elsewhere, the Rhine Valley had also changed from simply being a convenient route to a tourist attraction in its own right, where tourists particularly enjoyed viewing the steep crags and ruined medieval castles and abbey (Feiffer 1986, Buzard 1993:41). Similarly, certain travel routes changes so that travelers could enjoy new types of scenery. For example, routes from Paris to Italy started to pass by Dijon, the Jura Mountains, Geneva and the Simplon pass (Towner 1985:314). The route to Rome also changed away from passing Adriatic coastal towns, such as Ancona and Loreto, towards inland routes with more picturesque medieval towns in central Italy, such as Arezzo and Perugia (*ibid*). According to Towner, who studied the personal accounts of travelers, these changes reflected “a passion for the medieval and a love of wild nature with its sublime and picturesque scenery” (Towner 1985:314).

Aside from the Grand Tour of Europe, it is also interesting to note that in this era certain domestic locations also became popular travel destinations. In particular, the middle to late nineteenth century witnessed the resurgence in the popularity of the English Lakes District which had since the 1700s been abandoned in favor of overseas destination (Towner 1996:100). In the early nineteenth century, new hotels opened in the town of Windemere, Rydal and Grasmere (Botton 2002:138). Spending recreational time in natural environments became a widely popular pastime with an increasing number of organized trips to savor the Scottish countryside (Brendon 1991). In the late nineteenth century co-operative holiday

associations were also formed to organize countryside holidays for the working class (Snape 2004:145).

In relation to what type of activities tourists undertook whilst traveling, these became more individualistic and sedate. Daytime outdoor pursuits included sea-bathing, botanizing and observing the natural coastal scenery (Lickorish and Kershaw 1975). In line with visiting less populated areas, it also became popular to seek out peasants living in hills, to study their dances and costumes. Evening entertainment was no longer arranged solely around the social assembly rooms, but now included playing cards or just reading Romantic novels (Brookfield 1950:111-112). Moreover, there was shift in the preference for the type of lodging, driven by an appreciation of a more private, less formal way of living (Soane 1993). Typical souvenirs included gems and crystals as well plant specimens from the Alps (Feiffer 1986:148).

Finally, the class composition of tourists embarking on the Grand Tour altered considerably. From around the 1780s the professional middle class began to dominate the tours with an estimated 60% share of all tourists from that time on (see Appendix 3). This led to a rise in the average age of tourists. From the 1760s on, females and family groups also recorded a significant rise in their share of tourists (Towner 1985). Since these changes started to occur approximately 50 years before the invention of the railway, the question needs to be addressed of what stimulated this new generation of tourists, who made on average shorter trips to Europe than their predecessors, to not only visit established attractions but also spend time in quiet and relatively desolate scenic locations?

Perhaps these tourists were motivated by status in that a new generation of *nouveau riche* emerged who had the means to imitate the consumption activities of the elite. One could identify literary greats and famed travelers like Rousseau and Wordsworth as a type of 'superior class' whom consumers sought to imitate. Yet such an explanation is contradicted by the fact that the Romantic movement represented a revolt against the aristocratic way of life which the act of status seeking embodied (Campbell 1987:183). Indeed, the elite ridiculed Romantic literature and satirized it for many years for its perceived 'celebration of the banal' (Botton 2002:137). Thus such an explanation seems problematic as consumers would imitate the actions of those who were ridiculed by the wealthy.²⁴ The status approach seems to be

²⁴ For almost 200 hundred years, many scholars have equated any type of imitation with status-driven behavior (Campbell 2001). Yet imitation as an example of social observational learning does not necessarily equate to the

better suited to explain changes in the earlier era of the Grand Tour which was dominated by aristocrats who actively sought to gain status (Feiffer 1986:75). In search for a better explanation of changes in the second period of the Grand Tour, the next section considers how consumer specialization may impact the manner in which consumers satisfy their want for arousal.

3.4 Specialization and the want for arousal

In order to offer a viable explanation of the Romantic transformation of the Grand Tour, this section discusses the role that consumer specialization can play in how consumers satisfy their want for arousal. We propose a counterhypothesis (hypothesis 2) to hypothesis 1 which suggests that specialization processes may have been responsible for this change, for which evidence will be gathered in the next section. From the theory of consumer specialization set out in chapter 2 it is possible to reach a different conclusion about how the emergence of more convenient means of entertainment may affect the consumer's tendency to engage in skilled consumption acts. As noted there, specialization results from a dynamic interplay of what consumers know and like (Witt, 2001:31). On the one hand, the consumer's set of likes and dislikes guides what consumers insightfully learn about (the refinement effect). Furthermore information about consumption activities deriving from the social environment may also guide learning (shift effect). Consequently, from this approach past consumption experiences are seen as not only influencing what the consumer 'knows' but they can, under certain conditions, also stimulate changes in their underlying set of likes and dislikes.

There is a notable difference between this approach and Scitovsky's more simple and rigid characterization of how consumers decide to invest in the acquirement of consumption skills by weighing up the future benefits of such skills relative to their costs (Scitovsky 1976:230). From the theory of consumer specialization there is no single point in time where a consumer 'chooses' to specialize in one consumption act. Rather, the accumulation of consumer knowledge is seen as the outcome of a dynamic interplay between cognitive and non-cognitive learning processes. Consumers may or may not be aware of the influence that their own likings have on what they cognitively learn about. It emphasizes the 'backward looking' nature of behavior, which is also a consequence of past experiences, and not just

gain or loss of social status (Bandura 1986). Hence scholars advocating such an analytical narrative need to explicitly account for how imitation leads to the gain or loss of status.

purely the result of what consumers perceive to be the future benefits of future choices. From this perspective, different factors affect whether or not consumers acquire knowledge about certain consumption acts:

First of all, in relation to the refinement effect, an important factor that fosters specialization is the availability of information and knowledge pertaining to the consumption act in question. As Witt noted, an important reason why the consumer's subjective consumption knowledge has grown is the rise of educational institutions which make more sophisticated consumption technologies intelligible (Witt 2001:40). Since specialization involves gathering detailed information about aspects of the consumption act, such a process is fostered by the existence of sources of information and knowledge that can inform them of these details. Of course, consumers may also specialize in a consumption act on their own. For instance, a consumer who discovers a trumpet does not necessarily have to take instructions from a teacher or read a textbook to learn about playing the trumpet: they may learn via a trial and error process. However, in many circumstances consumers who seek information tend to access knowledge that exists in society, simply because it can accelerate the rate at which knowledge is accumulated (as will be discussed below). Thus, the availability of knowledge (e.g. the availability of trumpet teachers or textbooks on trumpet playing) is an important factor that may foster consumer specialization processes.

Second, in relation to the shift effect, what consumers specialize in also depends on how intensively information about the consumption act is communicated across social networks. Information and knowledge that the consumer is exposed to in social interaction tends to attract attention, especially if they are communicated under reinforcing conditions (Witt 2001:36). This is different from the general availability of knowledge, since here consumers are inadvertently exposed to information through their social environment, whilst knowledge that is tacitly available in the cultural institutions may not necessarily come to the attention of consumers. For example, information about the philosophy of Friedrich Nietzsche may be easily available to a consumer via a library or the internet, but whether or not consumers access this available information is altogether another question. Here exposure to information through social interaction can make an important difference in the probability that consumers will access knowledge that is socially available. As a result, knowledge that is actively communicated amongst groups of consumers can lead members

to specialize in a similar direction and may give rise to sub-cultural phenomena (Witt 2001:36).²⁵

In light of these two factors, one must question whether the tendency described in hypothesis 1 leads to consumers possessing less knowledge of less-convenient forms of entertainment. First of all, many modern forms of entertainment do not only act to expose consumers to arousing stimuli: they can also contain information which may foster consumer specialization processes. In economic history, it is generally agreed that ISCTs have aided the learning and innovation processes of suppliers by reducing access costs of knowledge and promoting its dissemination amongst agents on the supply side (Mokyr 2002:43).²⁶ However, beyond influencing supply side learning processes, it is obvious that these information technologies also impact on the learning processes of consumers. Take a simple example of a children's book about dinosaurs. Not only does it contain arousing stimuli in the form of dinosaurs, but it would also contain information about the dinosaur's behaviour, habitat, eating habits and so on. While consumers find exposure to dinosaurs stimulating, the book also provides information which enables consumers to gain detailed knowledge about this phenomenon. Similarly, television travel programs do not only contain arousing stimuli in the form of beautiful locations but they can also include knowledge about the destination shown in the program. As a result, rather than viewing the emergence of these forms of media simply as sources by which consumers gain exposure to arousing stimuli, these technologies can also act as sources of information which may aid the refinement effect in that consumers gain detailed knowledge about arousing stimuli.²⁷ Furthermore, because this information is presented to the consumer in association with

²⁵ Beyond these factors, it should be emphasized that certain similarities between the approaches by Witt and Scitovsky exist. For both basic constraints still matter, for example, incomes and prices may limit the frequency of consumption, and the rate of knowledge accumulation. Furthermore, the probability of specialization in entertainment activities is affected by whether or not more basic wants, such as hunger and thirst, are satiated.

²⁶ Donald argues that ISCTs have impacted the cognitive architecture of agents (Donald 1991:309). Technology which allows humans to store and access information mimics the function of biological memory, but it has the chief advantage of being able to store relatively more knowledge in a way that does not necessarily degenerate over time. Furthermore, once it is shared, Donald notes that knowledge becomes more robust and precise, "Thought moves from relatively informal narrative ramblings of the isolated mind to the collective arena, and ideas thus accumulate over the centuries until they acquire the precision of continuously refined exterior devices," (Donald 1991:311). In other words, information technologies do not only enable society to store more knowledge, but because of its collective nature knowledge stored in these systems becomes more refined and systematized.

²⁷ Of course to what degree media can not only be entertaining but also informing depends on the type of content in question (DeFleur and Ball-Rokeach 1989, Winston 1998).

arousing stimuli, such information has a relatively higher probability of capturing the consumer's attention than other information which is not associated with arousing stimuli.

Hence given that new means of entertainment may stimulate rather than dampen consumer specialization processes, we hypothesize that these may dynamically *complement* rather than *substitute* less convenient means of attaining exposure to arousing stimuli. In chapter 2 we noted how specializing consumers, because of their refined knowledge and specific likings, tend to significantly modify the goods and services used in the consumption act. In the context of the want for arousal, specialized consumers seek to vary the manner in which they are exposed to the arousing stimuli about which they have accumulated detailed knowledge. As a result, a subsequent change in the means by which they expose themselves to particular stimuli may lead them to engage in relatively less convenient means of satisfying their want for arousal. For example, mountain climbing in the Himalayas may come to the attention of a consumer via social communication or through watching a television program. Such arousing stimuli may lead the consumer to buy climbing magazines or to engage in minor climbs, an act through which they may gain more knowledge about the sport in general and what particular types of climbs they like. Eventually, with rising income, this learning process may lead them to engage in a range of relatively difficult climbing expeditions. Thus one single learning process related to gaining exposure to 'mountain climbing' entails different stages in which there is a significant change in the means used to satisfy the underlying want for arousal. Such a change may lead the consumer to engage in relatively inconvenient, high skill consumption acts. In this way, the relatively convenient forms of entertainment that initially stimulated the specialization process can complement high-skill forms of entertainment that are undertaken by relatively specialized consumers. We summarize this argument in the following hypothesis:

Hypothesis 2: By fostering consumer specialization processes, certain relatively more convenient means of attaining exposure to arousing stimuli can dynamically complement rather than substitute less convenient means of gaining exposure to arousing stimuli. This occurs because, via specialization, consumers tend to vary the manner in which they are exposed to particular stimuli, which may lead to a change in the means by which they satisfy their want for arousal.

Hypothesis 2 is a counterhypothesis to Hypothesis 1 as it argues that under certain conditions, more convenient forms of attaining arousal can complement rather than substitute less convenient forms of attaining arousal. However it should be note that this hypothesis does not apply to all convenient forms of entertainment, but only those which tend stimulate specialization. To account for the Romantic transformation of the Grand Tour, in the following we review evidence that the emergence of books fostered a consumer specialization process that stimulated a new generation of consumers to travel.

3.5 The Romantic transformation

In this section we argue that the emergence of Romantic literature in late 18th century Britain stimulated consumer specialization processes in two ways: Firstly, it produced a shift effect in so far as the relatively inexpensive nature of mass produced literary novels led to the reading of literature becoming widely diffused and hence a popular topic of social conversation. Secondly, this literature also fostered a refinement effect since it provided not only exposure to certain stimuli, but also information about the details of particular arousing stimuli. The result was that specialized consumers were motivated to travel and visit and experience those arousing stimuli which they had become first exposed to via reading. Thus we arrive at a more satisfying explanation of the Romantic transformation of the Grand Tour described in section 3.3.

The emergence of the British print industry was already described in section 3.3. With its rise, reading habits diffused widely amongst the British population (Raven 1992, Altick 1998). Total sales of newspapers in England jumped from 7.3. million in 1750 to over 16 million in 1790 (Raven 1992:34). While the average number of new novel titles between 1740 and 1760 remained roughly stable at around 20 per annum, this number exploded to 60 in 1770 and rose to around 90 at the beginning of the 19th century (Raven 1992:34). As a way of making Romantic novels more affordable, they were sold in quarters, each sold for a price of approximately 30 British shillings (in 1812), which amounted to half the weekly income of a professional (St Clair 2004:186). Beyond cheaper prices, St Clair notes how in the 1790s a ‘explosion in reading’ was fostered by the abolition of perpetual copyright, which led to the flourishing of literary piracy (St Clair 2004:235). The state also encouraged aspiring authors to publish in the form of Queen Anne’s 1710 Act ‘for the encouragement of learning’, which was designed to reward the inventiveness of authors with the sole right of publication for a

term of fourteen years (St Clair 2004:43). However, this was not effective until 1774 as a monopoly still governed the publishing industry keeping book prices restrictively high (St Clair 2004:101).

The diffusion of reading habits had unprecedented social ramifications (Campbell 1987, Raven 1992). In terms of contents, in the late 18th and 19th century English literature was dominated by Romanticism. A major theme of this group of artists, poets, writers, musicians, and thinkers was the natural scenery and its role in human's moral renewal (Campbell 1987:181). As a new social philosophy, authors such as Rousseau and Wordsworth sought to inspire a quest for the natural in readers and preached the doctrine of natural man (*ibid*). Civilization was perceived as a form of corruption and people were urged to return to nature (Feiffer 1986:141). Natural surroundings were seen as a type of stimuli that helped people learn about intuition. For example, Joseph Addison wrote in an essay on the pleasures of the imagination, of a 'delightful stillness and amazement' that he had felt whilst viewing certain scenery such as open champion country, vast uncultivated deserts, and huge heaps of mountains and high rocks (Botton 2002:165). Similarly, Hildebrand Jacob lists places most likely to inspire sublime pleasure: oceans, the setting sun, precipices, caverns and mountains (*ibid*). Specific geographic locations that were described by this literature included Switzerland, Italy, the English Lakes District and various coastlines (Bernard 1978, Buzard 1993, Soane 1993, Towner 1996, Prickett 2002).

Thus the Romantic transformation of the Grand Tour took place in the context of a wider change related to the penetration of print media in 18th century Britain. In terms of how this affected consumer learning patterns, evidence suggests that the literature was a prominent topic of conversation, which increased the likelihood that consumers were exposed to Romantic literature and the arousing stimuli it contained in positively reinforcing conditions. By 1750 circulating libraries were established in 119 towns that provided consumers access to the latest literature (McKendrick et al. 1985:270). Furthermore, book clubs, such as the Women's literary society, were formed where people met on regular occasions to discuss novels and played an important social role in Victorian Britain (Snyder 2004). The late nineteenth century also saw the formation of the National Home Reading Union to improve the standard of working-class leisure reading (Snape 2004:145). Hence this evidence suggests that literature became a popular topic of conversation as an increasing

percentage of the population gained access to reading materials as well as to new opportunities to discuss this literature in libraries, book clubs and reading unions.

Secondly, such literature did not only provide exposure to arousing stimuli, it also provided knowledge and information about these stimuli, fostering the refinement effect. A primary example is the emergence of the travel writing genre, in which the European travel experiences of authors such as Jean-Jacques Rousseau, Mary Shelley, Lord Byron and James Boswell became popular amongst readers (Feiffer 1986:135). Furthermore, many Romantics wrote travel guides to certain scenic areas. An example is Wordsworth's guide for independent travelers in "Guide to the Lakes District" (Buzard 1993:20). The aim of this guide, which is also recognized as an important part of his literary accomplishment, was of "supplying the tourist with directions (of) how to approach the several scenes (of the Lakes) in their best... order" (Buzard 1993:23). Elsewhere in Germany, Goethe, who considered himself to be a natural scientist as well as a writer, recorded his travels in the Thuringian forest which were later used as guides by visitors (Lohman and Mundt 2002:214). The result was a mini-boom in the number of hotels and inns in the Thuringian forest which was unprecedented in the 18th century (*ibid*).

In conclusion, we argue that these described shift and refinement effects led to the Romantic transformation of the Grand Tour in Europe described in section 3.3. Romantic literature stimulated consumers to specialize and learn about arousing stimuli described in the literature, such as the picturesque landscapes of Switzerland. As part of this learning process and as a way of varying their exposure to stimuli, many traveled to places mentioned and described in the literature. This is reflected in the popular habit amongst many Romantic tourists to keep written diaries of their experience. Interestingly, these were written in a manner similar to the Romantic literature, using 'emotionally colorful' language and emphasizing the tourist's reactions to particular attractions that had been popularized in literature, such as the famous Mount Vesuvius volcano (Chard 2002).

Hence the places where consumers traveled to were not only those which were rich in arousing stimuli, such as Rome and Paris, but also those places that they had acquired knowledge about through reading Romantic literature. Consequently, by stimulating consumer specialization, the emergence of more convenient forms of entertainment did not compete with the travel as an alternative way in which consumers can satisfy their want for arousal. Rather these two forms of entertainment dynamically complemented each other in

that reading of Romantic novels exposed them to particular scenic landscapes which they could learn about via the literature and social interaction with consumers.

3.6 Specialization and its impact on habituation dynamics

Beyond identifying the factors that stimulate specialization, this section considers what impact this type of learning process had on the degree to which habituation necessitates change in how consumers satisfy their want for arousal. To this end, two hypotheses are constructed using scientific evidence on the factors which govern the habituation process. Scitovsky argues that habituation significantly influences the consumption of entertainment because when a stimulus is no longer arousing, consumers need to look for new types of stimuli to satisfy their want for arousal. We argue that the consumer specialization process can have an important impact on both the rate of habituation and the degree to which habituation impacts consumption activities related to the want for arousal.

Habituation is the phenomenon by which a response to a repeated stimulus wanes over time (McSweeney and Roll 1998). It should be noted that this relates to a non-associatory type of behavioral dynamic, as it simply describes how behavior changes in relation the repetition or withdrawal of a stimulus.²⁸ From the evolutionary perspective, habituation is thought to be an important mechanism that prevents animals from wasting resources by repeatedly responding to constant stimuli that present little danger or opportunity (McSweeney et al. 1996:448). Studies in habituation have made much progress since Scitovsky hypothesized what impact these have on consumer behavior in 1972. The following factors have been found to significantly impact the habituation rate:

a) Intensity of stimulus

A basic robust stylized fact is that the weaker the stimulus, the more rapid and/or the more pronounced is habituation (Wathieu 2004:593). On the other hand, very strong stimuli may yield no significant habituation (Thompson and Spencer 1966:19).

b) Interstimuli Interval

²⁸ A major question is how these interact with associatory and cognitive forms of learning (See McSweeney et al. 1996)

This refers to the time period between stimuli exposure (interstimuli interval). Here it has been shown that habituation is more rapid and complete when these intervals are short rather than when they are long. If the time lapse between exposures is reduced, then it takes fewer total exposures to the stimuli for organisms to become habituated. Simultaneously, the habituation effect of each subsequent stimulus is more dramatic. On the other hand, reducing the stimulus rate delays or even inhibits habituation (Wathieu 2004:592).²⁹

c) Variety effects

Studies have found that exposure to a variety of stimuli slows down habituation (McSweeney and Swindell 1999:445). By exposing an organism to a variety of related stimuli (e.g. the same stimuli presented in different colors and shapes, different types of foods), habituation to one specific stimulus is significantly slowed. This is related to the notion of ‘stimulus specificity’, i.e. that habituation to one stimulus does not extend to others. It is widely found in higher order organisms: for example, a baby that has habituated orientation to one face will look again at a new or altered one (McKenzie et al. 1980).

d) Dishabituation

This concept is related to variety effects in that a change in habituation occurs as the result of the presentation of novel stimuli. However, rather than simply delaying habituation, sensitization may also occur. This is an increase in the organism’s responsiveness to a stimulus, the counterpart to habituation (McSweeney and Swindell 1999:443).³⁰ In the case of dishabituation, behavioral response to a habituated stimulus is restored via the presentation of a strong extra or novel stimuli (McSweeney and Swindell 1999:445). Stimuli, such as strange noises and minor electrical shocks have been found to have this effect.

These experimentally proven insights into habituation processes are interesting to economists for a number of reasons.³¹ In terms of consumer behavior, Wathieu notes that the consumer’s willingness to pay for exposure to a stimulus would be at a maximum in

²⁹ This has been demonstrated in the sea slug *Aplysia*, suggesting that the underlying mechanism is relative simple (See Staddon and Higa 1996).

³⁰ Sensitization is usually observed to occur when organisms are initially exposed to stimulus (McSweeney and Swindell 1999:442). For example, aggressive display may initially increase before decreasing with exposure to an intruder. After the initial sensitization period, habituation is triggered eventually leading subjects to no longer respond to a presented stimuli (Stevens 1957, Dinnerstein 1965).

³¹ These have implications for recent attempt to resurrect a version of the law of diminishing utility that occurs in real (irreversible) time (Steedman 2001, Nistico 2005).

some period after sensitization has taken place, and before habituation occurs (Wathieu 2004). However there is a big difference between the experimental settings in which these studies have taken place and the reality of consumer behavior set in every day life. In the former, the nature of stimulus exposure is strictly controlled. In most cases, the subject has no control in what they are exposed to and for how long. In contrast, in many cases in reality consumers have the ability to change and vary the nature of exposure to stimuli.

From this perspective, let us now consider how these factors interact with consumer specialization processes. We have noted that as consumers specialize, they are more inclined to modify and vary consumption acts because of their detailed knowledge and refined tastes. In the context of entertainment, consumers may change the way they are exposed to arousing stimuli: they can change the frequency of exposure, the strength of the stimuli, or the variety of stimuli they are exposed to on a particular trip. For example, in the case of travel, this consumption act can be varied and changed in many potential dimensions, such as what destinations are visited, the speed at which they travel through a particular region, what accommodation is used, what type of transport is used, how long the consumers stay in one particular destination, and the frequency at which consumers are exposed to the same type of attractions (e.g. museums).

Thus we hypothesize that specialization mediates the influence habituation has on consumption acts related to the want for arousal in two important ways. First, modifications stimulated by specialization can alter the rate at which a consumers habituates to a stimulus. For example, if consumers alter the speed at which they travel through a particular region, this may change the above-mentioned interstimuli interval, which in turn influences the rate at which consumers become habituated to arousing stimuli, such as ‘forests’ or ‘mountains’. Furthermore, consumers can vary the strength of exposure by, for example, viewing a landscape first hand rather than viewing it on television or reading a description in a novel. Alternatively, via the above-mentioned variety effects, consumers can delay habituation to a particular stimulus by exposing themselves to a variety of stimuli. Sampling a number of different variants of one specific category of arousing stimuli (e.g. forests) thus leads to consumers slowing down habituation to each particular stimuli. Otherwise, by enacting a radical sequential variation of the exposed stimuli, consumers could also trigger dishabituation, where the restoration of a response to a habituated stimulus is achieved by the presentation of a strong, or novel, stimulus. For example, after touring various

landscapes for a number of consecutive days, exposure to a densely crowded, polluted city may re-sensitize tourists to the arousing nature of landscapes. Let us summarize this argument in the following hypothesis:

Hypothesis 3: Through their tendency to modify the manner in which they are exposed to arousing stimuli, specialized consumers may delay and/or inhibit the habituation process through changing the strength of the stimulus, the speed of exposure, and the variety of stimuli which they are exposed to.

Secondly, beyond delaying the habituation process *per se*, consumer specialization can also influence the magnitude to which habituation processes impact consumption activities. As mentioned in section 3.2, an important question is to what degree one particular habituation process can impact the manner in which consumers seek to satisfy their act of arousal. Here we argue that the accumulation of knowledge can localize the habituation effect in that specialization can change the degree to which consumers classify arousing stimuli. As noted above, ‘stimulus specificity’ is the degree to which a particular habituation also affects the organism’s responsiveness to other stimuli. We argue that because of the relatively more detailed knowledge that specialized consumers possess, their habituation patterns occur at a higher level of specificity. For example, after reading a brochure about the sunny Mediterranean, consumers may visit Majorca and consequently become habituated to it. As a result of this habituation, non-specialized consumers may become habituated to the act of traveling to the Mediterranean *per se*, since they may not know about the differences between the visited location and other destinations in the region. On the other hand, specialized consumers who underwent the same habituation process may also no longer visit Majorca, but nevertheless continue to travel to other places in the region thanks to their relatively more detailed knowledge of that region.³²

Furthermore, another way in which specialization mediates the impact of habituation on consumption patterns is that, through modifying the details of the consumption act,

³² In a similar fashion, whilst discussing to what degree organisms classify stimuli, Hayek argues that “a higher degree of selection of classification is reached when several responses (behaviors) are alternatively connected with each of a given group of sensory impulses (stimuli), so that which of these responses will be elicited by particular stimulus depends on which of a number of other sensory impulses occur at the same time with the former,” (Hayek 1952:87).

specialized consumers may also gain exposure to other arousing stimuli that may further motivate consumers to continue engaging in a particular consumption act even after they have become habituated to the original arousing stimuli. For example, by embarking on a trip to Majorca, consumers with no previous experience in international travel may develop a liking for local foods, culture, or a particular type of accommodation. This new set of likes and dislikes may trigger consumers to learn more about holidaying to gain exposure to these stimuli. Consequently, even if they become habituated to one particular stimuli that motivated travel (e.g. warm environment), they may still travel to the same destination in order to be exposed to other arousing stimuli which the consumer has discovered at that particular destination. Hence, as a consequence of the discovery of arousing stimuli, the nature of the consumption act may change significantly and be re-orientated to relatively more arousing sources of stimulation. Thus, specialization may lead consumers to perpetually satisfy their want for arousal by the same act of ‘traveling to Majorca’, although precisely which arousing stimuli motivates this act may change with habituation. Let us summarize these two arguments about hot specialization that may mediate the impact of habituation on consumption in the following hypothesis:

Hypothesis 4: Specialization can dampen the impact that habituation has on consumption activities related to the want for arousal because it leads to consumers classifying stimuli in greater detail and can also lead consumers to discover new arousing stimuli that become associated with the consumption act.

Together, hypotheses 3 and 4 provide new theoretical insights into how consumer specialization can impact the manner in which consumers satisfy their want for arousal. From this perspective, Scitovsky’s argument that skilled consumption gives access to ‘reservoirs of novelty’ (Scitovsky 1976:235) is undoubtedly correct. However it also becomes clear that the accumulation of knowledge does not only influence the quantitative amount of novelty that consumers can enjoy. Rather, hypothesis 3 argues that specialization also influences the rate at which consumers become habituated to stimuli. Furthermore, hypothesis 4 suggests that the impact of habituation on such consumption activities can be significantly dampened. In this sense, the process by which consumers acquire consumption knowledge is not just a cost that must be incurred in order to gain access to some given

amount of arousing stimuli. Instead, it is transformative in the sense that the discovery of new sources of stimuli may significantly change the source of arousal underpinning the consumption act.³³

In terms of testing hypotheses 3 and 4, there is no observable historical data in relation to the Romantic era by which one can observe consumer's individual habituation rates (we leave this for future work). However, there is some interesting preliminary evidence that shows how specialized Romantic travelers valued the ability to modify the manner in which they were exposed to arousing stimuli. This is captured in their opposition to relatively fast modes of travel by means of coach and train transport. The train in particular was in the 19th century a radically novel experience, given that trains could cover considerable distance in about one-tenth of the time required for horse-drawn coaches (Harvey 1990:241). The experience of riding in a speedy train was likened to being 'shot' through the landscape, an act causing disorientation (Larsen 2001:82-83).

The Romantic opposition to train travel was less based on the grounds of environmental degradation or seen as a matter of encouraging the inferior classes to travel, but objected more to the rate at which consumers were exposed to landscapes. The chief critique of this mode of travel was that tourists would have little ability to vary the rate at which they were exposed to arousing scenery. Romantics argued that this diminished the value of being exposed to the arousing stimuli, rendering the act of exposure 'superficial'. For example Wordsworth, in opposing the construction of railway lines in the English Lakes District, argued that tourists cannot "gain material benefit from a more speedy access that they now have to this beautiful region..." because "...the perception of what has acquired the name of picturesque and Romantic scenery is so far from being intuitive, that it can be produced only by a slow and gradual process," (Wordsworth 1844). Romantics feared that the blurred nature of the landscape, caused by an accelerated rate of exposure to stimuli, would positively augment traveler's boredom in such a way that tourists would pay more attention to their guidebooks than to the arousing landscapes through which they were passing (Buzard 1993:36). Hence, travel by train was seen as ultimately reducing the ability of consumers to gain proper exposure to arousing stimuli because the rate of exposure was too

³³ The transformative nature of specialization lies close to Bianchi's notion of creative consumption (Bianchi 1998).

fast. This argument makes sense in the light of the evidence that habituation can be reduced by slowing down the rate at which consumers are exposed to arousing stimuli.

As an alternative, Romantics advocated walking, which was seen as a form of travel that everyone could participate in (Edensor 2000). Indeed, many members of the Romantic movement actively organized workers in tramps through the countryside (Snape 2004). This is because the slower pace of walking enables consumers to have a relatively greater freedom to vary the manner in which they are exposed to the environment, and in Thoreau's words, walking "returns the walker to his senses" (Edensor 2000:86). In justifying his claim that all travel becomes dull in exact proportion to its rapidity, Ruskin noted that when walking,

"Every yard of the changeful ground becomes precious and piquant, and the continual increase of hope, and of surrounding beauty, affords one of the more exquisite enjoyments possible to the healthy mind, besides that real knowledge is acquired of whatever it is the object of traveling to learn, and a certain sublimity given to all places, so attained, by the pure sense of the space of earth that separates them. A man who really loves traveling would as soon consent to pack a day of such happiness into an hour of railroad, as one who loves eating would agree... to concentrate his dinner into a pill," (Buzard 1993:35).

In relation to hypothesis 4, this evidence suggests that these relatively slow and flexible modes of travel were indeed valued because of the opportunity for the traveler to learn and discover new aspects of some particular stimuli or location. Because of the lack of opportunity for consumers to discover and learn more about stimuli, there was also concern for how this new form of travel changed the notion of 'place'. Modern forms of travel imposed stricter limits on what attractions were worth visiting. Romantics noted that attractions falling outside these limits, for example the twenty-eight mile route between Brieg and Isella through the Simplon pass, is every bit as real, as much of a 'place' as the towns it connects (Buzard 1993:34). This is why Romantic travelers especially preferred walking and climbing, so that everything they pass is fully 'a place' to them, "for they are alive to the stimuli offered to their finely-tuned sensibilities in every location"(Buzard 1993:34). In this context, Karl Bädeker liked to use the phrase "sich (etwas) erwandern" – "to get (something) out of walking" to describe the enriched sense of experience walking gives to the traveler (*ibid*). This arguments reflects how slow modes of travel lead consumers to develop a relatively more detailed classification of what types of stimuli exist in a particular region.

In conclusion, based on how specialization may dampen the effects of habituation on consumption activity, one may note that there are two benefits which accompany the specializing in the context of the want for arousal.³⁴ First, by positively impacting on the consumer's ability to actively modify the consumption act, specialized consumers gain the extra benefits that come with all 'tailor-fitted' and individualized goods. Whereas in the pre-enlightenment era, entertaining stimuli were shaped mainly by suppliers (e.g. chefs, artists, and directors) (Campbell 1987:57), the consumption experience in the Romantic mode of travel is partially shaped by consumers themselves, allowing them to modify the act in such a way as to better suit their own particular likings (Campbell 1987:77). At the same time it should be noted that this effect can be tempered by the fact that because specialized consumers may also have more refined wants, they may be no better off relative to consumer with little knowledge and unrefined tastes. Nevertheless, as long as their ability to modify improves at a relatively faster rate than the degree to which their likings become refined, some net improvement in the consumers ability to satisfy their wants should be realized from specialization.

Secondly, specialization can deliver potential savings in that it delays habituation in such a way that consumers may remain relatively satisfied with the same consumption act for relatively longer periods of time. For example, because of relatively faster habituation rates, unspecialized tourists may have to search for new travel destinations more frequently. On the other hand, specialized consumers may be relatively satisfied with visiting the same destination for a number of years, as by varying aspects of their trip to a certain destination they may delay habituation, and also come to associate a destination with a variety of arousing stimuli. Repeated travel to the same destination enables them to re-use their accumulated knowledge related to that particular destination, such as knowledge of which hotels provide a satisfactory standard of accommodation. Hence via repetition, the usefulness of previously accumulated knowledge is extended.³⁵ Furthermore, specialization in such a manner also works to diminish the frequency at which consumers face problems that accompany the selection of new destinations to visit. For the very fact that they are novel implies that there is the inherent uncertainty about their potential to satisfy the consumer's

³⁴ Note that these factors are 'beneficial' purely in the sense that they can aid the consumer in satisfying their wants, however whether they entail welfare improvement is entirely another question.

³⁵ In Chapter 5 we consider what implication this tendency has on modern tourism intermediary services.

set of likes and dislikes. Hence, from this perspective, in the context of the want for arousal, the phenomenon of consumer specialization can be viewed as having a positive impact on the consumers' ability to satisfy their want for arousal.

3.7 Conclusion

This chapter has discussed how consumer specialization can impact the manner in which consumers satisfy their want for arousal, and in particular the role it played in the Romantic transformation of the Grand Tour. In a way, the results of this chapter present an interesting paradox: via consumer specialization, consumers are stimulated to change and modify the manner in which they gain exposure to arousing stimuli, which can seriously impact what goods and services they use. On the other hand, because it can inhibit and delay the rate at which consumers become habituated to arousing stimuli, consumer specialization can dampen the extent to which habituation necessitates change in entertainment-related consumption activities.

From a broad historical perspective, this suggests that while consumption activities related to the want for arousal still undergo periodic changes, the underlying sources that drive this change have significantly shifted from those that are related to habituation dynamics towards those that are related to consumer specialization. Consumers today have a wide variety of arousing stimuli at their disposal in the form of books, television programs, music, theatre, films and so on. At the same time, when one recognizes that these modern means of entertainment not only deliver arousing stimuli but also provide information which can stimulate insightful learning and specialization, then it may be recognized how the emergence of these new means of entertainment have significantly increased the opportunities for consumers to accumulate socially-available information and consumption knowledge; as was shown in the case of new romantic literature stimulating consumer interest in travel. Via specialization, consumers have a greater ability to modify the manner in which they are exposed to arousing stimuli. This ability may slow down the rate at which they are habituated to arousing stimuli. Together, the stimulation of specialization and inhibition of habituation suggests that an increasing amount of change in consumption

activities related to the want for arousal is the result of consumer specialization processes rather than of habituation dynamics.³⁶

Furthermore, because knowledge contained in the Romantic literature was widely available, specialization across consumers led to a sub-cultural phenomenon as predicted by Witt (Witt 2001:36). By accessing the same widely available information and knowledge stored in literature, consumer specialization processes tended to become more coordinated: the reading of Romantic novels led to similar interests in terms of which potential places to visit on the European continent. While synchronous changes in consumer behavior tend to be labeled merely a 'fashion' and are attributed to status concerns, such explanations miss a far more important change in the manner in which consumers learn and specialize, namely how consumers learn to satisfy their wants has been universally affected by the emergence of widely-available sources of information and knowledge. The wrong attribution of coordination as a result of status concerns can lead to misleading conclusions being drawn about why consumers' behavior occurred in such a synchronized manner. In the particular context of tourism, this has important implications for understanding why certain destinations become increasingly or decreasingly popular in a coordinated manner, as we have seen in the case of scenic destinations in Europe that became popular in the Romantic era of the Grand Tour.

³⁶ It should be noted that this in no way implies that new means of entertainment did not affect consumer ability to specialize *per se*, since consumers do not necessarily need to access socially available information and knowledge to be able to accumulate knowledge about a certain arousing stimulus. Rather, these impacted on the rate at which specialization took place: the availability of social information and knowledge changed how fast and how much information and knowledge consumers accumulated about a certain consumption activity.

4. Consumer Generalization and the Mutation of British Resorts

4.1 Introduction

This chapter has two aims. Firstly, it examines what role consumer learning processes have played in the functional mutation of British resorts. For a large part of history, a significant travel motivation was the search for medical treatment. Long before the emergence of modern hospitals and treatment techniques, consumers traveled to particular geographic regions in order to utilize natural inputs such as mineral water, sea-air and sunshine to treat a variety of illnesses. Likewise resorts were, for much of their history, not what they are today: destinations that are visited by tourists on a recreational basis in order to enjoy pleasurable environs. Rather, these were proto-hospitals providing accommodation and treatment for those who sought to improve their health. While this motivation is less prominent today, it played an important role in laying the socio-economic foundations of contemporary resort tourism. Indeed, today there still exists a popular belief amongst British tourists that such travel is generally beneficial for their health (British Resort Association 1989, Inglis 2000, Papatheodorou 2004)

Secondly, having discussed the impact of consumer specialization in the last chapter, this chapter considers the opposite situation, namely consumer generalization, in which consumers learn relatively little about the consumption act. In such situations, expert advice can play an important role in guiding consumption techniques. However, the state of ignorance that leads consumers to consult experts in the first place equally inhibits their ability to determine *which* advice is effective and worth using. Here we argue that the

consumer's tendency to follow expert advice is not only formed by mental deliberation alone but can also be guided by what consumers like. By taking into account how associative and insightful modes of learning may interact in such situations, we gain a better understanding of how consumers behave in situations in which it is difficult for consumers to discern causal associations between goods and the wants they are designed to serve.

Evidence for this particular interaction of learning modes can be found in the early history of resorts. Here sick consumers were faced with a wide range of both medical treatments and supposed experts offering medical advice, which posed substantial problems for discerning which treatments and advice is effective. We argue that sick consumers tended to perceive treatments which elicited immediate physiological reactions as reinforcing. Consequently, when confronted with difficulties in insightfully learning what treatments may satisfy their want for health, sick consumers tended to follow, via associative learning, that advice which coincided with such reinforcement, as well as that advice which is intensively socially-communicated. Examining the early history of resorts, we find qualitative for these learning tendencies of consumers that had a significant cumulative impact on the developmental trajectory of resorts in general and the bio-meteorological treatments which resorts offered in particular.

Beyond being used to satisfy the want for health, the act of visiting resorts came to be used by consumers to satisfy their want for status and their want for arousal from the 17th century. Here the developmental trajectory of resort treatments played a key role in the functional mutation of resorts. We argue this functional change was caused, amongst other things, by the schematization of resort treatments, along with the tendency of health-seeking consumers to learn and imitate other consumers. Hence, understanding the manner in which consumers learn to satisfy their respective wants and the long run impact these may have on goods and services, we gain a better understanding of how consumption activities may lose or acquire new functional uses. This functional mutation was one of the factors that enabled resorts to survive the obsolescence of bio-meteorological theory for treating serious illnesses in the 19th century.

At the same time, whilst the act of visiting resorts came to be associated with the wants for status and arousal, it was also linked in new ways to the want for health in the late 19th and early 20th century. In this era, urbanization had a spectacular impact on consumption patterns. As consumers adapted to urban habitats, some of the negatively-perceived changes,

including the rise of alcoholism, gave impetus to a social movement that actively sought to encourage the working class to visit seaside resorts. Therefore, while previously consumers sought to improve their health at resorts because of the unique bio-meteorological treatments they possessed, in this era resorts were appealing because of what they lacked: alcoholism and diseases that were associated with the urban habitat of that era. Thus while resort travel started to gradually appeal to other wants, new associations were also formed to the consumer's want for health as a consequence of urbanizations and its influence on consumer lifestyles.

All in all, studying evolution of resorts sheds light on both how consumer generalization may influence the development of goods and services as well as the manner in which 'combination' goods emerge that appeal simultaneously to a number of different wants (Witt 2001:39). In both cases, salient features of consumer learning processes play an important role in enabling certain consumption activities to i) gain new associations to other wants, as well as ii) *re-form* associations to existing wants they serve. The latter may occur as result of the changing nature of how a particular want, in this case the want for health, manifests in consumption patterns and the changing type of neutral stimuli that are associated with its deprivation (e.g. illness) as well as its satisfaction (e.g. the curing of illness). In relation to the former, such functional mutation may significantly interfere with the process by which old goods and services become obsolete in the face of technological advance.

The chapter is structured as follows. Section 4.2 examines the role of expert advice in consumption as the quantity and quality of knowledge that exists within economies increases. Section 4.3 hypothesizes how sick consumers act in situations where it is difficult to discern via mental deliberation alone which treatments may satisfy their want for health and considers how these tendencies impacted the evolution of resorts. The hypotheses are evaluated in section 4.4, while the nature of how resort travel came to be associated with other wants is discussed in section 4.5. Finally, section 4.6 examines how, as a result of urbanization in the late 19th and early 20th century, the act of traveling to resorts was linked to the want for health in new ways. Section 4.7 concludes.

4.2 Expert advice and the evolution of consumption

This section discusses the increasingly prominent role that expert advice plays in consumption as economies accumulate an increasing amount of knowledge which may be relatively abstract in nature and can pose difficulties for consumers in learning the causal relations between potential goods and the satisfaction of their wants.

As we noted in chapter 2, consumer generalization describes the situation in which consumers know relatively little about a consumption act. One of the reasons this may occur is because of epistemic constraints: The causal connection by which a particular good is related to the satisfaction of a want may be relatively complicated and hard to understand for the average consumer. Consider further that a chief driver of long run economic growth is the accumulation of knowledge (Hayek 1960:41). The more society knows, the smaller becomes the share of total knowledge that any one mind can absorb (Hayek 1960:26). Hence, the very division of knowledge that must occur as the economy evolves increases the relative ignorance of the individual.

Beyond growing in terms of quantity, the quality of knowledge has also become more abstract. Scientific knowledge in particular has played a fundamental role in economic development (Mokyr 2002). Central in enabling science to achieve its spectacular progress over the past three centuries was an objective, non-anthropocentric examination of natural phenomena (Lavoie 1991:474). As Hayek notes, the advance of physical sciences has led to the emergence of a ‘natural order’ in which objects are classified very differently from the manner in which they are perceived by the human senses, what he dubs the ‘sensory order’ (Hayek 1952:3). A prime example of how the accumulation of abstract knowledge affects consumption patterns is the case of medicine. It would cost the average consumer considerable time and effort to learn about the chemical composition of a certain medicine, how it is produced, and how exactly it impacts human physiology. How do consumers come to terms with the increasingly complicated chains of causal association upon which certain goods and services are produced?

Starting with Menger’s approach (as outlined in chapter 2), more roundabout production techniques should not pose a problem to consumers as long as they are demonstrably effective in serving the consumer’s want. As long as consumers can learn the causal associations between a specific good or service and their want, the abstract scientific principles upon which they are based do not affect the consumption act. This point has been

echoed in the concept of ‘demonstrability’: If a technique can be easily demonstrated as being superior to existing techniques, it has a higher likelihood of being accepted (Mokyr 2002:18)³⁷. Menger is thus optimistic about the impact that such ‘objective knowledge’ would have on consumption patterns. He argues it would improve consumer’s welfare by promoting those consumption technologies which are in some sense relatively more ‘objectively accurate’ (Menger, 1950:53).

At the same time, there is no doubt that consumers are naturally suspicious of new goods that are based on increasingly abstract knowledge relative to preexisting techniques. Throughout history, resistance to new technologies has been recorded in everything from new medical techniques, nuclear power to food production techniques (Bauer 1995). In many circumstances the effectiveness of knowledge-intensive goods and services can not be easily demonstrated and it remains difficult for consumers to work out precisely which technique is effective. Menger himself notes that the increasing amount of higher order goods tends to lead to error in consumption patterns (Menger 1950:56).

It is in these circumstances that the role of expert advice becomes central. According to Earl and Potts, expert advice is sought when consumers lack specialized knowledge in a certain domain of consumption that would enable them to satisfy their wants (Earl and Potts 2004:629). Consumers can seek advice by consulting magazines, public authorities and word-of-mouth recommendations from fellow consumers, intermediate retailers, or even from producers themselves. In economics, numerous studies have investigated how consumers seek information on goods and services from others (Nelson 1970, Akerlof 1980, Rosen 1981, Bikhchandani et al. 1992). However, Earl and Potts argue that the use of advice is not simply a matter of seeking information on what goods and services are available, but rather a matter of consumers working out what kind goods and services would properly satisfy their wants in the first place, “Expert advice enables consumers to rank products in terms of characteristics that are subordinate to their high order preferences,” (Earl and Potts 2004:624). Hence a number of institutions have emerged in advanced economies to guide consumers in solving their problems in the face of uncertainty created by the sheer variety of goods and services available on markets and their knowledge-intensive nature. They note that the primary need for such advice is in regard to infrequently purchased goods and

³⁷ See also the concept of trialability in (Rogers 1962)

services, such as furnishings, kitchenware, wedding arrangements, automobiles and medical supplies (Earl and Potts 2004:626).

However, the general tendency to emphasize the role of experts in guiding consumption raises a question that seems just as difficult to answer as the problem it seeks to resolve. If experts advise consumers in the making of effective consumption choices, how do consumers discern which experts to rely on? From Menger's perspective, expert advice is a type of higher order tool that consumers use in the consumption act. As such, it adds a degree of complexity, another causal association, that the consumer has to learn about. Earl and Potts note that credibility becomes a key issue when consumers are faced with multiple authorities, which may lead them to consult yet other authorities (Earl and Potts 2004:626).³⁸ It seems that the consumer's state of ignorance which leads them to consult experts in the first place, simultaneously disadvantages them in determining which advice to heed and to determine how effective this advice is (O'Driscoll and Rizzo 1985:43). This central question of social epistemology³⁹ is extremely relevant to economies in which the accumulated knowledge has become increasingly complex as well as divided across the economy.

In the next section, we suggest a way in which consumers may overcome this potential infinite regress is by taking into account both the associative as well as the insightful ways in which consumers learn and how these may interact (as set out in chapter 2). These interactions result in behavioral tendencies that represent important ways in which consumers may be able to assail the inherent problems in consuming medical advice.

4.3 The want for health and the demand for medical advice

This section examines the want for health and hypothesizes how the consumer learning processes related to this want have impacted the evolution of resort treatments and the expert advice that accompanied these treatments. In general, the maintenance of health is a historically important source of growing consumption expenditure. Lebergott estimates that in the 20th century alone US average expenditure on health has risen from US \$114 dollars in 1900 to US \$69,900 dollars in 1990 (Lebergott 1993:123).

In its most basic form, the want for health is triggered by the perception of painful aversive stimuli (Fabrega 1997:29). This leads to a state of illness which then stimulates the

³⁸ For more on how consumer behave when in situations 'when we simply do not know' see (Earl 1986:227).

² For more on the issue of social epistimology see (Goldman 2001).

organism to act to stop the perception of pain. ‘Health’ in this basic sense is the absence of pain. In terms of the approach set out in chapter 2, this represents a basic want in that it is a behavioral disposition that is part of the human genetic endowment and hence universally shared. However, unlike other basic wants, such as the want for food or drink, in most circumstances the want does not re-emerge in the absence of periodic consumption.⁴⁰ Evidence for the fact that this want is part of our genetic endowment can be found in the fact that even many species of animals have been observed to act and consume certain materials found in their environments in order to rid themselves of aversive stimuli (Lozano 1998). For example, monkeys tend to chew on a bitter-tasting pith plant and swallow particular leaves whole (rather than chewing on them) which helps to relieve pain from parasite infections (Huffman 2003).

As consumers learn and accumulate experience, a number of acquired wants may emerge in the form of formerly neutral stimuli that have come to be associated with the experience of pain. For example, people injured in a car crash may have an aversion to traveling in cars. Consumers who have become sick after being infected at public places may develop a disliking for crowded places. These can also emerge for relatively minor pains: people who cough in smog-ridden cities may develop an aversion to polluted areas (Evans and Jacobs 1981, Gresnahan et al. 1997). Consumers with an allergy to animals tend to dislike contact with them. It is interesting to note that associations to aversive stimuli have a much slower rate of extinction relative to those made to rewarding stimuli (Elster 1997). We leave open the possibility that these associations may develop in conjunction with insightful learning (as described in chapter 2) in that they reflect some insight on the part of the consumers on what the causes of pain were.

In relation to their wants, Witt argues that “people reflect and learn about how to instrumentalize goods and services to satisfy their wants, by personal experience and inventiveness. Knowledge implicit in socially practiced consumption technologies is also acquired by communicating with, and observing and imitating, other consumers,” (Witt 2001:32). In respect to the extent to which consumers interact with others to acquire

⁴⁰ Witt names among basic wants the want “for medicine to cure an ill” (Witt 2001:32). He also claims that for all basic wants, a state of deprivation tends to re-emerge if the organism does not consume, because the “activities of the organism gradually uses up the direct inputs (Witt 2001:32). While this observation is correct for the want for food and drink as well as for some medicines, it is not correct for all cases in which medicine is consumed. For example, if a patient consumes a medicine that successfully combats an infection, the patient will not necessarily suffer from such an infection again.

consumption techniques, evidence suggests that from a very early phase in human phylogeny, illnesses induced consumers to “search for knowledge of healing possessed by members of the group, and this would include primarily family members... and others (not necessarily kin) of the immediate group who are more experienced on sickness and medical care-giving,” (Fabrega 1997:30). In terms of supporting the sick, even certain animal species have been observed to help a sick or injured member by adjusting travel pace, saving and sharing food, and actively helping (Fabrega 1997:20).

As noted in section 2, consumers may develop likings for certain goods and services based on whether they coincide with reinforcement and the satisfaction of wants. In the case of medical treatment, we argue those treatments are perceived as reinforcing that elicit changes in the consumer’s physiological state during or after treatment. For example, consumers suffering from a cough may develop a liking for cough medicine which relieves the pain from this particular illness. Again, this may well involve insightful learning: consumers tend to evaluate the effectiveness of a particular treatment by introspectively assessing how their body reacts to the treatment (Damasio 2003).⁴¹ Hence the changed physiological state, e.g. how the consumer ‘feels’, consequently forms the basis of what treatments consumers like and dislike. These changes in the consumer’s physiological state may or may not involve the negation of the perception of pain. Scientifically one can thus qualitatively distinguish between two classes of treatments that are likely to be favored by consumers:

- i) Those that combat the pathogenic source of the pain, what we label ‘effective’ treatment. This refers to any type of treatment which reduces pain by curing the disease in terms of ridding the body from infection, the healing of wounds, etc.
- ii) Treatments that change the physiological state of the organism, without necessarily affecting the pathogenic cause of pain. For example, taking opium may change the physiological state and block the perception of pain, but it does not necessarily affect the source of pain. Other such treatments may elicit

⁴¹ This suggests that consumers faced with complicated situations and not knowing better, may use certain types of ‘gut reactions’ to goods as a means of evaluating their effectiveness. Indeed such conjecture is not at all new to economics. Adam Smith devised behavioral theory of knowledge growth in which he argues that agents evaluating complex goods such as astronomical theories will favor those that elicit surprise, wonder and admiration (Smith 1980). In this sense commentators concerned with investigating how knowledge grows emphasize the need to pay more attention on how aesthetic tastes may guide scientific inquiry (Loasby 2002).

negative physiological reactions to the same effect, e.g. electroconvulsive therapy (shock treatment) is used to subdue the central nervous system.

Amongst these two classes of treatments we expect consumers to naturally prefer ‘effective’ treatments which negate the source of pain rather than those that simply change the consumer’s physiological state. This is because in the latter case there is nothing that may stop the pain from returning, once the treatment is over. However, as we discuss below, there are important cases in which consumers still use treatments that fall into the latter category. In these instances the following hypothesis is proposed:

Hypothesis 1: In the absence of effective treatment, consumers tend to like those treatments which elicit immediate physiological reactions, relative to other treatments which do not elicit immediate physiological reactions.

Furthermore, the formation of the consumer’s likes and dislikes in this manner also impacts which expert advice consumers tend to follow. As we noted in the last section, expert advice can guide consumption in situations where it is difficult for consumers to discern the causal associations between goods and the satisfaction of their wants. In relation to medical advice, we restrict our analysis to that advice which takes the form of ideas held by a medical expert or a group of medical experts pertaining to the underlying principles of the treatment (e.g. sunshine kills bacteria), or ideas concerning the manner in which the illness should be treated (e.g. drink sea water to cure illness X). To understand how the consumers’ likes and dislikes may temper their acceptance of expert advice, recall the shift effect, which is a component of the consumer specialization process outlined in chapter 2. Elsewhere, Witt uses this effect to describe how attention processes in the brain work to screen which incoming messages are attended to:

“consumer attention tends to focus from information less frequently and less intensely recognized towards information recognized more often and more intensely, particularly if the latter is experienced under positively reinforcing conditions. In the long run the composition of information in current knowledge and the tastes or preferences for information tend to shift correspondingly.”(Witt 1996).

This suggests that consumers tend to accept expert advice which coincides with treatments that deliver positive reinforcement. Merging this insight with the above-stated conditions under which a treatment is considered reinforcing, we may reach the following hypothesis: In the context of the want for health, advice associated with reinforcing treatments tends to be accepted by patients relative to advice which does not have this association.

Note that the shift effect also states that another relevant factor which influences the consumer's tendency to follow expert advice is the frequency at which such advice is socially communicated. As noted above, the search for social knowledge is a particularly salient feature of health-related consumption. Via social observational learning (Bandura 1986), consumers do not have to experience reinforcement themselves, but rather can act on the experiences of others and what they have found to be reinforcing. Such anecdotal learning seems to be especially relevant in the case of the want for health, since it is a general and popular topic of everyday conversations.

Practically speaking, little detailed information exists that can be used to directly measure how frequently advice was socially communicated. However, this can be estimated via a number of proxy factors that are closely correlated with the frequency at which some piece of advice is socially communicated. In particular, we observe in the following case study that the popularity of certain types of medical advice was strongly influenced by their association with other social institutions, such as the Christian church. Historians have also noted that advice stemming from the personal experiences of other consumers is relatively more popular. Hence we can expect the emergence of technologies which foster social communication amongst agents (i.e. the ISCTs discussed in chapter 3) to increase the frequency at which this anecdotal advice was communicated. Moreover, another proxy for the frequency of social communication would be whether a piece of advice is associated with recently-discovered scientific insights, whose novelty suggests that this advice would tend to be communicated relatively frequently. Hence in the following, we study these factors in order to gain some approximate measure of how frequently expert advice was socially communicated.⁴²

⁴² All in all, the proxy method represents a compromise between theory and available evidence, and in the light of the absence of *prima facie* evidence for the pure effect of 'frequency of social communication', these proxies will suffice for the purposes of this study. It is generally problematic to identify how much the frequency at which an idea is communicated impacts consumer behaviour because this variable is almost always associated with other factors, such as the degree to which consumer have associate them with reinforcement.

Of course, there may be instances in which the attainment of reinforcement and the frequency of social communication work in a synchronic, self-augmenting fashion: treatments may be followed because they are intensively socially communicated *and* they are associated with reinforcing treatments. However, in other instances, they may work against each other: For example, new evidence may emerge that a certain piece of expert advice is scientifically illegitimate, leading to some decline in the frequency at which it is social communication. Nevertheless, the same piece of advice may be associated with a treatment that delivers positive reinforcement. These special situations will be reviewed in the next section as they can help to shed light on which of the two factors have relatively more influence on the degree to which consumers are willing to accept expert advice. Let us summarize our argument about how the shift effect influences what expert medical advice consumers tend to accept in the following hypothesis:

Hypothesis 2: Consumers have a tendency to follow that expert advice which corresponds to treatments that are perceived as reinforcing and/or are intensively socially communicated.

Together, these two hypotheses represent an important way in which consumers overcome the problem associated with working out which treatments to use and what advice to follow. In the case of hypothesis 2, the selective manner in which attention is allocated to particular stimuli provides a natural solution which helps to cope with too much information. While scholars have recognized that attention is a scarce resource (Bandura 1986), many tackle this problem by conceiving of agents who somehow decide how much attention they should allocate to a problem. This approach alternatively views attention as something that is allocated not by deliberate decision, but “of spontaneous attention processes built into the human cognitive apparatus,”(Witt 1996).⁴³

Today given the large advances that have been made in medical science since the 18th century, including the effective combat of some longstanding serious diseases (e.g. tuberculosis, malaria, etc.), one may be tempted to conclude that these instances in which non-effective treatments are used (category 2 above) would be relatively rare. Yet consider

⁴³ From the evolutionary perspective Goodson notes how the hedonic value of certain sensory inputs essentially acts as a marker which helps organisms prioritize which sensory information is valuable. This occurs as during each waking moment, the individual is bombarded by a multitude of information bits, representing both energies in display around him and internal systems (Goodson 2003:15).

the number of ways in which health expenditure has increased beyond the emergence of new and more effective treatments to longstanding serious illnesses. In the long run, these include:

a) Changes in diseases

The type of illnesses that consumers suffered from have significantly changed. While some were exogenous (e.g. Black Death) others were the result of fundamental changes in the lifestyles of humans (Kiple 1996:46). In particular, as most humans started to live in settler societies, diseases relating to nutritional deficiency and degenerative diseases became much more significant. So, too, did viruses and bacterial diseases that thrived more easily on geographically stable human populations (Fabrega 1997:35). In contrast, earlier mobile foraging groups were far less affected by degenerative diseases (e.g. heart disease, cancer, hypertension) as well as by viral diseases (influenza, mumps, measles). Anthropologists have also found that consumers living in the stone age, despite having a low-calcium diet, nevertheless suffered from infrequent bone fractures because their nomadic life style with continual exercise strengthened the bones through shaping their structural geometry (Fabrega 1997:35). Long run changes in exercise patterns and diet have promoted a sedentary lifestyle that has seriously affected body composition in terms of adiposity (fat), muscularity and fitness, which has contributed to creating the conditions for the epidemic spread of type 2 diabetes and obesity (Eaton et al. 2001:9).

b) Treatment of minor pains

With increasing wealth, consumers can afford to treat relatively minor symptoms. Illnesses such as skin allergies were problems that received little attention or were treated with home remedies. In other situations, problems such as crooked teeth were simply ignored, while today an entire sub branch of the medical profession has been dedicated to it (orthodontics). In 2004 over £133 pounds was spent on orthodontic treatment on those aged under 18 years in England and Wales alone (Chestnutt et al. 2006). Another example is hay fever. The first clinical description of hay fever occurred in 1819 and it was a disease largely treated only amongst the middle and upper class of society (Jackson 2006). Furthermore, as an increasing number of minor pains are treated, many of these are chronic in nature. Unlike acute pains,

the underlying causes of these persistent pains, such as 'back pain', are relative complex in nature in which a number of socio-psychological factors can play a role (Turk and Okifuji 2002). Not only is it medically harder to find an effective solution to such illnesses, but their chronic nature makes it relatively difficult for consumers to learn about which treatments work. Chronic back pain, for example, has been estimated to affect 10% of contemporary Americans and the cost to the American health care system has been estimated to be over \$50 billion per annum (Vowles et al. 2004:78).

While by no means exhaustive, these two simple factors alone suggest that there has been a great change not only in the treatments which are used to satisfy the want for health, but also in the frequency and type of pains that have motivated this type of consumption activity. They also suggest that, because of the emergence of new types of diseases and the increasing treatment of pains of a minor and chronic nature, the number of instances in which category 2 type treatments are applied are just as prominent today as they were in the past, despite the advances of medical techniques in treating longstanding diseases. What *has* changed are the instances in which these treatment will be favored. Whereas previously category 2 treatments were used to treat serious illnesses, today the advance of modern medicine has ensured that their use has declined in this area. Hence category 2 treatments tend to be used mostly in the treatment of chronic and minor illnesses.

This is reflected in the changing types of illnesses which have utilized resort treatments. Historically, medical treatments offered at resorts were based on bio-meteorological principles that use certain climates and natural environment to treat illness (Kevan 1993). The idea that weather can affect health in both a positive or negative fashion has a long been pervasive in human thought (Sargent 1982) and is still prominent today: for example, the idea that a change in weather causes arthritis (Redelmeier and Tversky 1996). While initially resorts mainly treated serious illnesses including plague and syphilis (Hembry 1990:6), over time there was a notable qualitative change in the diseases treated. A survey of patients visiting resorts in 1883 recorded many that suffered from chronic rheumatism, older people suffering from bladder infections, and persons recovering from long debilitating illness (Jankovic 2006:274).

Thus in the next section we examine what evidence there is for these two hypotheses by examining how resort treatments and the medical advice which accompanies these have

evolved in the era in which resorts mainly functioned as proto-hospitals. If such behavioral tendencies are sustained over time, a corollary is that the trajectory along which resort treatments is guided not only by scientific advance, but also by these behavioral tendencies which result in treatments becoming more reliable in eliciting immediate physiological reactions in consumers. As we shall see in section 4.5, this developmental trajectory played an important role in the process by which resorts functionally mutated.

4.4 The evolution of resort treatments

In this section we review the early evolution of British resorts from 16th century onwards to find evidence for the hypotheses discussed in the last section. Travel and health have been intimately associated for much of history. Many ancient civilizations were aware that incidences of diseases are seasonally distributed (Kevan 1993:114), and some rulers built summer palaces which were used in order to avoid unhealthy times of the year that occurred in certain regions, such as the monsoon season. Similarly, in ancient Rome, aristocracies built estates in geographical locations which were thought to have a generally healthy effect (Towner 1996:20, Kevan 1993:115). In classical Greece one of the most influential tracts in medical history emerged by the physician Hippocrates, entitled “*On Airs, Water, and Places*”. It introduced an empirical approach to the theory and practice of medicine which formed the basis for the study of how climate and natural inputs could be used to cure illnesses (Sargent 1982:46). It was in this context that the earliest resorts emerged as part of the general effort to discover which different natural inputs could be used to cure various types of illnesses. During the Roman empire, extensive use was made of mineral waters and many thermal springs in Europe were discovered and used for medicinal purposes, such as those of Bath and Buxton in England (Hembry 1990:1, Towner 1996:53).

When examining the historical and geographical development of resorts that were popular amongst British travelers from the 16th century on, three broad eras are observable which largely relate to precisely what type of natural inputs were used for resort treatments. In the 1500s, the first generation of spa resorts emerged at inland spas that utilized spring water (Towner 1996:57). Starting from around the 18th century a new generation of resorts were located at the seaside that used sea-water as well as sea-air for treatment (Towner 1996:170, Lencek and Bokser 1998:70). Finally from the 19th century onwards, the use of sunshine and other aspects of warm climates in medical treatment became prominent and

consequently resorts located in the Mediterranean region became increasingly popular (Albert and Ostheimer 2002, Jankovic 2006). Appendix 4 provides some figures showing the geographical evolution of resorts. It should be emphasized that these three eras represent broad trends in popularity in which there is room for overlap: many of the inland spa and coastal resort still exist in Britain today, although they are not as popular as those located in Britain (Cooper 1997).

a) Evidence for Hypothesis 1

In the early era of British spa resorts during the 16th century, consumers were faced with a wide variety of potential treatments. According to one observer in the seventeenth century, there were precisely 479,001,600 sorts of mineral waters available in Britain, each with its own individual and unique properties and uses (Lencek and Bokser 1998:61). It has been estimated that between 1558 and 1815 about 173 spas were created (Towner 1996:62), which joined an estimated 450 existing holy wells that were also used for healing (Hembry 1990:4). In terms of treatment techniques, observers noted the essentially chaotic nature in which these waters were used to treat all sorts of cures. Walter Bailey wrote in 1587:

“I found great concourse of all sorts of people affected with sundry and dissident diseases, which all in one manner used the waters, both inwardly and outwardly without counsel or any just consideration, carried away with opinion, as it seemed that the faculties and virtues of them, were supernaturally given from God without any ordinary means, and so the use of the same not to depend of any order or advice of Physicke, but that it was sufficient by any means to use them. Much like unto the superstition of our fore fathers...”(Harley, 1990:49).

Along with this wide variety of different medicines and treatments, a multitude of supposed experts who advised consumers on the use of these treatments (Hembry 1990, Hamlin 1990). While these experts were originally motivated by charity in the middle ages when most were priests who supervised and advised the sick as part of their occupation (Porter 1996a:88), the vast majority of physicians from the Elizabethan era onward were motivated by profit (Hamlin 1990). The primitive state of medical knowledge and a wide variety of diseases from which consumers suffered (Porter 1998) together represented a lucrative business opportunity. The result was that a large number of experts were available to consumers who were prepared to advise them on the most effective treatment for their particular illness. Irish physician Charles Lucas wrote in 1756:

“Most of the voluminous and numerous tracts, and of these the most pompous... have been published by men living and practicing upon the spot... always interested in the fame of the particular water, which was their idol... such a man’s evidence therefore be deemed as doubtful, concerning the efficacy of his favorite water, as that of any other priest touching the miracles of the shrine, by which he gets his daily bread,” (Hamlin, 1990:69)

In the face of this diversity, a problem was that medical advice and treatments were not readily falsifiable; without precise definitions of diseases and very sophisticated techniques for conducting clinical trials, there was no real basis for verifying the effects of treatment and for deciding whether or not claims of uniqueness were warranted (Hamlin 1990). The few forms of experimentation that did occur relied on the consumer’s own assessment. For example, Frederick Slare compared waters of two spas by drinking first one and then the other for a week, and then drinking them alternately for 20 days, “the result was so plain and manifest to me that the Pyrmont water gave me more spirit and strength those days I drank them, than when I used the others,”(Hamlin 1990:71). We now turn to separately investigate what evidence there exists in this era for the two respective hypotheses stated in the last section.

Given these conditions, much evidence suggests that consumers tended to favor those treatments which elicited immediate physiological reactions, as suggested in hypothesis 1. In the 17th century, it was thus no coincidence that the most popular spas seemed to be those which offered bitter-tasting, foul-smelling and darkly-tinted water (Lencek and Bokser 1998:60): water whose properties tended to elicit some type of physiological change in the form of an intestinal reaction or taste sensations. Spas that were recorded to be popular in this era included the ‘Sweet Spa’ where the spa water would be consumed, or the ‘Old Sulphur Well’ which offered heated bathing in sulphuric water (Hembry 1990:51). Ironically, some of these did indeed turn out to be toxic and quite harmful to health (Harley, 1990:53). Later, cold water became popular for its ability to elicit immediate physiological reactions, including shock and numbness. Here Vincent Pressnitz (1799-1851) promoted cold water to a focal point for a radically new concept in therapeutics, which became extremely popular throughout the European continent (Price, 1981:271). Drinking and bathing in special types of cold water was used to cure everything from constipation to preparing women for the toughness of childbearing (Lencek and Bokser 1998:76).

In the era of seaside resorts, the cold water continued to be favored, and early coastal resorts would be visited during the winter and autumn, when the water was at its coldest (Whittet 1982:7, Towner 1996:177). In order to gain the maximum effectiveness from bathing, the bather would employ a horse cart and attendant to be taken out to the deeper part of the beach (Lencek and Bokser 1998:76). There the attendant would repeatedly plunge the bather into the water in rapid fashion until the bather was fully submerged. Sir John Floyer, a leading expert at the time, wrote in 1702:

“Cold baths caused a sense of chillness, and that, as well as the **terror** and **surprise**, very much contracts the nervous membrane and tubes, in which the aerial spirits are contained, and they being kept tense and compressed, do most easily communicate, all external expressions to the sensitive soul. Not only the external senses are more lively in cold water, but all our animal actions and reasoning are then more vigorous by the external compressure of cold air” (Lencek and Bokser 1998:76 own emphasis added).

Beyond eliciting shock, cold water was also used to numb the state of the body. A good example of this advance can be seen in how Charles Darwin was treated at the Malvin spa in 1842. It was one of the most popular health spas of its era. Darwin’s treatment included a good deal of rubbing with wet towels for the first ten days, and then being wrapped in wet sheets for a considerable length of time to lower the energy of the brain, which should in turn subdue the irritation of the stomach (Browne 1990). However absurd it sounds today, Darwin assured his friend “I feel certain that the water cure is no quackery”(Browne 1990:109).

In the late 18th century, another type of treatment that became widely popular was the act of deeply inhaling sea-air for extended periods. Scientific investigations of the period demonstrated sea air to be the purest and most saturated with oxygen, superior even to mountain air (Towner 1996:169). Patients took extended outdoor walks to breath deeply in sight of the sea, so that the whole body could be infused with an ethereal antiseptic that was thought to reduce ‘morbid humors’ (Inglis 2000:15): This type of repeated and deep inhalation increases the level of oxygen in the body and elicits strong psychophysical reactions (Raub 2002:808). Because of its popularity, an important criterion for assessing resort location was according to the wind direction, strength and air quality as well as temperature variations (Towner 1996:201).

In diametric opposition to cold water therapeutics that dominated resort treatment in the 18th century, heat-therapy became a prominent force in the mid to late 19th century (Jankovic 2006). This harnessed logic of existing home-based remedies based on warm baths and sweating. A new generations of physicians advocating such treatments argued that the cold inspired violence, gaming, and alcoholism (Jankovic 2006:275). In contrast heat bestowed its victims a bodily strength and immunity to ‘purification’ (*ibid*). Consequently, visiting warm climates was used as a way of treating tuberculosis and lung diseases, as well as symptoms of other illnesses, such as asthma. In the same era, another treatment which was simultaneously a seaside amusement was a ‘sun-bath’ in which consumers sought to expose themselves to sunlight for prolonged periods (Lencek and Bokser 1998). By the late 19th century, a British medical journal remarked “rightly or wrongly, the face browned by the sun is regarded as an index of health, and there are some persons who feel that the money spent upon a holiday has been well spent if they come back sun burnt,” (Albert and Ostheimer 2002:931).

All in all, this evidence suggests that popular types of resort treatments were those which coincided with the elicitation of physiological reactions, such as shock, numbness, intestinal reactions, changes in body temperature, sweating, darkened skin and so on. At the same time, one must not discount the fact that some of these treatments may have been popular because of other factors not related to the want for health. For example, sunbathing has been argued to have become popular in the early 20th century since a tan became associated with the natural sensuality of black people, and it was presumed to bring people closer to nature (Turner and Ash 1975:75). The emergence of other motivations for visiting resort suggests that the most appropriate era in which one should search for evidence in relation to hypothesis 1 is limited to the period during which the predominant motivation to travel was the pursuit of medical treatment. How these other motivations came to be associated with resort travel will be considered in section 4.5.

b) Evidence for Hypothesis 2

Turning to hypothesis 2, it suggests that two chief factors which influence the consumers’ tendency to follow medical advice are, firstly, whether it corresponds with treatment that is reinforcing and, secondly, the frequency at which it is socially communicated. Having reviewed the popularity of treatments that elicit physiological reactions, we now examine

whether the medical advice associated to these treatments was popular, and to what degree this popularity was also influenced by other factors identified by historians.

During the early modern spa resort era, the medical advice related to Galenic medical theory was popular amongst patients and physicians alike (Hamlin 1990:70). Galenic physicians based their advice on a theory which perceived waters as unique, irreducible and inimitable (*ibid*). Water was seen not simply as an element or a chemical compound but rather as a complex entity which possessed a certain 'spirit' that transcends analysis or capture (Harley 1990:49). Beyond their association with treatments that elicited physiological reactions (described above), many Galenic physicians were prone to mention the role of God's providence in the promotion of their waters (Harley 1990:49). Hence resort therapy was openly promoted as a vehicle for 'spiritual' regeneration. The quasi-religious nature of such advice gave it credence because since the medieval era priests had been primarily responsible for attending to the sick (Porter 1996a:88). They treated disease as a symptom of sin, and thus church doctrines often championed healing rituals which involved the use of relics, offerings made in fulfillment of vows, pilgrimages, holy waters, shrines and cults (*ibid*). Many of the original spas were also dedicated to saints (Hembry 1990:4). This association of water with religious purification was reflected in the Elizabethan government's inability to stamp out the association of this spring water with saints (Hamlin 1990:68). Consequently, the government allowed the continued operation of certain spa resorts under the condition that water contained proven mineral waters where no miraculous element was claimed (Hembry 1990:6).

Later, in the era of seaside resorts, medical advice based on the study of how marine environments affect human physiology (thalassotherapy) became popular. This type of advice became popular not only because of its association with cold water treatment offered by the likes of John Floyer, but also as a result of chemical studies on the contents of seawater. For example, Bertrand Russel's praised seawater for its heavy traces of iodine, bromine, chloride of sodium and muriate of magnesia, chloride of potassium, Epsom salt, sulfate of lime and carbonate of lime (Lencek and Bokser 1998:77). Beyond these elements even the organisms that lived and died in the seawater were thought to add a uniquely stimulating power (*ibid*). It was claimed that by regulating glandular secretions, seawater cleansed the system, controlled the rate of internal putrefaction, and invigorated the entire organism. Furthermore, advice related to the treatment the inhalation of sea air was

popularized by the discovery of oxygen which was believed to destroy unwholesome substances (Inglis 2000:15). Scientific investigations of the period demonstrated sea-air to be the purest and most saturated with oxygen, superior even to mountain air (Towner, 1996:169).

Finally, in the case of heat-therapy and heliotherapy in the late 18th century, the popularity of advice associated with these treatments was aided by personal travel experiences of consumers. Jankovic notes that amongst the lay public there was a consensus that traveling to the Mediterranean was a good antidote to the ‘English Malady’ “(a) condition or state of body and mind, intermediate between that of sickness and health, but much nearer the former than health” (Jankovic 2006:276). Rather than stemming from medical authorities, many of these lay ideas evolved from traveler’s personal experiences and of those in their social circles (Jankovic 2006:277). As we note in chapter 3, the emergence of ISCTs in the late 18th and early 19th century also facilitated the diffusion of such anecdotal evidence with the emergence of cheap novels and the rise of the travel-writing genre. This revolutionized the way consumers sought advice from experts and other experienced consumers since they had no longer needed to travel in order consult these parties in first-person or rely on word-of-mouth accounts of advice. Rather the medical tracts and experiences of other consumers became widely available in libraries and book clubs.

Later, heat and helio- therapy also gained support from scientific research. In 1877, sunlight was shown to influence bactericidal and fungicidal activity in vitro. Then, in the 1890s the Danish physician Finsen reported the successful clinical use of ultraviolet radiation in treating tuberculosis (Albert and Ostheimer 2002:932). The impact on medicine and science was fundamental in popularizing the idea that sunshine could be used as a cure (*ibid*). This was reflected in the fact that Finsen was awarded the Nobel Prize in Medicine in 1903.

All in all, the evidence lends support to hypothesis 2 which suggests that those theories became popular which were, on the one hand, linked to treatments that delivered strong physiological reaction and, on the other hand, were advocated by medical science. A crucial question is which of these two factors tended to be the dominant influence in determining the popularity of advice. Below we examine some cases where one can gain some understanding of why theories sometimes remained popular despite being criticized by medical authorities. If one accepts that this criticism diminished the frequency of social

communication, then such instances may shed light on the relative importance of these two factors.

One of the earliest scientific methods for verifying the effectiveness of spa waters was to conduct a chemical analysis of their mineral contents. Indeed, the quest to use the curing properties of spa water without the ordeal of travel motivated the birth of inorganic chemistry, which sought to understand precisely what was in the water in order to work out appropriate ways of transporting it (Routh et al. 1996:553). However, whilst chemists could discern what minerals were present in the water, for a long time they could not account for the existence of dissolved gases (Hamlin 1990:70). Such gases were responsible for the water's most intriguing properties – its bubbles, taste, texture and odor (*ibid*). Subsequently chemists could not find any objective difference between water that contained gases and other water that did not contain gases. Hence chemical investigations were generally dismissed as being too simplistic to understand the intricacies of the water and its potential effects on the human body (Hamlin 1990:74).

In other instances, the critique of medical experts greatly impacted what type of treatments consumer used and which resorts they visited. For example, in the mid 19th century, a number of reputable physicians began to criticize a resort located in Madeira, arguing that their humidity and north African winds made it hardly more beneficial to patient health than London itself (Jankovic 2006:287). Within two decades the resort town was avoided by patients who traveled to Switzerland or the less humid Egypt (Jankovic 2006:290).

In yet other instances, theories of resort treatment were popular precisely because they offered an alternative to established medical treatments. Indeed, in the early nineteenth century, mistrust of medical procedures was fermented when there seemed to be a 'reckless ignorance' on the part of many medical practitioners concerning a range of new drugs which had recently arrived in Britain (Price 1981:270). These included sulphur, tobacco, tar and acetate of lead, and were used despite the fact that it was by no means clear what precise effect they had (*ibid*). In reaction, the cold water cure's emphasis on the importance of air exposure, reflected a new holistic paradigm, a drugless system of natural therapeutics intended to tranquilize and stimulate the nervous system (Price, 1981:270). For general medical practices, the doctrine of the natural healing process was reemphasized (Neuburger, 1943). Hence this approach encouraged consumers to trust their own intuition in assessing

the effectiveness of medical cures, over the advice of established medical authorities (Price, 1981).

All in all, consumers did tend to use those treatments which elicited immediate physiological reactions, and accept medical advice that was associated with these treatments. However, it should be stressed that this tendency represents only one among many factors that have shaped the nature in which resort treatments and advice related to these have evolved. As modern medical science gradually progressed and the legitimacy of medical experts grew, they gained an increasingly stronger influence on what type of treatments and advice consumers followed. At the same time, given that resort treatments catered for a range of illnesses that were new or chronic in nature, there always existed instances in which the authority of medical advice was questioned, and here there was greater variability in the types of treatment consumers used and the advice which they followed.

4.5 The foundations of modern resort tourism

Having discussed their role in the evolution of resort treatments, this section turns to examining the role that consumer learning processes played in the functional mutation of resorts. An important feature of modern consumption is the emergence combination goods, which may serve a number of different wants (Witt 2001:39). In relation to the functional evolution of resorts, it is historically difficult to pinpoint precisely when resorts started to appeal to other wants beyond the want for health. Though there are many instances where resorts were used for other purposes, whether these constituted an actual trend is another question. Inglis notes that up to the early 19th century health remained the principal motivation to travel to the seaside for most consumers (Inglis 2000:15). Urry contends that the resorts of the 18th century were still places of 'medicine' rather than 'pleasure' (Urry 1990b:17). On the other hand, Hembry finds evidence for the commercialization of leisure interests in the late 17th century (Hembry 1990:303).

What is clear is the type of motivations that were involved in the mutation. Over time, resort travel came to be associated with the want for status and the want for arousal. In terms of social status, it was evidently at play during the era of Elizabethan spa resorts, where certain spas were frequented by royalty, and this patronage greatly aided the reputation of some resorts (Hamlin 1990:71). Social fashions also affected seaside resorts in that some of the architectural styles tended to 'date' certain resorts (Towner 1996:177, Soane

1993). Some authors argue that during the 18th and 19th century, the presence of the *nouveau riche* encouraged the gentry to forsake inland spa resorts, such as Bath and Cheltham, in favor of seaside resorts (Farrant 1987:140, Inglis 2000:14, Lencek and Bokser 1998:72).

Secondly, in terms of the want for arousal, Towner notes that by the 1780s a new generation of spas was equipped with a wide array of shops, such as food outlets, wine shops, music, books, perfumes, china, glassware, furniture, haberdashers, drapers, milliners, florists, goldsmiths, watchmakers and toy shops (Towner 1996:82). In the 19th century, the trend towards offering a range of regular entertainments on community stages emerged, for example performances by military bands, the presentation of light opera excerpts, popular ballads, and troops of minstrels (Inglis 2000:15). Over time, in the face of increasing competition, other attractions developed through which resorts attempted to distinguish themselves from and emulate each other. These included the pleasure pier, a promenading area, and fairgrounds that sprang up next to popular parts of the beach in the larger resorts (Walton 2000:95). The latter were permanent and on a scale which dwarfed the itinerant fairs which circulated through the inland industrial towns.

In light of the evidence that other motivations were also associated with resort tourism, it may be tempting to argue that consumers have always been traveling to resorts for the sake of attaining arousal or status ‘all along’, and that what has changed is simply the fact that in modern times such travels no longer need to be legitimized by the quest for health. However, there are two problems with this contention. First of all, the vast amount of historical evidence strongly suggests that the predominant use of resorts from the medieval period until at least the 18th century was undeniably related to health. It would be difficult to use an explanation based upon other motivations to explain a large part of the manner in which resort travel took place for much of its history. Furthermore, for such an explanation to be credible, it must account for how, in the total set of possible activities that may be done in order to signal status or attain arousal, why the act of visiting resorts was found amongst these. Given the multitude of ways in which consumers can signal status and attain arousal (See last chapter, also Trigg 2001, Veblen 1899), it would be difficult to explain why consumers should engage in such an act that was strongly associated with sickness to satisfy their want for status. While we do not deny that eventually this act did in fact satisfy other wants, an understanding of how these associations came to be inevitably leads one to describe the historical evolution of resorts in which the want for health figured prominently.

We argue that a proper explanation of how this functional mutation occurred begins with an account of the original manner in which consumers learnt to satisfy their want for health, which was done in section 4.3.. By comparing salient characteristics of this learning process with how consumers satisfied their want for arousal and status, we gain a better understanding of how this particular consumption act came to serve these other wants.

In terms of the want for arousal, evidence suggests that the schematization of resort treatments played a large role in enabling the emergence of entertainment facilities. As mentioned in section 4.3, a corollary to the hypotheses is that resort treatments changed towards providing techniques that were more reliable in eliciting immediate physiological reaction in consumers. During the 18th century, resort treatments became increasingly schematized and sophisticated where ill patients were subject to a ‘regime’ of treatments. For example, Charles Darwin’s treatment at the Malvern spa in 1842 included a good deal of rubbing with wet towels for the first ten days, and then being wrapped in wet sheets for a considerable length of time which was used to lower the energy of the brain (Browne 1990).

Via such schematization, physicians also began to include other therapeutic activities, such as regular outdoor exercise. Sir John Floyer, the above-mentioned pioneer of salt-water bathing, insisted that immersion in cold water should be followed by vigorous exercise, such as riding or walking in cold air (Lencek and Bokser 1998:61). Vincent Pressnitz also used a therapeutic scheme in which the use of water was accompanied with eating particular kinds of coarse food and daily exercise (Price 1981:271). Hence, a general view emerged that, for this type of medical treatment to be effective, they had to be utilized as part of a complete spa regime (Kevan 1993:116). As such, even in the 16th century, some suspected that the effort to develop treatments that were increasingly effective in eliciting physiological reactions was in fact nothing but an attempt to harness the power of what today is known as the ‘placebo’ effect:

“Even if the waters held no detectable virtues, the change of air, the check on gross feeding and gross habits, the novelty of exercise and the distraction of the journey often brought on improvements in the patient”(Kevan 1993:116)

The inclusion of pleasure activities into the schema of resort treatment harnessed the theory that inducing particular pleasures could be effective medical treatment that benefited the

mind may well also benefit the body. This derived from the notion of the ‘natural healing process’, which experienced a revival in the 18th century. It held that medicines should help the body heal itself rather than attempt to simply correct symptoms of sickness (Neuburger 1949). Consequently, the amenities of the spa- scenery, food, peace, amusement- were as much part of the effect as were the material effects of water (Hamlin 1990:70).

Over time, the pleasure infrastructure originally associated with medical treatments gradually became a focal point of competition between resorts. From the 17th century onward, provisions for entertainment at resorts steadily increased, starting with assembly rooms and specialized card, dancing, raffling, and music rooms (Hembry, 1990:303). In conjunction with exercise prescribed by doctors, as well as the act of inhaling sea-air, stages and amusements were located near the seaside as a way of making it easier for visitors to spend more time out of doors. Furthermore, piers and promenades were used to create paths along which visitors could be exposed to the sea air.

Of course, the schematization of resort treatment was not the only factor driving the demand for entertainment facilities. It was augmented by the generally aristocratic nature of resort visitors who also demanded a variety of facilities (Hamlin 1990:70). Larger investments of coffee-houses, libraries and pleasure gardens became either commercially viable or were financially supported by local municipalities and royalties (Hembry, 1990:303). Also, Inglis further notes how the stationing of military personnel along the coast, to prevent a possible Napoleonic invasion, also had a positive effect on the provision of entertainment at seaside resorts in the 19th century (Inglis 2000:15, Soane 1993). In exchange for the local’s hospitality, various regiments offered the services of their brass bands to seaside resorts in the area.

Turning to how the act of visiting resort came to serve the want for status, in section 4.3 we noted how consumers learn to satisfy the want for health tends to be social in nature. Consumers tend to seek information on effective treatment from their peers. Via social observational learning, consumers can learn to satisfy their want for health according to what others have found reinforcing. The general topic of ‘what treatments work’ is popular in everyday conversations, and was particularly popular during in the tuberculosis era (Jankovic 2006). Furthermore, because it was the rich who tended to be the first to be able to afford medical treatment and who had a relatively large set of resorts to choose from, one would

expect a demonstration effect to occur through which other consumers would imitate their consumption patterns (Bikhchandani et al. 1992).

Thus, the social nature of consumer learning suggests that consumption activities related to this want provide natural opportunities for consumers to signal their want for status. As Veblen notes in *The Theory of the Leisure Class* (Veblen 1899), prior to using goods and services as a means for consumers to gain distinction, wealth was displayed by how much of their time was free from labor and could be spent in a non-productive manner in “decent surroundings”. Veblen defined the very concept of leisure as “the pecuniary ability to afford idleness,” (Veblen 1899: Chapter 3). In this respect, the act of visiting resorts provides a good opportunity for the wealthy to signal status precisely because of its expensive and time-intensive nature. Hence, both the costly nature of the consumption act as well as the social nature of consumer learning process thus enabled the act of resort travel to become associated with the satisfaction of the consumers want for status.

All in all, the manner in which resorts functionally mutated was not random or unpredictable in nature. One of the reasons why the want for arousal came to be associated with resort travel was because consumers tended to favor treatment which elicited physiological reactions. This sparked the schematization of resort treatments, which in turn caused a wide range of arousing activities to be incorporated in the typical resort experience, the enjoyment of which provided an alternative motivation to visit resorts. One of the reasons why the want for social status came to be associated with resort travel was because of travel’s expensive and time-consuming nature that made it a good opportunity for the rich to signal their status. Furthermore, imitation was an inherent part of how consumers learnt to satisfy their want for health in the early era of resort evolution. Therefore, by taking into account the complementary nature of how consumers learn to satisfy different wants, one can begin to understand the manner in which consumption activities change and functionally mutate over time and may begin to appeal to a number of different wants.

4.6 The birth of modern resort tourism

This section highlights the important role that urbanization has played in the birth of modern resort tourism in the late 19th century. A major benefit of the functional mutation described in the last section was that the resort industry in general remained viable even though the bio-meteorological theory upon which it was established became obsolete in

treating serious illnesses. Starting in the 19th century, advances in modern medicine increasingly rendered the need for bio-meteorological treatment obsolete. Advances in chemistry made it possible to synthetically produce strong sedatives, such as morphine (Porter 1998:675). Along with the invention of the hypodermic syringe in 1853, this brought about a portable treatment for pain that was far more effective than anything general practitioners could previously offer. Furthermore, the ascendancy of germ theory from 1865 a new body of medical knowledge emerged that would provide effective treatment against infections and promoted immunization (Mokyr 2000:15). Together with the emergence of modern hospitals in a number of locations throughout Britain (See Porter 1996b), these factors all helped to minimize the need for ill patients to travel to resorts in order to treat serious illnesses.

However, not all resorts benefited equally from such change. British resorts in particular faced stiff competition from Mediterranean and German resorts. As noted above, a trend had already developed in the 19th century amongst the British which favored the hot and dry climate of the Mediterranean (Jankovic 2006). For those British consumers who still demanded bio-meteorological treatment, German spa resorts were perceived to have a clear advantage (Bacon 1997). For in contrast to the British, German spas were run by relatively interventionist municipalities whose introduction of the tourist tax in places like Wiesbaden produced relatively large capital funds for infrastructure investment. Consequently, these towns enjoyed better hygiene levels, and advanced sewerage and running water systems (*ibid*). In addition, German spa practitioners were regulated and required to study for a license at state-run universities. In Britain the reputation of resorts suffered from frequent malpractice and charlatanism, which had led to the closure of a number of spa resorts by the 1860s (Bacon, 1997:177).

In spite of these factors, British resorts grew tremendously in popularity towards the end of the 20th and the beginning of the 21st century (Walton 1981, Towner 1985, Urry 1990b, Towner 1996, Walton 1997, Walton 2000). By 1911 it was calculated that 55 per cent of people in England and Wales took at least one trip to the seaside per year (Urry, 1990). The source of this growth was a generation of working class tourists who began to visit resorts. Indeed, the birth of modern resort tourism is typically traced to the adoption of resort tourism by the working class (Urry 1990b, Walton 1981, Walton 2000, Inglis 2000, Barton 2005).

Significantly, this occurred despite the fact that resort travel was relatively expensive for the budgets of the working class. Unlike the emergence of other modern leisure pastimes, visiting a seaside resort represented a substantial investment of money and time, in an era when real wages and leisure time for the working class were on the decline (Voth 1998).⁴⁴ A week's stay typically required workers to save for one entire year (Walton, 1981:257).⁴⁵ Moreover, in this period the leisure time of working class was actually declining. Voth notes that whilst working hours remained constant between 1750 and 1800, the practice of extending the weekend by an extra day (known as 'Saint Monday') largely disappeared and a considerable number of political and religious festivals were no longer observed (Voth 1998:143). It was only in the second half of the 19th century that the passing of the August bank holiday act in 1857 brought an improvement by providing another opportunity for many workers to enjoy an extended weekend (Barton 2005:88).

Concerning what motivations these consumers possessed, it may be tempting to conclude that the working class were the sort of tourists who were attracted to resorts because of their entertaining nature, or as an opportunity to gain status. However, the resorts that the working class visited in this era were in a different region from those which were used by the upper class, who since the late 19th century tended to visit resorts in Europe (as noted above). Furthermore, the working class traveled *en masse* as a collective party from a particular town or factory and thus visited the same resort together (Walton 1981). Hence this act could hardly serve to distinguish the individual from his or her peers.

In regard to the want for arousal, the British working class had other established means of enjoying their leisure time which were relatively cheaper, just as stimulating and required less travel. Most notably, as mentioned in the last chapter, local fairs and festivals were a common occurrence throughout Britain and were held in many towns for several days each year. During these annual festivals, entertainment included alcohol consumption, gambling, theatre troupes, street entertainers, and street sports such as football. Over time, these evolved into sophisticated and mechanized events. By 1892 fairgrounds featured such amusements as swing boats, roundabouts, shooting galleries, wild beast shows and various other mechanical contrivances (Vorspan 2000:912).

⁴⁴ For a review of how living standards changed with the industrial revolution see (Mokyr 1988).

⁴⁵ As one worker noted "I'm not savin' oop twelve bloody months for t'sake a going away for a week. Wife's always asking about what I do wi'me overtime, and I told her – why, I bloody well spend it, what dost think..." (Walton 1981:257).

We argue that this change in consumption patterns is linked to the impact that urbanization had on consumption by affecting the types of activities that consumers engaged in and aspects of the consumer's physical habitat. Urbanization, as the process by which a population becomes geographically concentrated, is one of the most spectacular changes that consumers have experienced in the course of economic development. In Britain, the bulk of urbanization occurred in the 19th century. At the beginning of the 1800s only 30% of the British population lived in towns and cities of more than 2000 inhabitants, however, this had risen to more than 50% by 1850 and to 75% by 1900 (Cameron 1993:195). Except for London, this change impacted larger cities relatively more than smaller town and cities. Between 1811 to 1871 London's share of the population grew very little from 11% to 14%, whereas the share of the population in large towns increased dramatically from 2% to 18%, while small towns doubled their share from 12% to 22% (Schofield 1994:89).

Urbanization had a very significant impact on consumption patterns (Plumb 1982, McKendrick et al. 1985, Clark et al. 1995, Horrell 1996, Mokyr 2000). Major aspects of consumption that underwent change in this era include nutrition, health, demand for government services, and social interaction patterns. In particular, working class leisure patterns underwent a profound change in this era (Cunningham 1980, Vorspan 2000, Barton 2005). In pre-industrial English society, there was no sharp demarcation between 'work' and 'leisure'. Traditional occasions such as harvesting centered on labor, while popular festivals conformed to the agrarian calendar. Yet by the 1850s and 1860s a new range of 'modern' and commercialized recreation activities, such as professional sports, amusement parks and music halls,- emerged to replace leisure within the confines of traditional occasions and fests (Vorspan 2000:892).

In terms of the act of travel, the impact of urbanization on consumer's habitat led to a new connection between travel and health. This is because the new environ in which an increasing percentage of the population was now located in also contained a number of aversive stimuli:

"The growth of cities was not an unmixed blessing. They contained huge ramshackle tenements and long rows of miserable cottages in which the families of the working classes crowded four and even more persons per room. Sanitary facilities were generally nonexistent, and refuse of all kinds was disposed of by being thrown into the street. Drainage facilities, where they existed, usually took the form of open ditches in the middles of the streets, but more often than not rain, waste-water, and refuse were left to stand in stagnant pools and

rotting poles that filled the air with vile odors and served as breeding ground for cholera and other epidemic diseases. The streets were mostly narrow, crooked, unlighted, and unpaved,” (Schofield 1994:189).

The observation that the urban living conditions contain a number of aversive stimuli has been long noted in the urbanization literature (Hohenberg and Lees 1995). Early urbanized habitats contained not only aversive stimuli themselves, but they were commonly associated with disease. Indeed, the medical conditions of the urbanized working class in 19th century Britain left a lot to be desired. Fatal diseases included chickenpox, scarlet fever, rubella and a multitude of gastro-intestinal and dysenteric diseases (Porter 1998). Measles, tuberculosis, syphilis, diphtheria, meningitis and postpartum sepsis were also commonly encountered. The poor living conditions of urbanized environs were seen to contribute to a large majority of these diseases (Porter 1998, Albert and Ostheimer 2002). Therefore, both on the count of the generally unappealing nature of crowded and polluted environs as well as their association with disease, one can understand how travel, as an act which (at least temporarily) delivers the consumers away from this environment, may be perceived as reinforcing by consumers. Hence urbanization, by severely altering the consumers living environment, played a significant role in providing a modern motivation to travel.

In particular relation to working class resort travel, the impact of urbanization on consumer's general lifestyle gave impetus to the emergence of a strong social movement which promoted resort travel amongst the working class. This was linked to the general perception that the urbanized working class suffered from high rates of alcoholism. The first alcohol epidemic occurred between 1720 and 1770 when gin consumption rose from negligible levels at the start of the century to 19 million gallons per annum at its midpoint (Nicholls 2003:127). Per capita consumption of alcohol increased up to eightfold from between 1 and 2 pints in 1700 to between 8 and 9 pints in 1752 (Mitchell and Deane 1962). Later, in the 19th century, according to Dingle a second alcohol epidemic peaked in 1875 when around 34 gallons of beer and one and a half gallons of spirits per head was annually consumed amongst the working class (Dingle 1972).

Urbanization had a positive direct and indirect influence on the rise of working class alcoholism. Many attribute the rise of alcoholism as being a direct social consequence of urbanization. De Vries argues that increases in binge drinking during the industrial revolution were linked to the fact that the nature of work became more intensive and

workers chose to work longer hours in what he calls the ‘industrious revolution’ (De Vries 1994:260). In a more indirect manner, urbanization also increased the prevalence of malnutrition amongst the working class (Dingle 1972). A way in which public authorities sought to combat malnutrition was to promote the consumption of beer amongst the working class, which was perceived as having high nutritious value (Brendon 1991:28). Hence the Beer House Act of 1830 removed most limitations on the opening of taverns, and 30,000 new drinking places opened within the year (Wilson 1940:101).⁴⁶

By the early 19th century, the need to combat alcohol consumption fermented into the formation of the temperance movement, founded in 1828. This quasi-evangelical movement sought to “civilize the leisure habits of the masses” (Brendon 1991:29). To properly fight this new type of disease, they sought not to cure alcoholism with particular treatments but rather attempted to change the general lifestyle of consumers. The temperance movement promoted the ‘rational’ use of newly earned wealth on acceptable past-times. It promoted such activities as visiting public libraries, museums, parks and participation in choral societies, and brass bands. These alternatives were seen as respectable and “morally improving” pastimes (Vorspan 2000:894). It found much support amongst churches, politicians and even employers who found such changes improved the productivity of workers (Vorspan 2000:897). As part of its promotion of rational recreation, the temperance movement funded the construction of entertainment infrastructure, such as music halls, and also organized temperance walks and outings (Brendon 1991:25).

In this context, the idea of organizing working class excursions to the seaside became popular amongst employers, who began to sponsor mass visits to seaside resorts from the 1840s on (Walton 1981:255). Binge drinking caused great difficulties for early industrial districts, such as the Lancashire cotton towns, because of mass absenteeism which occurred particularly when local fairs were held (Walton 1981:254). As an alternative to visiting local fairgrounds where workers tended to engage in drinking and gambling, excursions to seaside resorts were promoted, which were thought to give workers the opportunity to improve their physical, intellectual and moral health (Walton 1981:249). The holiday excursion also countered binge drinking by promoting savings habits amongst workers, as they had to save for prolonged periods in order to afford week long excursions (as was mentioned above).

⁴⁶ Note that Mokyr argues sharp increases observed in the per capita consumption increases were caused by changes in duty or collection methods (Mokyr 1988:78).

This new trend also provided an impetus for the establishment of official holiday periods. From 1850s onwards there was a average decrease in the length of the working day so that by the 1870s a nine-hour day was practiced, and further reduced to 8 hours a day by 1919 (Walton 1981:256).

Later, another contributing factor to the popularity of resort travel amongst the working class was the rickets epidemic which particularly affected urban populations in the early 1900s. Rickets was common amongst urban children, who were subsequently treated with sunlight once its effect on the body's production of vitamin D was discovered (Albert and Ostheimer, 2002:909). As a result, exposure to ultraviolet light became a public health goal (Albert and Ostheimer, 2002:911). Children were encouraged to keep out of the shade and outdoor sunbaths were recommended for infants. Along with encouraging consumers to visit sunny seaside resorts, glass was also developed that more efficiently transmitted ultraviolet radiation and it was subsequently used in schools, hospitals and hotels.

Finally, in economic terms, urbanization also enabled newly emerging tour operators to achieve scale returns. A greater density of the population naturally leads to a larger market which enables specialization (Simon 1977:35). Early package tours, such as those offered by Thomas Cooke (who was also a member of the temperance movement), offered accommodation and transport in a single, standard package at a relatively cheap price (Brendon 1991). His success also depended on the cooperation of railway companies, who tolerated Cooke's activities since they occurred intermittently and the railway network possessed excess capacity (Urry, 1990:21). For consumers, the organized nature of such travel was also convenient in that the consumer left the organization of transport, food, and accommodation up to the tour operator.

All in all, through a number of changes in working class consumption patterns caused by urbanization, the act of resort travel became linked in new ways to the consumer's want for health. Firstly, excursions to seaside resorts were promoted as a means of dampening alcohol consumption, which was perceived to have been partially caused by urbanization. Furthermore, the generally unappealing nature of the urbanized environment set up a situation in which consumer found travel away from these environs as reinforcing. Later the emergence of rickets, another disease which was linked to the urban environment, led public authorities to promote travel to seaside resorts as a means to gain exposure to sunshine. Finally, the geographically concentrated nature of urbanized consumers also

enabled package tourism to become economically viable. Thus because of urbanization and the social changes that it generated, the act of resort travel formed new associations to the consumer want for health.

4.7 Conclusion

This chapter has shown how the evolutionary approach to consumption can shed light on how consumers behave in situations where they know relatively little about the consumption act. By taking into account how associative learning processes may interact with insightful learning, not only do we outline a way in which consumers avoid potential infinite regress in working out which expert advice to follow, but uncover a tendency which can have an important impact on the manner in which markets evolve. As we have seen, the developmental trajectory of resorts and the treatments they offered were heavily affected by the consumers' tendency to favor those treatments that elicited physiological reactions and that advice which coincided with such reinforcement. As the knowledge accumulated in advanced economies becomes increasingly abstract, such tendencies that result from the interaction of associative and insightful learning will become increasingly important for analyzing consumer behavior in situations where it is difficult for consumers to discern the causal connection between available goods and services and the wants they are designed to serve.

Furthermore, in order to understand how resort travel has historically grown and transformed itself, this chapter has explored how this act functionally mutated in two fundamental ways: Not only did this consumption act come to be associated to the want for status and arousal, but the manner in which this consumption act was linked to the want for health also changed. Central to both of these changes is the manner in which consumers learn to satisfy their wants. In relation to the former, we have found that the schematization of resort treatments played a pivotal role in understanding how the act of travel came to be associated with the want for arousal. Furthermore the time-intensive and costly nature of the consumption act, together with the consumer's tendency to engage in social observational learning, enabled the act of travel to be associated with the want for status. In relation to the latter, beyond facing new types of diseases, the emergence of painful aversive stimuli in the consumer's environment as result of urbanization combined with the consumer tendency to counter minor pains as income rises enabled this consumption activity to be associated in

new ways with the want for health. As such we have gained a better understanding of the manner in which resort travel has historically grown to become one of the major forms of tourism today (British Resort Association 1989, Agarwal 1997, Papatheodorou 2004).

All in all, in order to ascertain what impact the emergence of new and technologically superior goods and services have on the economy, it is important to understand the nature in which existing goods and services may undergo functional mutation. As we have seen in the case of the functional mutations of resorts, economic obsolescence was avoided by the fact that the act of traveling to resorts came to be associated to different wants, as well as to the want for health in new ways. Hence the introduction of novelty, by rendering existing goods and services obsolete in serving one particular want, may stimulate functional mutation and the emergence of combination goods. Pivotal to this process was the nature in which consumers learnt to satisfy their wants, and how these learning processes changed in the face of rising income and economic development. By studying these factors and the emergence of combination goods, one may attain a better picture of the adaptation processes that occur as economies undergo self-transformation.

5. The Specialization, Saturation and Adaptation in the German Organized Tourism Industry, 1971-1994.

5.1 Introduction

In the last two chapters we have investigated how the act of travel became associated with two particular wants and how these associations have changed or remained stable over time. In this chapter we move away from focusing on specific motivations of travel and consider the more general situation in which the overall consumer population is distributed over varying degrees of specialization. Given some common tendency for consumers to use different goods and services at particular stages of specialization, the impact of consumer learning would then manifest itself in terms of substitution rates between markets, rather than causing functional change within any one particular market. In the context of understanding the growth patterns of markets and industries, such regularities represent an interesting counteracting force to scale returns emerge with increases in the extent of the market. Indeed, the substitution patterns of specialized consumers may become particularly crucial as markets near saturation and the total number of new consumers entering the system declines.

Specifically, we focus on modern tourism intermediary services (services of travel agents and tour operators) whose use is hypothesized to be mediated by the level of consumer specialization. The more specialized consumers are, the less likely they are to embark on full-organized trips that are relatively inflexible in nature. Simultaneously, in

relation to the size of the total population of consumers, these inexpensive and convenient fully-organized trips played an important role in stimulating consumers to travel and specialize in this consumption act. Together these observations imply that within a certain growth phase, one may expect fully-organized forms of travel to prosper at the beginning of a growth phase, but experience problems as existing consumers specialize and the number of new consumer declines. Using empirical data we find evidence that indeed fully and partially organized travel markets are hierarchically structured in that there is a tendency for consumers with more experience to substitute towards partially organized travel. Evidence from the empirical analysis of three separate growth phases also suggests that this tendency increases in the later stage of each growth phase, as the number of new consumers entering the market declines.

In such situations that periodically occur within a growth phase, suppliers in these markets need to devise strategies to retain consumers and dampen the substitution effect that tends to occur with specialization. Here we suggest one way to do so is to offer new more 'exotic' destinations that are situated further away which are sufficiently appealing to specialized consumers so as to entice them to utilize more intermediary services, rather than traveling to familiar destinations where their own knowledge renders the use of fully-organized travel unnecessary. We find evidence that this occurred in two out of three growth phases that were investigated.

The chapter is structured as follows: Section 5.2 discusses how consumer specialization processes can cause consumers to substitute between goods and services, while section 5.3 considers how this becomes a serious issue for suppliers as markets near saturation and what strategies suppliers can undertake. Section 5.4 relates these theoretical considerations to the tourism intermediary service markets and develops empirical hypotheses. Section 5.5 reviews the growth phases that occurred in the German postwar travel market which are then used to calibrate the empirical test in section 5.6 that is designed to test for substitution patterns between markets and find evidence for how suppliers of fully-organized trips may have overcome these periodic crises. Section 5.7 concludes.

5.2 Specialization and substitution

Uncovering empirical regularities in how consumption changes with increasing income is the major aim of long run studies of consumption. Witt hypothesized that because consumer's basic wants can be satiated, this creates an upper limit on the frequency of consumption and the corresponding amount that consumers are willing to spend on consumption acts related to the wants (Witt 2001). While in the case of travel, the two particular underlying wants that are related to this consumption act investigated in previous chapters seem to be less subject to satiation, this nevertheless does not imply that there are no regularities to be observed as consumption patterns change with increasing income. Indeed we argue that regardless of the underlying wants that drive the consumption act, there are instances in which specialization can trigger important changes in what goods and services consumers utilize. Consequently, just as entrepreneurs whose goods and services are linked to the satisfaction of basic wants need to innovate in order to escape satiation, here entrepreneurs catering to specializing consumers also may have an incentive to modify their goods and services in order to remain appealing to specializing consumers. Such a consequence of specialization represents a more general type of regularity that also occurs in a relatively shorter time-span relative to satiation dynamics.

In the context understanding how markets change as they grow, such regularities represent an interesting counteracting force to scale returns that become possible with increases in the extent of a market. Recall from chapter 2, that 'market' simply refers to a group of interacting suppliers and consumers. Typically in economics, 'market growth' is mainly described in terms of how an increase in the number of consumers (or the frequency of purchases) may enable scale returns. Given particular production technologies, such an increase serves to lower the marginal cost of production, leading to a reduction in price (Smith 1776, Young 1928, Langlois 2001). For example, as mentioned in the last chapter, British urbanization played a role in leading to the emergence of travel intermediaries, since the concentration of a large number of consumers in cities and large towns made large-scale travel services profitable. Hence the market growth process from this perspective is basically a description of how an increase in the size of the consumer population may influence the cost and organization of production. A key assumption here is that demand remains homogenous during the growth process, i.e. over time no significant differences emerge in what the population of consumers demand.

However, as we have seen in chapter 3, it is possible that consumers may become specialized which can lead to considerable changes in what consumers know and like. Consequently, these scale effects may not be realized since specialized consumer would demand relatively differentiated types of goods and services. As a result, entrepreneurs operating in markets that are characterized by both increases in the total number of consumer as well as consumer specialization processes may be confronted with a dilemma. On the one hand, they may adapt to the wants of specialized consumers, a strategy that may incur considerable restructuring costs. On the other hand, they may bank on the market to continue to grow, such that the number of relatively unspecialized consumers continues to increase substantially. As we shall see, empirical evidence suggests that the growth in the extent of the market does not typically occur in a steady fashion, but rather occurs in bursts. This suggests that in periods in which growth slows down, suppliers may have a relatively strong incentive to adapt their goods and services to relatively specialized consumers.

In concrete form, the regularities we investigate that may emerge because of consumer specialization are substitutions in the goods and services that are consumed. Essentially, gaining more detailed knowledge and more refined (dis)likes may change significantly how consumers assess the performance of goods and services used both in the past and those that are potentially used in the future. Items used in the past that were once deemed adequate may at some later stage be regarded as no longer suitable due to this specialization process. For example, after having gained experience with relatively basic personal computer, consumers may become unhappy with the performance capabilities of their computers and upgrade to sophisticated computers with relatively more software and hardware features. Consequently, new types of goods and services emerge that are adapted to the more refined state of the consumer's knowledge and their likings. As mentioned in chapter 2, a wide range of markets have emerged which are performance-orientated nature of products, such as cameras, sports cars, furniture, clothing, jewelry, carpets, lamps, and printing (Scranton 1994). As we saw in chapter 3, new destinations emerged on the Grand Tour to cater for the consumer's specialized want for visiting scenic and desolate locations.

An important question here is to what extent the level of a consumer specialization may interfere with their price elasticity. As consumers specialize, we can expect them to generally prefer those goods and services that best match what they know and like. In general, Non-specialized goods are relatively cheaper because of the relatively higher scale

returns they can achieve.⁴⁷ As we shall see below, this certainly holds true in the case of tourism intermediary services, where fully-packaged trips offer very significant discounts on airfares and accommodation relative to partially organized trips. In such cases, specialized consumers face a tradeoff between using those goods that are cheap but do not match their particular likings and using those that are more expensive though they better match the consumer's particular likings. This is an issue that has been discussed in the 'General Purpose Technology' literature where the probability that users adopt a common technology depends on the mismatching costs incurred in using a widely available but untailored technology versus using one that is more expensive but tailored to the users specifications (Bresnahan and Gambardella 1998). In relation to learning consumers, the costs of using unspecialized goods and services are not static, but increase in accordance with the nature and speed at which the consumer's knowledge and likings become refined. Because their acquired wants are unlikely to be similar between consumers, it is hypothesized that these progressively differentiated sets of likings lead to an increasing mismatching cost as consumers specialize. The higher these costs are, the more consumers are willing to pay for goods that better match their particular wants. As a result, we expect that the specialization level to indeed lower their willingness to pay for goods and services that do not match their particular liking, while it should increase it for goods and services that do properly match their likings.

At the same time, let us note that there is nothing inevitable about such a specialization process. As we have discussed in chapter 2, it is a unique interaction between insightful and associative learning patterns that results in a self-reinforcing learning trajectory. There, we outlined a number of factors that may influence the likelihood that consumer specialize in a particular consumption activity. A necessary but not sufficient condition for such a process to take place is a relative high frequency of consumption, which facilitates the interaction between what the consumer has experienced and what they know. In chapter 3 we saw how specialization processes are also fostered by the availability of knowledge in social institutions, as well as social interaction patterns that may work via the

⁴⁷ However, this is not always the case. Cosgel and Langlois give the example of the Land's End catalogue which, by offering a varied assortment of mix-and-match clothing elements within a coordinated design paradigm, consumers can better fine tune a wardrobe to their personal tastes (Langlois and Cosgel, 1998:116). Here it is still possible to realize economies of scale, although not from the final goods and service *per se*, but rather from how suppliers coordinate with consumers. Such forms of organization would not be viable if all consumers had the same likings, where standardized methods of coordination would be sufficient.

shift effect to stimulate consumers to insightfully learn about particular consumption activities. These considerations must be kept in mind when drawing conclusions between observed substitutions patterns and hypothesized specialization patterns.

Furthermore, the main argument that the consumer specialization process leads consumers to substitute between goods and services also assumes that there is some critical boundary that is reached in the course of specialization at which the consumer ceases to use certain goods and services. When such a limit is reached depends on, amongst other things, the characteristics of the good or service in question. Certain characteristics may render it useful for relatively longer phases in the specialization process. For example, in relation to the want for arousal, those goods that are more complex tend to be used for relatively longer periods (Scitovsky 1976:50). In other cases, how well a set of goods may be creatively varied can also influence the duration of use (Bianchi 1998, Langlois and Cosgel 1998). Hence when examining consumption patterns over time, it may well be the case that producers innovate their goods and services in such a fashion as to delay or even accelerate the point along the specialization process at which consumer substitute between goods and service (this we will discuss further below). In other instances, specialization may not lead to the substitution of goods and services in the first place. Instead, it can lead to new goods *complementing* existing goods, such that consumers collect a number of different goods related to a particular consumption act (Bianchi 1997, Ruprecht 2002a, Saviotti 2002). This occurs especially in cases where items are of a durable nature and can be easily stored. In the case of services however, higher quality services must replace rather than complement lower quality services given their intrinsically non-storable nature.

Let us also emphasize that specialized consumers by no means tend to use exactly the same types of goods and services. Because it depends on the characteristics of the individual learning process, it is indeed probable that the specialization process may serve to accentuate heterogeneity in consumption patterns, such that consumers in relatively advanced stages of specialization are increasingly unlikely to exhibit common features in their consumption activities. Nevertheless, at the appropriate level of analysis, it is not difficult to find some commonalities amongst the likings of specialized consumers. A simple example is computer software, where ‘novice’ consumers are more comfortable with using ‘user-friendly’ standard Microsoft Windows operating packages, whilst specialized consumers prefer more flexible and less cumbersome operating systems such as Linux which

offers features that are more appreciated by experienced consumers. Here the very fact that specialized consumers do tend to have relatively different likings means that they tend to use goods and services which enables them to modify the consumption experience according to their likings. One can think of a number of such examples with regards to any type of consumption activity that involves potentially complicated goods and services, such as electronic products, cars (e.g. automatic versus manual transmission), white-goods and sporting equipment.

5.3 Market hierarchies and saturation

This section considers when and how suppliers may react to specialization-related substitution patterns as the extent of the market periodically experiences growth and saturation. Let us consider the situation where the population of consumers are segmented into a different classes ($c = 0, 1, 2 \dots C$), according to their level of specialization. For each class of consumer we may expect a different mix of goods and services to be used in the consumption activity. Some may complement each other across different learning stages (such as how 18th century romantic novels complemented the Grand Tour as discussed in chapter 3), whilst others may substitute each other at the same stage (such as spending an hour watching television or reading a novel). Hence we can think of markets being related to each other in a hierarchical fashion, depending on whether they serve relatively specialized or unspecialized classes of consumers. The overall strength of these interrelations depends on the aggregate state of the consumer's specialization patterns, i.e. how many total consumers are in the total system, and how they are distributed across different levels of the hierarchy. As the individual consumer specializes, they can graduate towards higher classes and hence higher levels of the market hierarchy.⁴⁸ The number of consumers in the j th class at timepoint t ($N_{t,j}$) can be thought of as the difference between the total number of entering consumers ($Y_{t,j}$) and the total number of exiting consumers ($X_{t,j}$) in addition to the residual number of consumers that have neither entered nor exited since the last period ($N_{t-1,j}$):

$$N_{t,j} = (Y_{t,j} - X_{t,j}) + N_{t-1,j}$$

⁴⁸ We leave open the possibility that consumers may not necessarily graduate to ever higher levels of the hierarchy. As each specialization process is different, some may stay put at one level of the hierarchy, or may altogether de-specialize and move down the hierarchy. Ultimately these are tendencies which may only be meaningfully discussed with empirical data, as will be done below. Note also that “hierarchy” and “class” simply refers to an order reflective of the consumers level of specialization, and does not refer to any social distinction or income-related differences in the consumer population.

Where t denotes time point and j denotes the class level.

In general, it is common for there to be a degree of synchronicity amongst consumers in terms of when they start to learn and substitute between goods and services. As will be shown later, relevant here are exogenous shocks created by general economic conditions that may enable consumers to start consuming or afford more specialized goods and services in bursts, as well as technological shocks which may alter the lower boundary for all consumers simultaneously. Thus, rather than assuming a uniform and constant distribution of consumers across levels of the hierarchy, consumers tend to climb the hierarchy in a lumpy fashion such that particular levels of the hierarchy experience waves of entry and waves of exit.

The synchronous nature of substitutions patterns can pose serious potential problems for suppliers situated at one level of the hierarchy if there is a sharp increase in $X_{t,j}$ as well as a decline in $Y_{t,j}$. In particular, this can occur when specialization that results in increasing $X_{t,j}$ coincides with markets nearing their saturation point. ‘Saturation’ refers to a point in time where the number of adopters has reached its maximum, implying an exogenous decline in $Y_{t,j}$. It has been widely studied in innovation diffusion studies and forms the chief cornerstone of evolutionary econometrics (Rogers 1962, Foster and Wild 1999).⁴⁹ Note that it may take a considerable period of time for a market to reach such a point. In spite of specialized consumers substituting away from them, goods and services at the bottom of the hierarchy may remain economically viable for a considerable period, as long as there are enough non-specialized consumers to replace exiting specialized consumers. For example, McKendrick reported that an English magazine that was founded in the 1880s to guide the newly rich bourgeoisie in the rigors of social etiquette did not have to dramatically change its content until the late 1920s (McKendrick et al. 1985). Thus the situation of having specialized consumers exit (increases in $X_{t,j}$) is a necessary but not a sufficient condition for stimulating innovation. What needs to coincide with this exit is a joint decline in $Y_{t,j}$. Obviously, if there is a sufficient number of consumers who continue to consume the same thing each time period ($N_{t+1,j}$), such a crisis point may not occur.

⁴⁹ In the case of innovation studies, these have a different focus relative to the study being conducted here, as they tend to examine what factors accelerate or impede diffusion *prior* to saturation point. In our case we are more interested in studying how the saturation point itself tends to impact markets, and what tourism intermediaries can do in the face of saturation

If, however, there are an insufficient number of consumers left in $N_{t,j}$, it will be necessary for suppliers to devise new strategies to attract more consumers by either increasing $Y_{t,j}$ or decreasing $X_{t,j}$. Beyond changing price, which may be problematic given that the consumers level of specialization may interfere with their willingness to pay (as discussed above), this can also involve innovating goods and services in such a way as to influence the point along the specialization process where consumers begin and cease to use the goods or services in question. For a good to be effective in satisfying the consumers want, it may require a minimum amount of knowledge, without which it would remain a thing rather than a good (Menger 1950, Ruprecht 2002b). Suppliers can change how much knowledge is required by making goods increasingly convenient to use. Think of the complicated instruction manuals related to VCR recorders or personal computers. Upon purchase, these goods require the consumer to intensively learn about the nature of the good in order for them to be able to use it properly. By automatising sophisticated machines or simplifying once-complicated consumption acts, suppliers can substantially lower the amount of learning that is required by consumers in order to properly use goods and services and thereby increase $Y_{t,j}$. Below, we show how tourism intermediaries played a similar role in fostering a new era of modern travel by introducing all-inclusive packaged tours that utilized jet-engined aircraft. Entrepreneurs may also seek to modify the upper bound where consumers cease using the good or service in question. In relation to entertainment, entrepreneurs may delay this exit by making goods and services in question more complex (Scitovsky, 1976:35). For example, consumers who have mastered a particular type of board or card game may continue to enjoy it by using new versions of the game in which the rules are more complicated.

When faced with the task of having to attract more novice or expert consumers (increasing $Y_{t,j}$ or decreasing $X_{t,j}$ respectively), one could argue that the former is generally more appealing because there tends to be a greater number of non-specialized consumers with relatively homogenous type of demand where scale returns can be achieved. Along these lines scholars have recently noted the important role that ‘disruptive’ technologies can have on markets (Christensen 1997, Adner and Levinthal 2001). Disruptive technologies are relatively worse performing variants of existing products that nevertheless come to dominate over their technologically-superior competition. This is because they attract a new generation of consumers who increase the total size of the market. Examples include the 3.5 inch disks

which were relatively worse in terms of performance than existing floppy discs. Christensen further argues these provide a dilemma for established firms in the industry since they tend to focused on increasing the performance of products, although there may no longer be a demand for it, which he dubs ‘performance oversupply’ (Christensen 1997:165).⁵⁰

Two things should be noted about this strategy of increasing $Y_{t,j}$. Firstly, if the substitution process reoccurs in subsequent periods, such a strategy is only a temporary solution. Increasing the total number of consumers could deliver more benefit to the entire hierarchy of markets, as current novices become specialized in future time periods. Furthermore, where markets reach saturation and the decline in novice consumers is exogenously driven, such strategies could fail. At the saturation point, a particular good or service has diffused through a market such that the total number of consumers who potentially adopt a particular good or service have already done so (Rogers 1962).⁵¹ In such cases, unless there exists a sufficient number consumers that have neither entered nor exited since the last period ($N_{t-1,j}$), suppliers may have to focus on adapting their goods and services to specialized consumers (decreasing $X_{t,j}$), despite the fact that they have more refined likings that are relatively harder to satisfy.

5.4 Tourism intermediaries

This section outlines some hypothesis concerning how certain types of tourism intermediary services both foster consumer specialization and are simultaneously adversely affected by it when substitution effects related to specialization coincide with market saturation. Tourism intermediaries are essentially business entities that profit from their specialized knowledge of and ability to organize goods and services related to recreational travel. They can be broken into two broad groups: travel agents and tour operators (Sinclair and Stabler 1997:74). Technically, travel agents function as brokers in arranging all aspects of travel but act as agents that represent principals. While they may be independent, many are integrated with tour operators. Tour operators supply holiday packages (usually including but not limited to

⁵⁰ Interestingly enough, Christensen argues that one reason why successful firms failed in the computer industry is because they tend to focus too much on the needs of existing markets, rather than on focusing how to sell products to emerging markets. In our framework this suggests that suppliers tend to focus on existing specialized consumers rather than attracting more novice consumer who have different functional requirements. Thus there seem to be costs and benefits of both alternatives which can only be evaluated in the particular context and conditions in which firms are operating.

⁵¹ While many fail to make the distinction, Foster and Wild note how a tendency towards saturation is not a tendency towards stable equilibrium (Foster and Wild 1999:119).

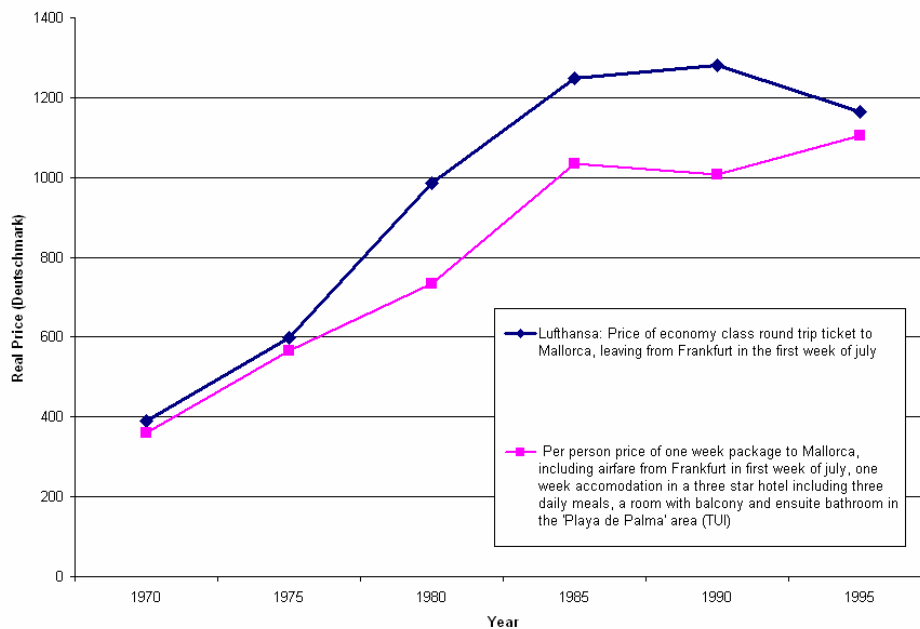
transport and accommodation) and facilitate the link between suppliers of transport, facilities and services, as well as between tourist and suppliers. Tour operations today can be conducted by a number of different kinds of firms: as a specialized business, as a subsidiary of a conglomerate, as a division of an airline, or linked with a travel agency.

Historically, the growth of tourism intermediaries was driven by two main factors. First, they were utilized because of their specialized knowledge and their ability to organize details of the consumption act in advance in order to minimize the uncertainty surrounding a trip. For instance, Thomas Cook's 19th century package tours to Scotland included pre-arranged transport, accommodation, tour guides, meals, special excursions to castles and a guidebook to locations visited (Brendon 1991:44). Furthermore they may play an advisory role in helping consumer to plan details when their own knowledge does not suffice. Intermediaries can suggest what attraction consumers may wish to visit, advise on how to reduce risks related to travel and so on.

Secondly, tourism intermediaries are able secure discounts for consumers. Especially in the case full-organized trips, tour operators are able to attain lower prices utilizing excess capacity in the transport and accommodation sector. This strategy is typical of the mass production era, one of offering a cheap price in order to obtain near-capacity loads (Lipsey *et al.*, 1998:45). Thomas Cook, one of the world's first tour operators, managed to secure discounts on railway transport. Although most of their profit came from cargo transport, railway companies cooperated with Cook since these tours occurred only intermittently and the railway network possessed excess capacity (Urry, 1990:21). In other cases, tour operators can secure discounts at hotels by bulk-booking (Bray and Raitz 2001). To get a rough idea of the extent to which tourism intermediaries are able realize discounts, consider figure 5.1 below. It compares the real cost of a one week TUI packaged vacation to Mallorca with the cost of a Lufthansa economy class return airfare in June between 1970 and 1995. The former includes three daily meals and accommodation in a room with balcony and *ensuite* bathroom at a three star hotel. The figure provides convincing evidence that at least for some popular destination such as Mallorca, the discounts that package tours achieved were indeed substantial. Despite combining meals, accommodation and travel into one package, the price for this package was consistently lower than the price Lufthansa charged for a return ticket to Mallorca between 1970 and 1995. This evidence suggests that consumers who opt to use

fully package trips pay considerably less to those who opt to self-organize their trips and utilize airlines such as Lufthansa.

Figure 5.1 The relative price of package holidays, 1970-1995.



(Source: TUI and Lufthansa)

We now turn to the question of how these services interact with population growth and saturation dynamics discussed in the previous section. First, it is likely that the emergence of intermediary services had a dual effect of lowering both the cognitive effort and the pecuniary cost associated with recreational overseas travel. This is especially the case for fully-organized package tourism, where little minimal organizational effort and knowledge is required on the part of consumers. Rather than having to think about every detail of the trip, the consumer utilizes intermediaries to organize it for him or her. Furthermore, because of the ability to realize discounts from their 'mass' nature, these types of fully-organized holidays relatively cheap. As the figure above shows, such fully organized forms of travel managed to realize substantial discounts relative to other cases where consumers partially or completely self-organized their own travel. With regards to the specialization process, we argue that the emergence of fully-organized holiday intermediary services appealed to relatively inexperienced consumers and play an important role in stimulating consumers to

travel overseas for the first time, thereby increasing the total number of consumers who traveled internationally for recreational purposes. If this is the case, we would expect such forms of travel to be relatively more popular with relatively inexperienced consumers.

H1 Stimulation Hypothesis: Relative to other forms of travel, fully packaged travel is comparatively more popular with inexperienced and less frequently-traveling consumers.

If there is evidence for this hypothesis, it would support the notion that fully organized trips played a role in stimulating an increase in the total number of consumers traveling overseas. At the same time, whilst there the number of consumers traveling increases, we also expect over time a substantial percentage of these to specialize in the act of travel. This is because such a consumption activity as travel is rich in aesthetically-appealing stimuli, it is a good topic for social conversation, and can be varied and changed in many dimensions (e.g. destination, accommodation, transport, food etc). Because of the institutionalized nature of vacation periods, it is also a consumption activity that can be done relatively frequently (at least once a year). Furthermore, it is also a consumption act that can be associated with a wide array of goods and services in a potentially complex fashion (Urry 1990a).

Consequently, if consumers gather experience and become specialized, there would be a general tendency for them to stop using ‘all-inclusive’ full-organized trips since these are relatively restrictive in nature. Many of these rely on special deals with the accommodation sector, where only particular dates are available, for a set period (e.g. at least 7 days), and consumers pay for extras they do not necessarily want or like (e.g. meals in hotel restaurants). Moreover, given that such packages rely on excess capacity in hotels and the ability to ‘bulk-buy’, destinations are limited to where the accommodation sector is well-established (Papatheodorou 2004). As consumers specialize and accumulate experience, they tend to demand a greater degree of flexibility to self-determine specific aspects of the act, which should lead them to substitute away from using fully-organized trips to partially-organized (or even self-organized) modes of travel. For example, specialized consumers could use the travel agencies to organize specific aspects of their holiday, such as only booking transport or accommodation. However for other aspects of the trips they have the

freedom to utilize their previously accumulated to, say, pick which attraction to visit in a city rather than taking a guided tour. Hence by using travel agencies to partially organize their trips, consumers enjoyed the same type of capability to travel overseas but with a greater ability to use their own knowledge to modify certain details of the consumption act.

H2 Specialization. As a result of specialization, consumers who have relatively more experience and travel more frequently tend to cease using fully organized trips and tend to use intermediaries to only partially organize their trips or completely self organize their trips themselves.

As noted in the previous section, for suppliers this increase in $X_{t,j}$ should not pose a problem as long as there is a sufficient increase in $Y_{t,j}$ that can offset this flow. However, in periods where the market reaches saturation point, intermediaries may be faced with a serious challenge. In such a situation they could have little choice but to find ways to decrease $X_{t,j}$. One way would be to make more tailor-made package tours that target particular consumers. For example in the late 1980s, a survey of travel agents noted the general perception that many consumers were no longer satisfied with simply 'baking in the sun' but wanted more sophisticated types of holidays (Office for Official Publications of the European Communities 1994). This coincided with the emergence of packaged holidays that were specifically targeted towards certain types of consumers, such as health, sport, eco and adventure tours (BAT 1985). Another way would be to promote new exotic, far-off destinations to entice consumers to visit those locations which they have not yet visited and thus have not cultivated specific knowledge about. In this sense, specialized consumers face a tradeoff between visiting new, exotic locations for which they would tend to use more intermediary services and visiting previously experienced locations for which they would have a relatively better ability to self-organize their trip. By promoting exotic locations, consumers who have accumulated more experience may thus be enticed to continue to use tourism intermediary services to travel to these destinations that are typically further away. Because of the unfamiliarity surrounding these destinations, consumers are more likely to pre-plan a trip in more detail and thereby use more services (hence diminishing $X_{t,j}$). Hence suppliers manage to delay the point in time at which consumers cease to use a high level of

services by offering new travel opportunities where the consumer's previously accumulated travel knowledge is not applicable.⁵²

H3: Saturation. In periods where the number of new consumers declines and markets near saturation, suppliers devise strategies through which they intermediary services become more appealing to relatively specialized consumers.

Having hypothesized the nature in which consumer specialization processes, together with saturation, impacts tourism intermediaries, the following section seeks to substantiate these claims with empirical evidence derived from the travel patterns of Germans in the Postwar era.

5.5 The German postwar organized tourism market

This section reviews the historical emergence of organized tourism in Germany, and its development in the postwar era in particular. We identify specific growth phases that will be used to test the hypotheses outlined in the last chapter. The early development of tourism in German shares some similarities with the history of British tourism discussed in the last two chapters. Lohman and Mundt report how Romantic figures such as Johann Wolfgang von Goethe inspired the emergence of type of *Studienreise* that involved visiting scenic location where the focus of these trips moved from broad educational purposes towards the dominance of subjective experience (Lohman and Mundt 2002:213). It was these types of trips that gave impetus to emergence of tour operators, such as that of Dr Hubert Tigges who founded a tour operator business in 1928 (Dietsch 1996:74).

Furthermore, as in Britain, inland spa resorts figured prominently in the early development of tourism, which also gradually spread to coastal locations (Soane 1993). In the 1790s there was a vigorous medical debate on whether new health resorts should be founded at the Baltic or North Sea coasts (Towner 1996:185). The former won due to it possessing calmer and warmer summer water and the first resort was developed in Doberan in 1794, near Rostock. Other resorts emerged in Travenmuende (1800-1802), Luebeck, Colberg (1802). The somewhat slower development of the German seaside resort tourism has been partly attributed by Soane to the more localized and regulated culture of the

⁵² At the same time, not all travel knowledge learnt by consumers is destination-specific..

German middle class who were less inclined to indulge in purely pleasurable activities (Bacon 1997).

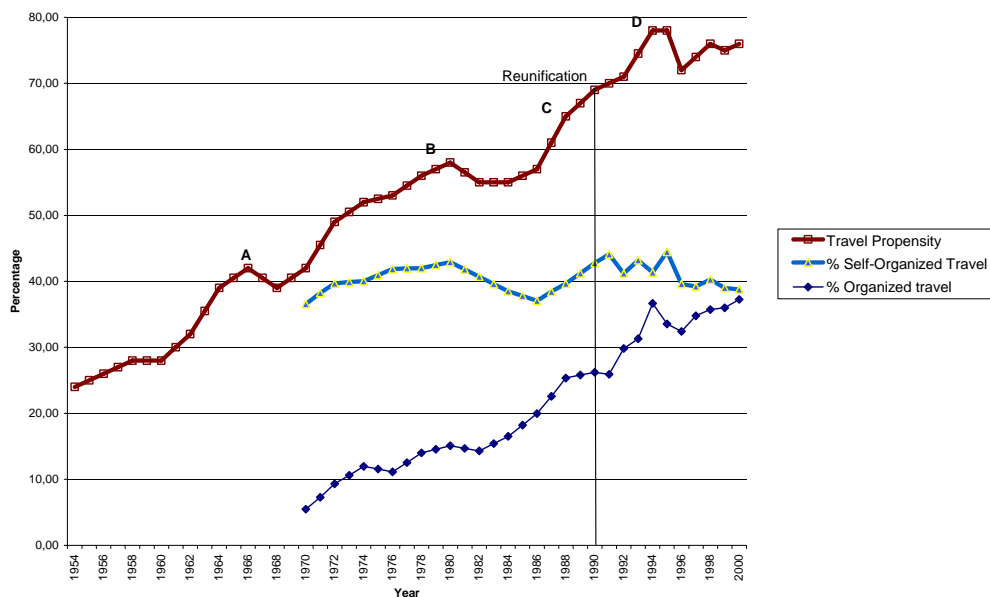
In the 19th century the popularity of mass tourism was significantly aided by the onset of fascism. In 1931 Mussolini subsidized “popular trains” in which over half a million travelers took advantage of a 50% discount within the first year. Using this as a model, the Nazi “Kraft durch Freude” became the world’s biggest tour operator by 1935 (Keitz 1997:209). It charged on average 35 Reichmarks for an all-inclusive trip to the coast. At its peak in 1937, 1.8 million enjoyed Kdf holidays and an additional 8.4 million participated in Kdf excursions. The program also heavily invested in travel infrastructure, with plans to construct five new seaside resorts housing 20,000 beds in Rügen, Kolberg, Königsberg, Kiel and Danzig (although construction only ever started in Rügen).

In the postwar era, tourism in Europe as a whole entered into an era of unrivalled growth. On the supply side, the war itself contributed tremendously both in the short and long run to tourism infrastructure (Bray and Raitz 2001). Germany experienced an economic boom which led to substantial increases in employment, real wages as well as holiday time available to German workers (Pierenkemper 1987, Schudlich 1987, Walter 1995:224). As result, personal savings rose as did consumption expenditure in a number of areas including durables and services (Deaton 1975:15-19). Furthermore, car ownership increased dramatically, which led to a large increase in the percentage of ‘self-organized’ car holidays. Where in 1954 only 20% of all holidays utilized private automobile transports, this rose to over 61% in 1970 (Aderhold 2000:table 11). This change heavily affected railway travel in particular, where 56% of all holidays undertaken in 1956 utilized railways, this dropped to 26% in 1970 (*ibid*).

Such a fundamental shift was problematic for tour operators, as many of the early forms of tours utilized railway transport that was relatively inflexible and slow. For example, Dietsch reports that in 1949, a trip from the Ruhr area to Oberbayern took 22 hours (Dietsch 1985). Over time, this problem grew more severe as the power and reliability of cars available to Germans improved dramatically (Südbeck 1998). Furthermore, while tour operators did innovate by introducing package tours that utilized aircraft in the 1950s, the relatively expensive nature and the technologically-primitive state of aircraft hindered the popularity of this type of travel. In 1956 a flight to Tenneriffe (Spain) required a total of six refueling stops, took around 44 hours and cost over 1000 DM (Keitz 1997:265).

However, the fortunes of travel intermediaries dramatically changed with the emergence of new jet-powered aircraft which facilitated travel to relatively further distances such as the Mediterranean. Jet-powered aircraft began to be utilized by tour operators from the late 1960s and early 1970s and facilitated structural change and growth in the intermediary sector (Keitz 1997:270). From the late 1960s, a new batch of market entrants into this sector, including Quelle, Reisedienst, NUR-Reisen, ITS-International Tourist, forced an industry shake up where the top 5 firms consolidated into TUI (Keitz 1997:276). These new entrants were equipped with new marketing techniques, good connections to accommodation facilities in attractive destinations, and pursued a strategy of offering a cheap prices in order to obtain near-capacity loads, a vintage example of the ‘mass production’ strategy (Lipsey et al. 1998:45). In such a fashion, Neckerman, one of the new entrants, offered a two week vacation to Lebanon in 1964, inclusive of meals, for 745 DM, at a time when a normal flight to Beirut cost more than double that price (Euler 1974). Hence, by offering a new range of destinations to visit that were relatively more distant at affordable prices, German tourism intermediary market experience significant growth in spite of the increasing number of Germans who owned cars. This growth is captured in the following figure:

Figure 5.2. The German propensity to travel, 1954 to 2000.



(Source: Aderhold 2000, Reiseanalyse 1970-2000)

This graph shows the annual percentage of the total German population that embarked on at least one trip per year that lasted at least five days (Travel Propensity). It has risen in four growth waves. The first major increase (A) occurred during the 1960s, followed by a second wave (B) that started around 1968 and lasted until the late 1970s and early 1980s. A third wave (C) starts in the mid 1980s and grows strongly up to the reunification in late 1989. Finally, the 1990s marks another smaller but strong wave (D). These growth phases support the notion that there is some degree of synchronicity in when new entrants $Y_{i,j}$ begin to travel and enter the system. Likewise they suggest that intermediary services face saturation points when the number of new entrant $Y_{i,j}$ slows down. While these saturation points are not ‘final’ in the sense that the total population of consumers increases after their occurrence, they nevertheless signify points where there is a sharp decline in the number of new consumers entering the market. As such, we expect to find suppliers reacting to these significant changes in market conditions.

What caused such synchronicity? In relation to phase B, firstly at the end of 1970s, the oil crisis significantly affected the German economy as a whole and the propensity for consumers to travel in particular. While the first crisis occurred in 1973 and raised the international price of oil from approximately US \$12 dollars per barrel to US \$40 dollars per barrel, it was only after the second oil crisis in 1978/9 when the world price of oil peaked at almost US \$70 dollars per barrel (de Vries 2005: See Appendix 5). This affected almost all types of transport mediums, although oil prices dropped again dramatically by the mid 1980s. Secondly, Germany experienced a new phase of economic growth in the 1980s (Giersch et al. 1992), which would have contributed to growth phase C. Thirdly, a further shock occurred in 1990 with the German reunification. After 1990 a new generation of consumers in the ‘Neue Bundesländer’ entered the sample who were formerly severely restricted in their ability to travel, experienced accelerated income growth and new opportunities to travel.

Beyond the synchronized nature of these consumption patterns, when we look at the types of goods and services that were used, most of this growth has occurred in activities which utilized tourism intermediaries. In terms of the percentage of trips that use these services, as we can see in Figure 5.3 above, it has grown from around 5% in 1970 to almost 40% in 2000. In contrast, the percentage of the population that self-organized their trips remained relatively constant. Furthermore, apart from an increasing number of traveling

consumers, Figure 5.4 below shows how, over time the proportion of consumers who have traveled more frequently has sharply increased over time. This evidence suggests that more experienced, frequently-traveling consumers have gradually come to dominate tourism markets as the number of new consumers entering the system declines.

Figure 5.3 The increasing frequency of travel

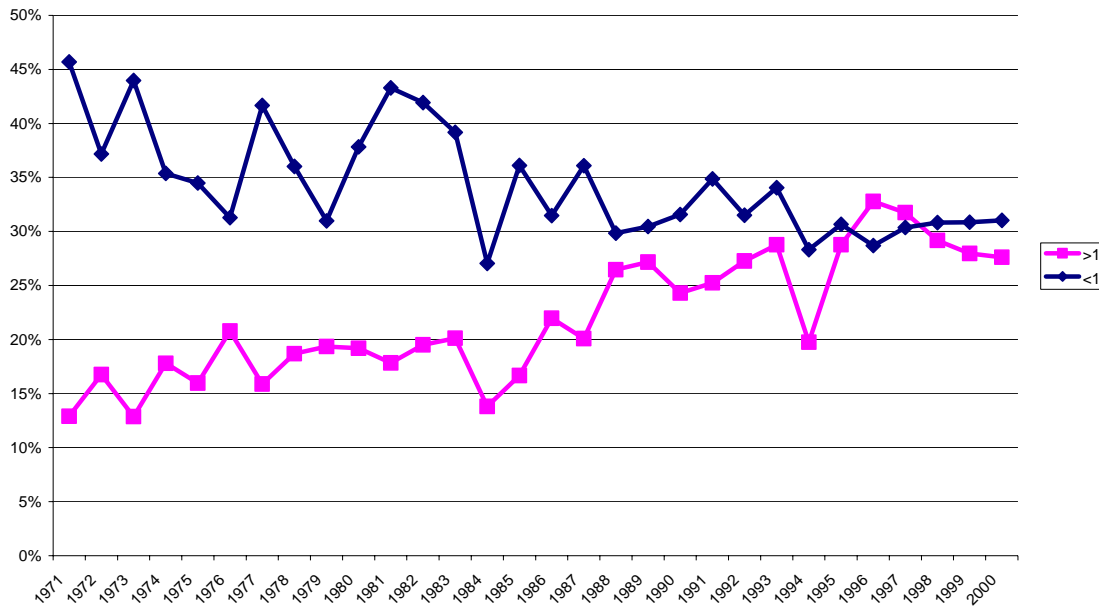


Figure 5.3. This graph was constructed by aggregating the number of people who traveled on average less than once a year in the last three years (<1) and those who traveled on average more than once a year in the last three years (>1). It reflects the fact that consumers who travel with increasing frequency have gradually dominated the market. For the purposes of simplifying this graph, the number of people of traveling who traveled on average once a year was omitted, which explains why the shares do not sum to 100% (Source: Reiseanalyse).

In the next section we examine what evidence there are for the hypotheses outlined in section 5.4 in each of the three growth phases B, C and D. In relation to growth phase D, Much evidence suggests it was predominantly the addition of East German population to the sample population that accounts for this growth phase (Aderhold 2000). Hence we utilize rather than control for the occurrence of the reunification by testing whether the hypothesized learning dynamics occurred in the travel patterns of the East German population in the early 1990s. Analyzing how their travel patterns developed after reunification provides the unusual advantage of knowing approximately when consumers

were first able to travel to particular destinations using modern intermediary services. It is also interesting to compare whether specialization occurred relatively faster amongst this generation of consumers given their previously restricted ability to travel and accelerated nature of income growth amongst East Germans in the early 1990s (Krause 1995).

5.6 Empirical analysis

To formally test stimulation and specialization hypothesis, we use discrete choice models to study what factors influenced the probability that tourists went on partially or fully organized trips, and how they changed over time. Discrete choice models apply to situations in which the dependent variable represents a set of discrete events or choices (Train 2003). The data is sourced from the Reiseanalyse, undertaken by the Forschungsgemeinschaft Urlaub und Reisen E.v.. Since 1970, the Resisanalyse is an annual survey of a large number of Germans (3000 to 5000) about their travel patterns. This data was collected in interviews with respondents, whose permission was first sought via written request. The sample is designed to be representative of the German population in a number of demographic dimensions, including age, income, and geographic location (Aderhold 2000). On average the number of households who agreed to partake in the interview from the original list was around 75,4%. The respondent's minimum age is 14. Respondents are asked a number of questions concerning their holiday trips that are at least five days long. For practical purposes, we focus on who have embarked on travel abroad (holidays outside of Germany).

To analyze how market growth interacted with consumer specialization processes, we separately analyze each of the three growth phases B (1968-1979), C (1980-1989) and D (1991-1994) which were identified in figure 5.3. This enables us to compare and contrast the degree to which specialization occurred in each growth phase and provide robust insights in whether and to what degree suppliers reacted (if at all) to specialization processes as markets neared the observed temporary saturation points. To this end, we construct a separate dataset for each growth phase by amalgamating observations taken from a number of years within each observed growth phase.

In terms of precisely which years to use, it would not be wise to choose sequential years, since the discussed effects may normally take a number of years to occur and adding too many time dummies would negatively affect the parsimony of the model. Consequently, we compose the sample by taking observations from the start, middle and end of each

growth phase. This allows us to study broad changes in markets size ($Y_{tj} - X_{tj}$) between the start and middle of the growth phase (as captured by the time dummy D-1 below) and the middle and the observed saturation point (as captured by the time dummy D-2 below).

Hence for growth phase B the year 1971 was selected since it was the earliest available year in our sample, 1975 was chosen since a gap of five years was deemed sufficient time for the stimulation effect to become significantly observable, 1978 was chosen since it was the last data before 1979, the year in which the second oil price shock dramatically influenced travel patterns (see appendix). For the second growth phase C, 1980 was selected since it represents the last sample year before the oil price shocks fell significantly, along with 1985 as a midpoint and 1989 was used since it was the final year before the reunification of Germany. In relation to growth phase D, it must be remembered that income growth for East Germans rose much faster relative to West Germans in the 1970s and 1980s. Data from the German Socio Economic Panel shows that nominal net household income in East Germany almost doubled between 1990 and 1995, whilst inflation remained relatively stable (Krause 1995). Furthermore, East-Germans had a naturally higher initial propensity to travel since it was a consumption act that was previously highly restricted. Therefore the gaps between sample periods were substantially shortened as these factors would accelerate the pace at which consumers learn and specialize. Hence 1991 was chosen since the number of East Germans in the survey was not sufficiently large before this date. Next 1992 was chosen as traveling abroad became an extremely popular consumption act amongst East Germans, while 1994 was chosen as the latest endpoint before the deviation from the long trend seems to have ended (see figure 5.3 above).⁵³

In the following models, the dependent variable (y) refers to the manner in which consumers used tourism intermediaries and can take on three mutually exclusive states (j):

1. Used intermediaries to fully organize their trip (e.g. package tour), ($j=1$)
2. Used intermediaries to organize part of their trip (e.g. accommodation or transport) ($j=2$)
3. Fully organized the trip themselves (do not use any intermediary services) ($j=0$).

⁵³ The following models we run with different time dummies to check the robustness of results. Result in growth phase B and C where found to be robust, whilst results for D where sensitive to change, which can be attributed to relatively lower sample observations available, or simple higher volatility in travel patterns.

The following explanatory variables (x) were used to predict how consumers utilized tourism intermediaries:

- **Intensity:** The number of times the respondent has traveled in the last three years, ranging from 1 (traveled once) to 9 (traveled 9 or more times).
- **Age:** The consumer's age.
- **Income:** The monthly net income. This was reported in 14 uniformed categories, the lowest being 'Less than 500 DM', the highest being '8,000 DM or more'. Categories progress in steps of 500 DM.
- **Distance:** This variable represents how far their holiday destination was away from their home. It was reported in 12 categories, the lowest being 'Up to 100km', the highest being '7000km and more'. Categories from 500km upward progress in steps of 250km, whilst categories under 500km progress in steps of 100km. Note that in the interview respondents were given a map to help them calculate the distance traveled.
- **Time dummy variables.** We use time dummies to capture general changes in the size of markets over time $N_{t,j}$. If the parameter estimates for the time dummy variable is positive, this means there is a higher likelihood that consumers use category j in the specified time period t relative to other sampled time periods. This reflects an increase in $N_{t,j}$ category j in period t . Hence (D-1) is used to examine which categories have increased in size in the early stage of each growth phase, while (D-2) is used to capture which categories have increased in size in the latter stage of the growth phase.

Using the multinomial logistic function, the probability that y for the i th person takes on the j th state can be calculated as (Greene 2003:721):⁵⁴

$$P(y_i = j) = \frac{\exp(\alpha_j + \beta_j x_i)}{1 + \sum_{k=1}^2 \exp(\alpha_k + \beta_k x_i)}, \quad j = 0,1,2$$

The likelihood function is

$$L(\alpha_j, \beta_j | y_i) = \prod_{i=1}^n \frac{\exp(\alpha_j + \beta_j x_i)}{1 + \sum_{k=1}^2 \exp(\alpha_k + \beta_k x_i)}$$

From which one may derive the log-likelihood function as:

$$\ln L = \sum_{i=1}^n \ln \left(\frac{\exp(\alpha_j + \beta_j x_i)}{1 + \sum_{k=1}^2 \exp(\alpha_k + \beta_k x_i)} \right)$$

The parameters for the model are thus estimated using maximum likelihood equations, where the last category (self-organization) is the reference group. It is in relation to this category that the log odds that consumers fall into the other two categories (fully and partially organized) are calculated. In other words, the parameter estimates reported in the Table 5.1 below signify how each explanatory variable influences the log probability that a consumer has their holiday fully or partially organizes, rather than self-organizing their holiday. The large majority of self-organized trips are motor and camping vacations to close destinations such as the Netherlands and Denmark.⁵⁵ As seen in Figure 2 above, this category has remained fairly stable over time.

⁵⁴ Using a Probit function revealed no significant differences in results

⁵⁵ Clearly these categories are very different from each other such that it is safe to assume Independence from Irrelevant Alternatives (IIA) (Train 2003:49). Apart from the distinct nature of self-organized travel, recall the significant price differences between partially organized and fully organized trips discussed previously. Using Probit models, which does not assume IIA, also revealed no significant differences.

H1: Stimulation

If the H1 stimulation hypothesis is correct, the intensity parameter should have a negative impact on the probability that consumers fully organize their trips relative to the likelihood that they self-organize their trips, since we argue that novice consumers are more likely to use packaged tours relative to experienced consumers. The counterhypothesis is that packaged tours did not stimulate new consumers to travel, but instead appealed to relatively more experienced travelers. This H_0 would be confirmed by the case in which the reported intensity parameter has a positive or insignificant impact on the likelihood that consumers use fully packaged trips relative to the likelihood that they self-organize their trips. As we predict this to occur early in the growth phase, we should see a substantial early increase in the general probability that consumers use fully-organized trips, as captured in 'D-1' being positive and significant for category 1. Furthermore, the above historical evidence suggests that income has a negative impact on the probability that consumers embarked on fully-organized trips. If income does indeed have a negative sign for category 1, it provides evidence that the general increase in fully-organized travel is not an outcome of newly-rich consumers fulfilling some 'latent' demand, since this would imply more wealthier consumers should have a greater propensity to embark on fully-organized travel.

Table 5.1: Results from Multinomial Logit Model

	Phase B 1971-1978	Phase C 1980-1989	Phase D 1991-1995
Category 1: Fully organized			
Intercept	- 4.314	-4.182	-4.685
<i>Std. error</i>	0.213	0.166	0.325
<i>P-value</i>	0.000	0.000	0.008
Intensity	- 0.081	-0.099	-0.099
<i>Std. error</i>	0.022	0.017	0.030
<i>P-value</i>	0.000	0.000	0.001
Distance	0.476	0.536	0.663
<i>Std. error</i>	0.014	0.012	0.025
<i>P-value</i>	0.000	0.000	0.000
Income	- 0.096	-0.32	-0.103
<i>Std. error</i>	0.020	0.011	0.023
<i>P-value</i>	0.000	0.002	0.000
Age	0.015	0.020	0.030
<i>Std. error</i>	0.002	0.002	0.003
<i>P-value</i>	0.000	0.000	0.000
D-1	- 0.239	0.348	0.374
<i>Std. error</i>	0.080	0.067	0.115
<i>P-value</i>	0.003	0.000	0.001
D-2	0.008	0.499	-0.238
<i>Std. error</i>	0.081	0.065	0.125
<i>P-value</i>	0.818	0.000	0.056
Category 2: Partially organized			
Intercept	-3.246	-3.156	-2,387
<i>Std. error</i>	0.239	0.205	0.300
<i>P-value</i>	0.000	0.000	0.000
Intensity	-0.034	-0.042	-0,029
<i>Std. error</i>	0.025	0.021	0.030
<i>P-value</i>	0.169	0.042	0.331
Distance	0.245	0.265	0,396
<i>Std. error</i>	0.016	0.014	0.025
<i>P-value</i>	0.000	0.000	0.000
Income	0.033	0.039	-0,030
<i>Std. error</i>	0.023	0.013	0.023
<i>P-value</i>	0.135	0.003	0.187
Age	0.005	0.001	0.009
<i>Std. error</i>	0.002	0.002	0.003
<i>P-value</i>	0.027	0.663	0.005
D-1	-0.062	0.008	0.315
<i>Std. error</i>	0.097	0.092	0.128
<i>P-value</i>	0.534	0.930	0.014
D-2	0.366	0.610	0.775
<i>Std. error</i>	0.095	0.082	0.120
<i>P-value</i>	0.000	0.000	0.000
Log likelihood	1590,228	3043,263	1216,435
<i>P-value</i>	0.000	0.000	0.000
Nagelkerke Pseudo R²	0,202	0,296	0,338

In terms of the overall goodness fit, the pseudo r^2 and log likelihood χ^2 statistic for each model in each growth phase is reported in the last row of the table. The models used 9061 observations in growth phase B, 10823 observations in phase C and 3527 observation in

phase D. The log likelihood ratio test for the individual parameters also performed well,⁵⁶ with no parameters being insignificant at the $\alpha = 0.05$ level, except for the first time dummy 'D-1' in the phase 1.

The results show that experience and income both have a negative and significant impact on the probability that consumers fully organize their trips. This implies that there was a tendency for relatively inexperienced and less wealthy consumers to utilize fully organized package holidays. This supports the H1 Stimulation hypothesis that the emergence of fully-packaged holidays helped stimulate a new generation of consumers to travel, rather than modify the way in which existing travelers organized their holidays. Note that bar for growth phase C, the intensity parameter is not significant for category 2, which suggests partially organized intermediary services did not have a similar stimulatory impact on travel patterns. Furthermore, except for the first growth phase in the 1970s, the D-1 time dummy is positive and significant for category 1, which supports the argument that the initial part of each growth phase was caused by an increase in the number of consumers who fully-organized their trips. In other words, there was significant increase in $N_{i,j}$ for this category in the early part of growth phase C and D. We suspect that D-1 was not significant in phase B because in the base year 1971, most of the increase in package tourism had already occurred (as seen in Figure 5.3 above, the phase B started in the late 1960s). However, since this was the earliest year in our sample, not much can be done to amend this problem. This early increase in the demand for fully-organized holidays at the start of each growth phase, combined with the fact that such a category was more popular amongst novice consumers, provides evidence that stimulation did indeed occur.

H2: Specialization

In relation to the H2 specialization hypothesis, it argues that as consumers accumulate experience they have a tendency to cease using fully organized trips and tend to use intermediaries to only partially organize their trips *or* they may completely self organize their trips themselves. Table 5.1 already confirms one part of this hypothesis as it shows that relatively frequently traveling consumers tend to prefer self-organizing their holidays relative to using fully packaged trips (which is shown in the fact that the intensity parameter is negative for category 1 across all periods). However, the hypothesis also argues that

⁵⁶ See Appendix 5.

frequently traveling consumers may also substitute from using fully organized trips towards using partially organized trips. In order to examine this, it is necessary for us to run another model which calculates how the explanatory factors influence the probabilities that consumers partially organize their holidays using those consumers who fully organized their holidays as the reference category. This was not covered by the previous model, as the conditional probabilities were calculated in relation to category 3, self-organized travel. Thus we leave out this category and instead use category 1, fully organized travel, to examine what the probability is that consumers utilize category 2, partially organized travel. This represents binary choice logit model where

$$P(y_i = 1) = \frac{\exp(\alpha_1 + \beta_1 x_i)}{1 + \exp(\alpha_0 + \beta_0 x_i)}$$

Here 1 denotes the parameter estimates for category the partially organized category and 0 denote the parameter estimates for the fully organized category. The likelihood function is then

$$L(\alpha_1, \beta_1 | y_i) = \prod_{i=1}^n \frac{\exp(\alpha_1 + \beta_1 x_i)}{1 + \exp(\alpha_0 + \beta_0 x_i)}$$

From which one may derive the log-likelihood function as:

$$\ln L = \sum_{i=1}^n \ln \left(\frac{\exp(\alpha_1 + \beta_1 x_i)}{1 + \exp(\alpha_0 + \beta_0 x_i)} \right)$$

The model uses the same explanatory variables stated above. If the specialization hypothesis is correct, then we expect consumers with more experience to be less likely to use fully package trips and more likely to use partially organized trips. Hence we expect the intensity parameter to have a positive and significant on the likelihood that consumers use partially organized trips relative to using fully packaged trips. The counterhypothesis is that the accumulation of experience does not determine or has a positive influence on the degree to which consumers organize their trips. This H_0 would be confirmed by the case in which the reported intensity parameters have a negative or insignificant impact. Furthermore, D-2

should be positive and significant as we expect exit to occur in the latter stage of the growth process. For this regression we use the same independent variables as above, but we set category 1 (fully organized) as the reference category.

Table 5.2: Results from Binomial Logit Model

Cat. Partially Organized	Phase B 1971-1978	Phase C 1980-1989	Phase D 1991-1995
Intercept	1.448	0.561	2.284
<i>Std. error</i>	0.258	0.264	0.369
<i>P-value</i>	0.000	0.033	0.000
Intensity	0.057	0.060	0.081
<i>Std. error</i>	0.029	0.023	0.034
<i>P-value</i>	0.045	0.009	0.017
Distance	-0.229	-0.273	-0.270
<i>Std. error</i>	0.018	0.016	0.024
<i>P-value</i>	0.000	0.000	0.000
Income	0.111	0.160	0.076
<i>Std. error</i>	0.033	0.027	0.027
<i>P-value</i>	0.001	0.000	0.001
Age	-0.010	-0.017	-0.021
<i>Std. error</i>	0.003	0.002	0.004
<i>P-value</i>	0.000	0.000	0.000
D-1	0.165	-0.281	-0.057
<i>Std. error</i>	0.116	0.103	0.144
<i>P-value</i>	0.154	0.006	0.694
D-2	0.689	0.158	1.056
<i>Std. error</i>	0.123	0.092	0.144
<i>P-value</i>	0.000	0.085	0.000
Log likelihood	184,214	398,299	230,142
<i>P-value</i>	0.000	0.000	0.000
Nagelkerke Pseudo R2	0,092	0,135	0,180

The number of observations in the 1970s growth period was 2648, for the 1980s it was 4058, while for the 1990s it was 1601. The pseudo r^2 and log likelihood χ^2 statistic as reported in the last row shows that the goodness of fit of the models is good. The log likelihood ratio test for the individual parameters reveal that except for D-1 in phase 1 & 3, and D-2 in phase 2, no parameters are insignificant at the $\alpha = 0.05$ level.⁵⁷

In the above table, the intensity parameter is positive and significant, which implies that the more experience consumer have, the more likely they are to partially organize their trips and the less likely they are to fully organize their travel, supporting the H2: Specialization hypothesis. Furthermore this effect seems to have become relatively stable over time, the parameter values ranging between 0.057 to 0.081. Note that the strong and

⁵⁷ See Appendix 5.

positive value of D-2 the parameter relative to the D-1 parameter suggests that partially organized trips seem to have become more popular relative to fully organized trips in the latter stage of each growth phase. In other words, the N_{tj} for category 2 significantly increased in the latter part of growth phase B and D. Indeed in growth phases C and D, there was a reverse in signs between D-1 and D-2, although in phase C, D-2 is only significant at the $\alpha = .01$ level). Furthermore, note also that income is positive. This suggests that wealthier consumers are, the less likely they are to fully organize their holiday. Given that one would expect relatively richer consumers to have a higher opportunity cost of time and thus be more likely to use the services of travel agents to organize their trips for them, this result is somewhat surprising. Nevertheless, the previously-discussed inflexibility associated with package trips may explain this tendency.

H3: Saturation

In relation to the H3 saturation hypothesis, the observed periodic decline in the number of novices over time (as seen in Figure 5.4) is argued to pose a problem for tour operators that focus on the market for fully organized trips, and whose services are demanded by relatively inexperienced consumers, as seen in table 5.1. Faced with a decline in the number of novices, these intermediaries need to find ways in which they are able to attract more specialized consumers to continue to fully organize their trips. As mentioned in section 5.4, one way to do this is to promote destinations that even relatively experienced consumer have not yet visited. As such, new types of fully packaged trips which focus on relatively far off distances may represent a way in which suppliers can adapt their services in order to cater for relatively specialized consumers. In the following, we study the influence of the distance parameter as a proxy for understanding the relative significance of these particular types of fully packaged trips.

To start, confirmation of this hypothesis can be seen in Table 5.2, where distance has a negative and strong impact on the probability that consumers partially organize their holidays. It suggests the farther consumers travel, the more likely they are to fully organize their trips rather than partially organizing their trips. However, to show that distance played a crucial effect near the saturation point, and that it specifically impacted the likelihood of experienced consumers to use fully organized trips, in the following we add an interactive variable to the binary version of the model in which distance, intensity and D-2 are

combined and added into the model as DISTINT-2. This tests whether there was significant association between these three terms. We compare this to DISTINT-1, which is the same interactive term combined with D-1. If found significant, it suggest that the three variables interact in a significant manner as to influence the probability that consumers fall into the category of partially organized trips, rather than fully organized trips. We argue this effect would be negative and significant, since increasing the distance traveled leads to more experienced consumers tending to remain in the fully-organized category rather than substituting towards partially organized forms of travel.

Table 5.3: Results from Binomial Logit Model with Interacting variables

Cat. Partially Organized	Phase B 1971-1978	Phase C 1980-1989	Phase D 1991-1995
Intercept	1.512	0.556	2.531
<i>Std. error</i>	0.262	0.271	0.378
<i>P-value</i>	0.000	0.040	0.000
Intensity	0.094	0.072	0.108
<i>Std. error</i>	0.045	0.037	0.055
<i>P-value</i>	0.037	0.050	0.053
Distance	-0.219	-0.268	-0.263
<i>Std. error</i>	0.024	0.019	0.032
<i>P-value</i>	0.000	0.000	0.000
Income	0.092	0.159	0.071
<i>Std. error</i>	0.034	0.027	0.027
<i>P-value</i>	0.006	0.000	0.009
Age	-0.011	-0.017	-0.022
<i>Std. error</i>	0.003	0.002	0.004
<i>P-value</i>	0.000	0.000	0.000
D-1	0.044	-0.287	0.526
<i>Std. error</i>	0.170	0.168	0.245
<i>P-value</i>	0.798	0.088	0.032
D-2	0.948	0.217	0.801
<i>Std. error</i>	0.171	0.140	0.207
<i>P-value</i>	0.000	0.121	0.000
DISINT-1	0.006	0.000	-0.032
<i>Std. error</i>	0.007	0.007	0.012
<i>P-value</i>	0.399	0.969	0.006
DISINT-2	-0.016	-0.003	0.010
<i>Std. error</i>	0.008	0.005	0.008
<i>P-value</i>	0.040	0.592	0.206
Chi 2 Log likelihood	193.883	398.715	251,891
<i>P-value</i>	0.000	0.000	0.000
Nagelkerke Pseudo r²	0,096	0,135	0,196

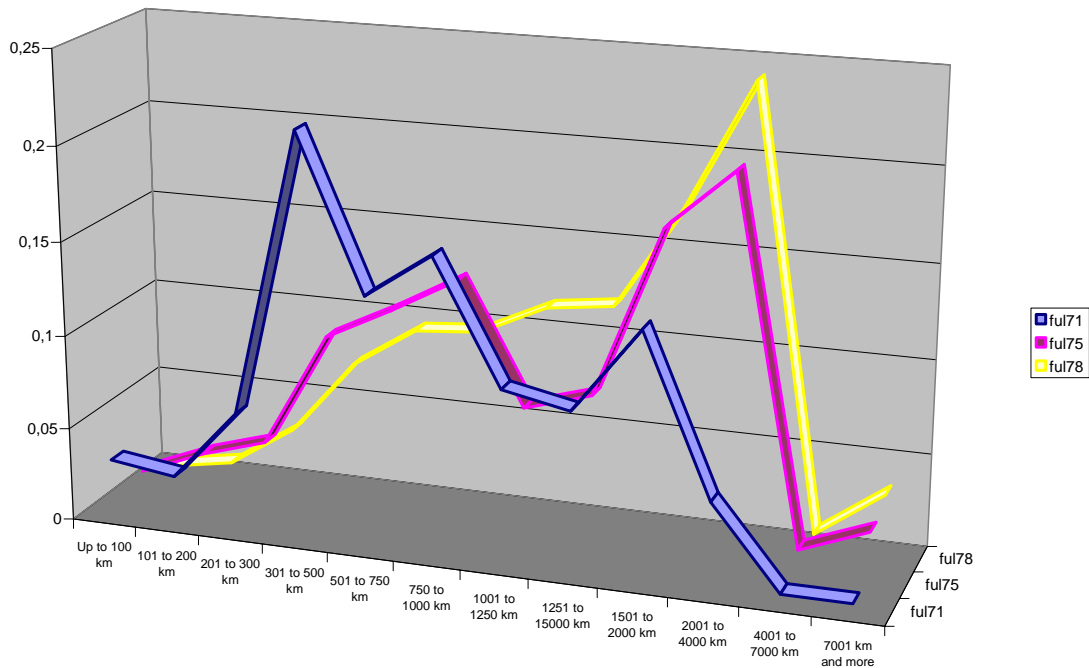
This model uses the same number of observations as the last model reported in table 5.2. The pseudo r^2 and log likelihood and log likelihood χ^2 statistic as reported in the last two row show that these models have a relatively better goodness of fit relative to those reported in table 5.2 (in this case we can compare these values as the models are nested).

The above results show that while the hypothesis 3 holds for growth phase B in which DISINT-2 is found to be negative and significant, the predicted effects do not show up in phases C and D. This suggests that it was only in the late 1970s where suppliers successfully offset the impact of specialization via the promotion of exotic, far-off destinations. In other phases, suppliers may have reacted to the saturation point in a different manner, or they may have simply not reacted at all. As mentioned above, in the latter part of phase B (the late 1980s), surveys of travel agents noted the general perception that many consumers were no longer satisfied with simply 'baking in the sun' but wanted more sophisticated types of holidays (Office for Official Publications of the European Communities 1994). This coincided with the emergence of packaged holidays that were specifically targeted towards certain types of consumers, such as health, sport, eco and adventure tours (BAT 1985). Hence rather than promoting far-off destinations, improving the quality of the package tour may have been one way to appeal to specialized consumers. In phase D, it is interesting to note that DISINT-1 is negative and significant, which suggests that this effect occurred relatively earlier than predicted. East German travelers may have had a particular urge to explore exotic far-off destination relatively soon after the reunification.⁵⁸

Below, in Figure 5.5 we plot for growth phase B the percentage of fully packaged trips according to the distance traveled for each time sample in the growth phase. The double peak distribution over distance is expected as a significant percentage of consumers who use fully organized holidays because of their relatively cheap and convenient nature should travel a relatively shorter distance than those consumers who use fully organized in order to travel to relatively exotic destinations. Over time a noticeable shift towards further distances occurs over the growth phase as the saturation points nears:

⁵⁸ We leave it to future work to uncover more on this issue.

Figure 5.4 The distribution of consumers using fully-organized trips according to distance traveled in growth phase B (1971-1978).



This figure shows that in 1971 the percentage of consumers who traveled short distances in the fully organized category clearly dominated those who used it to travel far-off destinations. This radically changed over time and the 1978 distribution shows that the second peak clearly dominates the total distribution. As such, it lends some evidence to the argument that suppliers adapted the nature of fully packaged tours in order to appeal to relatively specialized consumers.

5.7 Conclusion

In this chapter we have uncovered important regularities in how consumer specialization may cause significant changes in the goods and service consumers use, and what implications these have for understanding market growth and development processes. Whilst an increase in the number of consumers in a particular market is typically seen to contribute towards achieving returns to scale by widening the extent of the market, this only holds if demand remains relatively homogenous during the growth process. In the case of recreational activities such as travel, there is a relatively high probability that consumers specialize as they accumulate experience, which leads them to demand more differentiated goods and services,

as well as a greater flexibility in being able to configure consumption acts in such a way as to better fit what they like and what they know. Suppliers, if they are interested in ensuring their goods and services remain useful to consumers, need to make appropriate adjustments to their offerings in light of these changes. In particular, if specialization is pervasive then such adjustments become particularly necessary as markets near saturation.

We have shown in this chapter empirical evidence which supports the argument that consumer specialization processes were both stimulated by the innovations in the packaged services that tourism intermediaries provided, and in turn, also had an impact on the organization of service markets. On the one hand, we found that novice consumers tended to use fully-organized trips that were especially popular in the early part of growth phases, which supports the hypothesis that these played an important role in stimulating consumer to travel. On the other hand, evidence also suggested that there was a tendency for more experienced consumer to substitute towards partially-organized trips, as was predicted by the specialization hypothesis. Furthermore, these types of trips were also found to be relatively popular in the later stages of each growth phase.

Hence, as the mix of expert and novice consumers regularly changed over the growth phase, we argued that suppliers of fully organized trips had to modify their services in order to appeal to relatively specialized consumers. Specifically, in order to delay specializing consumers from substituting towards relatively flexible forms of travel, we argued that suppliers promoted fully packaged trips to exotic destinations. Such a strategy could have successfully induced specialized consumers to continue to use fully package trips given the relative uncertainty surrounding exotic destinations. Here, the evidence was mixed and evidence for its occurrence was found in only one out of the three growth phases under analysis (growth phase B). This suggests that suppliers may have engaged in other strategies not involving the promotion of exotic destinations to appeal to relatively specialized consumers, or they may have simply have not bothered to adjust their services in the first place.

All in all, the evidence uncovered in this chapter about the regular substitution patterns related to the likings and knowledge that consumer accumulate through their consumption experiences presents a more dynamic and complex of picture of market growth and development processes. Whilst price and income effects are fundamentally important to understanding the consumer behavior, we have also seen how consumer

specialization patterns may substantially affect what consumers demand, interfere with their willingness to pay for certain goods and services, stimulate qualitative change in goods and services, as well as shape market hierarchies whereby different goods and services are related to each other depending on what stage of the specialization process they are used. If we further recognize that market interactions may themselves play an important role in stimulating consumer specialization processes, then it no longer makes sense to view markets as simply coordination mechanisms through which economic activity is organized and distributed. Rather, they must also be understood as growth mechanisms which enable consumers to accumulate knowledge, attain new experiences and consequently alter their expenditure patterns. By studying the relationship between market innovation process and consumer learning patterns, we can gain a better idea of how the functioning of markets lies at the core of the growth of the capitalist growth process (Schumpeter 1934).

6. A glimpse beyond the shadows: The new microeconomics of endogenous growth

Referring to prisoners confined to a cave who could only perceive the outside world by watching its shadows:

And now look again, and see what will naturally follow if the prisoners are released and disabused of their error. At first, when any of them is liberated and compelled suddenly to stand up and turn his neck round and walk and look towards the light, he will suffer sharp pains; the glare will distress him, and he will be unable to see the realities of which in his former state he had seen the shadows; and then conceive someone saying to him, that what he saw before was an illusion, but that now, when he is approaching nearer to being and his eye is turned towards more real existence, he has a clearer vision,—what will be his reply? And you may further imagine that his instructor is pointing to the objects as they pass and requiring him to name them,—will he not be perplexed? Will he not fancy that the shadows which he formerly saw are truer than the objects which are now shown to him?

- Plato on the Allegory of the Cave, *The Republic*.

6.1 Introduction

Whilst the analysis of human behavior is a fundamental part of economics, it has long been argued that the conception of the consumer in orthodox economic theory is simply not human (Veblen 1898, Metcalfe 2001): Rather, it is some Olympian ‘lightning calculator’ who, despite his wisdom, is not seen as an agent of real change but is instead an impassive arbitrator of markets (Hildebrand 1951, Swann 2002). Building on the work of others, what we have offered in this work is a start to systematically studying how consumers, in terms of their motivations and learning tendencies, can play an important role in economic growth and transformation processes. In the short run, consumer specialization processes have been shown to have significant implications for the evolution of markets and the functional change of goods and services. Furthermore, this work has also shown how long run changes in the relative significance of particular wants that occur in the face of rising income and economic development have led to significant shifts in expenditure patterns. As such, important demand-related factors have been highlighted which provide a better understanding of the microeconomic processes involved in endogenous economic growth. This chapter concludes with a summary of the work undertaken, provides an outlook for future research and discusses some of its implications for the concept of endogenous growth and the notion of consumer sovereignty.

The chapter is structured as follows. Section 6.2 summarizes the work and discusses what light it has shed on the long and short run determinants of the growth and development of consumption and on recreational travel in particular. Section 6.3 provides an outlook for future research, while section 6.4 discusses the implications for understanding the nature of endogenous growth and the notion of consumer sovereignty. Section 6.5 draws the overall conclusions.

6.2 Identifying the determinants of consumption growth.

In sum, this work has propounded an evolutionary analysis of consumption and has employed it to specifically examine the origins, growth and transformation of the demand for recreational travel. Chapter 2 reviewed and summarized the approach which takes into account consumer wants that drive consumption and how consumers learn to satisfy these wants in understanding changing consumption patterns (Witt 2001). Furthermore, it also provided a discussion of the differences in market growth processes that would result from different modes of consumer learning, namely specialization and generalization.

In chapter 3 we studied how the act of travel came to be associated with the want for arousal and how consumer specialization influenced the association between recreational travel and the want for arousal in a way that had important implications for the travel patterns of British consumers visiting Europe from the 18th century onward. It highlighted how certain relatively low-skill means of satisfying the want for arousal (means of entertainment) tend to complement rather than compete with more high-skill alternatives by stimulating consumer specialization processes. Specialization led consumers to insightfully learn about and modify aspects of the consumption act, and thereby led to significant changes in the goods and services consumers used to satisfy their want for arousal. As such, it reflects how taking into account learning patterns of the consumer can improve our understanding of the economic relations between goods and services and whether they are substitute or complement each other.

In chapter 4, during the early history of resorts we find that how consumers satisfied their want for health played an important role in the process by which resorts functionally mutated. On the one hand, the consumers' tendency to favor those types of treatments which elicited physiological reactions had a strong impact on the development trajectory of resort treatments and the corresponding infrastructure which they required. These became a

focal point of competition amongst resorts and, thereby, enabled resort travel to become associated with the want for arousal. On the other hand, the consumers' tendency to engage in social-observational learning in discerning which resorts offered effective treatment also fostered new associations between resorts travel and the want for status. Together these insights suggest that through studying the precise characteristics of how consumers learn to satisfy different wants and the effects such learning processes have on the supply side, one can shed light on the emergence of combination goods that jointly serve a number of different wants.

Finally, chapter 5 uncovers empirical evidence for how consumer specialization may dynamically impact hierarchically structured systems of markets where consumers are distributed across different levels of the hierarchy according to their level of specialization. Evidence was found for regular substitution patterns predicted by specialization which in turn were found to influence the supply of intermediary services, particularly when the number of new consumers entering the hierarchy of markets neared saturation. Consequently important empirical regularities were discovered in how specialization processes may periodically lead to significant changes in consumption patterns and the organization of hierarchically structured markets.

All in all, these results highlight the evolutionary approach's capability to uncover long and short run factors that contribute to consumption growth and development. In the short run, a major determinant of how consumption expenditure grows is the consumer's level of specialization. In the case of specializing consumers, studied in chapter 3, goods and services related to the act of travel were shown to have evolved in a way that adapted to the specific liking and knowledge of consumers. As a result, desolate locations sprung onto travel itineraries before the invention of modern steam-powered transport. In the case of resort travel, an important factor in resort evolution was how generalized consumers overcame the inherent difficulties they faced in discerning the effectiveness of resort treatments and related expert medical advice. By favoring those treatments and medical advice associated with immediate physiological changes - a tendency which we argue was an outcome of the interaction between insightful and associative learning - treatment techniques and resort facilities developed in line with these significant aspects of the consumers' learning process. This was one reason why resort travel functionally mutated and formed new associations with the want for arousal and status.

Beyond this, another important aspect in the short run is to understand the factor(s) that stimulate changes in the level of consumer specialization and how they may affect suppliers. In chapter 3 we noted how the emergence of ICSTs⁵⁹ influenced the rate and direction of specialization. Not only did new technologies, such as books, provide exposure to a new variety of arousing stimuli but they enabled consumers to access more information about these stimuli, and also facilitated social interaction. Consequently, because the increasing availability of knowledge accessible to learning consumers can affect the manner and rate of specialization as well as the habituation process and the degree to which it influences the consumption act, we concluded that the observed changes in consumption activities related to the want for arousal were increasingly related to specialization patterns, rather than habituation processes. In regard to the factors which mediate the impact of specialization on suppliers we showed in chapter 5 how the overall distribution of consumers across varying levels of specialization can act to mediate their effects. It is only in particular periods, namely when markets reach saturation, that suppliers must modify their services in order to better cater to specialized consumers.

In respect to the long run determinants of consumption growth and its observed uneven development (as discussed in chapter 1), this work has shown how certain basic wants and their manifestation in consumption patterns have changed with economic development and increasing income. Chapters 3 and 4 have highlighted how particular long run trends in the pleasurable and painful stimuli consumers are exposed to have influenced the intensity of certain basic wants as well as the type and number of acquired wants that emerge in association with these basic wants. In the case of the want for arousal consumers have gained exposure to a growing number and variety of entertaining stimuli in an increasingly convenient fashion due to technological advances. This may, via the laws of associative learning, lead to changes in what consumers like and dislike. In the case of the want for health the types of aversive stimuli that motivated consumption were heavily influenced by urbanization that accompanied economic development. Furthermore, associations made between disease and aspects of the consumer's urban habitat led to the emergence of acquired wants, through which travel became an act that was experienced as reinforcing by consumers. In such a way, one can understand how economic development not only provides new ways for consumers to satisfy their wants, but also how it influenced

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to some degree what type of wants consumers possessed in the first place. Consequently, uncovering the changes in the aversive/positive stimuli present in the consumers' surrounding, or what one may call their 'sensory environment', is imperative for the understanding of the endogenous nature of consumption growth, a point further discussed in the next section.

6.3 Implications for consumer sovereignty and endogenous growth

This section provides a brief discussion of what implications this work holds for the notion of consumer sovereignty and the concept of endogenous growth.

a) Consumer Sovereignty

In the literature, the concept of sovereignty is used in two ways, one being descriptive and the other being normative in nature (Rothenberg 1965, Lowery 1998). This section discusses implications for each of these in turn. In the descriptive sense, consumer sovereignty reflects the argument that the consumers have some say in what is produced in a market economy (Rothenberg 1965:269). Thus 'sovereignty' here ultimately refers to power. This is clear in the original definition of the term by William Hutt, who defines it as "the controlling power exercised by free individuals, in choosing between ends, over the custodians of the community's resources, when the resources by which those ends can be served are scarce," (Hutt 1940:66).⁶⁰ In open market economies, the 'consumer' directs, while the 'producer' obeys (Persky 1993:186). Hutt perceives consumer sovereignty not merely as something that exists, but rather as something that may be incomplete, and thereby advocates organizing institutions in a way which will accord full sovereignty to the consumer (Fraser 1939:544). This refers to the second normative notion of consumer sovereignty. The normative implications of promoting consumer sovereignty typically involve ensuring that markets function properly, which can be characterized in a number of different ways (Hildebrand 1951:21, Friedman and Friedman 1980:9-27). A corollary to this is the idea that the emergence of new goods and variety in competitive markets also improves consumer sovereignty as it enables consumers to find goods and services that better match their particular likings (Scitovsky 1962).

⁶⁰ As (Persky 1993)notes, the original definition appeared in (Hutt 1936),

In relation to the work done in this dissertation, let us consider what impact consumer learning processes have on the descriptive version of consumer sovereignty. As we noted in chapters 2 and 3, specialized consumers have a greater ability and impetus to vary aspects of the consumption act because the subsequent accumulation of subjective consumption knowledge gives them a greater ability and impetus to vary aspects of the consumption act. Through actively shaping the consumption act, rather than having it fully designed and produced by suppliers, the consumption act tends to better suit the consumers particular likings, since consumers have a better idea of what they want relative to suppliers. If the consumers accumulate knowledge improves the ability of consumers to satisfy their particular wants, then consumer specialization processes can be considered to enhance the consumer's sovereignty. In other words, how much consumers are in a position to 'direct' or be a source of agency in the economy is positively influenced by the level of subjective consumption knowledge they possess, which may be accumulated via specialization.⁶¹

Let us qualify the idea that specialization via the accumulation of subjective consumption knowledge improves consumer sovereignty in two ways. Firstly, the advantage that specialized consumers enjoy relative to non-specialized consumers in regards to being better able to satisfy their wants depends on what suppliers offer. In some situations, relatively unspecialized consumers may still be able to find something that matches their particular wants relatively well. Nevertheless, this is unlikely since, as mentioned in chapter 2, suppliers that cater to unspecialized consumers tend to look towards achieving scale returns in which homogenous goods and services are offered at low prices, thereby limiting the amount of variety available to them (Scitovsky 1962). Of course, as the production and organization of supply improves, such obstacles may be overcome. For example, recall the Lands End catalogue that enables a large variety to be made available whilst still achieving scale returns (Langlois and Cosgel 1998, also see Langlois 2001). At the same time, dealing with an increasing variety of goods and services may itself be problematic to unspecialized consumers for a number of reasons (Earl 1986, Earl 1998). An increase in the number of potential ways in which a want can be served is only automatically beneficial if we assume that consumers already know which goods are useful in serving their wants and which ones are not. However, as discussed in chapter 4, in situations where purchases are infrequent and

⁶¹ As the popular saying goes, 'knowledge is power'

goods are complex, there is a real possibility for making costly and irreversible mistakes (Menger 1950, Earl 1986).

Secondly, the level of subjective consumption knowledge that consumers possess may not only be achieved through consumer specialization. Other sources of knowledge in the form of expert advice or the knowledge of informed peers may act to guide the individual's consumption activity and enable them to deal with the growing variety of products (Scitovsky 1962, Earl and Potts 2004). Here Scitovsky notes that the advantage "of a market that caters to different people's differing tastes is that it gives those with informed tastes a chance to set an example to the rest of the community," where the tastes of informed consumers "are based on knowledge of a wider range of alternatives, which includes the alternatives available to the uninformed person," (Scitovsky 1962:266). Hildebrand also comments that in order to ensure consumer sovereignty "some consumers must be sufficiently alert and well informed as marginal buyers to police the entrepreneurs," (Hildebrand 1951:21). However as we have seen in the case of expert advice, it is important to take heed of the fact that because socially available knowledge and advice is itself another type of higher order good/service, there may be limits to its effectiveness in guiding consumer actions depending on how efficaciously it fits with what consumers learning patterns (as discussed in chapter 4).

If one accepts that consumer specialization endows consumers with the ability to modify aspects of their consumption act, then this perspective differs from the traditional one in which the consumer acts as a passive judge of goods and services who simply "assigns by his spending patterns the rewards and penalties for specific productive efforts" (Hildebrand 1951:20). In the traditional role of the passive arbitrator "the consumer in this system is not an innovator... Because the consumers' role is judicial rather than initiative, the pattern of production then depends also upon the choices exerted by entrepreneurs, subject of course to final consumer review"(Hildebrand 1951:21).

From our perspective, given that specialization leads to a greater ability to modify, consumers may be seen as not only judges but also as instigators of innovation in goods and services available on markets, as discussed in chapter 2.⁶² As is recognized in the household production literature, highly specialized consumers can utilize their innovative capability to altogether do away with using goods and services available on markets and self-produce the

⁶² The concept of consumers possessing a capability to innovate goes back to Marshal's work (Swann 2002).

relevant goods and services (Bianchi 2002). This reflects Menger's idea that markets are simply another type of tool that consumers may or may not use to satisfy their wants. Furthermore given that the consumer's level of specialization can change over time, it is possible that these tools can be rendered obsolete (as we have seen in chapter 5). For example, a specializing consumer may be so unsatisfied with what a restaurant in his local area may provide that they may end up cooking their own food. Later a stage may be perhaps reached in which the same consumer is highly unsatisfied with the food available in supermarkets, and may decide to grow their own food. These fundamentally innovative actions can therefore stimulate important changes in what instances and to what extent consumers rely on markets.

A typical critique of consumer sovereignty is that what consumers like is heavily influenced by the market environment and producers (Galbraith 1958, Scitovsky 1976). From the evolutionary perspective, this position is partially correct: The past experiences of consumers can, through the laws of associative learning, modify not only what consumers want, but also what consumer like. Nevertheless, the inherently complex manner in which experience influences consumption behavior suggests that this influence is not reconcilable to a situation in which consumers are subject to outright manipulation (Witt 1996). The complex nature of attention processes and the tendency for the brain to block out a large part of stimuli to which it is exposed to suggests that such concerns are unfounded. Furthermore, if we recognize that consumers are not simply passive arbitrators of markets but through specialization have an important impact on their development, then the endogenous accumulation of what may be called the 'ability to modify' further casts doubt on this scenario. Where consumers have accumulated a substantial amount of knowledge and refined their tastes on the basis of their experiences, they are less likely to be swayed by attempts to influence consumers' wants via associative learning, as noted in chapter 2.

b) A new microeconomic approach to endogenous growth

A proper microeconomic foundation for understanding how a novelty emerges in economic systems involves understanding why and under what conditions individual agents are more or less inclined to search for and discover novelty (Witt 1994:106). As Witt notes, this is an aspect that many have insisted is vital to understanding endogenous change, including (Schumpeter 1934, Shackle 1972, Kirzner 1973, Hayek 1978). If we can understand the

nature of the behavioral motivations which cause individuals to pursue new actions, we may then understand how these motivations may be fostered or dampened by changing socio-economic conditions.⁶³

Note that this micro-orientated approach is different from what is known as ‘endogenous growth theory’, which seeks to explain how factor productivity improves as a result of how resources are allocated and organized, rather than viewing productivity improvements as a result of exogenous shocks (Fine 2000). Fine notes that the microeconomic processes portrayed in these models “have nothing to do as such with the economy as a whole, other than in the trivial sense of requiring at least two economic agents in order for exchange to arise” (Fine 2000:248). Here the notion of endogenous change has been conflated with the economics of production systems in that the chief causes of growth are primarily seen as supply side phenomena, such as R&D expenditure, human capital, economies of scale and scope or externalities.

From the Schumpeterian perspective, which sees the entrepreneur and the functioning of markets as being at the core of capitalist growth process (Schumpeter 1934, Loasby 2001, Potts 2001), these models provide a rather inadequate characterization of the forces driving modern capitalism. As an alternative, it is conjectured that growth is not a result of the re-organization of production but more generally occurs as a consequence of the introduction of novelty into the economic system (Witt 2003). Here, *endogenous* growth occurs as a result of the system's capacity to undergo self-transformation (Witt 2002), where the introduction of novelty sets into motion, and brings about, the conditions in which new novelty emerges. In other words, endogenous growth is that process by which a burst of growth that is produced by the introduction of some novelty leads to a further phase in which more novelty is generated that in turn causes more growth.

From this perspective, the general strategy of evolutionary economists has been to examine how entrepreneurs, firms, consumers, and entire societies learn and accumulate knowledge (Hayek 1937, Dosi 1982, Nelson and Winter 1982, Loasby 1999, Witt 2003). Here knowledge is perceived not as something that is detachable from the economic process

⁶³ It should be noted that in embarking on such an individualistic account of endogenous growth, we do not claim to be able to predict the specific outcomes of the agent's learning and discovery process, since novelty is by definition something that cannot be predicted. Rather, our point is to highlight the conditions that increase the likelihood that novelty, whatever its form, may emerge, and specifically, those conditions that stimulate consumers to intensively learn about acts certain of consumption.

but as the basic ingredient of economic evolution (Metcalfe et al. 2005:8). Consequently, the emphasis is on how and when agents face new opportunities and problems which stimulate them to learn and experiment and how the results of learning are capitalized upon through entrepreneurship and the market process.

Nevertheless, many of the ‘innovation studies’ that make-up much of this research are impeded by the same problem that affects endogenous growth models: investigation into the self-transformation processes have largely restricted themselves to describing supply-side transformations, i.e. endogenous *technological* change (Metcalfe 2001). Typically the demand side forms ‘the selection environment’ for new innovations, which screens what kind of novelties succeed or fail. As such, it does not play an active role in introducing novelties, but shapes what types of novelties are accepted or rejected. To some extent this is because of the inherent difficulties in identifying the short run link between demand and innovation (Mowrey and Rosenberg 1979). Consequently, most of these studies focus on supply-side factors that contribute to economic self-transformation. It is then doubtful to what extent such work can capture the self-transformation of an entire system when they only examine the supply side.⁶⁴

In order to construct a more complete picture of self-transformation, more consideration must be given to how consumer demand has changed with increasing income and economic development. In doing so, the focus of analysis shifts back onto the market interaction between consumers and suppliers, that, according to Schumpeter, is not just a mechanism for coordinating economic activity but the core engine of economic growth (Schumpeter 1934). Here the satiation process postulated by Witt and investigated by Ruprecht already outline an important type change that represents a self-transformation of the system: A slow down in consumption expenditure due to the satiation of the want for food, which was itself caused by improving advances in food production technologies, has led to innovation in the food industries that look to overcome this slowdown by modifying goods in order to appeal to new wants (Witt 2001, Ruprecht 2002a).

⁶⁴ Recent crucial attempts at a more balanced analysis are those works which examine the role that expert consumers play in co-inventing uses for new technologies (Bresnahan and Gordon 1997, Malerba et al. 2003, Bünstorf 2003, Jeppsen and Molin 2003, von Hippel 2005, van den Ende and Dolfsma 2005). Whilst in some instances making no distinction between consumers and other suppliers which are called ‘users’ of novelty, such studies, nevertheless, have underlined the importance of expert consumers in introducing innovations into the system.

In this dissertation, another way was uncovered in which economic development has affected the nature and intensity of consumer wants, namely through changes in the types of reinforcing stimuli consumers tend to be exposed to, what may be called the 'sensory environment' of consumers. Specifically, the emergence of ICSTs and urbanization, two general and significant trends in modern economic development, have both facilitated the exposure of consumers to a new set of reinforcing stimuli, which have led to significant changes in the wants consumer's possess. For example, exposure to crowded, smelly and polluted cities which are strongly associated with disease (as discussed in chapter 4), influenced how consumers satisfy their want for health and enabled them to enjoy the temporary avoidance of such stimuli through travel. Likewise, in relation to the want for arousal, the emergence of ICSTs have fostered exposure of consumers to a greater variety of arousing stimuli. This has enabled an immense growth in the variety of arousing stimuli that consumers seek in order satisfy their want for arousal. Hence these technologies enabled consumers to develop new acquired wants for previously unknown arousing stimuli, such as the Swiss Alps. In such a way, certain causal processes have been highlighted through which it is possible to uncover the precise nature by which the interaction between consumer and supplier learning processes has led to changes in consumption and the emergence of new economic activity.

In both cases, changes in the sensory environment led to a fundamental change in not only how consumers satisfied their wants but to the set of wants consumers had in the first place. These changes played a fundamental role in how the types of travel became popular, and why indeed tourism has become one of the world's largest industries in the 20th century. Therefore, an approach that explicitly considers the nature of wants, the laws under which these may change, and the specific nature whereby particular aspects of economic development influence consumer's wants, has a better understanding and explanation of the micro processes of endogenous growth. While such a microeconomic approach may seem a peculiar way to study such a concept typically associated with fundamental changes in production techniques, it is one that is fundamental to explaining the rate and uneven manner in which economies and industries have grown in the long run. Given that all economic activity serves the wants of consumers, analyzing changes in these wants is imperative to shedding light on long run economic growth and evolution.

6.4 Outlook

In terms of future research dedicated to improving our understanding of the evolution of consumption, the methodological framework set out in LTC and employed in this work has proven to be a fruitful and effective analytical narrative to understand the evolution of consumption. Its dual emphasis on the changing wants of consumers and their learning processes has delivered a new way to uncover both the short and long run determinants of consumption expenditure growth. In this work we built upon these foundations in two ways. Firstly, in relation to consumer learning processes, we outlined the theoretical implications of consumer specialization on the organization and evolution of markets, and provided some empirical evidence for these in chapters 2 and 5. In chapter 3 we provided further considerations of the factors that triggered specialization. Chapter 4 extended the approach to the analysis of how the interaction between insightful and associative learning may affect consumption in situations where consumers have accumulated relatively little knowledge about the consumption act (consumer generalization). Such an understanding of the nature of both consumer specialization and generalization provides a more complete picture of how learning processes interact with markets as well as of the development of consumption.

Secondly, detailed consideration was given to the nature of two particular wants and why they have represented a growing share of consumption expenditure. While some progress was made, much more remains to be done in this respect to understand the nature of basic wants and their precise relation to consumption. As we have seen in the previous chapters, particularities of wants seem to be vitally important for a proper understanding of the endogenous nature of growth. In our work we uncover some important differences that govern the intensity of these wants which are somewhat different from the characterization of 'basic wants' made in LTC (Witt 2001:32). Here the functioning of basic wants is described in the following way:

- Basic wants emerge from a state of deprivation of an organism.
- Organisms tend to become more deprived over time if they do not satisfy their basic wants.
- Consumption per unit of time is subject to physical satiation.
- Satiation is temporary: deprivation will re-emerge after the absence of consumption.

These characterizations fit the want for food and aqueous solutions very well. However when we look at other wants, some notable differences emerge. For example, in the case of the want for arousal, whilst also argued to be part of normal homeostatic regulation of the body (Parker and Tavassoli 2000), the want for arousal can also be satisfied by eating and drinking, hence its temporal ability to motivate consumption acts to some degree also depends on how deprived other wants are. In contrast, the want for food does not depend in the same way on how deprived consumers are of arousal. Hence, there seem to be important connections between basic wants which should be taken into account.

Furthermore, in relation to the want for arousal, while there exists a tendency similar to satiation where consumers tend to become less responsive to stimuli after prolonged exposure (habituation), it is in a number of ways fundamentally different from how satiation occurs in the context of consuming food and drink (McSweeney and Roll 1998). One difference, outlined in chapter 3, is that through varying how they are exposed to arousing stimuli, consumers may delay or entirely inhibit the rate at which consumers become habituated to it. While this may occur to a lesser degree in the case of food, varying the type of foods we eat causes consumers to eat more (McSweeney and Swindell 1999:445), ultimately the consumer experiences a negative aversion to eating when full, a signal related to the physiological capacity of the stomach unable to take in any more food (Cabanac 1992). However, in the case of the want for arousal, no such physiological constraint related to the size of a particular organ exists. Thus it would be problematic to view habituation as homologous to satiation effects.

Similarly, the want for health, like other basic wants, is also motivated by deprivation in the form of the perception of aversive painful stimuli. Like for other basic wants, the consumption of medicine is subject to something like satiation in that consumers are generally not motivated to consume when they no longer perceive pain. However, unlike other basic wants, deprivation in this context will not typically re-emerge periodically after effective treatment has been used. Once healthy, there is no regular mechanism that necessitates consumer becoming sick again.⁶⁵ Furthermore, chapter 4 shows that the

⁶⁵ An exception is, of course, if the consumer uses 'ineffective' medicine which does not permanently diminish the perception of pain. In the case of the want for food, this would be like consuming food that does not really diminish hunger. The difference between wants comes down to the point that if both are effectively treated in that a consumer is given enough food so as to no longer feel hungry and enough effective medicine so as to no

frequency and nature of consumption is determined by the nature of their habitat, what diseases are located in it, and what neutral stimuli have become associated with disease. Additionally, the consumption of medicine, like the want for arousal, does not encounter physiological constraints on consumption. Hence consumers may continue to use medicine for an unlimited amount of time even though they may not experience pain, e.g. taking preventive measures to avoid sickness which had important economic consequences during the 19th century hygiene revolution (Mokyr 2000).

To sum up, it is important to note the subtly different characteristics of certain wants since these differences can have important implications for the changing composition of consumption expenditure. Indeed, some of these subtle differences may explain why consumption activities related to wants, like health and arousal, have increased relative to consumption expenditure related to wants like food, which represent a shrinking share of total expenditure (Engel's law).

Observers may react to these differences by questioning the validity of the very notion of a 'basic want'. To some degree, when introducing something as complex and intricate as the human genetic endowment into the economic explanatory framework, an inevitable tradeoff is made between the ability to make general observations for a large amount of phenomena (like the utility function) on the one hand, and the opportunity to build explanatory frameworks that rest on real scientific insights into human nature, on the other hand.

However, from this perspective it is fascinating to see how well the general characterizations made in LTC can be used in describing consumption activities related to a number of different wants. If economists are interested in answering Menger's challenge, they can not be satisfied with any other option but to take a closer look at the nature of what motivates consumption: a task that must be undertaken by selectively using insights from the natural sciences in a way that ensures that safeguards the framework's general applicability and explanatory power. It is in this difficult task that the LTC approach excels and hence represents a promising method for understanding the evolution of consumption. For those who prefer simple, mathematically elegant models, the price of reconciling economic analysis with one of the most important principles of the natural sciences may be too high. Yet in the

longer feel ill, at some point in the future, because of the homeostatic functioning of the body, the consumer will feel hungry again, while this is not necessarily the case in regard to the want for medicine.

long run, scholars ultimately have no choice but to confront their theory with reality. Relying on the 'black-box' approach of utility to study consumption phenomena is much like a prisoner in Plato's allegory of the cave, who refuses to investigate the real world outside the cave and prefers to sit inside the cave and watch its shadows dance.

APPENDIX 3

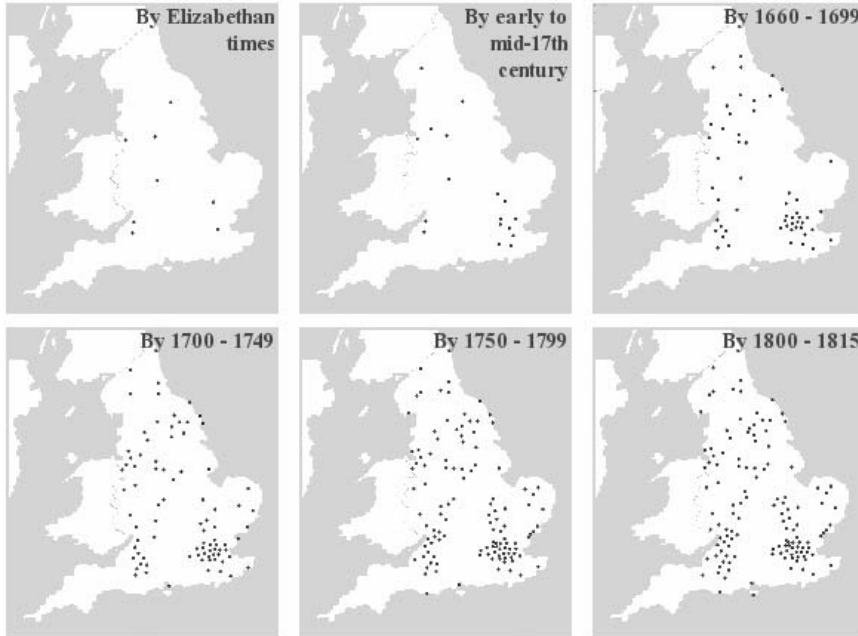
Tables A3.1: Social Status and Occupation of Grand Tour Sample 1547 – 1840:

Percentage of:	Aristocracy	Gentry	Clergy	Professional	Forces	Trade	Other	n=
1547 - 1603	-	80	-	-	-	-	20	(5)
1604 - 1639	14	43	-	14	-	29	-	(7)
1640 - 1660	-	80	-	20	-	-	-	(5)
1661 - 1700	20	25	5	35	5	10	-	(20)
1714 - 1740	35	15	15	30	-	5	-	(20)
1741 - 1762	30	10	20	20	10	-	10	(10)
1763 - 1780	22	28	11	28	11	-	-	(18)
1781 - 1791	11	11	11	44	-	23	-	(9)
1792 - 1802	11	11	11	67	-	-	-	(9)
1803 - 1813	-	-	-	100	-	-	-	(2)
1814 - 1820	8	8	16	44	16	-	8	(25)
1821 - 1830	15	8	8	69	-	-	-	(13)
1831 - 1840	-	-	13	62	-	25	-	(8) (151)

(Towner 1985)

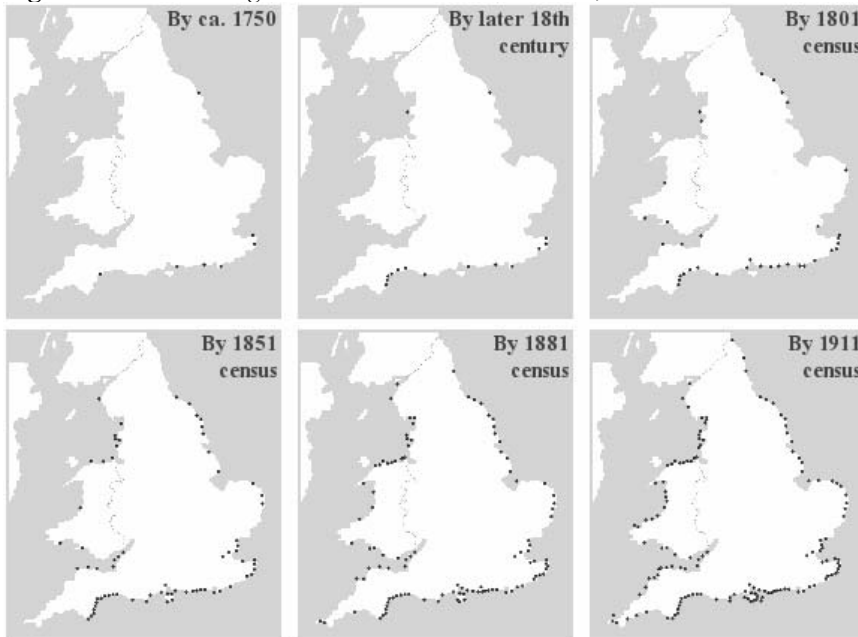
Appendix 4

Figure A4.1: The emergence of spa location in Britain, 1500-1815 (Source: Towner:1996)



(Source: Towner 1996:63)

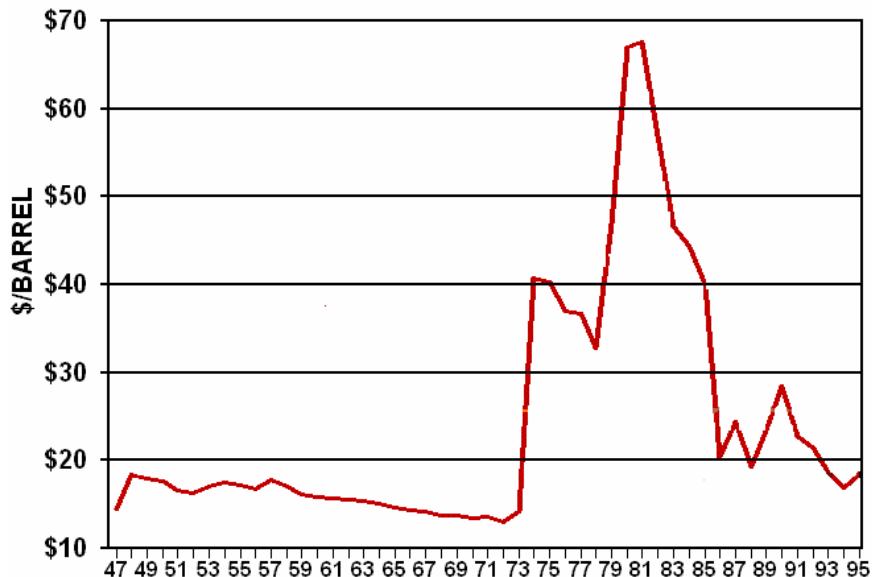
Figure A4.2: The emergence of the British seaside resort, 1750-1911.



(Source: Towner 1996:179)

Appendix 5

Figure A5.1: Crude Oil Prices, US\$ per barrel



(Source: US Energy Information Administration 2006)

Table A5.2: Loglikelihood Tests for Stimulation Hypothesis (related to Table 5.1)

Variable	Phase1 1971-1978	Phase 2 1980-1989	Phase 3 1991-1995
Intensity	13,970	36,442	11,188
<i>P-value</i>	0.000	0.000	0.004
Distance	1467,097	2808,870	1059,764
<i>P-value</i>	0.000	0.000	0.000
Income	31,633	25,716	20,334
<i>P-value</i>	0.000	0.000	0.000
Age	61,626	162,722	89,031
<i>P-value</i>	0.000	0.000	0.000
D-1	8,891	28,722	12,805
<i>P-value</i>	0.912	0.000	0.002
D-2	16,144	92,829	63,418
<i>P-value</i>	0.000	0.000	0.000

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Table A5.3: Loglikelihood Tests for Specialization Hypothesis (Table 5.2)

Variable	Phase1 1971-1978	Phase 2 1980-1989	Phase 3 1991-1995
Intensity	3,988	6,018	5,695
<i>P-value</i>	0.046	0.014	0.017
Distance	170,338	331,434	146,241
<i>P-value</i>	0.000	0.000	0.000
Income	11,418	28,542	8,146
<i>P-value</i>	0.001	0.000	0.004
Age	16,592	59,530	32,033
<i>P-value</i>	0.000	0.000	0.000
D-1	2,041	7,651	,155
<i>P-value</i>	0.153	0.006	0.694
D-2	32,012	2,639	56,112
<i>P-value</i>	0.000	0.104	0.000

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Table A5.4: Loglikelihood Tests for Specialization Hypothesis (Table 5.2)

Variable	Phase1 1971-1978	Phase 2 1980-1989	Phase 3 1991-1995
Intensity	4,297	6,018	3,736
<i>P-value</i>	0.038	0.014	0.053
Distance	90,365	210,690	73,902
<i>P-value</i>	0.000	0.000	0.000
Income	7,533	35,401	6,781
<i>P-value</i>	0.006	0.000	0.009
Age	17,641	53,784	32,637
<i>P-value</i>	0.000	0.000	0.000
D-1	,066	2,889	4,685
<i>P-value</i>	0.798	0.089	0.030
D-2	31,635	2,419	15,076
<i>P-value</i>	0.000	0.120	0.000
DISINT-1	,708	,001	8,074
<i>P-value</i>	0.400	0.969	0.004
DISINT -2	4,277	,287	1,605
<i>P-value</i>	0.039	0.592	0.205

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Reference List

- Aderhold, P. 2000.** Die Reiseanalyse. Forschungsgemeinschaft Urlaub + Reisen e.V., Hamburg.
- Adler, J. 1989.** Origins of Sightseeing. *Annals of Tourism Research* 16:7-39.
- Adner, R. and D. Levinthal. 2001.** Demand Heterogeneity and Technology Evolution: Implications for Product and Process Innovation. *Management Science* 47:611-628.
- Agarwal, S. 1997.** The Resort Cycle and Seaside Tourism: An Assessment of its Applicability and Validity. *Tourism Management* 18:65-73.
- Ainslie, G. 2003.** Uncertainty as Wealth. *Behavioral Processes* 64:369-385.
- Akerlof, G. 1980.** A Theory of Social Custom, of which Unemployment may be one Consequence. *Quarterly Journal of Economics* 94:749-775.
- Albert, M. and K. Ostheimer. 2002.** The Evolution of Current Medical and Popular Attitudes toward Ultraviolet Light Exposure: Part 1. *Journal of American Academic Dermatology* 47:930-937.
- Alhadeff, D. 1982.** *Microeconomics and Human Behavior: Toward a New Synthesis of Economics and Psychology.* University of California Press, Berkeley.
- Altick, R. 1998.** *The English Common Reader: A Social History of the Mass Reading Public, 1800-1900.* Ohio State University Press, Columbus.
- Anderson, J. 2000.** *Learning and Memory.* John Wiley & Sons Inc, New York.
- Bacon, W. 1997.** The Rise of the German and the Demise of the English Spa Industry: A Critical Analysis of Business Success and Failure. *Leisure Studies* 16:173-187.
- Bandura, A. 1986.** *Social Foundations of Thought and Action- A Social Cognitive Theory.* Prentice Hall, Englewood cliffs.
- Barton, S. 2005.** *Working-Class Organizations and Popular Tourism, 1840-1970.* Manchester University Press, Manchester.
- BAT. 1985.** *BAT Tourismusanalyse.* BAT-Freizeitforschungsinstituts.
- Bauer, M. 1995.** *Resistance to New Technology.* Cambridge University Press, Cambridge.

- Becker, G. 1976.** *The Economic Approach to Human Behavior*. Chicago University Press, Chicago.
- Becker, G. 1981.** *Treatise on the Family*. Harvard University Press, Cambridge.
- Becker, G. 1996.** *Accounting For Tastes*. Harvard University Press, Cambridge, MA.
- Bell, W. 1991.** *Searching Behavior: The Behavioral Ecology of finding Resources*. Chapman and Hall, London.
- Berlyne, D. 1960.** *Conflict, Arousal and Curiosity*. McGraw-Hill, USA.
- Berlyne, D. 1971.** *Aesthetics and Psychobiology*. Meredith Corporation, New York.
- Bernard, P. 1978.** *Rush to the Alps*. Columbia University Press, New York.
- Bianchi, M. 1997.** Collecting as a Paradigm of Consumption. *Journal of Cultural Economics* 21:275-289.
- Bianchi, M. 1998.** Taste for Novelty and Novel Tastes, pp. 64-86 In M. Bianchi [ed.], *The Active Consumer: Novelty and Surprise in Consumer Choice*. Routledge, London.
- Bianchi, M. 2002.** Novelty, Preferences and Fashion: When New Goods are unsettling. *Journal of Economic Behaviour and Organization*, 47:1-18.
- Bikhchandani, S., D. Hirshleifer, and I. Welch. 1992.** A Theory of Fads, Fashion, Custom and Cultural Change as Informational Cascades. *Journal of Political Economy* 100:992-1026.
- Bils, M. and P. Klenow. 2001.** The Acceleration in Variety Growth. *American Economic Review* 91:274-280.
- Botton, A. 2004.** *Status Anxiety*. Penguin, London.
- Botton, A. 2002.** *The Art of Travel*. Penguin, London.
- Braudel, F. 1992.** *The Structure of Everyday Life*. University of California Press, Los Angeles.
- Bray, R. and V. Raitz. 2001.** *Flight to the Sun*. Continuum, London.
- Brendon, P. 1991.** *Thomas Cook: 150 Years of Popular Tourism*. Secker & Warburg, London.
- Brenner, T. 1999.** *Modeling Learning in Economics*. Edward Elgar, Cheltenham.
- Brenner, T. 2006.** Agent Learning Representation: Advice on Modeling Economic Learning, pp. 895-947 In L. Tesfatsion and K. Judd [eds.], *Handbook of Computational Economics*. Elsevier, London.

Bresnahan, T. and A. Gambardella. 1998. The Division of Inventive Labor and the Extent of the Market, pp. 253-282 In E. Helpman [ed.], *General Purpose Technologies and Economic Growth*. MIT Press, Cambridge, M.A.

Bresnahan, T. and R. Gordon. 1997. *The Economics of New Goods*. University of Chicago Press, Chicago.

British Resort Association. 1989. *Perspective on the Future of Resorts*. British Resort Association, London.

Brookfield, H. 1950. *A Regional Study of the Urban Development of Coastal Sussex*. University of London, London.

Browne, J. 1990. Spas and Sensibilities: Darwin at Malvern, pp. 102-113 In R. Porter [ed.], *The Medical History of Waters and Spas*. Wellcome Institute for the History of Medicine, London.

Bukart, A. J. and S. Medlik. 1974. *Tourism: Past, Present and Future*. Heinemann, London.

Bünstorf, G. 2003. Designing Clunkers: Demand-side Innovation and the early History of the Mountain Bike, pp. 53-70 In S. Metcalfe and U. Cantner [eds.], *Change, Transformation and Development*. Physica, Heidelberg.

Bünstorf, G. 2004. *The Economics of Energy and the Production Process*. Edward Elgar, Cheltenham.

Butler, R. 1953. Discrimination Learning by Rhesus Monkeys to Visual Exploration Motivation. *Journal of Comparative and Physiological Psychology* 46:95-98.

Buzard, J. 1993. *The Beaten Track - European Tourism, Literature and the Ways to Culture, 1800-1918*. Clarendon Press, Oxford.

Cabanac, M. 1992. What is Sensation, In R. Wong [ed.], *Biological Perspectives on Motivated Activities*. Ablex, Northwood, N.J.

Cameron, R. 1993. *A Concise Economic History of the World*. Oxford University Press, Oxford.

Campbell, C. 1987. *The Romantic Ethic and the Spirit of Modern Consumerism*. Blackwell, Oxford.

Campbell, C. 1993. Understanding Traditional and Modern Patterns of Consumption in Eighteenth-Century England: a Character-Action Approach, pp. 58-84 In J. Brewer and J. Porter [eds.], *Consumption and the World of Goods*. London, Routledge.

Campbell, C. 2001. The Desire for the New: Its Nature and Social Location as presented in Theories of Fashion and Modern Consumerism, pp. 246-245 In D. Miller [ed.], *Consumption: Critical Concepts in the Social Sciences*. Routledge, London.

Chard, C. 2002. From the Sublime to the Ridiculous: The Anxieties of Sightseeing, pp. 47-68 In H. Berghoff, B. Korte, R. Schneider, and C. Harvie [eds.], *The Making of Modern Tourism: The Cultural History of the British Experience, 1600-2000*. Palgrave, Hampshire.

Chestnutt, I., D. Burden, J. Steele, N. Pitts, N. Nuttall, and A. Morris. 2006. The Orthodontic Condition of Children in the United Kingdom. *British Dental Journal* 200:609-612.

Christensen, C. 1997. *The Innovators Dilemma: When New Technologies Cause Great Firms to Fail*. Harvard University School Press, Boston, MA.

Clancy, M. 1998. Commodity Chains, Services and Development: Theory and Preliminary Evidence from the Tourism Industry. *Review of International Political Economy* 5:122-148.

Clark, C. 1951. *The Conditions of Economic Progress*. MacMillan and Co., London.

Clark, G., M. Huberman, and P. Lindert. 1995. A British Food Puzzle, 1770-1850. *Economic History Review* 48:215-237.

Coase, R. 1988. *The Firm, the Market and the Law*. University of Chicago Press, Chicago.

Cooper, C. 1997. Parameter and Indicators of the Decline of the British Seaside Resort: Cultural and Economic Perspectives, pp. 79-101 In G. Shaw and A. Williams [eds.], *The Rise and Fall of British Coastal Resorts*. Mansell, London.

Cordes, C. 2002. An Evolutionary Analysis of Long-Term Qualitative Change in Human Labor.

Cowan, R., W. Cowan, and P. Swann. 1997. A Model of Demand with Interactions among Consumers. *International Journal of Industrial Organization* 15:711-732.

Cunningham, H. 1980. *Leisure in the Industrial Revolution*. Croom Helm, London.

Damasio, A. 2003. *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*. William Heinemann, London.

Dashiel, J. 1925. A Quantitative Demonstration of Animal Drive. *Journal of Comparative Psychology* 5:205-208.

De Vries, J. 1994. The Industrial Revolution and the Industrious Revolution. *Journal of Economic History* 54:249-270.

- De Vries, C. 2005.** Sustained oil prices increases & increases in monetary policy. EMU Monitor.
- Dean, A., M. Durand, J. Fallon, and P. Hoeller. 1990.** Savings Trends and Behaviour in OECD Countries. OECD Working Papers 67.
- Deaton, A. and J. Muellbauer. 1980.** Economics and Consumer Behavior. Cambridge University Press, Cambridge.
- Deaton, A. S. 1975.** The Structure of Demand 1920-1970, pp. 5-47 In Cipolla.C. [ed.], The Fontana Economic History of Europe. Fontana, London.
- DeFleur, M. and S. Ball-Rokeach. 1989.** Theories of Mass Communication. Longman, London.
- Dietsch, K. 1985.** Reisebüro und Bahnreise. Zug Der Zeit 2:753-756.
- Dietsch, K. 1996.** Studienreisen, In A. Dreyer [ed.], Kulturtourismus. Oldenburg, München.
- Dingle, A. 1972.** Drink and Working-Class Living Standards in Britain, 1870-1914. Economic History Review 25:608-622.
- Dinnerstein, D. 1965.** Intermanual Effects of Anchors on Zones of Maximal Sensitivity in Weight Discrimination. American Journal of Psychology 78:66-74.
- Donald, M. 1991.** Origins of the Modern Mind. Harvard University Press, Cambridge, MA.
- Dosi, G. 1982.** Technological Paradigms and Technological Trajectories: A Suggested Interpretation of the Determinants and Directions of Technical Change. Research Policy 12:147-162.
- Eadington, W. R. and R. Redman. 1991.** Economics and Tourism. Annals of Tourism Research 18:41-56.
- Earl, P. 1986.** Lifestyle Economics: Consumer Behaviour in a Turbulent World. Wheatsheaf Books, Sussex.
- Earl, P. 1998.** Consumer Goals as Journeys into the Unknown, pp. 122-140 In M. Bianchi [ed.], *The Active Consumer: Novelty and Surprise in Consumer Choice*. Routledge, London.
- Earl, P. 2001.** Simon's Travel Theorem and the Demand for Live Music. Journal of Economic Psychology 22:335-338.
- Earl, P. 2005.** Economics and Psychology in the Twenty-First Century. Cambridge Journal of Economics 29:909-926.

- Earl, P. and J. Potts. 2004.** The Market for Preferences. *Cambridge Journal of Economics* 28:619-633.
- Eaton, S., L. Cordain, and S. Eaton. 2001.** An Evolutionary Foundation for Health Promotion. *World Review of Nutrition and Diet* 90:5-12.
- Edensor, T. 2000.** Walking in the British Countryside: Reflexivity, Embodied Practices and Ways to Escape. *Body & Society* 6:81-106.
- Elster, J. 1997.** More Than Enough. *The University of Chicago Law Review* 64:749-764.
- English Short Title Catalogue. 2006.** www.rlg.org.
- Energy Information Administration. 2006.** Crude Oil Prices. <http://www.eia.doe.gov/> . 2006.
- Etzioni, A. 1985.** Opening the Preferences: A Socio-Economic Research Agenda. *Journal of Behavioral Economics* 14:183-205.
- Euler, G. 1974.** *Fremdenverkehr im Wandel. Berner Studien zum Fremdenverkehr*, Bern.
- Evans, G. and J. Jacobs. 1981.** Air Pollution and Human Behavior. *Journal of Social Issues* 37:95-121.
- Fabrega, H. 1997.** Earliest Phases in the Evolution of Sickness and Healing. *Medical Anthropology Quarterly* 11:26-55.
- Fagan, R. 1981.** *Animal Play Behavior*. Oxford University Press, Oxford.
- Farrant, S. 1987.** London by the Sea: Resort Development on the South Coast of England. *Journal of Contemporary History* 22:137-162.
- Farrell, J. and G. Saloner. 1985.** Standardization, Compatibility and Innovation. *Rand Journal of Economics* 16:70-83.
- Feiffer, M. 1986.** *Tourism in History - From Imperial Rome to the Present*. Stein and Day, New York.
- Fine, B. 2000.** Endogenous Growth Theory: A Critical Assessment. *Cambridge Journal of Economics* 24:245-265.
- Flinn, M. 1997.** Culture and the Evolution of Social Learning. *Evolution and Human Behavior* 18:23-67.
- Foster, J. and P. Wild. 1999.** Detecting Self-Organizational Change in Economic Processes Exhibiting Logistic Growth. *Journal of Evolutionary Economics* 6:109-135.

- Foxall, G. R. 1990.** Consumer Psychology in Behavioral Perspective. Routledge, London.
- Frank, R. 1999.** Luxury Fever: Why Money fails to satisfy in an Era of Excess. Free Press, New York.
- Fraser, L. 1939.** The Doctrine of "Consumers' Sovereignty". The Economic Journal 49:544-548.
- Friedman, M. and R. Friedman. 1980.** Free to Choose. Harcourt Brace Jovanovich.
- Galbraith, J. K. 1958.** The Affluent Society. Houghton Mifflin Company, Boston.
- Georgescu-Roegen, N. 1954.** Choice, Expectations and Measurability. Quarterly Journal of Economics 68:503-534.
- Giersch, H., K. Paque, and H. Schmieding. 1992.** The Fading Miracle: Four Decades of Market Economy in Germany. Cambridge University Press, Cambridge.
- Gilbert, D. and J. Abdullah. 2004.** Holiday Taking and the Sense of Well Being. Annals of Tourism Research 31:103-121.
- Goldman, A. 2001.** Social Epistemology, In E. Zalta [ed.], Stanford Encyclopedia of Philosophy. Stanford Metaphysics Laboratory, Stanford.
- Goodson, F. 2003.** The Evolution and Function of Cognition, Lawrence Erlbaum, Mahwah, NJ.
- Granovetter, R. and R. Soong. 1986.** Threshold Models of Interpersonal Effects in Consumer Demand. Journal of Economic Behavior and Organization, 7:83-99.
- Greene, W. 2003.** Econometric Analysis. Prentice Hall, New York.
- Gresnahan, B., M. Dickie, and S. Gerking. 1997.** Averting Behavior and Urban Air Pollution. Land Economics 73:340-357.
- Gualerzi, D. 2001.** Consumption and Growth. Edward Elgar, London.
- Hamlin, C. 1990.** Chemistry, Medicine and the Legitimization of English Spas, 1740-1840, pp. 67-81 In R. Porter [ed.], The Medical History of Waters and Spas. Wellcome Institute for the History of Medicine, London.
- Harley, D. 1990.** A Sword in a Madman's Hand: Professional Opposition to Popular Consumption in the Waters Literature of Southern England and the Midlands 1570-1870, pp. 48-55 In R. Porter [ed.], The Medical History of Waters and Spas. Wellcome Institute for the History of Medicine, London.

- Harlow, H. 1950.** Learning and Satiation of Response in Intrinsically Motivated Complex Puzzle Performance by Monkeys. *Journal of Comparative Physiological Psychology* 43:289-294.
- Harvey. 1990.** *The Condition of Postmodernity*. Blackwell, Oxford.
- Hayek, F. A. 1937.** Economics and Knowledge. *Economica* 4:33-54.
- Hayek, F. A. 1952.** *The Sensory Order - An Inquiry into the Foundations of Theoretical Psychology*. Routledge & Kegan Paul, London.
- Hayek, F. A. 1960.** *The Constitution of Liberty*. Routledge, London.
- Hayek, F. A. 1978.** Competition as a Discovery Procedure, pp. 179-190 *New Studies in Philosophy, Politics, and the History of Ideas*. Chicago University Press, Chicago.
- Hembry, P. 1990.** *The English Spa: 1560-1815*. The Athlone Press, London.
- Hergenhahn, B. and M. Olson. 1997.** *An Introduction to Theories of Learning*. Prentice Hall, New Jersey.
- Hildebrand, G. 1951.** Consumer Sovereignty in Modern Times. *American Economic Review* 41:19-33.
- Hohenberg, P. and L. Lees. 1995.** *The Making of Urban Europe 1000-1994*. Harvard University Press, Cambridge, MA.
- Horrell, S. 1996.** Home Demand and British Industrialization. *Journal of Economic History* 56:561-604.
- Howard, J. 1983.** Marketing Theory of the Firm. *Journal of Marketing* 47:90-100.
- Huffman, M. 2003.** Animal Self-Medication and Ethno-Medicine: Exploration and Exploitation of the Medicinal Properties of Plants. *Proceedings of the Nutrition Society* 62:371-381.
- Hutt, W. 1936.** *Economists and the Public: A Study of Competition and Opinion*. Transaction Publishers, New Brunswick.
- Hutt, W. 1940.** The Concept of Consumer Sovereignty. *Economic Journal* 50:66-77.
- Inglis, F. 2000.** *The History of Holidays*. Routledge, London.
- Jackson, M. 2006.** *Allergy: The History of a Modern Malady*. Reaktion, London.
- Jankovic, V. 2006.** The Last Resort: A British Perspective on the Medical South, 1815-1870. *Journal of Intercultural Studies* 27:271-298.

- Janssen, M. A. and W. Jager. 2001.** Fashions, Habits and Changing Preferences: Simulation of psychological Factors affecting Market Dynamics. *Journal of Economic Psychology* 22:745-772.
- Jeppsen, L. and M. Molin. 2003.** Consumers as Co-Developers: Learning and Innovation outside the Firm. Working Paper Series, Department of Industrial Economics & Strategy, Copenhagen Business School 03-1.
- Keitz, C. 1997.** Reisen als Leitbild. Die Entstehung des modernen Massentourismus in Deutschland. Deutscher Taschenbuch Verlag, München.
- Kevan, S. 1993.** Quests for Cures: A History of Tourism for Climate and Health. *International Journal of Biometeorology* 37:113-124.
- Kiple, K. 1996.** The History of Disease, pp. 6-15 In R. Porter [ed.], *Cambridge Illustrated History of Medicine*. Cambridge University Press, Cambridge.
- Kirzner, I. M. 1973.** *Competition and Entrepreneurship*. University of Chicago Press, Chicago.
- Krause, P. 1995.** Ostdeutschland fünf Jahre nach der Einheit. German Institute for Economic Research (DIW) Weekly Reports WB 50/95.
- Kubovy, M. 1999.** On the Pleasures of the Mind, pp. 134-154 In D. Kahneman, E. Diener, and N. Schwarz [eds.], *Well-Being: The Foundations of Hedonic Psychology*. Russel Sage Foundation, New York.
- Lancaster, K. 1966.** Change and Innovation in the Technology of Consumption. *American Economic Review* 56:14-23.
- Langlois, R. and M. Cosgel. 1998.** The Organization of Consumption, pp. 107-121 In M. Bianchi [ed.], *The active Consumer*. Routledge, London.
- Langlois, R. 2001.** Knowledge, Consumption and Endogenous Growth, In U. Witt [ed.], *Escaping Satiation*. Springer, Berlin.
- Larsen, J. 2001.** Tourism Mobility and the Travel Glance: Experiences of Being on the Move. *Scandinavian Journal of Hospitality and Tourism* 1:80-98.
- Lavoie, D. 1991.** The Progress of Subjectivism, pp. 470-486 In N. de MARCHI and M. Blaug [eds.], *Appraising Economic Theories: Studies in the Methodology of Research Programs*. Edward Elgar, Aldershot.
- Lebergott, S. 1993.** *Pursing Happiness- American Consumers in the Twentieth Century*. Princeton University Press, Princeton.
- Lencek, L. and G. Bokser. 1998.** *The Beach: The History of Paradise on Earth*. Secker & Warburg, London.

Lickorish, L. J. and O. J. Kershaw. 1975. Tourism Between 1840 and 1940, pp. 11-26 In A. Burkart and S. Medlik [eds.], *The Management of Tourism*. Heinemann, London.

Lindner, S. 1970. *The Harried Leisure Class*. Columbia University Press, New York.

Lipsey, R., C. Bekar, and K. Carlaw. 1998. What Requires Explanation? pp.15-54 In E. Helpman [ed.], *General Purpose Technologies and Economic Growth*. MIT Press, Cambridge, M.A.

Littlewood, I. 2002. *Sultry Climates: Travel & Sex*. Routledge, London.

Lloyd, W. F. 1833. A Lecture on the Notion of Value as Distinguished not only from Utility, but also from Value in Exchange. Reprinted in 1927, *Economic Journal: Supp. Economic History*, Vol. 1 p.168-83.

Loasby, B. 1999. *Knowledge, Institutions and Evolution in Economics*. Routledge, London.

Loasby, B. 2001. Cognition, Imagination and Institutions in Demand Creation. *Journal of Evolutionary Economics* 11:7-21.

Loasby, B. 2002. The Evolution of Knowledge: Beyond the Biological Model. *Research Policy* 31:1227-1239.

Loasby, B. J. 1998. Cognition and Innovation, In M. Bianchi [ed.], *The Active Consumer: Novelty and Surprise in Consumer Choice*. Routledge, London.

Loewenstein, G. 1994. The Psychology of Curiosity: A Review and Reinterpretation. *Psychological Bulletin* 116:75-98.

Lohman, M. and J. Mundt. 2002. Maturing Markets for Cultural Tourism: Germany and the Demand for the 'Cultural Destination", pp. 213-226 In R. Voase [ed.], *Tourism in Western Europe: A Collection of Case Histories*. CABI Publishing, UK.

Lowery, D. 1998. Consumer Sovereignty and Quasi-Market Failure. *Journal of Public administration Research and Theory* 8:137-172.

Lozano, G. 1998. Parasitic Stress and Self-Medication in Wild Animals. *Advances in the Study of Behavior* 27:291-317.

Lundvall, B. 1988. Innovation as an Interactive Process: From User-Producer Interaction to the National System of Innovation, In G. Dosi [ed.], *Technical Change and Economic Theory*. Pinter, London.

MacDonald, K. 1993. Parent-Child Play: An Evolutionary Perspective, pp. 113-143 In K. MacDonald [ed.], *Parent-Child Play*. State University of New York Press, New York.

Maczak, A. 1995. *Travel in Early Modern Europe*. Polity Press, Cambridge.

- Malerba, F., R. Nelson, and L. Orsenigo. 2003.** Demand, Innovation and the Dynamics of Market Structure: The Role of Experimental Users and Diverse Preferences. CESPRI Working Papers 135.
- Marshall, A. 1890.** The Principles of Economics. Prometheus Books, London.
- Marshall, A. 1919.** Industry and Trade. MacMillan, London.
- Maslow, A. 1954.** Motivation and Personality. Harper & Row, New York.
- McFarland, D. 1987.** The Oxford Companion to Animal Behavior. Oxford University Press, Oxford.
- McKendrick, N., J. Brewer, and J. Plumb. 1985.** The Birth of a Consumer Society. Indiana University Press, Bloomington.
- McKenzie, B. E., H. E. Tootell, and R. H. Day. 1980.** Development of Size Constancy during the First Year of Human Infancy. *Developmental Psychology* 16:163-174.
- McSweeney, F. and J. Roll. 1998.** Do Animals Sate or Habituate to Repeatedly Presented Reinforcers? *Psychonomic Bulletin & Review* 5:428-442.
- McSweeney, F. K., J. Hinson, and C. Cannon. 1996.** Sensitization-Habituation may occur during Operant Conditioning. *Psychological Bulletin* 120:256-271.
- McSweeney, F. K. and S. Swindell. 1999.** General-Process Theories of Motivation Revisited: The Role of Habituation. *Psychological Bulletin* 125:437-457.
- Menger, C. 1950.** Principles of Economics. The Free Press, Glencoe, Illinois.
- Metcalf, J. 2001.** Consumption, Preferences and the Evolutionary Agenda. *Journal of Evolutionary Economics* 11:37-58.
- Metcalf, J., J. Foster, and R. Ramlogan. 2005.** Adaptive Economic Growth. *Cambridge Journal of Economics* 30:7-32.
- Mitchell, B. and P. Deane. 1962.** Abstract of British Historical Statistics. Cambridge University Press, Cambridge.
- Mokyr, J. 1988.** Is there still Life in the Pessimist Case? Consumption during the Industrial Revolution 1790-1850. *Journal of Economic History* 48:69-92.
- Mokyr, J. 2000.** Why 'More Work for Mother?' Knowledge and Household Behavior, 1870-1945. *Journal of Economic History* 60:1-41.
- Mokyr, J. 2002.** Gifts of Athena. Princeton University Press, Princeton and Oxford.
- Montgomery, K. 1953.** The Effect of the Hunger and Thirst Drives upon Exploratory Behavior. *Journal of Comparative Psychology* 46:129-133.

- Moreau, C., D. Lehman, and A. Markman. 2001.** Entrenched Knowledge Structure and Consumer Response to New Products. *Journal of Marketing Research* 38:14-16.
- Mowrey, D. and N. Rosenberg. 1979.** The Influence of Market Demand upon Innovation: A Critical Review of Some Recent Empirical Studies. *Research Policy* 8:102-153.
- Muller, B. 1991.** An Analysis of Information Content in Standardized vs. Specialized Multinational Advertisements. *Journal of International Business Studies* 22.
- Nelson, P. 1970.** Information and Consumer Behavior. *Journal of Political Economy* 78:329.
- Nelson, R. R. and S. G. Winter. 1982.** *An Evolutionary Theory of Economic Change.* Harvard University Press, Cambridge, MA.
- Nicholls, J. 2003.** Gin Lane Revisited: Intoxication and Society in the Gin Epidemic. *Journal of Cultural Studies* 7:125-146.
- Nissen, H. 1930.** A Study of Exploratory Behavior in the White Rat. *Journal of Genetic Psychology* 37:361-376.
- Nistico, S. 2005.** Consumption and Time in Economics. *Cambridge Journal of Economics* 29:943-957.
- O'Driscoll, G. and M. Rizzo. 1985.** *The Economics of Time and Ignorance*, 2 ed. Routledge, London.
- Office for Official Publications of the European Communities. 1994.** *The Evolution in Holiday Travel Facilities Inside and Outside the European Community.* ECSC-EEC-EAC, Brussels, Luxembourg.
- Orians, G. and J. Heerwagen. 1992.** Evolved Responses to Landscapes, pp. 555-580 In J. Barkow, L. Cosmides, and J. Tooby [eds.], *The adapted Mind.* Oxford University Press, New York.
- Papatheodorou, A. 2004.** Exploring the Evolution of Tourism Resorts. *Annals of Tourism Research* 1:237.
- Parker, P. M. and N. Tavassoli. 2000.** Homeostasis and Consumer Behavior Across Cultures. *International Journal of Research in Marketing* 17:33-53.
- Parrinello, G. L. 1993.** Motivation and Anticipation in Post-Industrial Tourism. *Annals of Tourism Research* 20:233-249.
- Pasinetti, L. L. 1993.** *Structural Economic Dynamics.* Cambridge University Press, Cambridge.

- Persky, J. 1993.** Retrospectives: Consumer Sovereignty. *Journal of Economic Perspectives* 7:183-191.
- Pierenkemper, T. 1987.** The Standard of Living and Employment in Germany, 1850-1980. *Journal of European Economic History* 16:51-73.
- Plumb, J. 1982.** The Commercialization of Leisure in Eighteenth-Century England, pp. 265-285 In N. McKendrick, J. Brewer, and J. Plumb [eds.], *The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England*. Indiana University Press, Bloomington.
- Porter, D. 1991.** *Haunted Journeys: Desire and Transgression in European Travel Writings*. Princeton University Press, Princeton, NJ.
- Porter, R. 1996a.** What is Disease?, In R. Porter [ed.], *Cambridge Illustrated History of Medicine*. Cambridge University Press, Cambridge.
- Porter, R. 1996b.** Hospitals and Surgery, pp. 202-245 In R. Porter [ed.], *Cambridge Illustrated History of Medicine*. Cambridge University Press, Cambridge.
- Porter, R. 1998.** *The Greatest Benefit to Mankind: A Medical History of Humanity*. Norton & Co, New York.
- Potts, J. 2001.** Knowledge and Markets. *Journal of Evolutionary Economics* 11:413-431.
- Price, R. 1981.** Hydropathy in England 1840-70. *Medical History* 25:269-280.
- Prickett, S. 2002.** Circles and Straight Lines: Romantic Versions of Tourism, pp. 69-84 In H. Berghoff, B. Korte, R. Schneider, and C. Harvie [eds.], *The Making of Modern Tourism: The Cultural History of the British Experience, 1600-2000*. Palgrave, Hampshire.
- Raub, J. 2002.** Psychophysiologic Effects of Hatha Yoga on Musculoskeletal and Cardiopulmonary Function: A Literature Review. *Journal of Alternative and Complimentary Medicine* 8:797-812.
- Raven, J. 1992.** Judging New Wealth: Popular Publishing and Responses to Commerce in England 1750-1800. Clarendon Press, Oxford.
- Redelmeier, D. and A. Tversky. 1996.** On the Belief that Arthritis Pain is Related to the Weather. *Proceedings of the National Academy of Science* 93:2895-2896.
- Richter, L. 1989.** *The Politics of Tourism in Asia*. Hawaii University Press, Honolulu.
- Rogers, E. M. 1962.** *The Diffusion of New Innovations*. The Free Press, New York.
- Rosen, S. 1981.** The Economics of Superstars. *American Economic Review* 71:845-858.

Rothenberg, J. 1965. Consumers' Sovereignty Revisited and the Hospitality of Freedom of Choice. *American Economic Review* 52:269-283.

Routh, H., K. Bhowmik, L. Parish, and J. Witkowski. 1996. Balneology, Mineral Water, and Spas in Historical Perspective. *Clinics in Dermatology* 14:551-554.

Rozin, P. 1999. Preadaptation and the Puzzles of Properties of Pleasure, pp. 109-133 In D. Kahneman, E. Diener, and N. Schwarz [eds.], *Well-Being: The Foundations of Hedonic Psychology*. Russel Sage, New York.

Ruprecht, W. 2002a. Preferences and Novelty: A Multidisciplinary Perspective, pp. 56-74 In A. McMeekin, K. green, M. Tomlinson, and V. Walsh [eds.], *Innovation by Demand*. Manchester University Press, Manchester.

Ruprecht, W. 2002b. *Towards an Evolutionary Theory of Consumption*.

Sargent, F. 1982. *Hippocratic Heritage: A History of Ideas about Weather and Human Health*. Pergamon Press, New York.

Sartorius, C. 2003. *An Evolutionary Approach to Social Welfare*. Routledge, New York.

Saviotti, P. 2001. Variety, Growth and Demand, pp. 115-138 In U. Witt [ed.], *Escaping Satiation*. Springer, Berlin.

Saviotti, P. 2002. Variety, Growth and Demand, pp. 41-55 In A. McMeekin, K. Green, M. Tomlinson, and V. Walsh [eds.], *Innovation by Demand*. Manchester University Press, Manchester.

Saviotti, P. 1996. *Technological Evolution, Variety and the Economy*. Edward Elgar, Cheltenham.

Schmookler, J. 1966. *Invention and Economic Growth*. Harvard University Press, Cambridge, M.A.

Schofield, R. 1994. British Population Change 1700-1871, pp. 60-95 In R. Floud and D. McCloskey [eds.], *The Economic History of Britain since 1700*. Cambridge University Press, Cambridge.

Schor, J. 1991. *The Overworked American: The Unexpected Decline of Leisure*. Basic Books, USA.

Schudlich, E. 1987. *Die Abkehr vom Normalarbeitstag, Entwicklung der Arbeitszeiten in der Industrie der Bundesrepublik seit 1945*. Campus, Frankfurt.

Schumpeter, J. A. 1934. *Theory of Economic Development*. Harvard University Press, Cambridge, MA.

- Scitovsky, T. 1976.** *The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction.* Oxford University Press, Oxford.
- Scitovsky, T. 1962.** On the Principle of Consumers' Sovereignty. *American Economic Review* 52:262-268.
- Scitovsky, T. 1981.** The Desire for Excitement in Modern Society. *Kyklos* 34:3-13.
- Scranton, P. 1994.** Manufacturing Diversity: Production Systems, Markets, and American Consumer Society, 1870-1930. *Technology and Culture* 35:476-505.
- Shackle, G. L. S. 1972.** *Epistemics and Economics.* Cambridge University Press, Cambridge.
- Simon, H. A. 1996.** *Models of My Life.* MIT Press, Cambridge.
- Simon, J. 1977.** *The Economics of Population Growth.* Princeton University Press, Princeton.
- Sinclair, M. and M. Stabler. 1997.** *The Economics of Tourism.* Routledge, London.
- Skinner, B. F. 1953.** *Science and Human Behavior.* The Free Press, New York.
- Smith, A. 1980.** The Principles which Lead and Direct Philosophical Enquiries; Illustrated by the History of Astronomy, pp. 33-105 In W. Wightman [ed.], *Essays on Philosophical Subjects.* Liberty Classics, Indianapolis.
- Smith, A. 1776.** *The Wealth of Nations.* Dutton Press, New York.
- Snape, R. 2004.** The Cooperative Holidays Association and the Cultural Formation of the Countryside Leisure Practice. *Leisure Studies* 23:143-158.
- Snyder, R. 2004.** Radical Civic Virtue: Women in 19th Century Civil Society. *New Political Science* 26:51-69.
- Soane, J. 1993.** *Fashionable Resort Regions: Their Evolution and Transformation.* Cab International, UK.
- St Clair, W. 2004.** *The Reading Nation in The Romantic Period.* Cambridge University Press, Cambridge.
- Staddon, J. and J. Higa. 1996.** Multiple Time Scales in Simple Habituation. *Psychological Review* 103:720-733.
- Stagl, J. 1995.** *A History of Curiosity.* Harwood, Switzerland.
- Steedman, I. 2001.** *Consumption Takes Time.* Routledge, London.

Steenkamp, J., Baumgartner H., van der Wulp, and E. 1996. The Relationships amongst Arousal Potential, Arousal and Stimulus Evaluation, and the Moderating Role of the Need for Stimulation. *International Journal of Marketing* 13:319-329.

Steenkamp, J. and S. Burgess. 2002. Optimum Stimulation Level and Exploratory Consumer Behavior in an Emerging Consumer Markets. *International Journal of Research in Marketing* 19:131-150.

Stevens, S. 1957. On the Psychophysical Law. *Adaptive Behavior* 4:21-436.

Stigler, G. and G. Becker. 1977. De Gustibus Non est Disputandum. *American Economic Review* 67:76-90.

Südbeck, T. 1998. Motorisierung, Verkehrsentwicklung und Verkehrspolitik in der Bundesrepublik Deutschland der 1950er Jahre. Steiner, Frankfurt.

Swann, G. 1999. An Economic Analysis of Taste- A Review of Gary S. Becker: Accounting For Tastes. *International Journal of the Economics of Business* 6:281-296.

Swann, G. M. 2002. There's More to Economics of Consumption than (almost) Unconstrained Utility Maximization, pp. 23-40 In A. McMeekin, K. Green, M. Tomlinson, and V. Walsh [eds.], *Innovation by Demand*. Manchester University Press, Manchester.

Swedberg, R. 1994. Markets as Social Structures, pp. 313-341 In N. Smelser and R. Swedberg [eds.], *The Handbook of Economic Sociology*. Princeton University Press, Princeton.

Thompson, R. F. and W. A. Spencer. 1966. Habituation: A Model Phenomenon for the Study of Neuronal Substrates of Behavior. *Psychological Review* 73:16-43.

Towner, J. 1985. The Grand Tour - A Key Phase in the History of Tourism. *Annals of Tourism Research* 12:297-333.

Towner, J. 1996. *An Historical Geography of Recreation and Tourism in the Western World 1514-1940*. John Wiley & Sons, West Sussex, England.

Train, K. 2003. *Discrete Choice Models with Simulation*. Cambridge University Press, Cambridge.

Trigg, A. 2001. Veblen, Bourdieu, and Conspicuous Consumption. *Journal of Economic Issues* 35:99-115.

Turk, D. and A. Okifuji. 2002. Psychological Factors in Chronic Pain: Evolution and Revolution. *Journal of Consulting and Clinical Psychology* 70:678-690.

Turner, L. and J. Ash. 1975. *The Golden Hordes*. Constable and Company, London.

- Urry, J. 1990a.** The Consumption of Tourism. *Sociology* 24:23-35.
- Urry, J. 1990b.** *The Tourist Gaze: Leisure and Travel in Contemporary Societies.* Sage Publications, London.
- US Department of Labor. 2006.** 100 Years of US Consumer Expenditure. Report 991.
- van den Ende, J. and W. Dolfsma. 2005.** Technology-Push, Demand-Pull and the Shaping of Technological Paradigms. *Journal of Evolutionary Economics* 15:83-99.
- Van Doren, C. and S. Lollar. 1985.** The Consequences of Forty Years of Tourism Growth. *Annals of Tourism Research* 12:467-489.
- Veblen, T. 1898.** Why is Economics Not an Evolutionary Science? *Quarterly Journal of Economics* 12:373-397.
- Veblen, T. 1899.** *The Theory of the Leisure Class.* Penguin, London.
- Vogel, H. 1998.** *Entertainment Industry Economic.* Cambridge University Press, Cambridge.
- von Hippel. 2005.** *Democratizing Innovation.* MIT Press, London.
- Vorspan, R. 2000.** 'Rational Recreation' and the Law: The Transformation of Popular Urban Leisure in Victorian England. *McGill Law Journal* 45:891-973.
- Voth, H. 1998.** Work and the Sirens of Consumption in Eighteenth-Century London, pp. 143-173 In M. Bianchi [ed.], *The Active Consumer.* Routledge, London.
- Vowles, K., M. Zvolensky, and R. Gross. 2004.** Pain-Related Anxiety in the Prediction of Chronic Low-Back Pain Distress. *Journal of Behavioral Medicine* 27:77-89.
- Wadman, W. 2000.** *Variable Quality in Consumer Theory.* Sharpe, New York.
- Walter, R. 1995.** *Wirtschaftsgeschichte: Von Merkantilismus bis zur Gegenwart.* Böhlau, Köln.
- Walton, J. 1997.** The Seaside Resorts of England and Wales, 1900-1950: Growth, Diffusion and the Emergence of new Forms of Coastal Tourism, pp. 21-48 In G. Shaw and A. Williams [eds.], *The Rise and Fall of British Coastal Resorts: Cultural and Economic Perspectives.* Wellington House, London.
- Walton, J. 2000.** *The British Seaside: Holidays and Resorts in the Twentieth Century.* Manchester University Press, Manchester.
- Walton, J. 1981.** The Demand for Working-Class Seaside Holidays in Victorian England. *The Economic History Review* 34:249-265.

- Warke, T. 2000.** Mathematical Fitness in the Evolution of the Utility Concept from Bentham to Jevons to Marshall. *Journal of the History of Economic Thought* 22:5-27.
- Wathieu, L. 2004.** Consumer Habituation. *Management Science* 50:587-596.
- Weatherill, L. 1988.** *Consumer Behavior and Material Culture, 1660-1760.* Routledge, London.
- Whittet, T. 1982.** Apothecaries and the Development of Sea Bathing. *Pharmaceutical Historian* 12:6-7.
- Wilson, G. B. 1940.** *Alcohol and the Nation.* Nicholson and Watson, London.
- Windrum, P. 2005.** Heterogeneous Preferences and New Innovation Cycles in Mature Industries: The Amateur Camera Industry 1955-1974. *Industrial and Corporate Change* 14:1043-1074.
- Winston, B. 1998.** *Media, Technology and Society.* Routledge, London.
- Winton, M. 1987.** Do Introductory Textbooks Present the Yerkes-Dodson Law Correctly? *American Psychologist* 42:202-203.
- Witt, U. 1994.** Endogenous Change - Causes and Contingencies. *Advances in Austrian Economics* 1:105-117.
- Witt, U. 2001.** Learning to Consume - A Theory of Wants and the Growth of Demand. In U. Witt [ed.], *Escaping Satiation; The Demand Side of Economic Growth.* Springer Verlag, Berlin.
- Witt, U. 1996.** The Political Economy of the Mass Media Societies. *Papers on Economics & Evolution* 9601.
- Witt, U. 2002.** How Evolutionary Is Schumpeter's Theory of Economic Development? *Industry and Innovation* 9:7-22.
- Witt, U. 2003.** *The Evolving Economy.* Edward Elgar, Aldershot.
- Witt, U. 2005.** A (Partial) Rehabilitation of 'Objective' Utilitarianism and its Implications for Assessing the Growth of Consumption. *Papers on Economics & Evolution* 0507.
- Wordsworth, W. 1844.** Kendal and Windermere Railway, In W. J. B. Owen and J. W. Smyser [eds.], *The Prose of William Wordsworth.* Oxford University Press, Oxford.
- Young, A. 1928.** Increasing Returns and Economic Progress. *The Economic Journal* 38:527-542.
- Zuckerman, M. 1994.** *Behavioral Expressions and Biosocial Bases of Sensation Seeking.* Cambridge University Press, Cambridge.

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Erklärung gemäß § 4 Abs. 1, Pkt. 3 (PromO)

Hiermit erkläre ich,

1. dass mir die vom Fakultätsrat am 15. Juli 1998 beschlossene und zuletzt am 7. Februar 2001 geänderte Promotionsordnung bekannt ist und ich sie anerkenne;
2. dass ich die Dissertation selbst angefertigt und alle von mir benutzten Hilfsmittel und Quellen in meiner Arbeit angegeben habe;
3. dass ich bei der Auswahl und Auswertung des Materials sowie bei der Herstellung des Manuskripts keine fremde Hilfe in Anspruch genommen habe;
4. dass die Hilfe eines Promotionsberaters nicht in Anspruch genommen wurde und dass Dritte weder unmittelbar noch mittelbar geldwerte Leistungen von mir für Arbeiten erhalten haben, die im Zusammenhang mit dem Inhalt der vorgelegten Dissertation stehen;
5. dass ich die Dissertation noch nicht als Prüfungsarbeit für eine staatliche oder andere wissenschaftliche Prüfung eingereicht habe;
6. dass ich die gleiche, eine in wesentlichen Teilen ähnliche oder eine andere Abhandlung nicht bei einer anderen Hochschule bzw. anderen Fakultät als Dissertation eingereicht habe.

Jena, 30. Januar 2007

(Andreas Chai)